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ISTANBUL OKAN UNIVERSITY

INSTITUTE of SOCIAL SCIENCES

IMPACT OF APPLICATION OF CORPORTAE GOVERNANCE RULES ON THE PERFORMANCE OF BANKING SECTOR IN TURKEY

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DOCTORAL DISSERTATION

DEPARTMENT OF BUSINESS ADMINISTRATION

PhD OF BUSINESS ADMINISTRATION

Advisor

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DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

Dedication

I wish to dedicate this thesis to my lovely wonderful wife **Naima**, my daughters **Waad**, and **Shahed** and my sons **Mohamed**, and **Yousef** who have never failed to give me their wonderful love and support.

I wish also to dedicate this thesis to soul of my father, and my mother.

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Table of Contents

Contents

ÖZET

KURUMSAL YÖNETİŞİM UYGULAMALARININ TÜRK BANKACILIK SEKTÖRÜNÜN PERFORMANSI ÜZERİNE ETKİLERİ

Günümüz para ve sermaye piyasalarında yaşanan krizler sonucu ortaya çıkan finansal çöküşlere karşı önlem almada, bilim adamları ve akademisyenler dikkatlerini kurumsal yönetişim uygulamaları üzerinde toplamışlardır.

Tüm sektörler için geçerli olan tek bir kurumsal yönetişim modelinin geçerli olmaması, finansal olmayan sektörlerden farklı özellikler taşıması, bankacılık sektöründeki kurumsal yönetişim uygulamalarına ayrı bir önem ve dikkat kazandırmaktadır.

Bu nedenle ülke kalkınmasında ve ekonomik gelişmede sahip olduğu önemli rolü nedeniyle Türkiye Finansal Piyasalarında kurumsal yönetişim kurallarının uygulanmasına yönelik bankacılık sektörüne özel önem verilmiştir.

Bu araştırmanın amacı, kurumsal yönetim kurallarının uygulanmasının Borsa Istanbul'da (BIST) işlem gören Türk bankalarının, bankacılık finansal performansı üzerindeki etkisini belirlemek, yönetişim kurallarının ne ölçüde uygulandığını analiz etmektir. Bu amaçla, Sermaye Piyasası Kurulu (SPK) ve Bankacılık Düzenleme ve Denetleme Kurumu (BDDK) tarafından yayımlanan uygulamaya yönelik açıklama gereklilikleri ile bankaların yıllık raporlarında yer verdikleri açıklamalar karşılaştırılarak, kurumsal yönetişim uygulamalarının bankaların finansal performansına yansımasının araştırılması, çalışmanın amacını oluşturmaktır.

Çalışmanın amacına ulaşabilmesi için araştırmacı, 2014-2018 döneminde BIST'te işlem gören bankaların yıllık raporlarında yayınlanan kurumsal yönetim puanlarını ve derecelendirme kuruluşları tarafından yayınlanan kurumsal yönetim derecelendirme raporlarını kullanmaktadır.

Çalışmada, Borsada işlem gören bankaların kurumsal yönetim kural ve ilkelerini ne ölçüde uyguladığını ölçmek için, derecelendirme kuruluşları tarafından dört ana bölüme göre ölçülen kurumsal yönetim puanları kullanılmıştır; hissedarlar, kamuyu aydınlatma ve şeffaflık, menfaat sahipleri ve yönetim kurulu.

Bankacılık mali performansı, “Varlık Getirisi” (ROA – Return on Assets), “Özkaynak Kârlılığı” (ROE – Return on Equity), P”ay Başına Kazanç” (EPS – Earnings Per Share) ve Fiyat-Kazanç oranı (PE – Price Earning Ratio) ile ölçülmüştür.

Bu araştırmada önerilen örneklem BIST'te işlem gören Türk Bankacılık Sistemi’ndeki bankalarıdır. Ancak bazı bankaların kurumsal yönetim derecelendirme raporunun bulunmaması nedeniyle bazı bankalar, hedef örneklemden çıkarılmıştır.

Çalışmanın hipotezlerini test etmek ve analiz etmek için iki farklı yöntem kullanılmaktadır; birinci yöntem, “Pearson korelasyonu”dur, kurumsal yönetim kuralları ile bankacılık finansal performansı arasındaki ilişkiyi incelemek için kullanılmaktadır. İkinci yöntem ise kurumsal yönetim kurallarının bankacılık finansal performansı üzerindeki etkisini incelemek için kullanılan “panel regresyon teknigi”dir.

Çalışma sonuçları, seçilmiş örnek bankaların SPK ve BDDK ilkelerine göre sağlam bir kurumsal yönetişim ilkelerini uyguladığını göstermektedir. Bankalar, derecelendirilen tüm bölümlerde bu ilkelerin % 92,61'ini ve kurumsal yönetime uyumu uygulamıştır.

Çalışma, ROA ve ROE ile ölçüldüğünde kurumsal yönetim kuralları ile bankacılık finansal performansı arasında bir ilişki olduğunu bulmuştur. EPS ve PE ile ölçüldüğünde ise kurumsal yönetişim kuralları ile bankacılık finansal performansı arasında bir ilişkinin bulunmadığı sonucu bulunmuştur.

Çalışmanın sonuç analizinde farklı sonuçlar elde edilmektedir. Kurumsal yönetim kuralları, bankacılık finansal performansı üzerindeki farklı etkiler göstermekte, bazen olumlu veya olumsuz, güçlü veya zayıf, statik olarak önemli veya önemsiz etkiler söz konusu olabilmektedir.

Çalışma, kurumsal yönetim derecelendirme puanlarının önemine daha fazla dikkat edilmesi gerektiğini, kurumsal yönetim kurallarının Türkiye'deki işletmelerin finansal performansı üzerindeki etkisini daha iyi anlamaya yardımcı olabileceğini önermektedir. Ayrıca çalışma, kurumsal yönetim ilkelerinin finansal performans üzerindeki etkisini ortaya çıkarmak için bu çalışmada aynı değişkenlerin diğer endüstrilerle kullanılması ve sonuçların karşılaştırılmasıyla daha fazla çalışma yapılmasını önermektedir.

Anahtar Kelimeler: Kurumsal Yönetim, Bankacılık Finansal Performansı, Bankacılık Sektörü, Panel Regresyon, Türkiye.

Tarih: July, 2021

ASTRACT

IMPACT OF APPLICATION OF CORPORTAE GOVERNANCE RULES ON THE PERFORMANCE OF BANKING SECTOR IN TURKEY

The importance of corporate governance has been increased in recent decades all over the world, by scientists, academics and organizations interested in corporate governance, especially after the crises and financial collapses that have occurred around the world.

The corporate governance at banking industry is different from the other non-financial sectors, and needs specific attention, and no one model of corporate governance that apply for all the industries. Therefore, Turkey took care of corporate governance and paid special attention to the banking sector because of its important role in the development and economy of the country.

The purpose of this research is to identify the impact of implementing corporate governance rules on the banking financial performance of Turkish banks listed in Borsa Istanbul (BIST). In addition, to explore the extent to which these governance rules are being implemented. through comparing the disclosures of these banks received in their annual reports with the disclosure requirements issued by Capital Market Board (CMB), and Banking Regulation and Supervision Agency (BRSA). As well as, to find out the relationship between implementing corporate governance rules with the banking financial performance of these banks.

In order to achieve the purposes of this study, the researcher employ corporate governance scores as published in annual reports of listed banks in BIST, and corporate governance rating reports as published by the rating agencies during period of 2014-2018.

To measure the extent to which listed banks are implementing the corporate governance rules and principles, the study utilized corporate governance scores that measured by rating agencies based on four main sections namely; shareholders, public disclosure and transparency, stakeholders, and the board of directors.

The banking financial performance has been measured through financial ratios Return on Assets (ROA), Return on Equity (ROE), Earnings Per Share (EPS), and Price–Earnings ratio (PE).

The suggests sample in this research are Turkish banks listed in BIST. But due to unavailable corporate governance rating report of some banks, since it is not mandatory, the sample excluded some banks from the target sample.

To test and analyze the hypotheses of the study two different methods were used; Pearson correlation employ to examine the relationship between corporate governance rules and banking financial performance. While the second method was the panel regression techniques employ to examine the impact of corporate governance rules on banking financial performance.

The study shows that the selected sample banks applying sound corporate governance according to the CMB, and BRSA principles. The banks implemented 92.61% of these principles, in all rated sections, and compliance to the corporate governance.

The study finds that there is a relationship between corporate governance rules and banking financial performance when measured by ROA, and ROE. While there is no relationship between corporate governance rules and banking financial performance when measured by EPS, and PE.

The results analysis of the study provided different results. It shows various impact of corporate governance rules on banking financial performance, this impact sometimes positive or negative, strong or weak, statically significant or not significant.

