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**Analysis of Factors Affecting Corporate Governance Maturity Level:
A Research on the Companies Traded on Borsa İstanbul**

**Kurumsal Yönetim Olgunluk Düzeyini Etkileyen Faktörlerin Analizi: Borsa
İstanbul'da İşlem Gören Şirketler Üzerine Bir Araştırma**

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ABSTRACT

Corporate governance, one of the management theories, is one of the important topics for companies. Compliance with corporate governance principles is a sensitive issue, especially in companies whose shares are traded on stock exchange markets, which have thousands/millions of investors and stakeholders, and/or operate internationally. Today, the economic activities of companies and their social interaction with their ecosystem have become dynamic on a national and global scale. The basic principles of corporate governance “transparency”, “responsibility”, “accountability”, “fairness” and the related obligations have great importance for companies. In Turkey, listed companies are obliged to comply with a significant part of the corporate governance principles with the regulations of the Capital Markets Board. As for the items that they are not obliged to comply with, as of 2018, there are reporting obligations with the “comply or explain” view on the Public Disclosure Platform operated by the Central Registry Agency. In this study, trading duration after initial public offering and corporate governance compliance reports of publicly traded companies have been taken into account, and Corporate Governance Maturity Level and Corporate Governance Maturity Index were studied with the developed methodology based on the subsections of “Shareholders”, “Transparency”, “Stakeholders” and “Board of Directors”. In the study, the effect of the duration after initial public offering on the Corporate Governance Maturity Level was examined in general and by subsections using Tukey HSD analysis. It is envisaged that being first study on this subject, it will have a leading impact on further next academic studies. As a result of the study, i) Except for 2021, when the number of newly traded companies is high, the Corporate Governance Maturity Index values of the listed companies tend to increase. ii) The maturity level of industrial companies is above the stock market average. iii) While the maturity level of listed companies is higher in terms of principles regarding public disclosure, it is the lowest in terms of principles related to the board of directors. iv) There is an improvement in the Corporate



Governance Maturity Level, depending on the length of time the companies are traded on the stock exchange, and the level of compliance with the principles regarding public disclosure and transparency and shareholders is relatively higher.

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ÖZ

Yönetim teorilerinden kurumsal yönetim, işletmeler için önemli başlıklardandır. Özellikle payları borsada işlem gören, binlerce/milyonlarca yatırımcısı ve paydaşı bulunan ve/veya uluslararası faaliyet gösteren şirketlerde, kurumsal yönetim ilkelerine uyum hassas konulardandır. Günümüzde işletmelerin ekonomik faaliyetleri ve buldukları ekosistemle sosyal etkileşimi, ulusal ve küresel ölçekte dinamik hale gelmiştir. Kurumsal yönetimin temel ilkeleri “şeffaflık”, “sorumluluk”, “hesap verebilirlik”, “adillik” ve bunlara dair yükümlülükler şirketler için büyük önem taşımaktadır. Türkiye’de Sermaye Piyasası Kurulu düzenlemeleriyle, payları Borsa İstanbul’da işlem gören şirketler kurumsal yönetim ilkelerinden önemli kısmına uymakla yükümlüdür. Uymaya zorunlu olmadıkları maddelere ilişkin ise 2018 yılı itibarıyla, Merkezi Kayıt Kuruluşu tarafından işletilen Kamuyu Aydınlatma Platformu’nda “uy ya da açıkla” bakışı ile raporlama yükümlülükleri bulunmaktadır. Bu çalışmada, halka açık şirketlerin halka arz yılları ve kurumsal yönetim uyum raporları esas alınarak, kurumsal yönetime ilişkin “Pay Sahipleri”, “Kamuyu Aydınlatma”, “Menfaat Sahipleri”, “Yönetim Kurulu” bölümleri bazında Kurumsal Yönetim Olgunluk Düzeyi gelişimleri ve Kurumsal Yönetim Olgunluk Endeksi, çalışmada geliştirilen metodoloji ile incelenmiştir. Çalışmada, ayrıca şirketlerin borsada işlem görme süresinin Kurumsal Yönetim Olgunluk Düzeyine etkisi Tukey HSD analizi kullanılarak genel olarak ve bölümler itibarıyla araştırılmıştır. Bu konuda da yapılan ilk çalışma olarak sonraki akademik çalışmalara yön vereceği düşünülmektedir. Çalışma sonucunda, i) Yeni işlem görmeye başlayan şirket sayısının yüksek olduğu 2021 yılı dışında, Borsa şirketlerinin Kurumsal Yönetim Olgunluk Endeksi değerlerinin artış eğiliminde olduğu, ii) Sınai şirketlerin olgunluk düzeyinin borsa ortalamasının üstünde gerçekleştiği, iii) Kamuyu aydınlatmaya ilişkin ilkeler açısından borsa şirketlerinin olgunluk düzeyi daha yüksek iken, yönetim kuruluna ilişkin ilkeler açısından en düşük olduğu, iv) Şirketlerin borsada işlem görme süresine bağlı olarak, Kurumsal Yönetim Olgunluk Düzeyinde gelişim olduğu, özellikle kamuyu aydınlatma ve şeffaflık ile pay sahiplerine ilişkin ilkelere uyum düzeyinin daha yüksek olduğu tespit edilmiştir.

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1. INTRODUCTION

Corporate governance is a management approach that takes into account the relations between the company’s management, the board of directors (BoD), shareholders, and other stakeholders, and provides a structure in which the company’s goals, the means to achieve these goals, and how performance will be monitored. In the Organization for Economic Co-operation and Development’s (OECD) Corporate Governance Principles, corporate governance aims to help create an environment of **trust, transparency, and accountability** necessary to foster long-term investment, financial stability, and business integrity and thereby supporting stronger growth and more inclusive societies. (OECD, 2016)

After the 1990s, with the corporate scandals, systemic crises, changes in the shareholding structures of companies,

awareness of institutional investors, globalization and acceleration of international capital movements, increase in competition, technological developments, and expectations in the social responsibilities of public companies and academic studies, corporate governance issues have gained increasing importance. In 1999, the “Corporate Governance Principles (KYI)” was declared by the OECD, after which studies and regulations gained momentum. Awareness on corporate governance in our country has started to emerge since 2002, and significant progress has been made so far.

The objective of this research is to examine the development of corporate governance regulations and practices in Turkish capital markets, to measure the compliance level of listed companies with non-mandatory KYI and their changes over the years, and to investigate the effect of the companies’ trading time in the Stock Exchange on the Corporate Governance Maturity Levels.

In the study, the “**Corporate Governance Compliance Report (KYUR)**” notifications announced on the Public Disclosure Platform (KAP) between 2018 and 2021 were used. For the first time, the “**Corporate Governance Maturity Index (KYOE)**” calculation model was developed for Turkish capital markets for the measurement of the compliance level of the listed companies with the KYI, which are subject to the voluntary basis, both in general and in terms of the principles regarding Shareholders, Public Disclosure and Transparency, Stakeholders and BoD. It is considered that this index methodology can be an indicator that can be used in future academic studies. Also, it can be used as a metric both in providing value-added data to market stakeholders and in monitoring the “**Corporate Governance Maturity Levels**” (KYOD) of listed companies by the regulatory and supervisory authorities. In addition, the listed companies can direct their corporate governance structures by comparing the Corporate Governance Maturity Levels on a company basis with the sectoral index values.

In the study, it was also examined how the Corporate Governance Maturity of the companies, depending on the year they traded in the stock market, and how the time variable affected the corporate governance maturity in terms of the Shareholders, Public Disclosure and Transparency, Stakeholders, and BoD sections included in the report. Since it is the first academic study conducted in Turkey on this subject, it is considered that it will both contribute to the literature on the institutionalization process of listed companies and guide future academic studies.

2. CORPORATE GOVERNANCE AS A CONCEPT AND THEORY

2.1. Corporate Governance Concept and Development

From the industrial revolution to the present, the number of fields of study and the depth of knowledge in management has expanded rapidly. After the classical and neoclassical management periods, there has been a great increase in management models and theories that have developed with contemporary management approaches, especially since the mid-1970s. The Institutionalization Approach and the Agency Approach, which are among the management theories that developed in this process, formed the basis of important perspectives on corporate governance. Principles and concepts on Corporate Governance have been developed by working with shareholding structures and the development of competition. Considering important issues and targets such as global relations, competition, sustainability, and investor relations, especially for businesses of a certain scale, corporate governance maturity has gained a high level of importance. Today, global standards, which are described as KYI, are accepted all over the world and are the subject of many international studies. In this context, management structures, corporate processes, certain units and functions, and communication

with shareholders in accordance with global standards are accepted as important audit, compliance, and maturity indicators for businesses.