The study recommends that there should be more attention to the important of corporate governance rating scores may be help to better understanding to the impact of corporate governance rules on firm financial performance in Turkey. Moreover, the study recommends that more studies may be done by using the same variables in this study with other industries, and comparing the results to find out the impact of applying corporate governance principles on financial performance.

Keywords: Corporate Governance, Banking Financial Performance, Banking Sector, Panel Regression, Turkey.

Date: July, 2021

ABBREVIATIONS

CG : Corporate Governance

FRC : Financial Reporting Council

OECD : Organisation for Economic Corporation and Development

CMB : Capital Market Board

SDIF : Savings Deposit Insurance Fund

BRSA : Banking Regulation and Supervision Agency

BAT : Banks Association of Turkey

TBB : Türkiye Bankalar Birliği

SOX : Sarbanes-Oxley Act

CML : Capital Markets Law

BIST : Borsa Istanbul

XKURY : Corporate Governance Index

BCBS : The Basel Committee on Banking Supervision

TCC : Turkish Commercial Code

ROA : Returns on Assets

ROE : Returns on Equity

EPS : Earnings Per Share

PE : Price–Earnings ratio

CGI : Corporate Governance Index

LIST of FIGURES

LIST of TABLES

LIST of APPENDIXES

Chapter 1. Introduction

The term corporate governance is one of the terms that has been rapidly spreading internationally due to the limitations of laws and regulations that govern the conduct of business and business activities, which led to many cases of bankruptcy and financial crises of many companies and affected a large number of shareholders and investors.

Thus, the world began to pay attention to corporate governance and to apply its standards and rules in many economies of the world, especially after many economic crises and successive collapses, and a practical vision of how corporate governance and rules were established in order to avoid any future collapses.

Now a day's corporate governance is an important subject for all local and global companies, as the financial crises suffered by the global economy put the concept of corporate governance a priority.

Since 1980s, Corporate governance studies become more interest from academics scholars, policymakers, and practitioners (Bektas & Kaymak, 2009a) .The case of Barings Bank of England's oldest established banks was the first failure in 1995,corporate governance have been a main concern to investors and academics when Enron in USA filed for bankruptcy in December 2001. The Enron scandal was followed by scandals of World Com and Tyco in USA, collapse of Maxwell publishing group in UK, widespread banking distress in Korea, cases of Holtzman, Berliner Bank, and HIH in Germany, Ansett Airlines and One Tel in Australia, Credit Lyonnais and Vivendi in France, and Swissair in Switzerland (Mallin, 2013).

Some of the main reasons that led to these scandals was transfer of powers from the board of directors to executive management, which caused tampering, fraud, accounting errors, hidden internal information, misinformation and lack of ethical compliance by the company's administrations, as well as irregularities committed by some global audit offices, prompting the financial community The judiciary is looking for the role of boards of directors, internal Audit committees and executive departments in the organizations (Alhneny & Hyimoue, 2013).

Corporate failures and financial crises related to these scandals have caused to find for methods to eliminate collapses in corporate management. Therefore, the term of corporate governance has arisen. Corporate governance could be a good management process by any organization, considering the interests of all stakeholders at maximum, can work

according to the principles and rules of transparency, fairness, accountability, and responsibility (Bayrakdaroglu, Ersoy, & Citak, 2012). A weak corporate governance could lead to collapses, and scandals, while good corporate governance can help prevent that, and restore stakeholder trust.

Corporate governance laws and regulations focus worldwide on limiting the use of administrative power in the interests of shareholders and enable the performance of boards of directors in such companies, as well as enhancing internal control and follow up the implementation of strategies and defining roles and powers of each of the shareholders, board of directors, executive management, and stakeholders to emphasize the importance of transparency and disclosure. The concept of corporate governance is the reformist approach and a new working mechanism that will entrench the integrity of financial transactions with public interests and parameters setting special rights of shareholders.

Board of directors chosen by shareholders supervises top management to make certain they are not working for self-interesting or short run view in detriment of stakeholders.

Over the last two decades, good corporate governance principles and rules have been developed to avoid corporate bankruptcy and financial crises. In addition to ensuring integrity, trust, accountability, responsibility, performance and sustainability

The safety of firms, markets and financial institutions is necessary to keep confidence and economic activity, and protect the interests of investors and stakeholders (Saatci, 2011).

There has been interest in the worldwide to develop the principles and rules of corporate governance and organize the relationship between management, boards and shareholders in addition to protect all stakeholders interests.

1.1 Overview of Development of Corporate Governance

Due to the financial crisis and scandals that occurred in last two decades in many countries all over the world, the attention to the role and important of Corporate Governance (CG) increased. The laws, and regulations are different from country to another. But in general, interest of all countries introducing CG codes that enhance applying sound CG.

1.1.1 Corporate Governance in UK and Europe

In UK, the starting of developing corporate governance have been issued to enhance corporate governance practices and mechanisms in the UK corporations was Cadbury Report (1992),then followed by several reports such as the Greenbury Report (1995) ,the Hampel Committee reviewed the implementation of the Cadbury and Greenbury Committee recommendations and published their report (1998),and the Combined Code (2003) was revised considering the Higgs and Smith reviews. Many recommendations of these reports were revised many times to explain the different aspects of corporate governance, the UK Corporate Governance Code (2010)(Mallin, 2013; A Zagoub, 2016).

The Financial Reporting Council (FRC) is responsible for promoting high standards of corporate governance, and the last reviews issued the 2018 UK Corporate Governance Code (the 2018 Code).This code focuses on how corporations implemented the principles and rules of corporate governance, in way that make shareholders to evaluate how extent the principles and rules have been implemented(Council, 2018; Mallin, 2013).

In EU Winter Report (2002), making various corporate governance recommendations for listed companies, such as publishing an annual corporate governance statement in their accounts and on their websites, as well as detailed disclosure of individual directors' remuneration.

1.1.2 Corporate Governance in USA

In USA, after financial scandals in 2001, further reforms in corporate governance that have had a great effect in the USA, and worldwide. The changes are embodied in the Accounting Industry Reform Act 2002, widely known as the Sarbanes–Oxley Act(2002), (Mallin, 2013).

1.1.3 Corporate Governance at The Global Level

Globally, in 1999 the Organisation for Economic Corporation and Development (OECD), published its Principles of Corporate Governance, and revised in 2004. OECD Principles have played a big role to help all countries in the development of corporate governance codes, for applying an effective corporate governance system.

1.1.4 Corporate Governance in Turkey

In Turkey, based on the purpose of improving the corporate governance regulations in Turkish listed companies, Corporate Governance Principles has been presented in 2003, and revised it in 2005, by the Capital Market Board (CMB) in accordance with the OECD publications of 1999 and 2001(Boyacioglu & Akdogan, 2010). Compatible with international standards and practices on corporate governance the CMB presented and classified these Principles into four sections: shareholders, public disclosure and transparency, stakeholders and board of directors to be applied for all sectors(CMB, 2005).

In 2005 and early 2006 Turkey agreed to participate in OCED study that known as a (Pilot study). The study to encourage member states to apply corporate governance principles. In OECD report of a pilot study, in many respects Turkey is better than many other countries to avoid corporate governance problems, and developing CG principles because:

- Establishing, high quality corporate governance standards (including audit standards).
- Significant improvement in transparency, especially in financial reporting sector.
- There is a positive and noticeable trend to apply the principles, and rules of corporate governance.
- Focus on remaining existing gaps and risk areas to implant required reforms of corporate governance principles and take steps to strengthen them (OECD, 2006a).

Turkey obtained high marks scores from the OECD for CMB and its regulatory reforms. According to the pilot study report (OECD, 2006) Turkey has a strong regulatory framework for corporate governance. The report pointed out some recommendations for reviewing, such as Turkish Company Law for more disclosure, and centralized the Turkish Accounting Standards according to the Turkish Accounting Standards Board (Arsoy & Crowther, 2008).

1.2 The Importance of Corporate Governance

In general, the importance of corporate governance has been increased in recent decades domestically and internationally, by scientists, academics and international

organizations interested in corporate governance, especially after the crises and financial collapses that have occurred around the world. Furthermore, the impact of corporate governance on corporate performance and protection of shareholders' interests has led to increasing corporate governance attention by researchers and policymakers.

Good corporate governance helps to ensure best choice in corporation decisions, with high performance management, and prevents managers possession corporation resources(Atuahene, 2016; Nam & Nam, 2004).

In addition, good corporate governance is beneficial to all stakeholders and contributes to increasing the efficiency, and sustainability of the corporation.

1.3 Models of Corporate Governance

Models of corporate governance differ from country to another, and from firm to another. In addition, that the success of various corporate governance frameworks and principles are influenced by different factors that are specific to each country, such as regulation frameworks, cultures factors, industry type, and market factor (Maher & Andersson, 1999).The terms of transparency, fairness, responsibility, and accountability are the main terms accepted in all global corporate governance approaches(CMB, 2005).

1.4 Corporate Governance in Banking Industry

The banking industry plays an important role in the development and prosperity of countries, for the sector to operate effectively, it is necessary to build a proper banking system, and it is important to know the performance of banks and their various activities which are differ from the activities of other economic institutions in order to understand the nature of the banking system(Handa, 2018; SOBA, EREM, & CEYLAN, 2016). Therefore, the stability and development of the economy in any country, depends on the stability and development of the banking system of this country.

The importance of the corporate governance at banking industry are different from the other non-financial sectors, and therefore requests specific attention, and no one model of corporate governance that apply for all the industries (OECD, 2006b; SOBA et al., 2016; Standard &Poor's, 2002). The banking industry complexities and differences in their process make different of their principles, rules, operations, and international

standards from other industries, and need to special discussion, and attention from governance research(Handa, 2018).

The corporate governance principles, and regulation designed for all sectors that do not considering sectors differences may be led to negative effects(SOBA et al., 2016).

Overall, the banking industry requests more, and special attention. Because good banking system causes development and growing of economic. Specialists, after international financial scandals, realized that banking sector needs high degree of supervision and good governance.

Good corporate governance in banking sector can reduce the investment risk of investors, and lower the cost of capital, that will offer continues flow of outside financial resources, and encourages them to investment into the country (Ahmed, Zannat, & Ahmed, 2017)

1.5 Corporate Governance and Performance

Many studies make attention about the link between corporate governance and performance. The efficient of the bank may result higher performance (Ahmed et al., 2017; Ajanthan & Balasundaram, 2013).Some of the reasons that make corporate governance in banking industry is important for performance, were introduced by(Ajanthan et al., 2013).First, corporate governance may lower the expenses of other parties' operations, and "self-dealing". Such reduction in these operations should led to enhance performance. Second, the cost of capital will be less for the banks with better corporate governance. Third, good corporate governance in banks can contribute for more effective and simplified processes.

1.6 The Banking Industry in Turkey

Turkey took care of corporate governance after many economic crises and collapses of some major companies around the world and paid special attention to the banking sector because of its important role in the development and economy of the country.

During 1990's, the rules, laws, and overseeing of banking industry in Turkey were a segmented structure. Issuance, implementation and follow-up of the regulations on banks is the responsibility of The Undersecretariat of Treasury. While the responsibility of Central Bank of Turkey for off-site overseeing and was managing Savings Deposit

Insurance Fund (SDIF). The Turkish Government, in 2000 started to create separate body to be the only reference and authority in banking industry. The purpose was to enhance the efficiency of legislation, and supervision and, create an independent decision-making a strategy. Thus, Banking Regulation and Supervision Agency (BRSA) was created according to Banks Act Nr. 4389 and started activity in August 2000(BRSA, 2015).

Based on the Banking Law the regulations, rules, and laws should specify by BRSA, taking in consideration the compatibility with regulations and rules provided internationally, particularly developed countries, to ensure protection the rights of all stakeholders of corporations such as public firms and banks that play important role in managing of the funds of third parties. All banks must follow these regulation and principles with reference of the Banking Law .These principles, and regulations issued by BRSA should consider the views and opinions of the Banks Association of Turkey (BAT) (Türkiye Bankalar Birliği (TBB)), the Association of Turkish Participation Banks and the CMB. (Hanli & Gunal, 2006).

1.7 The research Purpose, and Aims

Due to the major role of banking sector to contribute to the growing and development of economy of countries. The researchers, and policymakers gave more attention recently to corporate governance and its role in improving shareholders value and firm performance, and due to its important in financial industry of the country, therefore, it has necessary to measure the influence of CG on banks performances(Ahmed et al., 2017; Handa, 2018).

Turkey as well, make a special attention to CG in banking sector, to get sound corporate governance practices, avoid risk of scandals and financial crises, and to be able to compete with the international financial markets. Applying corporate governance principles and rules according to the regulations presented by the authorized institution one of the factors that may be led to improve the firm performance, and the relationship between governance and performance one of the important issues that discussed by researchers, in addition many studies focused in same subject from different perspectives.

The purpose of this research is to identify the impact of implementing corporate governance rules on the performance of Turkish banks listed in Borsa Istanbul (BIST). In addition, to investigate the extent to which these governance rules are being implemented.

Therefore, the research aims to explore the impact of implementing corporate governance rules on the performance of banks, and to investigate the extent to which these principles and rules are being implemented through comparing the disclosures of these banks received in their annual reports with the disclosure requirements issued by CMB, and BRSA. It is also aimed to identify, the variables that represent the corporate governance rules and banking performance. as well as, to examine the relationship between implementing corporate governance rules with performance of these banks.

In addition to the previous objectives, the study aims to detecting the shortcomings of selected banks in terms of applying corporate governance practices.

1.8 The research Objectives

Many previous studies examined the association between CG and financial performance from different views. These studies used various models, methods, sectors, and different variables. Therefor this study is attempt to investigate and evaluate CG rules, and understanding the influences of applying corporate governance practice in deposit banks in Turkey by using different perspective.

In order to achieve the above aims, the following objectives were set for the study:

- Identify the current situation and developments concerning corporate governance in Turkey.
- Identify the corporate governance rules and principles of banking sector in Turkey.
- Analyze and comparing the disclosures of target banks received in their annual reports with the disclosure requirements issued by CMB, and BRSA.
- Identify governance and financial variables that will be used to measure banks performance.

1.9 Research Questions and Hypotheses

In order to achieve the previous aims, and objectives, the thesis addresses the following questions:

1. What are the corporate governance principles and rules in banks in turkey, and have they all applied the same rules or are there any differences? If so why?

2. What are the variables that represent the corporate governance rules and banking performance?
3. Is there any relationship between corporate governance rules and banking financial performance in banking sector in Turkey?
4. Do corporate governance rules have any impact on banking financial performance in banking sector in Turkey?

Hypotheses

In order to answer above questions, some hypotheses were proposed to be tested as a part of the research. These hypotheses are formed as below:

H1: There is no relationship between corporate governance rules and banking performance.

H_{1a}: There is no relationship between corporate governance rules and ROA.

H_{1b}: There is no relationship between corporate governance rules and ROE.

H_{1c}: There is no relationship between corporate governance rules and EPS.

H_{1d}: There is no relationship between corporate governance rules and PE.

H2: There is no impact of corporate governance rules on banking performance.

H_{2a}: There is no impact of corporate governance rules on ROA.

H_{2b}: There is no impact of corporate governance rules on ROE.

H_{2c}: There is no impact of corporate governance rules on EPS.

H_{2d}: There is no impact of corporate governance rules on PE.

1.10 The Structure of The Study

The study contains five chapters. **Chapter one** includes introduction about the study topic, the purpose, aims, and objectives of the research, in addition to the research questions, and the structure of the thesis. **Chapter two** reviews the general literature about corporate governance. It starts with the definitions, and importance of corporate governance, corporate governance principles, and rules, as well as theories, systems of corporate governance, recent developments on corporate governance, and corporate governance in banking sector. **Chapter three** presents an overview about the corporate governance and specifically the banking corporate governance and its special nature. in addition to the foundation and legal frame work of CG Turkey, and the relationship between corporate governance and the performance. **Chapter four** describes the sample, research questions and hypotheses. Also, it explains methods that will be used for chosen

sample, and the data collection. This chapter also defines the variables and shows the descriptive statistics, as well as it introduces the results of the study. **Chapter five** discusses and explains the research results and questions. Moreover, concludes the findings and presenting the contribution of this research, recommendations, and suggestions for future research.

Chapter 2. Concept and Importance of Corporate Governance

2.1 Definition of Corporate Governance

Most of the literature previous studies are agreed about there are no specific definition for CG. The various CG definitions that introduced by scholars, researchers, and literature are presented the same meaning and idea including the basic elements of CG, such as relationships between the corporation's stakeholders, transparency accountability, and systems of control inside the corporation. Therefore, different definitions were introduced to define CG from different perspectives.