In today's world where commercial relations and financial investments are carried out cross-border on a global scale, the reliability of businesses is measured not only by their financial statements but also by how well they comply with corporate governance regulations. In particular, various internationally accepted standards, scales, and indicators have emerged, which are expected to comply with the growth of enterprises, and if they go public. In this sense, the studies carried out by the OECD and the published G20/OECD KYI are accepted as important global standards.

In the Cadbury Report published in England in 1992, corporate governance was defined as the financial and other controls system by which a company is managed and controlled. (UNCTAD, 2003)

A large and growing body of literature has investigated this concept. In the study of Shleifer and Vishny (1997), it is stated that corporate governance is the way of providing a return on investments of those who provide finance to companies.

According to OECD (2016), corporate governance is a management approach that includes the relations between company management, the BoD, shareholders, and other stakeholders, and it also provides a structure in which how the company goals, tools to achieve these goals, and the performance will be monitored.

The purpose of corporate governance is expressed as providing the elements of **accountability, transparency, and trust** necessary to promote financial stability, long-term investment, and business integrity, thereby supporting the goals of strong growth and an inclusive society. (OECD, 2016)

After the 1990s, the importance of corporate governance gradually increased as a result of various company scandals, changes in the shareholding structure of companies, awareness of institutional investors, increased international capital movements due to globalization, developing competitive conditions, technologic improvements, expectations from public companies within the scope of social responsibility and increasing academic research. In the early years, the American Law Institute Report (1992), Cadbury (1992), Greenbury (1995), and Hampel (1998) reports in England, Hilmer Report (1993) in Australia, Vienot Report (1995) in France, King Report (1995) in South Africa, various studies as a guide on best practice examples in Hong Kong, Singapore, Malaysia, and other countries had a significant impact on the issue (Bilgiç, 1999).

In 1999, KYI have been prepared by the working group consisting of member country representatives by the OECD, especially for listed companies, to establish the institutional, legal, and regulatory framework regarding corporate governance, and to guide companies, stock exchanges, investors, and other relevant stakeholders in the development of the corporate structure. OECD KYI consist

of the rights and responsibilities of shareholders, the role of stakeholders, fair treatment of shareholders, disclosure and transparency, and duties and responsibilities of company management.

2.2. Basic Principles on Which Corporate Governance Is Based

2.2.1. Transparency

Transparency stands for presenting financial and non-financial information about the company to all stakeholders, especially shareholders, in a complete, accurate, understandable, and timely manner. **Establishing public confidence** is an important factor in the effective functioning of capital markets and the efficient distribution of capital, and therefore in the development of capital markets. The problem of asymmetric information in the capital markets, that is, the information imbalance between the parties of a transaction, is one of the issues that damage trust. (Bilgiç, 2014)

During the initial public offering, there may be differences in the level and content of information between the investors and issuer company. Also, information asymmetry exists also between the buyer and seller parties after the capital market instruments start to be traded on the stock exchange. This situation comes with it the challenges called **adverse selection problems** or **moral hazards**. With mandatory public disclosure regulations in capital markets, regulatory authorities determine and regulate the information that issuers must disclose to the public. Thus, the level of asymmetric information is tried to be kept at a low and acceptable level.

2.2.2. Fairness

Fairness means that the company management maintains an equal approach and treats all stakeholder groups equally, and treats different people and institutions in the same stakeholder group equitably. Equitable company management should consider the interests of shareholders and all other stakeholders and should treat all shareholders holding the same group of shares equally, including minority and foreign shareholders. Company management should treat not only shareholders but all other stakeholders in the same way, create an effective solution and compensation structure in case of violation of rights, encourage stakeholders to take a role in the organization and disclose information about the interests of stakeholders to the public. (UNCTAD, 2003)

2.2.3. Accountability

In the implementation of the principle of accountability, it is important to clearly define the duties and responsibilities within the company, to determine the accountability obligations in proportion to the powers given, and to have an effective and strong internal control structure as well as the existence of independent external audit mechanisms. (Alp and Kılıç, 2014)

Accountability at different levels and aspects, such as the accountability of the,

- BoD to the shareholders and stakeholders,
- Senior management to the BoD,
- Units within the company and their employees to the managers

should be defined and regulated within the company, and it should be ensured that the processes are carried out in accordance with these regulations.

2.2.4. Responsibility

The principle of responsibility implies that the company creates value for its shareholders and that it operates in accordance with laws and regulations, as well as social values, in this value-creation process. (Alp and Kılıç, 2014)

2.3. Development of Corporate Governance in Turkish Capital Markets

In 2002, following the announcement of the OECD KYI in 1999, studies on corporate governance in Turkish capital markets began, and significant progress has been achieved so far by going through important stages.

2.3.1. First Period Corporate Governance Studies (2002-2007 Term)

“Corporate Governance Best Practice Code: Structure and Functioning of the BoD”, was the first study in Turkey, which was published by Turkish Industry and Business Association (TUSIAD) in 2002 and only focuses on the BoD dimension of corporate governance (Alp and Kılıç, 2014). By establishing a working group by the Capital Markets Board (CMB), both OECD Principles and other best practice examples were examined, and with the CMB’s decision dated 04.07.2003 (No: 35/835), KYI were published especially for companies whose shares are traded in the Stock Exchange. In the first principles published by the CMB, according to the “comply or explain” principle, it was made mandatory for the listed companies to disclose to the public whether they apply the KYI or not, and if they do not, the reasons why should be explained. The principles consist of Shareholders, Public Disclosure and Transparency, Stakeholders, and BoD sections in line with the OECD Principles. With the CMB’s decision dated 10.12.2004 published in the Bulletin numbered 2004/51 (No: 48/1588), concerning the minimum elements to be included in the corporate governance compliance reports of the listed companies, to be used as of the 2004 reports to be published in 2005. “Corporate Governance Compliance Report” format has been announced.

The Principles were revised and republished in light of updates made by the OECD in February 2005. In the OECD’s report on “**Corporate Governance Pilot Study in Turkey**” published in 2006, the regulations that need to be made for the development of corporate governance practices in our country are explained. After this report, with the update made by the CMB in the rating communiqué,

the corporate governance rating has been included within the scope of the communiqué. (Alp and Kılıç, 2014)

2.3.2. Development Period Corporate Governance Regulations (2007-2012)

2.3.2.1. Changes in Capital Market Legislation

The process of implementing KYI in Turkish capital markets has progressed on voluntary basis until 2007. After 2007, regulations have been made by regulatory bodies to encourage good practices. Borsa Istanbul (BIST) (The previous title was Istanbul Stock Exchange) started to calculate the “BIST Corporate Governance Index (XKURY)”, which shows their price return performance, by including companies with a score of at least 6 out of 10 with the KYI principles given by the rating agencies authorized by the CMB. In addition, Borsa Istanbul has started to apply discounts to the companies within the scope of the index in their annual listing/recording fees (50% for two years, 25% for the next two years, and 10% for the following years).

With Decree-Law No. 654 amending the Capital Market Law No. 2499 and published in the Official Gazette on October 11, 2011 (No: 28081 (Repeated)), it has given the CMB the authority to determine and announce the KYI, to require compliance with these principles in whole or in part, or to take measures in case of inconsistency. Thus, a period has begun when the principles will become mandatory from the principle of “comply or explain” in compliance with KYI. On the same date (No: 28081 (2. Repeated)), the Communiqué Serial: IV, No: 54 on Determination and Implementation of Corporate Governance Principles was published in the Official Gazette and became effective.

In Article 5 of the Communiqué, it is regulated that companies whose shares are traded in the stock exchange, except for the banks in the BIST 30 Index, are obliged to implement certain principles in the “Shareholders” section of the principles, and in that way some of the principles have been made compulsory for certain companies for the first time.

With the Communiqué Serial: IV, No: 56 on the Determination and Implementation of Corporate Governance Principles published in the Official Gazette dated 30.12.2011 (No: 28158), the scope of the mandatory KYI and the companies involved have been expanded with partnerships traded on the Stock Exchange (Except those in the Emerging Companies Market and the Watchlist Market). Within the scope of the Communiqué, also listed companies were divided into three groups according to their market values and actual free float amounts, and different obligations were imposed for each group.

2.3.2.2. Changes in the Turkish Commercial Code

In the new Turkish Commercial Code (TCC), which was put into effect on 01.07.2012, and in Article 1529, titled Corporate Governance Principles, in publicly traded companies, it is stipulated that the principles of disclosure to be made by the BoD and the corporate governance rating

rules and results of the companies are determined by the CMB and that other public institutions and organizations can only make limited regulations in their own fields with the approval of the CMB.