Under a narrow definition perspective, the definition of corporate governance highlights on the relationships between the corporation and its shareholders. Such definitions take the view of agency theory(Solomon & Solomon, 2004). This is close to the definition by (Shleifer & Vishny, 1997), they defined corporate governance as "the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment". Also, (Cadbury, 1992) it is stated that "Corporate governance is the system by which companies are directed and controlled"

On the other hand, a broader definition perspective of CG describes the relationships between the corporation and other stakeholders such as: employees, customers, suppliers, bondholders, and take the view of stakeholder theory. the OECD describes corporate governance as: "a set of relationships between a company's board, its shareholders and other stakeholders. Corporate governance provides the structure through which the objectives of the company are set, and the means of attaining those objectives, and monitoring performance, are determined" (OECD, 1999). Similarly, Sir Adrian Cadbury (1999) said

"corporate governance is concerned with holding the balance between economic and social goals and between individual and communal goals"(Iskander & Chamlou, 2000).

According to (Solomon & Solomon, 2004), defines corporate governance as "the systems of checks and balances, both internal and external to companies, which ensures that companies discharge their accountability to all their stakeholders and act in a socially responsible way in all areas of their business".

(Oman et al., 2003) considering macro level, country perspective of CG and declares that "corporate governance comprises a country's private and public institutions which together govern the relationship between the people who manage corporations and all others who invest resources in corporations in the country", also they noted that(Jesover & Kirkpatrick, 2005) defines corporate governance from financial and economics view and states that "corporate governance is a set of rules and applications governing the relations between employees and creditors as well as managers and shareholders; contributes to the growth and financial stability by supporting market confidence, integrity of financial markets and economic efficiency".

Through the previous definitions, the researcher can describe the corporate governance as dealing with the credibility, transparency and responsibility among all the stakeholders of the company to ensure the rights of everyone in the framework of the principles and laws governing it.

2.2 Importance of Corporate Governance

The importance of corporate governance has been increased in recent decades all over the world, by scientists, academics and international organizations, especially after the crises and financial collapses that have occurred around the world.

The role of influence of CG on corporation performance and protection of shareholders interests draw more attention to the important of CG by researchers and policymakers. (Monks & Minow, 2004)indicated that the importance of corporate governance became clear after the financial failures, and crises of several companies in the USA, and elsewhere.

(Claessens & Yurtoglu, 2012, 2013) identified some reasons why corporate governance has become important for economic development in many countries. First, Privatization, contributed to spread CG issue in many countries, so that the private, market-based investment process supported by good CG, is currently more important for economies than before.

Second, due to influence of advanced technology, the opening up of financial markets, and trade liberalization, that led to an increase in domestic and foreign investments. This makes good CG, especially transparency more important to provide investors with all financial statements, to increase investor confidence, encourage competitiveness and improve economic growth.

Third, the increasing role of financial mediators, and the complex financial derivatives in investment operations, due to the mobilization of capital and the increasing size of firms. This series of processes of investment need for good CG. In addition to the other parties who involved in this process such as agents, hedge funds, institutional investors, which led to many steps that increases the degree of asymmetric information and agency problems and makes CG between the firm and its final investor more important.

Fourth, the financial crisis has proved how collapses in CG can harm firms and affect economies. This increasing the need for good CG to prevent such crisis to occur.

A good CG helps to guarantee that firms use their resources in the best way to enhances investor confidence which reduce the cost of capital, and considering the benefits of constituencies, and the communities in which they operate, in addition the boards are responsible to the firms and shareholders. This makes the firms operate for the interests of society.

Good CG increases firm competitiveness, and improve economic growth for the firms and country(OECD, 1999, 2004) . Companies with good CG improve helps to improve country economy and society, and added more value all stakeholders better than companies with weak CG which are may led to job losses, and weaken trust in securities markets (IFC, 2004). Good CG helps to Increase convergence between the benefit of all shareholders, enhancing investor confidence and reducing the cost of capital.

After revised OECD Principles of Corporate Governance in 2004, the importance of good CG increased globally to its role in improving to the economic and its stability for firms and countries. Good CG - the rules and practices - that organize the relationship between all stakeholders enhances to growth and financial stability through supporting market confidence, integrity, and economic efficiency(Jesover & Kirkpatrick, 2005).

A firm with good CG can avoid failures, crises and promote investor confidence more than firm with weaker CG, in addition, firm with good CG able to encourage investors for investment and obtain external capital more than firm with weaker CG (Mallin, 2013).

In Turkey, (CMB, 2005)pointed out the important and benefits of effective and proper corporate governance practices for corporations and countries. The good CG for corporations means:

- low capital cost.
- increase in financial abilities, and liquidity.
- ability to avoid scandals and crisis.

On the other hand, with respect to the country, good CG means:

- Optimizing of a country’s image.
- Stopping of outflow of local funds.
- Encourage overseas capital investments.
- Increase in the competition of economic and financial markets.
- Avoid the crisis.
- More efficient allocation of resources attainment.
- High standard of prosperity.

Corporate governance is particularly important in the business agenda for the benefit of firms and society as a whole and has emerged the importance of governance in recent times when the global financial crisis is affected the economies of many developed and developing countries and governance tops headlines everywhere.

2.3 Development of Corporate Governance

The financial crisis, and the companies' failures during last two decades make attention to the role and important of CG all over the world. These failures and crises have made countries review, amend many acts and regulations of CG code every year. The legal laws, and regulations are different from country to another. But in general, Interest of all countries introducing CG codes to increase investor confidence, and more transparency and accountability.

2.3.1 Development of Corporate Governance in the UK

In the UK, beginning of the development of corporate governance after many of corporate failures and financial scandals, such as the collapse of Bank of Credit and Commerce International (BCCI) and the Robert Maxwell pension funds scandal in 1991, and also as a result of general lack of confidence in the financial reporting of many UK companies (Mallin, 2013).

In 1991, the UK established corporate governance committee (the Cadbury Committee). the committee published the Cadbury Report in 1992. The codes of the report affected the development and improve the CG codes in UK and various countries.

The Cadbury Report recommended a Code of Best Practice, 'comply or explain' mechanism; that is, the boards of all listed companies registered in the UK should to comply with the governance codes but, if it cannot comply, then it should explain why they do not comply.

Since the publication of the Cadbury Report, many important changes of CG structures and practices within UK companies took a place (Cadbury, 1992; Keasey, Thompson, & Wright, 2005; Mallin, 2013).Appendix 2.1 shows the Code of Best Practice of the Cadbury Report published in 1992.

Following the Cadbury Report (1992), many corporate governance codes, and principles reports were issued such as, Greenbury Report (1995), and Hampel Report (1998), which led with Cadbury Report (1992) to the original the UK's Combined Code (1998). Table 2.1 presented summary of reports that contributed of developments of CG in the UK(Mallin, 2013).

Table 2. 1 Development of Corporate Governance in the UK

Report	Published date	Version
Cadbury Report	1992	The Financial Aspects of Corporate Governance.
Greenbury Report	1995	Study directors' remuneration
Hampel Report	1998	Review the implementation of Cadbury and Greenbury recommendations.
Combined Code	1998	Includes the recommendations of the three previous reports
Turnbull Guidance	1999	To provide guidance on the implementation of the internal control requirements of the Combined Code
Myners Report	2001,2008	The institutional investment.
Higgs Report	2003	The recruitment and development of non-executive directors
Tyson Report	2003	The role and effectiveness of non-executive directors.
Smith Report	2003	Review of audit committees
Combined Code	2003	The revision of Combined Code (incorporate the substance of the Higgs and Smith Reports). incorporated the substance of the Higgs and Smith reviews
Turnbull Guidance	2005	The revision of guidance on the Turnbull Guidance (1999).
Combined Code	2006	Update version of the Combined Code.
Combined Code	2008	Update version of the Combined Code.
Revised Smith Guidance	2008	A new edition of the guidance.
Walker Review	2009	Review of the governance of banks and other financial institutions.
The UK Corporate Governance Code	2010	Update version of the Combined Code.
Stewardship Code	2010	A new UK Stewardship Code was introduced
Davies Report	2011, 2012	The representation of women on UK boards.
UK Corporate Governance Code	2012	Update version of the UK Corporate Governance Code

2.3.2 Development of Corporate Governance in the USA

In USA, the features of CG appeared after the stock market crash of 1929 that pointed out important of create organizational entity for securities markets, that can help to enhancing corporate governance practices. As result, Congress issued the Securities Act of 1933 and Securities Exchange Act of 1934 to serve U.S. securities laws(Altıntaş, 2010).

In 1934, The United States Securities and Exchange Commission (the SEC) founded by Congress to enforce the Securities Act of 1933 and the Securities Exchange Act of 1934. The US paid more attention to CG after series of corporate Collapses such as Enron and WorldCom. So that, the Sarbanes-Oxley Act of 2002 (SOX) introduced to regulates CG in US corporations. SOX applies to all American and foreign companies that have to file reports with the SEC under the US Securities Exchange Act of 1934(Calder, 2008).

The SOX try to prevent failures that may occur in future, and restore investor confidence, in addition to enhancing the corporate's audit committee, and auditor independence(Altıntaş, 2010; Mallin, 2013).

The SOX Act, highlighted the most important objectives which are:

- To strengthen the independence of auditing firms.
- To improve the quality and transparency of financial statements and corporate disclosure.
- To enhance corporate governance.
- To improve the objectivity of research.
- To strengthen the enforcement of the federal securities laws, including the use of criminal penalties(Jackson, 2010).

As result, the Public Company Accounting Oversight Board (PCAOB) was formed by SOX to revising auditor independence rules, and to supervise the activity of the auditors of public companies in the US(Calder, 2008; Mallin, 2013). The SOX needs corporates to evaluate a risk of present information security policies, to setup how these polices needs to be updating which contribute to strengthening the integrity of company financial information(Altıntaş, 2010). The SOX, is rules-based designed to work on a "comply or be punished" principles, which is different from members of OECD counties have all taken CG codes that work on the "comply or explain principle"(Calder, 2008).

2.3.3 Development of Corporate Governance at Global Level

Globally, the OECD posted Corporate Governance principles in 1999, and updated in 2004.Currently OECD members are 36 countries, include many developed countries, and emerging countries and Turkey one of them. These principles are the foundation of CG for both OECD and non-OECD countries, also they have been approved by the Financial Stability Forum as one of the 12 key standards for sound financial systems. In addition, it was making the foundation of CG of the World Bank/ International Monetary Fund (IMF) Reports on the Observance of Standards and Codes (ROSC). The OECD main aims are to contribute of the development of the global economy, sound economic expansion in OECD and non-OECD countries in economic development, and the expansion of world trade(OECD, 2004).

The principles of corporate governance issued by OECD to help member countries and non-member to improve and develop the legal and institutional frameworks for corporate governance in their countries. The OECD mentioned that "there is no single model of good corporate governance". So that the OECD determined main components that enhancing good CG. The Principles based on these components were issued to applicable at various models of CG in all countries(OECD, 2004).

The OECD in 2004 introduced the revised principles, consists into six main principles, each supported by a number of sub-principles, the main principles are:

1. Ensuring the basis for an effective corporate governance frame-work.
2. The rights of shareholders and key ownership functions.
3. The equitable treatment of shareholders.
4. The role of stakeholders in corporate governance.
5. Disclosure and transparency.
6. The responsibilities of the board(OECD, 2004).

The revised principles are presented in Appendix 2.2, these principles are not mandatory, but it gains their strength as the main elements of good CG, and they have been introduced into codes in several various countries.(Mallin, 2013).

The OECD publishing continued to enhance the applying of CG principles and its important role for good CG. Table 2.2 presents titles and dates of some publications.

Table 2. 2 Some Publications of the OECD.

Publication date	Title
2006	Methodology for Assessing Implementation of the OECD Principles of Corporate Governance.
2006	Corporate Governance in Turkey A PILOT STUDY
2008	Using the OECD Principles of Corporate Governance: A Boardroom Perspective
2010	Corporate Governance and the Financial Crisis: Conclusions and Emerging Good Practices to Enhance Implementation of the Principles
2011	Board Practices, Incentives and Governing Risks
2015	G20/OECD Principles of Corporate Governance

2.3.4 Development of Corporate Governance in Turkey

In Turkey, since the economic crisis in 2000 that caused failures in many corporates and banking industry, the attention increased in Turkey to prevent such crises in the future. The Capital Markets Law (CML) in 1981 empowered CMB as the regulatory and supervisory authority in charge of the securities markets in Turkey. The CMB has several responsibilities such as, organize, and develop the regulation and supervision of the securities markets and institutions, and protecting investors rights.

The CMB in 2003 introduced the CG principles in Turkey depending on OECD principles which were published in 1999, to improve the CG regulations in Turkish listed companies, and to merging Turkish capital market to the international markets. After CG developments that occurred in OECD principles revised in 2004, the CMB CG principles were revised in 2005. “comply or explain” is the CG model that chosen by CMB for its principles which is similar to OECD Model(CMB, 2005; Turel, Sengur, & Evren Turel, 2012) .

In parallel with OECD principles the CMB introduced CG model into four categories includes the shareholders rights, the principles of disclosure and transparency, the principles that organize the relationship between the corporate and stakeholders, and the last category include principles and the role of the board of directors. Appendix 2.3 presented CG principles of Turkey as published by CMB in 2005.

In 1985 The CMB established The BIST for encouraging corporates to comply with CG principle. As result the BIST established a Corporate Governance Index (XKURY) in 2007 to encourage the corporates to implement CG principles, provide references to others(Boyacioglu & Akdogan, 2010; CMB, 2005) .

2.4 Theories of Corporate Governance

The development of CG influenced by several theories that are contributed to develop and clarify the corporate governance paradigm. These theories are various in its perspective resulting from different areas, such as economics, finance, accounting, management, and law. All theories try to interpret the same CG issues from different view, for example the agency theory based on finance and economics perspective, while transaction cost theory based on economics perspective, and the stakeholder theory based on social-orientated perspective on CG(Mallin, 2013; Solomon & Solomon, 2004).

Previous studies mention to the various theoretical perspectives, some of them are based on the governance structures, and process that influence the performance of firms. These theories are agency, stewardship, stakeholder and resource dependency theories(Atuahene, 2016; Farhat, 2014).

There are three major theories namely stewardship theory, team or stakeholder theory, and agency theory that provide the foundation for corporate governance in modern corporations, and most widely discussed on CG context.

2.4.1 Agency Theory

The agency theory is the main theory that influenced and contributed in the development of CG. The relationship of (the principals) shareholders – (the agents) managers, are the main issue in this theory. The scholars and researches introduced a lot of work in this subject. The important work done to interpreted and developed the theory was by Alchian and Demsetz (1972), Jensen and Meckling (1976), Fama and Jensen (1983) as mention by many previous literature(Abdullah & Valentine, 2009; Mallin, 2013) .

The theory defined the agency relationship where the principals who are the owners of the corporation employs the agents who are the mangers to carry out work (Abid, Khan, Rafiq, & Ahmed, 2014; Mallin, 2013). There are some limitations in the agency relationship due to the “opportunism or self-interest” of the agent that caused conflicts between the principals and the agents.

Firstly, the agents will look for self-interest such as maximize their financial situation, illegal using of their authority for more benefits, and stability of their business of the

company. In other words, it's expected that the agents not to seek in the interests of the principals(Calder, 2008; Mallin, 2013).

Secondly, asymmetries of information between the principal and the agent is another problem, since the principal and the agent have access to various channels of information, and this led to more information of the agent regarding the best decision for the principle investment(L'Huillier, 2014; Mallin, 2013).

Thirdly, the agent doesn't take suitable steps to avoid risks of the principal's interests, because different views of agent and principals towards risk(Abid et al., 2014; Mallin, 2013).

The agency theory views the board of directors as basic monitoring tool to try to minimize any problems that may occur by the principal–agent relationship. The conflict of interest between the principal and the agent is the reason of agency problem that caused "agency cost" that comes from the agent misusing their authority, in addition, the costs of monitoring them to prevent that behavior(Mallin, 2013). Agency costs also result from structuring, monitoring, following up and design suitable contracts between agents with different interests(Fama & Jensen, 1983) .

The issue of separation of ownership and control is a big part of agency theory that related to the context of corporations as noted by Mallin to the work of Berle and Means (1932) who described the agents are the managers and the principals are the shareholders which is usually mentioned in agency relationship in the CG. the agency relationship can also include many other relationships such as company and creditor, and of employer and employee(Mallin, 2013).in addition, the agency theory focuses on the relationship between the board independence and corporation performance(Abid et al., 2014).

2.4.2 Stewardship Theory

Stewardship theory perspective assumes that no conflict of interest between managers and owners, and the main target of company managers to protect and maximize the interests of shareholders.

In stewardship theory there is no self- interest and individual objectives for managers who looking for company interest through their work and improve company effectiveness and performance.

Stewardship theory refers that there is no motivation problem of managers that caused conflict of interest between managers and owners(Donaldson & Davis, 1991), and

managers motivated naturally to achieve company objectives and interests of shareholders(Davis & Schoorman, 1997). Stewardship theory indicate to the strong link between managers who are working to achieve company goals, the owner's satisfaction, and other participants in the company reward. As managers increase company performance, the interest of shareholders increases and managers achieved their purpose. Managers decisions in the best interest of shareholder and stakeholder can be achieved through balance between them(Clarke, 2007; Davis & Schoorman, 1997).

Stewardship theory focuses on saving shareholder interest by facilitate and empower managers that improve company performance instead of put them under more control(Davis & Schoorman, 1997; Donaldson & Davis, 1991; Mallin, 2013).