With the new TCC, it has been regulated that shareholders will be treated equally under equal conditions, shareholding rights have been expanded, and new lawsuit rights have been granted. The non-transferable duties and powers of the general assembly were defined, and the privilege of voting at the general assembly meeting was limited. Electronic general assembly meetings have been paved for them to participate in the general assembly meetings and to exercise their rights easily, and the conditions regarding the limitation of share transfer have been aggravated. (Alp and Kılıç, 2014)

Regarding the BoD, the number and nature of the members have been determined, it has been defined in the articles of association that certain share groups and minorities can be represented, their inalienable duties and powers have been regulated, and the authority to establish committees and commissions has been given. The right to obtain information and examine the company’s business and transactions has been ensured, the determination of its financial rights has been regulated, the concept of liability insurance has come, and the prohibition of making transactions with the company and borrowing has been introduced (Alp and Kılıç, 2014).

Concerning disclosure and transparency, the principles for the preparation and presentation of financial statements and annual reports to the general assembly have been regulated, an independent external audit structure has been introduced, companies have been regulated to open a corporate website on the internet and to allocate some of them to matters that require legal disclosure. (Alp and Kılıç, 2014) Regarding stakeholders, there have been regulations that protect the rights of employees/workers, and improve, expand, and secure the rights of creditors. (Alp and Kılıç, 2014).

2.3.3. Regulations Made After 2013

2.3.3.1. Changes in Capital Market Law and Communiqués

On 30.12.2012, the new Capital Markets Law (CML) numbered 6362, which repealed the CML numbered 2499, entered into force and the legal infrastructure was defined in more detail in compliance with KYI. The CMB has been given powers in determining and regulating the issues such as the content of the KYI, the scope of the corporate governance compliance report and its announcement to the public, corporate governance compliance rating, determining the procedures and principles of independent membership of the BoD, appointing members, exercising the powers of the general assembly under certain conditions in case the quorum of the BoD cannot be met and new members cannot be elected, appointing members, exercising the powers

of the general assembly under certain conditions (Alp and Kılıç, 2014).

After the amendments made in the CML, the Corporate Governance Communiqué and its annexed principles were published in the Official Gazette No. 28871 on 03.01.2014 and entered into force. The purpose of the Communiqué was to determine the procedures and principles regarding KYI and related party transactions. The Communiqué regulates the procedures and principles regarding pledges, guarantees, and mortgages, as well as the investor relations unit, and listed companies whose shares are traded in certain markets are held liable. In addition, companies are required to comply with certain KYI.

2.3.3.2. New Phase in Corporate Governance Compliance Reporting

Until 2019, BIST companies published their KYI compliance reports in pdf format within the annual reports on the KAP system. With the CMB mandating certain principles, new regulations on corporate governance with the new TCC, and the increase in the knowledge and adoption levels of listed companies on corporate governance, it has become necessary to analyze corporate governance compliance reports by regulatory authorities, investors, academics, and analysts.

Depending on the reporting period and the increase in the number of companies, the need to determine the compliance status of BIST companies with the principles and to compare them by market, sector, index, and years has come to the fore. For this, a project was initiated by the CMB with the European Bank for Reconstruction and Development (“EBRD”). CMB, EBRD, and Central Registry Agency (MKK) worked on technical developments to prepare a template for the announcement of corporate governance compliance reports on KAP in an analyzable and comparable Extensible Business Reporting Language (XBRL) format.

With the CMB decision (2/49) on 10.01.2019, it was announced that KYUR notifications should be made via the Corporate Governance Information Form (KYBF) template via KAP. Thus:

- 1) KYUR notification to report compliance with voluntary principles;
- 2) Reporting of KYBF templates and annual financial reports on KAP within the reporting period to inform about corporate governance practices was regulated.

Beginning with the 2018 year-end annual reports, announced in 2019, corporate governance reporting at KAP started with KYUR and KYBF notifications. The KYUR notification format has been created to monitor the level of compliance of the listed companies with the principles (Except Pre-Market Trading Platform, Watchlist Market, and Emerging Companies Market companies that were closed on 01.10.2020 and whose members were moved to the Sub-Market), the implementation of which

is subject to a voluntary basis within the scope of the CMB Corporate Governance Communiqué. With KYUR, it is aimed to standardize and be comparable in public disclosure of corporate governance practices and to inform all relevant stakeholders. KYBF is designed to complement the information shared within the scope of KYUR and includes information on the practices of listed companies regarding all principles. (CMB, 2020))

3. DOMESTIC ACADEMIC STUDIES ON CORPORATE GOVERNANCE

3.1. SAHA World Corporate Governance Index

The World Corporate Governance Index (DKYE), calculated by Saha Corporate Governance and Rating Services Inc. (SAHA), consists of countries with a score of 60 or higher out of 100. In the 2021 update study, 150 countries were examined and classified into 5 groups according to their country grades.

In the updated study carried out by SAHA (2021), it was stated that the purpose of publishing the index in question was to be able to compare different countries in terms of corporate governance infrastructure and practices. International trade is increasing due to globalization. Compliance of international companies with investment, trade, or joint business with the KYI is related to the general level of corporate governance of the country in which they operate. For this reason, DKYE is important for companies doing international business.

In the DKYE methodology;

- a) Corporate governance infrastructure and practices of 150 countries were comparatively examined.
- b) It has been examined whether there is a corporate governance regulation in the countries in terms of social responsibility, independent board membership, privileges.
- c) The establishment of the stock exchange in the relevant country, the existence of the corporate governance index, the existence of regulatory authorities for capital markets and financial institutions, and the situation of the country in political rights and personal freedoms were evaluated.
- d) The corruption perception index was used to measure the business environment, and the existence of non-governmental organizations was investigated.
- e) Score has been calculated for each country by weighting these components;
- f) Countries were divided into 5 groups according to their scores, Group 1 was the highest, and Group 5 was the lowest, Group 1 and 2 were included in the index, and other groups were excluded.
- g) It is stated that 37, 22, and 32 countries are included in Groups 3, 4, and 5, which are not included in the index, respectively. (SAHA, 2021)

Table 1. Countries in the DKYE Groups

	Group 1	Group 2
Explanation	Countries with a score of 80 and above	Countries with a score of 60-80
Number of countries	22	37
Countries	USA, Germany, Australia, Austria, Belgium, Denmark, Estonia, Finland, France, England, Sweden, Switzerland, Iceland, Japan, Canada, Korea, Latvia, Luxembourg, Hungary, Norway, Peru, Turkey	Argentina, Bosnia, and Herzegovina, Brazil, Bulgaria, China, Morocco, Philippines, South Africa, Georgia, India, Netherlands, Honduras, Spain, Israel, Italy, Qatar, Cyprus, Colombia, Costa Rica, Lebanon, Malaysia, Malta, Mauritius, Mexico, Egypt, Portugal, Singapore, Slovakia, Slovenia, Saudi Arabia, Chile, Thailand, Taiwan, Tunisia, Ukraine, New Zealand, Greece

Source: SAHA, 2021

3.2. The Study of The Borsa Istanbul

After the KYI announced by the CMB, the first comprehensive study on the status of the listed companies and their members was made by the BIST in 2001. A 71-question survey prepared based on the OECD's management principles and standards for joint stock companies was applied to determine the compliance status of the companies whose shares are traded and the intermediary institutions that are members of the BIST, and the quality of their practices. The survey questions are basically grouped under the following headings;

- Board members and independence,
- Transparency and relations with shareholders,
- Audit effectiveness,
- Relations with employees,
- Equal treatment of shareholders.

415 of 513 companies in total participated in the survey. 56 of the brokerage houses and 79% of the listed companies were included in the evaluation, so an analysis was made on a sample that reflects 70% of the BIST companies and member brokerage houses. In the study, the results of the survey between the manufacturing sector and the financial sector were also compared. The important findings of the study were as follows:

1. Most of the members of the BoD also work in companies within the group, and since they also hold other duties within the company, performance auditing, and management efficiency are insufficient.
2. In intermediary institutions, there is a high level of attention to the kinship relations between the members of the BoD and the partners.
3. Financial benefits are not provided to the members of the BoD based on performance.
4. Decisions of major partners/owners are effective in the appointment of senior managers.
5. Public disclosure practices are at a very good level.
6. Units performing an executive or advisory role in relations with partners are limited.
7. While the internal audit unit is common in intermediary institutions depending on the requirements of the legislation, it is not generally available in listed companies.

8. Share programs for company employees, foundation or fund applications for employees are very limited.
9. There are different groups in 17% of the listed companies and their members in terms of voting rights. Preferred shares are more common in companies than in members. Differences in voting rights and privileges are more common in the financial sector than in the manufacturing industry.
10. The distinction between the General Manager and the Chairman of the BoD has not been established.
11. There is no independent board member practice.
12. General Managers are professionals and they are mostly not assigned to other companies.
13. Board members can access the information they want.
14. The establishment of a special unit for the management of relations with partners is limited.
15. Companies that apply KYI and standards relatively better have higher financial and market return performance. (Tezcanli et al. 2001)

3.3. The Study Conducted by CMB

After the corporate governance reporting started to be published in XBRL format that can be analyzed in the KAP system in 2019, the "Monitoring Report" jointly prepared by the CMB, the EBRD, Nestor Advisors Ltd, and Ünsal Law Firm was published in 2020. The report is important because it is the first study on KYUR and KYBF disclosures published in new analyzable content, and it shows the progress in compliance with the KYI and practices of the listed companies.

The report has been prepared to encourage compliance with KYI, to encourage its implementation, and guide companies. Based on the 2018 year-end data of the companies traded in BIST 30 and BIST 100, the corporate governance reports were announced in 2019 (CMB, 2020). In addition, a sample group named "OTHER 70" was created to be used in the comparison of the companies in this sample. Compliance with non-mandatory principles in 2019 is 82.5% for BIST 30; 80% for BIST 100; 79.2% for OTHER 70.

Table 2. Compliance Levels of BIST Companies with Non-Mandatory Principles

Compliance Level	Average (%)		
	BIST100	BIST30	OTHER70
Yes	80.3	82.5	79.2
No	7.9	8.0	7.9
Partially	9.5	7.5	10.4

Source: CMB,2020

In the CMB report (2020), it is stated that the “Partly” option has the potential to fully comply with the principles, and if full compliance with these principles is achieved in the following years, the compliance rate for BIST companies will increase to 90%. In addition, for BIST 100 and 30, the lowest level of compliance was determined as “BoD”, and the highest section was “Public Disclosure and Transparency” (CMB, 2020)

3.4. Studies on Company Performances within the Scope of the BIST Corporate Governance Index

Most of the literature on the capital markets in Turkey has been published on investigating the relationship between corporate governance compliance rating grades and stock market performances or financial performances. In these studies, besides the findings that it has a positive effect on stock returns, some results show no effect.

Eyüboğlu (2011) examined the effect of companies within the scope of XKURY on stock returns, using the data of 24 companies within the scope of the index. The stock returns of the companies for two periods (i. between initial public offering (IPO) and entry and the XKURY index, ii. between the entry to the XKURY index and December 2010) were analyzed. However, there was no significant difference between stock returns before and after entry into the index, and it was stated that it might be due to the small number of samples.

Sevimli (2021), studied on the relationship between corporate governance and organizational resilience, with 23 companies in the XKURY index in the 2017-2019 period and found that there is a high level of relationship between corporate governance and organizational resilience.

In her study, **Zengin (2014)** examined the relationship between the financial statement items and stock performances of 35 companies within the scope of XKURY between 2008 and 2013 by using the panel data analysis method before and after entry into the index with Tobin’s Q ratio. A statistically positive and significant relationship was found between Tobin’s Q, which is the dependent variable as an indicator of firm performance, and net dividend ratio, total debt/equity ratio, foreign shareholder ratio, and price/earnings ratio.

Yazgan (2017) examined the relationship between the announcement of the corporate governance rating of 58 companies within the scope of XKURY between 2011 and

2015 and their stock returns. It has been concluded that no abnormal returns can be achieved 10 days before and after the rating note is announced, and the market is efficient in a semi-strong form.

Tursun (2021) investigated the relationship between compliance with KYI and the financial performance of the banks whose shares are traded on the stock exchange. Between 2016 and 2020, the relationship between the return on assets of 12 banks and the ratio of women in the BoD, the size of the board, the ratio of independent members, the free float ratio, and the graduate education level of the Board members were examined. A positive and significant relationship was found between return on assets and female ratio in the BoD and total assets, but no significant relationship was found between other independent variables.

Soylu (2021) discussed performance measurement systems and KY applications in the study. As of 2019, the relationship between the financial and organizational performances of 18 companies in the XKURY index, excluding banks and insurance companies, and their corporate governance rating scores were examined. It was determined that there was a weak-moderate positive relationship between the grades at a 10% significance level. It has been evaluated that this may be due to the relevance of the company’s financial performance to the sector and economy in which it operates, the inadequacy of the number of ratios used in the measurement of financial performance, the difficulty and complexity of reducing the corporate governance dimensions to a single note, and the adherence to bureaucratic and legal regulations that the improvements to be made in corporate governance practices should be spread over time.

In the research conducted by **Balkan (2018)** on 38 companies for the years 2005-2016, no result supporting the relationship between corporate governance and financial performance was found, and it was evaluated that this might be because the financial value of companies can be affected by many events unrelated to corporate governance.

In the study of **Yetgin and Ersoy (2021)**, it was investigated whether the information on the inclusion of companies in the XKURY index caused abnormal returns, and in this context, stock market announcements regarding the inclusion of 59 companies in the XKURY index between 2007 and 2018 were examined. Whether it provides a statistically significant abnormal or cumulative abnormal return is made during the +/-10-day event window of the stock market’s announcement date for indexing. As a result of the study, although there is a general increase in the share values of the companies that comply with the KYI, it has been determined that there is no relationship between the rating grades and share prices in the analysis of the years 2007-2008 due to the low number of observations, that there is a positive relationship in other years, and that companies with good Corporate Governance practices increase their stock market values.

4. ACADEMIC STUDIES ON COMPLIANCE WITH CORPORATE GOVERNANCE

Studies on corporate governance abroad are carried out in a wider perspective compared to the studies in our country.

In the study of **Gompers, Ishii, and Metrick (2003)** in their analysis of approximately 1,500 large companies based on the management index created in terms of investor rights, it was concluded that the market value and returns of companies that are more observant of investor rights are higher.

Wilkes (2004) emphasized that the measurement of the corporate governance concept on a company basis may be specific to the organizational structure and competitive strategy of the company.

Selvaggi and Upton (2008) examined the correlation between corporate governance and performance and return on shares in publicly traded companies in England during the 2003-2007 study period, and their findings indicated a positive relationship.

Berthelot, Morris, and Morrill (2010), on the other hand, found that stock investors also consider the corporate governance rankings of companies when evaluating share prices. According to the results of 289 companies examined in Canada between 2002 and 2005, they determined that the published corporate governance scores of the companies were not only related to market prices but also to accounting results.

Akinkoye and Olasanmi (2014) analyzed the corporate governance practices of non-financial companies in Nigeria in terms of KYI in the country, based on the data disclosed to the public by companies between 2003 and 2010 and created an index. In the study, it was revealed that the companies observed between the relevant years had an average level of compliance of 72.15 percent and there was a 5.83 percent growth at this rate over the years.

In a study conducted by **Abdallah and İsmail (2017)**, it was stated that there is a positive relationship between corporate governance and firm performance in firms where ownership is widespread and diversified.

As a result of the study of **Singh and Rastogi (2023)** on small and medium-sized companies in India, it has been determined that KYI can be used to improve the financial performance of companies of this size.

Rehman and Hashim (2020) examined the corporate governance maturity level of publicly traded companies in Oman and whether this maturity level differs in terms of the sector with the survey method. In the study, it has been determined that the level of maturity in corporate governance is measurable and that the level of maturity does not differ between different sectors. Apart from this study, there are studies based on surveys conducted with companies that examine corporate governance practices in different countries every year. (Hussain and Mallin, 2002; IFC and Hawkamah, 2008; Naser and Khadija, 2010)

5. EXAMINATION OF CORPORATE GOVERNANCE MATURITY LEVEL DEVELOPMENT OF EXCHANGE COMPANIES

5.1. Methodology

KYUR notifications, which include compliance with 68 voluntary principles within the scope of the CMB Corporate Governance Communiqué, announced by listed companies (excluding the Watch List Market and Pre-Market Trading Platform) on the KAP were used in the study. The four main sections of the KYI and the number of principles subject to voluntary disclosure are given in the table below.

Table 3. Distribution of Non-Mandatory Principles by Sections

Section Name	Number of Principles
Public Disclosure	5
Stakeholders	21
Shareholders	17
BoD	25
Total	68

The KYUR elements, the scope of which has been determined and announced by the CMB, can be answered in 5 different ways as “Yes”, “No”, “Partial”, “Exempted” and “Not Applicable” for each principle. KYUR disclosures are of a quality that can measure compliance with the principles, and these notifications published on KAP website after the approval of the BoD of the company. Disclosed reports have been used by considering them to be reliable. KYUR notifications used in the 2018-2021 period are given in the table below.