2.4.3 Stakeholder Theory

Stakeholder theory is one of important theories that contributed of CG development, stakeholder theory perspective covers a wide range of all company stakeholder instead of interest of shareholder as in agency theory.

Edith Penrose provided great contribution to the development of a stakeholder theory, and understanding relations of the stakeholders inside and outside corporate, since she's included the corporate's human resources and stakeholders when studied the internal environment of the corporate(Pitelis & Wahl, 1998).

The interest and development of stakeholder theory increased since 1970, and introduced by Freeman (1984) in the management discipline, when he proposed integrating corporate accountability to include all stakeholder(Abdullah & Valentine, 2009; Solomon & Solomon, 2004).

The stakeholder theory based on diversity approach to corporates, Freeman (1984), described a stakeholder such as employees, clients, shareholders, suppliers, financial institutions, environmentalists, government and other groups or individual inside or outside the company that can influence or is influenced by the achievement company's purpose. (Freeman, 1984).

Stakeholder theory assumes that stakeholders are linked with the company by several agreements. The internal and external stakeholders relationship with the company is regulated by specific rules that serve the interest and benefits of all stakeholder. The aims of company are obtained through balancing the interests of all stakeholders(Clarke, 2007).

2.5 Corporate Governance Systems

The culture, legal systems, and economics of countries are different all over the world, as literature and previous studies mention that there is no single model of CG fit for all, corporate governance systems are various from country to another.

In any country the main parameters of corporate that specified system of corporate governance are ownership structure and legal frameworks. In addition, there are internal factors such as the economy, government policies, and culture, as well as external factors such as the foreign cashflow, and the global economic environment(Solomon & Solomon, 2004).

The models of CG are various from country to another, the main classification of corporate governance systems is the "insider/outsider" model. Countries that not applying one of these models of corporate governance sharing some features of the insider/outsider model to create their own corporate governance system(Ahmad & Omar, 2016; Solomon & Solomon, 2004). Therefore, the corporate governance systems are classified into two main types:

2.5.1 Anglo-American Model (Unitary System- Outsider Model)

Many countries around the world such as UK, USA, and commonwealth countries adapted this model in their CG system. The model called as Anglo-American or Anglo-Saxon model because it's the original CG system of the UK and USA, and due to the effect of stock market of both countries around the world. The model also known as Unitary System or unitary board model, where both executive and non-executive directors sharing in a single board with varies proportions. Also, the model introduced with different names in the literature based on its features, such as shareholder model, principal-agent model, finance model and market-based model(Ahmad & Omar, 2016; Fernando, 2012; Solomon & Solomon, 2004).

According to (Solomon & Solomon, 2004), the concept "outsider" indicates to systems of finance and CG. In this system the companies' ownership are belong to outside shareholders such as financial institutions or individual shareholders but dominated by their managers. The managers in this model controlled the companies directly, and shareholders have some level of control due to their voting rights.

In Anglo-American model the board of directors elected by shareholders, and consists both executive and non-executive directors to control the executive directors' in running company business(Ahmad & Omar, 2016; Larbsh, 2010; Mallin, 2013).

The main features of the Anglo-American model of corporate governance as mentioned by (Fernando, 2012; Nestor & Thompson, 2001; Solomon & Solomon, 2004) are as follows:

- Outside shareholders owned the companies and the ownership divided between individual shareholders and institutional shareholders.
- The company management controlled by managers.
- Dispersed ownership structure.
- The separation of ownership and management is clear in this model, which generates agency problems.
- The corporate law focusing on priority of the protection of shareholder interests.

2.5.2 German Model (Dual System- Insider Model)

The German model of CG is the accepted model in Germany, Holland, France, and some other Western European countries, so that also called Continental European approach(Fernando, 2012). The responsibility of the board in this model is to protect the interest of shareholders, and all internal and external stakeholders of the company, which is based on stakeholder theory(Ahmad & Omar, 2016; Cernat, 2004). The German system also known as Insider system or relationship-based system, due to The strong relationship between corporates and their dominant shareholders(Solomon & Solomon, 2004).

This model also called Dual System or two-tier board model, where the upper board supervises the executive board of directors. The members of supervisory board in this model elected by shareholders, and labour unions, this board appoints and observes the management board operations(Cernat, 2004; Fernando, 2012; Mallin, 2013).

The main characteristics of the German model of corporate governance as clarified by(Fernando, 2012; Nestor & Thompson, 2001; Rosser, 2003; Solomon & Solomon, 2004)are as follows:

- Insider shareholders owned the companies by small groups such as, family or state ownership.
- The company management controlled by Insider shareholders.
- Concentrated ownership structure.

- The separation of ownership and management is less in this model, which makes agency problems are rare.
- The protection of shareholder interests is weak in the corporate law.

2.6 Corporate Governance Mechanisms

To ensure the applying of the principles of corporate governance, there must be mechanisms to be applied by the company, to ensure that interests of all stakeholders are protected, through the control of performance in order to prevent the administrative and financial corruption, in addition to ensuring the optimal use of the assets of the company(Mukt, 2013).

The purpose of CG as a mechanism is to find methods to solve the problems resulting from control and ownership separation (Shleifer & Vishny, 1997).

The corporate governance system includes all mechanisms aimed to monitor managers and minimize conflicts of interest(Damak, 2013). In the finance literature the corporate governance mechanisms are classified into internal and external mechanisms. The items of internal and external mechanisms, and its effectiveness are different in the literature because the area of corporate governance mechanisms is too broad research area, so that studies, and papers attempt to focus on some particular governance mechanisms based on the subject of study(Basuony, Mohamed, & Al-baidhani, 2014).

(Jensen, 1993)pointed four groups of CG mechanisms: legal and regulatory mechanisms; internal control; capital markets; and market competition.

(Denis & Mcconnell, 2003) classified the main CG mechanisms into two groups: internal mechanisms that include board of directors, and ownership structure; and external mechanisms including the takeover market and the legal regulatory system.

(Farinha, 2003), summarized general external and internal disciplining mechanisms that have been studied in the literature. the first group is the internal disciplining mechanisms which include: large and institutional shareholders; board of directors; insider ownership; compensation packages; debt policy; and dividend policy.

The other group is the external disciplining mechanisms including: takeovers threat; product market competition; managerial labour market and mutual monitoring by managers; security analysts; the legal environment; and the role of reputation.

2.6.1 Internal Mechanisms

These mechanisms including board of directors, and ownership structure, which are the internal tools in the company that can encourage managers to maximize the company value.

2.6.1.1 The Board of Directors

The board of directors is the main element of CG, it represents important role in CG practices. The Cadbury Report (1992) stated that it is one of the most important mechanisms for achieving good corporate governance practices. The company strength and sustain comes from the board that represents the source of values and objectives(Clarke, 2004)

The board of directors is one of the main tools of monitoring company's behavior and performance. The board is responsible for employment executives, preparing executive compensations and making major decisions in the company(Fama & Jensen, 1983). The members of the board elected by the shareholders to run their business. It's important for the board to be independence to carry out its monitoring tasks effectively (Babatunde, M. Adetunji Olaniran, 2009).The board responsible for monitoring employees, and reduces the expenses caused by the separation of ownership and control in companies(Damak, 2013).

(Clarke, 2004), mention to the internal role of the board for the leadership and guidance of the company, in addition to more external responsibilities towards: investors, whereas the board is the link between the shareholders and the managers who are running daily business of the company; and stakeholders who are the main partners of the company.

To meet these tasks, boards have to create ways to balance between the strategy and accountability items that enhance performance while maintaining effective control. The major roles of the board as discussed by many researchers and summarized by (Clarke, 2004) as:

- Control: Monitoring the managers of the firm and ensuring accountability.
- Strategy: acceptance and monitoring the strategic direction of the firm.
- Counsel: providing advice and counsel to the firm executives on managerial issues.

- Institutional: Building institutional relationships with investors, stakeholders and the society.

2.6.1.2 Ownership Structure

The ownership structure or the shareholders is another important internal tool of CG that influence the efficiency of the firm. It is considered as the strongest factor that affect on systems of corporate governance. For any firm to run their business need funding, and the methods in which firms are financed which determines their ownership structure.

The ownership structure divided into two categories: Large Shareholders and Small Shareholders; or Institutional Shareholders and Individual Shareholders. Berle and Means (1932) in his model noted that increasing dispersion of ownership of stocks may be caused possibility to reducing separation of ownership and control. Ownership structure is now concentrated in a few major institutional investors instead of individual shareholders as in the model presented by Berle and Means (1932) which proposed that firms were owned by dispersed group of shareholders and controlled by a small group of managers(Solomon & Solomon, 2004).