The following steps were followed in the analysis process:

- 1) First of all, the answers given about compliance to each question in the KYUR notification announced on the KAP on an annual basis are noted as follows and the “**Corporate Governance Principle Score (KYIN)**” is calculated for each company in the sample. The difference between the intervals is used as 33.33 in the No and Partial options, and 33.34 in the Yes option. Exempted and Nor Applicable options are not included in the grading and average.
- 2) After converting the answers given on a company basis into grades, the “**Corporate Governance Section Score**” for each company based on 4 main sections was calculated with the formula below.

$$KYBN_{(b,i,t)} = \left(\frac{\sum_{i=1}^n KYIN_{(b,t)}}{m} \right)$$

Table 4. Distribution of the Number of KYUR Notifications by Reporting Years and Sectors on the Basis of the Period of Trade on the Stock Exchange

Reporting Year and Sector Info	BYear*=0	BYear= 1	BYear= 2	BYear= 3	BYear= 4	BYear= 5+	Total
2018 Services	0	4	0	0	2	48	54
Financial	0	2	1	0	2	103	108
Industrial	0	1	0	1	1	147	150
Technology	0	1	1	0	0	14	16
Total	0	8	2	1	5	312	328
2019 Services	0	2	4	0	0	49	55
Financial	0	0	2	1	0	104	107
Industrial	0	1	1	0	2	149	153
Technology	1	2	1	1	0	13	18
Total	1	5	8	2	2	315	333
2020 Services	0	3	2	4	0	50	59
Financial	0	0	0	2	1	105	108
Industrial	1	3	2	2	0	141	149
Technology	0	1	2	1	1	13	18
Total	1	7	6	9	2	309	334
2021 Services	2	18	3	2	4	53	82
Financial	0	9	0	1	2	110	122
Industrial	1	16	3	1	2	151	174
Technology	0	6	1	2	1	15	25
Total	3	49**	7	6	9	329	403
2018-2021 Services	2	27	9	6	6	200	250
Financial	0	11	3	4	5	422	445
Industrial	2	21	6	4	5	588	626
Technology	1	10	5	4	2	55	77
Total*** (Calculated)	5 (-)	69	23	18	18	1265	1398
		(69)	(23)	(18)	(18)	(1265)	(1393)

* BYear (b_yil)=0,1,2,3,4,5+ values describes the trading period of the reporting company in the Stock Exchange in years. The number of reports in the BYear=0 column means that the company initially offered to public reported in the same year. Since the companies do not have a reporting obligation in the year of the public offering, the KYUR notification of 5 companies that reported to the KAP in their first year on the stock exchange was not included in the analysis in this study. Therefore, analysis studies were carried out on 1396 reports.

** Report numbers in the BYear=1 column show the reporting 1 year after the IPO. In other words, if all of the publicly offered companies publish KYUR, it gives the total number of publicly offered companies in the relevant year. For example, although 52 companies went public in 2021, the number of KYURs being 49 means that the 3 companies that went public in 2021 do not have a KYUR statement for 2021 that should be published in the first quarter of 2022.

*** Looking at the BYear columns, the sector-based data size has not been sufficiently formed, especially for companies that have been traded in the stock market for 2, 3, or 4 years (BYear = 2,3,4). In this study, the analysis of the effect of the trading time on the Stock Exchange on the KYOD was examined not by sector, but by the total number of all companies. (Since the reporting has been done for 4 years, as the number of publicly traded companies from different sectors increases, the KYOD impact analysis of the period of being traded in the Stock Exchange in the coming years can also be looked at on a sectorial basis)

KYBN : Corporate Governance Section Score

KYIN : Corporate Governance Principle Note

b : Relevant Subsection in the Report

i : Company

n : Number of Companies

m : Number of Scored Principles in the Section

t : Year

- 3) It has been regulated that the weighting according to the sections will be applied as follows in the corporate governance compliance rating with the CMB's

Table 5. The Weights of KYUR Answers

Response	Score
Yes	100
Partial	66.66
No	33.33

principle decision dated 01.02.2013 and numbered 4/105

a. Shareholders 25%

b. Public Disclosure and Transparency 25%

- c. Stakeholders 15%
d. BoD 35%

In the study, the Corporate Governance Maturity Level (KYOD) of each company was calculated by weighting and summing the grades related to the sub-sections with the relevant coefficients mentioned above.

$$\text{KYOD}_{(i,t)} = (0.25 * \text{KYPS}_{(i,t)}) + (0.25 * \text{KYKA}_{(i,t)}) + (0.15 * \text{KYMS}_{(i,t)}) + (0.35 * \text{KYYK}_{(i,t)})$$

- KYOD_(i,t): (i) Company's Corporate Governance Maturity Level
KYPS_(i,t): Shareholders Principles' Section Note
KYKA_(i,t): Public Disclosure Principles' Section Note
KYMS_(i,t): Stakeholders Principles' Section Note
KYYK_(i,t): BoD Principles' Section Note
t: Year

- 4) In the following stage, the average of the KYOD was taken and the “Average Corporate Governance Maturity Level” for all the BIST companies was calculated as an index value on a year-based basis for the sectors.

$$\text{KYOE}_{(t)} = \left(\frac{\sum_{i=1}^n \text{KYOD}_{(i,t)}}{n} \right)$$

- KYOE: Corporate Governance Maturity Index
t: The year in which the index calculation was made
n: Number of companies in the index

KYOE can take a maximum of 100 and a minimum of 33.33. In the calculation of the index, the KYURs disclosed to the public on KAP were used as of the calculation date, and the updates made in these reports after the announcement were not taken into account.

- 5) The index value of BIST companies in terms of KYUR sections is also calculated.

$$\text{SectionKYOE}_{(b,t)} = \left(\frac{\sum_{i=1}^n \text{KYBN}_{(i,t)}}{n} \right)$$

- KYBN_(b, t): (b) Company's (t) Year Corporate Governance Section Score
t: The year in which the index calculation was made
n: Number of companies in the index

KYPSOE, KYMSOE, KYKAOE, KYYKOE: It is used for the Maturity Index calculated for the Shareholders, Stakeholders, Public Disclosure, and BoD sections, respectively, from the Corporate Governance sections.

$$\text{KYPSOE}_{(b,t)} = \left(\frac{\sum_{i=1}^n \text{KYPS}_{(i,t)}}{n} \right)$$

$$\text{KYMSOE}_{(b,t)} = \left(\frac{\sum_{i=1}^n \text{KYMS}_{(i,t)}}{n} \right)$$

$$\text{KYKAOE}_{(b,t)} = \left(\frac{\sum_{i=1}^n \text{KYKA}_{(i,t)}}{n} \right)$$

$$\text{KYYKOE}_{(b,t)} = \left(\frac{\sum_{i=1}^n \text{KYYK}_{(i,t)}}{n} \right)$$

- 6) In the last stage, the effect of the yearly trading time of the listed companies on the KYOD value was examined with a one-way analysis of variance. Tukey HSD analysis was applied in multiple comparison tests to reveal the difference between the mean of the treatment time, that is, the KYOD values. (Demir, 2020) The analysis was repeated based on KYUR subsections.

5.2. Analysis and Findings

5.2.1. KYOD Analysis and Findings by Trading Duration on the Stock Exchange

Table 6. KYOD Value Comparison by Trading Duration on the Stock Exchange

BYear	N	KYOD	Standard Deviation	Sd	F	p
1	69	85.97	5.43	4; 1391	8.833	0.000
2	23	88.73	4.80			
3	18	89.21	5.23			
4	18	88.20	5.70			
5+	1265	89.28	4.48			
Total	1393	89.09	4.61			

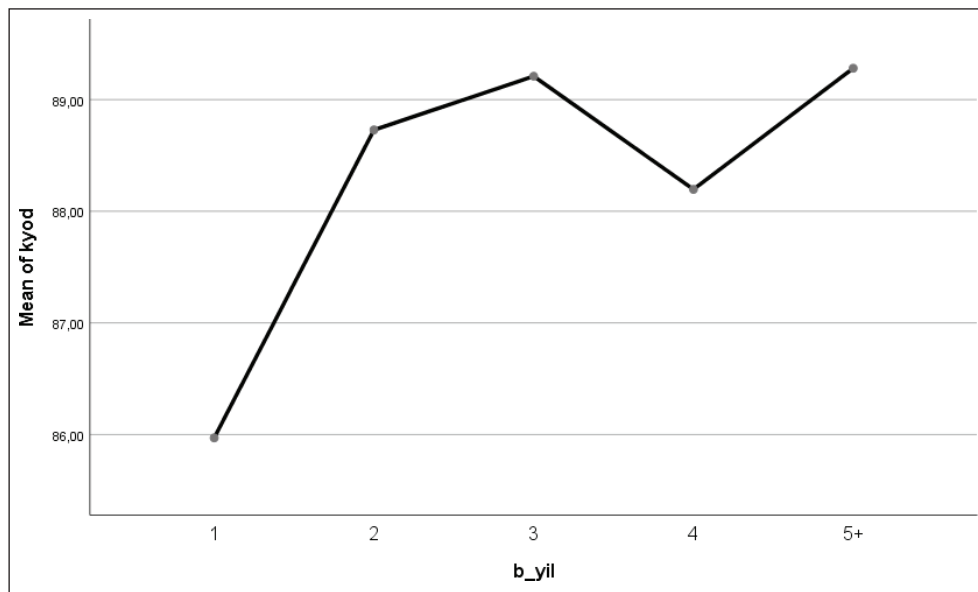


Figure 1. KYOD Value Change Chart by Trading Duration the Stock Exchange.

When the difference between the averages of the KYOD values according to the trading duration on the stock exchange every year was examined, it was found that there was a statistical difference between the averages ($F_4; 1391=8.833; p<0.05$). According to the results of Tukey HSD analysis which aimed to determine the difference between the averages, the results point out that the KYOD value of the companies with a trading period of 1 year in the stock market is lower than the companies that have been traded for a longer period.

It is seen that the KYOD value is at a low level (approximately 86) in the first KYUR made by the companies following the year they started to be traded on the stock exchange. In the ongoing second-year reporting results, a significant increase toward 90 stands out. In the third year, the upward trend continues, and it is seen that the rate of increase in KYOD has decreased even though it has exceeded the value of 90. In the fourth year, it was observed that the KYOD value dropped a little and fell to value of 89. It can be interpreted that the reason for this is that the companies have a higher level of sensitivity in terms of compliance with the principles in the first 3 years following the IPO, and then they start to behave more flexibly in their

handling of the principles and processes compared to the first three years. Therefore, in the fourth year, we can say that the sensitivity of the listed company to comply with the KYI, has decreased compared to its first 3 years of public service. When we look at the following years (5+ years), we can say that the company has started to make compliance with KYI a management culture, so corporate governance development continues, but the improvement has turned into a well-established upward trend, although the rate of increase in KYOD has slowed down.

5.2.2. KYPS Value Analysis and Findings by Trading Duration on the Stock Exchange

In the one-way analysis of variance, it was found that there was a statistical difference between the mean KYPS values of the companies according to their years of existence in the stock market ($F_4; 1391=18.958; p<0.05$). According to the results of the Tukey HSD analysis, the average values of the companies 1 year after they started to be traded on the stock exchange were lower than the other years.

After going public, new investors are formed in the stock market, and issues such as the protection of the rights of new shareholders, the distribution of profits, and the correct execution of processes such as the general assembly

Table 7. KYPS Value Comparison by Trading Duration on the Exchange

BYear	N	KYPS	Std.Deviation	Sd	F	p
1	69	87.29	6.74	4; 1391	18.958	0.000
2	23	91.58	3.43			
3	18	90.07	5.20			
4	18	91.01	3.54			
5+	1265	91.76	4.04			
Total	1393	91.50	4.32			

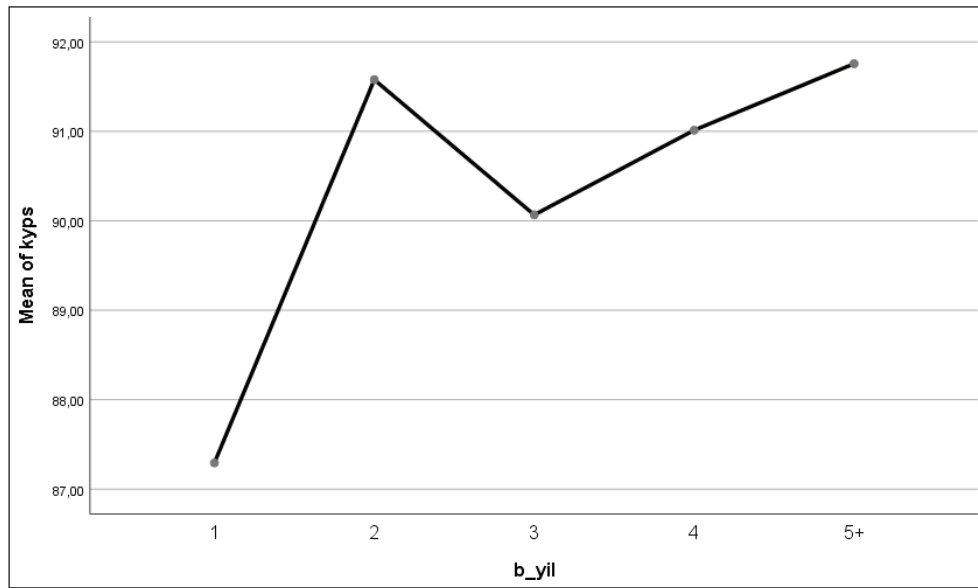


Figure 2. KYPS Value Change Chart by Trading Duration on the Stock Exchange.

are handled most sensitively. Therefore, as a publicly traded company, the KYPS value for the shareholders is 87 in the first year after the report, while it rises to approximately 92 in the second year. In the third year, it regresses to the 90s. The decrease in the KYPS value, which is noticeable in the third-year reporting after the first two years, may be the result of the flexibility of the sensitivity in the first 2-3 years after the IPO. However, as in the general trend, we can say that the upward trend in KYPS value has entered a relatively slow but continuous recovery process since the fourth year.

5.2.3. KYKA Value Analysis and Findings by Trading Duration on the Stock Exchange

It was found that there was a statistically significant difference between the averages of KYKA values according to the years of being in the stock market. ($F_4; 1390=3.097$; $p<0.05$). According to the Tukey HSD multiple comparison tests, the average values of the companies 1 year after they started to be traded on the stock exchange were lower than the other years. In addition, the average obtained as a result of being in the stock market after 4 years was lower than the average of 2 and 3 years of being in the stock market.

Public Disclosure is an important section for publicly traded companies such as the Shareholders Section. Particularly, the section value for public disclosure, which is in the range of 90-96, draws attention to the fact that KYKA is quite high. Since KAP notifications are always handled with the most precision starting from the public offering process, KYKA already starts with a relatively high level of maturity with a value above 90 even in the first year reporting. In the second and third years, it rises to the 95-96 range and remains quite high. However, the KYKA value also decreases in the fourth year and reaches 92 levels. The reason for this can be interpreted as the stretching of the sensitivity shown by the companies in the first 2-3 years after the third year. Afterward, starting from the fourth year and for companies with 5+ years, the KYKA value continues to develop in the range of 92-93 even though the rate of increase decreases.

5.2.4. KYMS Value Analysis and Findings by Trading Duration on the Stock Exchange

In the results of a one-way analysis of variance regarding whether there is a difference between the averages of the KYMS values according to the period of trading on the

Table 8. KYKA Value Comparison by Trading Time Stock the Exchange

BYear	N	KYKA	Std. Deviation	Sd	F	p
1	69	90.07	8.37	4; 1390	3.097	0.015
2	23	95.07	7.84			
3	18	95.18	8.50			
4	18	92.22	9.22			
5+	1264*	92.67	7.49			
Total	1392	92.61	7.60			

* Since this section is missing in a company report, the number is one less than the other sections.

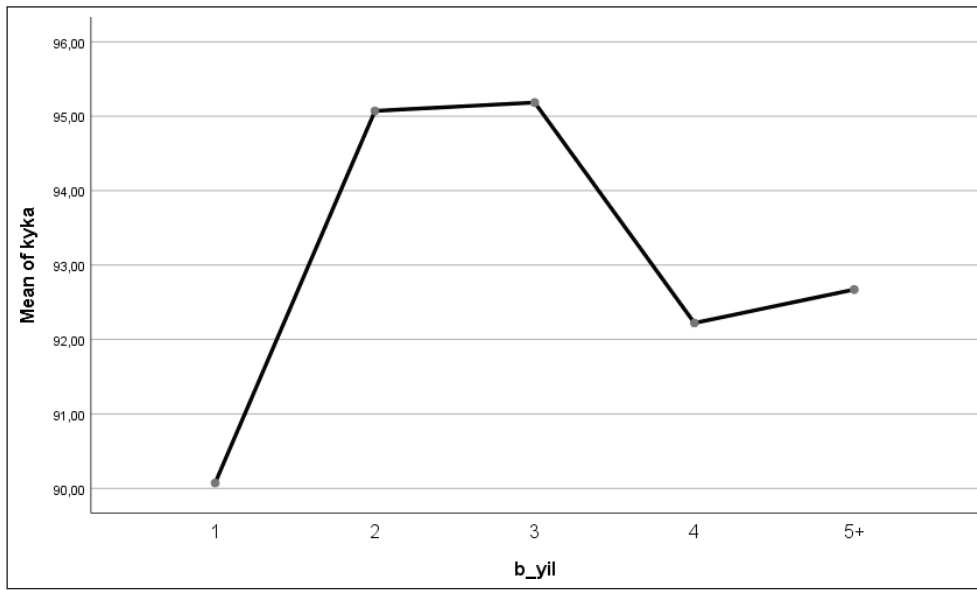


Figure 3. KYKA Value Change Chart by Trading Duration on the Stock Exchange

Table 9. KYMS Value Comparison with the Last Year in the Stock Exchange

BYear	N	KYMS	Std. Deviation	Sd	F	P
1	69	89.21	8.35	4; 1391	3.573	0.007
2	23	88.16	9.72			
3	18	89.71	10.61			
4	18	88.76	10.64			
5+	1265	91.71	7.63			
Total	1393	91.47	7.82			