The dispersion of ownership of stocks in firms has caused to transformed the firm control from shareholders to managers. As result this separation of control from ownership to managers may cause to conflicts of interest between them because objectives and interests of shareholders and managers are different, which is known as agency problem(Ali Zagoub, 2011).

According to Shleifer and Vishny (1997) the agency problem is not only between shareholders and managers. the agency problem can happen between other parties such as shareholders and creditors or other stakeholders. Therefore, identification the form of ownership focusses and composition, and whether it is dispersed or focused is important in order to identify which side has the controlling power in the firm.

Types of Ownership structures are different from country to another. In Anglo-American model company ownership structure is dispersed, while in German model is concentrated control is still under a few rich families or governments.

To specify ownership structures of controlling shareholders of firms, (La Porta, Lopez-de-silanes, & Shleifer, 1999), tested in their study 27 large firms from different countries. They classified ownership structures into five categories: the state-controlled; a family controlled; large financial institution; large firms; and miscellaneous grouping. They

found that dispersed shareholders are dominated ownership structure in the US, the UK and Japan. While, in other countries firm's ownership structures concentrated by families and the States.

Their results show a different image of the ownership structure than that suggested by Berle and Means (1932). The paper found that the shareholders with ultimate control prefer to have power over their cash flow rights. Also, they concluded that the shareholders control firms through pyramidal structures, and involvement in management. In addition, the study explained that the main feature of concentrated ownership is it might be an important mechanism to monitor managers, and to mitigate agency problems.

Large shareholders can be considering as potential controllers of equity agency problems that can give them a stronger motivation to monitor firm performance and managerial behavior(Denis & Mcconnell, 2003; La Porta et al., 1999; Shleifer & Vishny, 1997).

In any country the legal system plays important role and impacted the ownership structure of companies. The dispersed and diversified shareholder ownership structure, minority shareholders rights have good protection, where common law system is applied. while, the concentrated shareholder ownership structure minority shareholders rights are less protected, where civil law system is applied(La Porta, Lopez-de-silanes, Shleifer, & Vishny, 1997; Mallin, 2013).

2.6.2 External Mechanisms

The market for corporate control (the takeover market) is the most important external mechanism for company control, which applies as a mechanism of last resort(Jensen, 1986; Weir, Laing, & Mcknight, 2002)**.**

The external mechanism is another mechanism that help to reduce conflicts between shareholders and managers. The main external mechanism is the external market for corporate control(Bushman & Smith, 2001; Denis & Mcconnell, 2003; Farinha, 2003).

2.6.2.1 Market for Corporate Control (The Takeover Market)

The market for corporate control forms the main external mechanism in CG, which act as a mechanism to a discipline the performance of managers when internal control mechanism has ineffective, and failed(Shivdasani, 1993; Walsh & Seward, 1990).

The motivation for outside parties to control of the company is due to the large difference between the actual value of a company and its potential value. The threat of a change in control can encourage management to keep company value high, that's lead to reduce the large difference value and prevent outside parties to control of the company(Denis & Mcconnell, 2003).

From agency theory perspective (Wearing, 2005) noted that, the market for corporate control is an important method to discipline the managers and incentive them to act in the interests of the shareholders. The managers try to prevent a hostile takeover of their company, otherwise they maybe lose their positions in the company. To safe their job in the company, the managers try to keep a high share value, which means it is more expensive that prevent hostile takeover to control the company.

(Denis & Mcconnell, 2003), indicated that the takeover market may be possible solution for agency problem, but it can be part of this problem. The takeover market harmful side for shareholders appear when the managers seeking to maximizing their business which can waste corporate resources through overpaying for acquisitions instead of interest of the shareholders.

(Jensen, 1986), summarized the important of takeover market in; protecting shareholders when the company's internal mechanisms are failed; encouraging the efficient use of resources; and making organizational change**.**

Chapter 3. Corporate Governance in The Banking Sector

The subject of CG in banking industry is very important topic. As we mention earlier, the banking sector worldwide plays a significant role in a countries economy. The stability and growing of the economy in any country is linked with the stability and development of the banking system of this country.

(OECD, 2006b), noted that the important and nature of banking industry CG are different from other industries, and need special attention. This section discusses the nature, features, and important of CG in banking industry.

3.1 Overview on Corporate Governance of Banks

The interest of the corporate governance in banking sector increased at global level after many financial crises, and scandals in many different sectors, in addition to the major role of banking sector influence in a country's economic performance. The corporate governance at banking industry is different from the other non-financial sectors, since there is no single model of CG that apply for all the industries.

The rules, principles, process, and international standards of banking industry is different from other industries due to the complicated and differences in their operations(OECD, 2006b; Standard &Poor's, 2002).

The banking industry needs to create a suitable banking system to run their business in effective ways that contributes in the stability, growth, and development of the economy of countries, and the worldwide financial system (SOBA et al., 2016).The Basel Committee on Banking Supervision (BCBS), noted that CG of banking sector needs important guidance due to its great role in global financial system(BCBS, 2006).

In 1999(BCBS) published a report "Enhancing Corporate Governance for Banking Organizations" as a global guide to assist, and enhancing banking sector of countries to applying sound CG practices. the Committee released a revised report in 2004, and 2006 well known as (Basel II).

The aims of Basel II are; specify minimum capital required; supervision and audit mechanism of an institution's; encourage disclosure that led to enhancing market discipline(BIS, 2018). The report mentions to the important role of effective CG practices

in banking sector to gain trust and confidence in this sector, which are important for the banking industry in particular and for the economy in general. Banks crisis and failures may occur due to poor CG, which can cause extra public costs.

Basel II, highlighted the role of board of directors and top management in applying CG mechanisms, and introduced eight significant principles are presented in appendix 3.1that contribute for sound CG in banking sectors. The principles are clarified board qualifications, functions, composition and responsibilities, in addition to compensation policies, transparency and disclosure(BCBS, 2006).After 2007- 2009 financial crisis BCBS issued Basel III in 2010 which includes many reforms to strengthen, and treat the weaknesses in Basel II (BIS, 2018).

3.2 Corporate Governance and the Special Nature of Banks

The CG of banking sector characterized by its nature that differs from other sectors, that make it required more attention than other sectors. Referring to (OECD, 2006b), the CG of banks varies and required more and special attention for many reasons including:

- The banks management have to increase attention to the interests of depositors.
- Weaknesses of CG in banks affect and caused to Threatens the financial system and bring more risks to the economy.
- Banks are often more accountable by depositors and trusted.
- Banks and/or depositors have the protection, and access to government-sponsored safety nets.
- Banks are governed by several prudential regulations, in addition to the regulations that influence all corporations.

Due to the stranger contractual structure of banking sector, corporate governance mechanisms for banking institutions should consider the interest of both depositors and shareholders, which make (Macey & O'Hara, 2003) argue for applying a wider view of CG in banking sector.

(Arun & Turner, 2004) advocated that for the special nature of banking, its more suitable to consider a wider view of corporate governance for banking sector, in addition to the role of state involvement to restrain the behaviour of bank management.

The CG in banking industry is differs from other industries,(Renée Adams & Mehran, 2003) mention to some reasons that includes; the different groups beneficiaries from the

bank's business complicates the governance of banks; all groups such as investors, depositors and regulators have benefit in bank performance; and interest of regulators with the influence of governance on the performance of banks, since strength of economy based on banks performance.

The previous literature noted that CG in banking industry characterized by special nature and need special attention for many reasons; First, banks highly depended on debt(highly leveraged) (Caprio & Levine, 2002; Nam & Lum, 2006).; Second, the problem of the asymmetrical information in banking industry between insider and outsider stakeholders is more risky than other industries(Arun & Turner, 2004; Caprio & Levine, 2002).; Third, the banking systems usually well regulate by governments and have mechanisms that safeguard depositors and sustain stable banking system(Laeven, 2013; Nam & Lum, 2006).

3.3 Corporate Governance Aspects in Banking Sector

The regulation, rules, laws, and principles of CG are various between countries, in addition, the CG structures are different from country to country, therefore the regulations, and laws do not need to be the same for all countries(BCBS, 2006).

The BCBS (2006) noted that sound corporate governance can be reached whatever the form of CG used by a banking institution. The BCBS (2006) proposed that the organizational structure of any bank should include four forms of control to ensure suitable checks and balances: (1) control by the board of directors or supervisory board;(2) oversight by persons not involved in daily business;(3) direct supervision of all business areas; and (4) independent functions of compliance, risk management, and audit.

In addition to the CG principles that applying for all sectors such as OECD principles, Basel II proposed some addition principles to be applying in banking industry to enhance sound CG all over the world. These guidelines are focused to the role of board and top management duties linked to shareholders and other stakeholders. The main principles recommended by Basel II to enhance sound CG in banking sectors are presented in appendix 3.1.