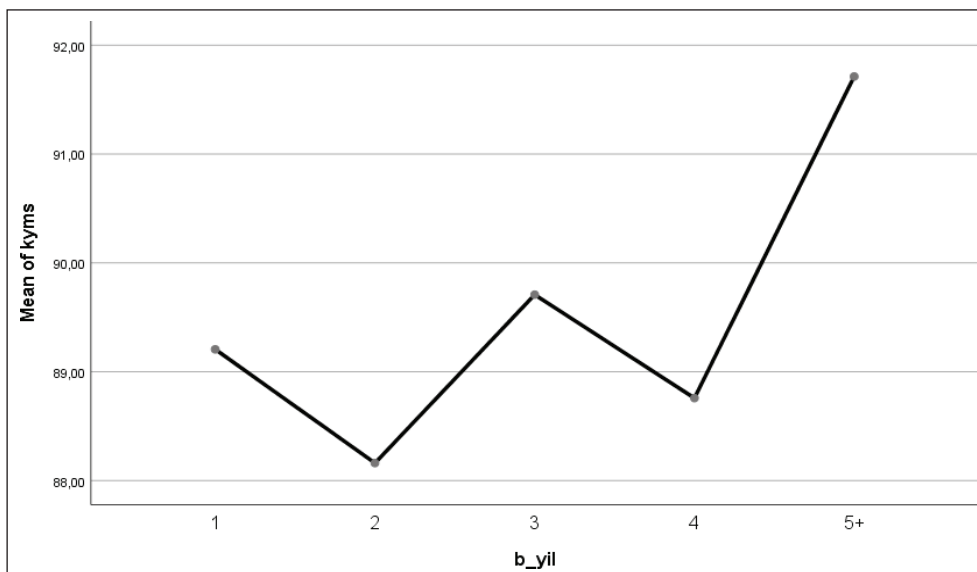


Figure 4. KYMS Value Change Chart by Trading Duration on the Stock Exchange.

Table 10. KYYK Value Comparison by Trading Duration on the Stock Exchange

BYear	N	KYYK	Std. Deviation	Sd	F	p
1	69	80.71	7.14	4; 1391	5.746	0.000
2	23	82.41	5.51			
3	18	84.12	5.46			
4	18	83.07	6.52			
5+	1265	84.10	5.91			
Total	1393	83.89	6.01			

stock exchange every year, it was found that there was a statistical difference between the averages ($F_4; 1391=3.573$; $p<0.05$). According to the Tukey HSD analysis, the average values in the first four years were lower than the values of being traded in the stock market for 5 years or more.

If we look at the Stakeholders section of the KYI, we see the KYMS value in the range of 88-92. While KYMS was in the range of 89-90 in the first year, it draws attention as the only value that decreased in the second year and regressed to 88 and again increased to the 89-90 band in the third year. In the fourth year, a downward trend is also seen in the KYMS value, as in KYOD and other sections. Issues related to stakeholders require radical changes that will take time, such as institutional transformation, as they regulate the rights and conditions of the affected company and employees, social responsibility, etc., which affect customer satisfaction, production and quality processes, supplier relations, organization, and human resources. Therefore, while the fourth year is in the range of 88-89, a significant improvement is remarkable with an increase to approximately 92 as it progresses to 5+ years.

5.2.5. KYYK Value Analysis and Findings by Trading Duration on the Stock Exchange

According to the results of a one-way analysis of variance, a statistically significant difference was found between the averages of KYYK values according to the years of trading in the stock market ($F_4; 1391=5.746$; $p<0.05$). According to the Tukey HSD multiple comparison tests, it was seen that the mean values increased as the years increased in the KYYK values.

When we look at the results of the KYI regarding the BoD, it is seen that it is relatively lower than the other sections in the 80-85 value range. In the second and third years, it rises to a value in the range of 84-85 with a significant increase. However, although the decrease in the KYYK value in the fourth year draws attention, it barely reaches the level of 83. After 5+ years, it rises above the value of 84 with an established upward trend and continues to rise towards the value of 85. The maturity level and values of the KYI for the BoD stand out as the weakest part in compliance with the KYI.

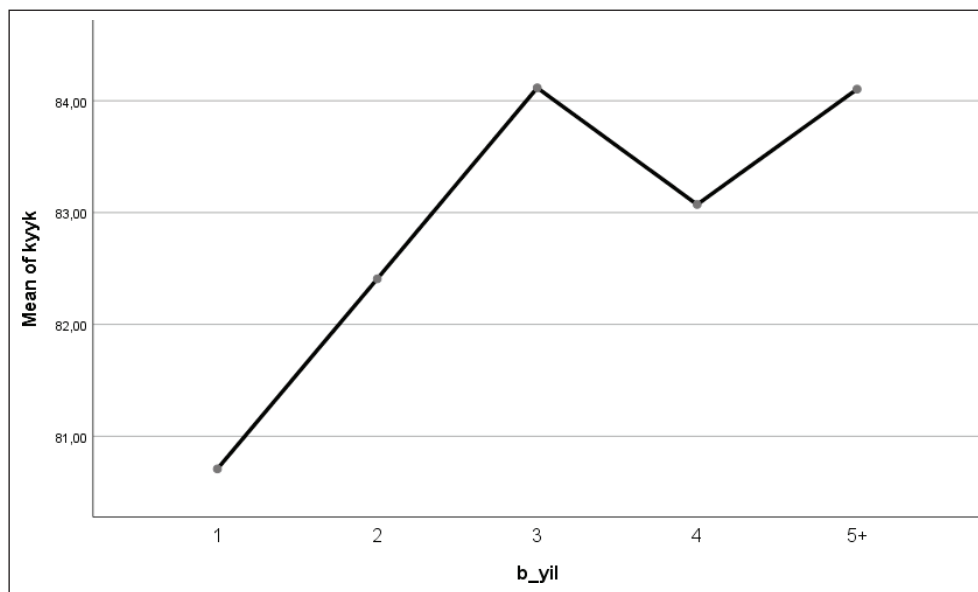


Figure 5. KYYK Value Change Chart by Trading Duration on the Stock Exchange.

Table 11. Values of KYOE and Maturity Indices for Corporate Governance Subsections by Years for All Companies and Sectors

2018-2021 Section KYOE and Averages (KYOE)	2018				2019				2020				2021			
	KYPSOE	KYKAOE	KYMSOE	KYYKOE	KYPSOE	KYKAOE	KYMSOE	KYYKOE	KYPSOE	KYKAOE	KYMSOE	KYYKOE	KYPSOE	KYKAOE	KYMSOE	KYYKOE
All Companies Avg. =KYOE	91.79	92.20	91.49	83.94	91.81	92.64	91.44	83.88	91.58	93.13	91.79	84.12	90.77	92.33	91.14	83.49
	89.10				89.12				89.39				88.67			
Industrial Avg. =KYOE	91.89	91.70	93.14	83.83	92.01	92.29	93.12	83.77	91.73	92.91	93.24	83.93	91.01	92.43	92.54	83.29
	89.21				89.36				89.52				88.89			
Financial Avg. =KYOE	91.85	92.64	90.02	84.18	91.98	93.03	89.99	84.17	91.80	93.69	90.35	84.30	91.19	92.93	89.89	84.15
	89.09				89.21				89.43				88.97			
Services Avg. =KYOE	91.50	93.02	89.93	83.30	91.83	93.52	89.72	83.74	90.75	93.16	90.86	83.82	89.56	91.18	90.27	83.03
	88.78				88.68				88.94				87.79			
Technology Avg. =KYOE	91.40	91.25	91.29	85.42	89.09	90.74	91.07	83.56	91.82	91.48	91.36	85.54	91.05	92.53	90.23	83.24
	89.25				87.86				89.47				88.56			

5.2.6. Maturity Indices and Analysis

The values obtained in the calculations of KYOE 2018-2021 are given in the table above. In Figure 6 below, the trend of KYOE values by years based on all companies and sectors is seen. In 2021, when the public offering is intense (see Table 4), a significant decrease is observed in all sectors and the general index.

When the 2018-2021 values of the Corporate Governance section indices (KYPSOE, KYKAOE, KYMSOE, KYYKOE) are examined, the trends seen in Figure 7 emerge. For the same reason, there is a downward trend in the indexes of all sections of the KYI, due to the high number of new companies that went public in 2021.

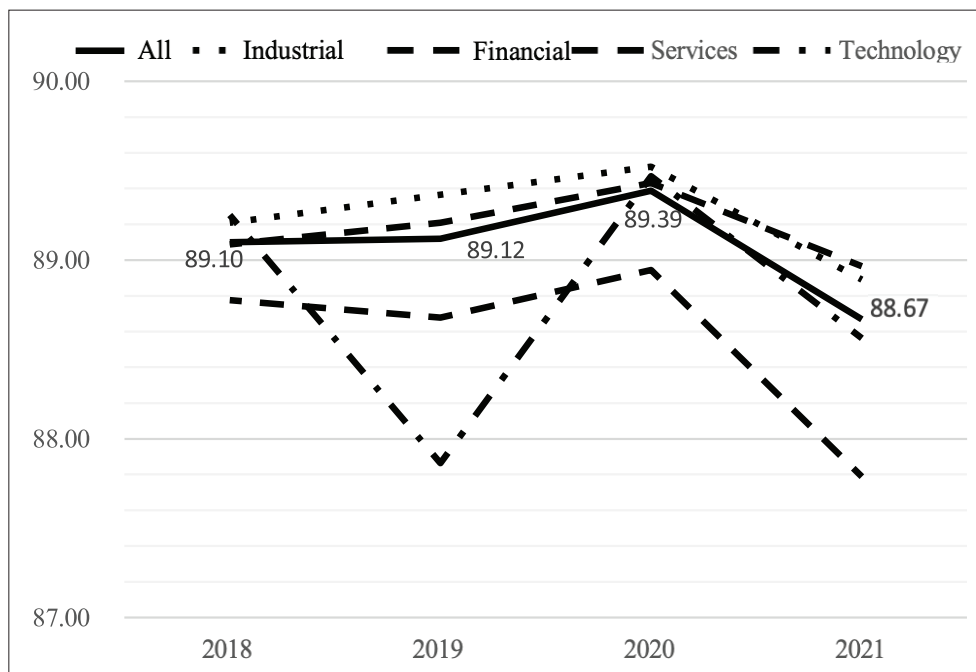


Figure 6. Corporate Governance Maturity Indices for All Companies and Sectors. (The values of both graphs can be viewed in the table above.)

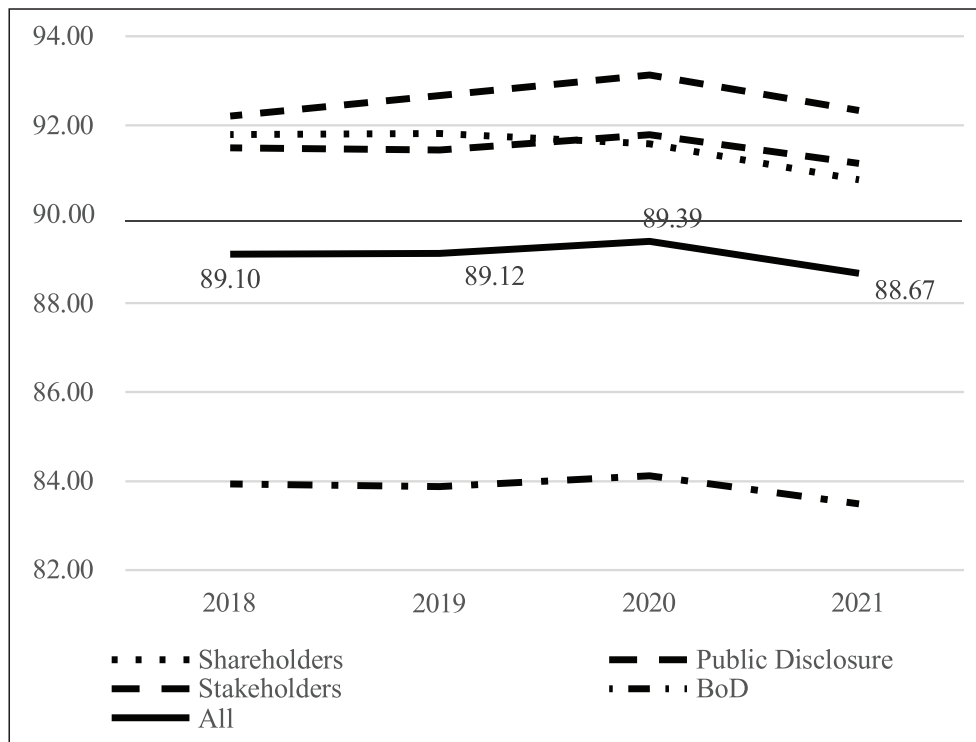


Figure 7. Section KYOE for All Companies.

6. CONCLUSION, DISCUSSIONS AND RECOMMENDATIONS

In this study, the development of corporate governance regulations and practices in Turkish capital markets was examined, and it was aimed to measure the compliance level of listed companies with the non-mandatory KYI and their changes over the years and to investigate the effect of the companies' trading duration on the corporate governance maturity levels. Thus, the study to add a different dimension to academic studies on corporate governance.

Within the scope of the study, the KYUR notifications announced by the listed companies in the KAP between the years 2018-2021 were examined. The KYOE calculation model has been developed as an index value for the measurement of the level of compliance with KYI.

Previous studies on corporate governance in our country generally discuss relationship between the corporate governance rating scores of the companies in the XKURY index and their stock market performance or financial performance. However, when the literature on corporate governance is analyzed at the global level, it is seen that different studies are carried out with a wider perspective compared to our country, and there are studies on the measurement of corporate governance maturity as well as studies on the measurement of the relationship between good corporate governance practices and market value and return. Nonetheless, it is seen that these studies are based on surveys conducted with companies rather than structured data

sets that examine corporate governance practices every year, revealing the current level of corporate governance practices of the countries or regions within the scope of the research, but do not reveal the changes in compliance over time and the causes and consequences of these changes.

For the first time in our country, the level of compliance of listed companies with the general principles and the sections discussed under four headings was measured with the KYOE model is provided with this study, and it is thought that this model can be used as a metric in future academic studies. In addition, it is considered that it can be used as an index value by the regulatory and supervisory institutions of our capital markets both in supplying value-added data to market stakeholders and in monitoring the corporate governance maturity levels of listed companies. By using the aforementioned methodology, the Corporate Governance Maturity Level scores, which will be calculated on a company basis, can also be compared with the sectorial index values, thus giving direction to the corporate governance structures of the listed companies.

As a result of the study, it has been seen that the KYOE values of the listed companies tend to increase in 2018-2020 and decrease in 2021 due to the high number of companies that have started to be traded on the stock exchange. The increase in corporate governance maturity of listed companies every year is also consistent with the results of the Akinkoye and Olanmi (2014) study, which used a methodology similar to the index methodology in our study.

When analyzed on a sectorial basis, the KYOE value for industrial companies is above the stock market average, while it is below the stock market average in the services sector.

When analyzed in terms of the KYI sub-sections, it has been determined that the index value of public disclosure is higher than other sections, and the index value of the BoD section is the lowest.

In addition, the effect of the duration of trading on the stock exchange after the public offering on the Corporate Governance Maturity Level was also examined in the study. Since it is the first academic study conducted in our country on the effect of the companies' trading time on the stock exchange on the corporate governance maturity levels, it is considered that it will both contribute to the literature on the institutionalization process of stock exchange companies and serve as guidance future academic studies.

By analyzing the maturity levels of the general and sub-sections of the KYI, depending on the period they are traded in the stock exchange significant results were obtained. In general, after the companies went public, there was an improvement in the Corporate Governance Maturity Level based on the previous year in the stock market. There has been an increase in the level of corporate governance compliance in the first 3 years after the public offering. A decrease was observed in the 3rd and 4th years, and after the 5+ years, although the rate of increase in the first three years decreased, it was observed that there was a regular development trend. Since the number of new public offerings was high in 2021, the effect of new companies that lowered the Corporate Governance Maturity Level and the overall index was clearly seen.

When KYI are analyzed based on sub-sections, it can be seen that there are different trends in their development. It has been observed that the principles regarding public disclosure and transparency, as well as shareholders, have been handled more sensitively by companies since the public offering and their compliance values are higher. It is noteworthy that compliance with the principles regarding stakeholders has achieved a steady rise over a longer period. On the other hand, the level of maturity in the section regarding the BoD is at a lower level. To determine the reasons for this situation, it is thought that issues such as the relationship between executive roles and the BoD of listed companies, the structure and functions of the board in family companies, effects of various professions, and female/male representation ratio in the BoD, the independence of the members, the working principles and practices of the subcommittees should be considered among the topics that can be researched in future academic studies.

The findings of this study shows that it is important to examine the effect of the period of trading on the stock exchange on the Corporate Governance Maturity Level from a sectorial perspective. However, because the sectorial distribution of KYUR numbers published in the 1st, 2nd, 3rd, and 4th years following the public offering of companies in the current situation is not sufficient for analysis,

this examination could not be made. This is an important issue for future research and can be among the potential research topics for the future that the development of KYOD is analyzed separately, both based on the general average and the KYI sub-sections, by sector, when the number of KYUR notifications of the companies that have passed 1-4 years since they started to be traded on the stock exchange increases and the data size reaches a sectorally analyzable size. There is abundant room for further progress in this area and it could be argued that our findings on the effect of the period of trading on the stock exchange on the Corporate Governance Maturity Level of the companies will also contribute to the foreign literature.

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