3.4 Corporate Governance and Financial Performance

Several studies confirmed that Implementation and applying CG principles in any company lead to sound CG and contribute to improve company performance. The relation between CG and firm's value has been the subject of various studies.

(Valenti, Luce, & Mayfield, 2011) States that good governance principles are important for high performance. In accordance with agency theory, if the company concern to protect the interests of its shareholders, the resources of the company will be operating to decrease waste and increase profitability, resulting in favor gains of shareholders.

By using "governance index" (Gompers, Ishii, & Metrick, 2003) founded a relationship between governance and shareholder returns, and concluded that companies with good governance will gain better stock performance.

In their CG principles (OECD, 2004) stated that good CG enhances economic efficiency and growth, in addition to increases investor confidence. (Fanta, Kemal, & Waka, 2013) indicated that good CG will contribute to increase in company value, and better performance.

Also, (Claessens & Yurtoglu, 2012) noted that good CG increases chances of company external funding, minimize cost of capital, and increases operational performance. (Mishra & Mohanty, 2014) stated that firms with good CG has more chance and easier for them to get funds from a financial institution with rate lower than that a weak CG firm. (Fatimoh, 2012) noted that recent studies indicate that good CG contribute to increased valuation, profit, sales growth and decrease capital costs.

Therefor sound CG improve firm performance, value, and presenting meaningful financial report on company's operations. In general, many studies, and researchers are support the implantation of CG principles and its aim that contribute to enhances company value and performance.

3.5 Corporate Governance in Turkey

The developments of CG principles during last decades influenced all countries around the world. The attention to the important role of implementation of CG principles increased after many financial crises, and failures in different sectors in many counties,

as result, each country review, amend many acts and regulations of CG code every year with parallel with international CG standard to enhance applying CG in the best way.

These international development in CG principles affected Turkey as any other country. CML in 1981 empowered CMB as the regulatory and supervisory authority in charge of the securities markets in Turkey. The attention to applying and improve CG principles increased in Turkey since the economic crisis in 2000 that caused failures in many corporates and banking industry.

(Ararat & Ugur, 2003), referred to the role of international and domestic developments and their influence in the CG context in Turkey. They noted CG debates at global level had a "pull" influence that make policy-makers and corporates to pay attention to the relationship between CG quality and sustainable development. While the domestic facts had a "push" effect such as restructuring of the banking system, limited Foreign Direct Investment (FDI). These developments encouraged policy-makers and corporates in Turkey to investigate the present situation of CG practice**.**

Turkey is classified as a civil law country. The previous studies show that the features of Turkish companies are concentrated and centralized ownership structure. These companies are owned and controlled by families, which is same as the CG system of German Model or "insider system"(Demirag & Serter, 2003; Kula, 2005; Saatci, 2011).

3.6 Legal Framework and Foundations of Corporate Governance in Turkey

The origin of CG regulations in Turkey based on the Turkish Commercial Code (TCC) of 1956, the (CML) of 1981, and regulations issued by the CMB and the (BIST). The main organizations of the Turkish capital market are CMB, and BIST. The TCC organize trading relationships and establishment and management of companies. The code amended many times and the last one has been published in 2011(Arsoy & Crowther, 2008; NEEDLES, TUREL, SENGUR, & TUREL, 2012).

The TCC purposes to organize trading relations according to the changes in the domestic and international business environment. The CG approach of the TCC is based on four principles; full transparency, fairness, accountability and responsibility. Appendix 3.2 present summary of the regulation of CG under the New Law(PwC, 2011).

The CML aim to organize and safe systemic performance of the capital markets and protect rights and interests of investors. CML in 1981 authorized CMB to be responsible for; regulation and supervision in charge of the securities markets in Turkey; specify of the operational principles of the capital markets; and protect rights and interests of the investors. In addition to that article 1529 of New Turkish Commercial Code empowers CMB to regulate CG practices for Turkish corporates. The main objective of CMB is enhancing the development of Turkish capital markets, and improving their global competitiveness.

In 2003 the CMB introduced the CG principles in Turkey depending on OECD principles which were published in 1999, to improve the CG regulations in Turkish listed companies, and to merging Turkish capital market to the international markets. After CG developments that occurred in OECD principles revised in 2004, the CMB CG principles were revised in 2005.In the same line with OECD principles the CMB introduced CG principles as mention in appendix 2.3 into four sections; shareholders, public disclosure and transparency, stakeholders and board of directors.

The BIST in Turkey founded in 1985 by CMB. The listed companies are induced to comply with CG principles of Turkey. In 2007 BIST established CG index in order to measure the price and performance of BIST listed companies. The evaluation of CG rating is specified by the rating institutions that are accepted by CMB.

Rating shows how a corporate complies with applying rules of CMB corporate governance principles. The CG rating reports include the four sections introduced by CMB that mention above(Arsoy & Crowther, 2008; Boyacioglu & Akdogan, 2010; Chambers, 2006; CMB, 2005; NEEDLES et al., 2012). Table 3.1 summarize the phases of capital markets and CG in Turkey.

Table 3. 1Phases of Capital Markets and CG in Turkey.

Date	Issue
July 1981	Capital Market Law was enacted.
December 1985	Istanbul Stock Exchange Market was opened.
July 1989	**Settlement and Custody Centre was founded.**
January 1992	Settlement and Custody Centre was turned in a separate company.
June 1993	**Communiqué on Public Disclosure of Material Events was published with the aim of disclosing public in capital market.**
July 1995	BIST Settlement and Custody Inc. was turned into a bank. Istanbul Gold Exchange started its activities.
July 1997	First portfolio management company started its activities.
February 1998	First rating agency was founded.
September 2001	Central Registry Agency Inc. was founded.
July 2002	Turkish Derivative Exchanges was founded.
December 2002	Turkish Industrialists' and Businessman's Association (TIBA) published the work named "Corporate Governance: Best Code of Practice".
July 2003	Corporate governance principles were published.
November 2003	CMB Accounting Standard was brought into conformity with International Accounting Standards.
December 2003	Regulation regarding the Corporate Governance Rating was published.
June 2004	Public Disclosure Project tests took start.
December 2004	CMB made it obligatory for the corporate governance compliance reports of the companies listed on to the BIST be included to annual reports and to create an investor relations section on their websites.
February 2005	Turkish Derivatives Exchange Inc. started its activities.
February 2005	ISE determined the rules regarding corporate governance index.
February 2005	CMB made amendments in corporate governance principles after the changes in OECD corporate governance principles.
November 2005	New Turkish Commercial Code Draft has been submitted to the Parliament.
November 2005	Banking Law including corporate governance principles was published by BRSA.
June 2006	CMB prepared the regulations regarding independent auditing standards.
July 2007	CMB updated the communiqué regarding rating activities and agencies.
August 2007	BIST Corporate Governance Index started to be estimated.

Source: Phases of capital markets and CG in Turkey (Boyacioglu & Akdogan, 2010).

3.7 Banking Sector in Turkey 2014-2018

In order to make Turkish Banking Sector updated and evaluating developments continuously, the (BAT) prepared a study for the period of 2014-2018, which is a chosen to be the same period to study in this research.

The total banks in Turkey are 52 banks, classified into three groups;

- Deposit bank: The institutions operating primarily for the purposes of accepting deposit and granting loan in their own names and for their own accounts,
- Participation bank: The institutions operating primarily for the purpose of collecting fund through participation accounts and granting loan,
- Development and investment bank: The institutions operating primarily for the purposes of granting loan and/or fulfill the duties assigned thereto by their special Laws.

Table 3.1 shows the number of banks in Turkey during 2014-2018, according BRSA data, and to Banking Law No 5411(TBB, 2018b).

Table 3. 2 The Number of Banks in Turkey 2014-2018(TBB, 2018b).

Bank/Group Name	**2014**	**2015**	**2016**	**2017**	**2018 March**
Deposit Banks	**34**	**34**	**34**	**34**	**34**
State-owned	3	3	3	3	3
Private	11	11	9	9	9
Foreign	19	19	21	21	21
SDIF	1	1	1	1	1
Development and Investment Banks	**13**	**13**	**13**	**13**	**13**
Participation Banks	**4**	**5**	**5**	**5**	**5**
Total	**51**	**52**	**52**	**52**	**52**

There are many bodies in charge of supervision of the institutions in the financial sector. The authorities responsible for supervising and regulating the respective financial institutions are the CMB of Turkey, Under secretariat of Treasury under the Prime Ministry of the Republic of Turkey, and the BRSA. The majority share in financial sector is belong to the banking system and represents 82 percent of total assets of the institutions in the financial sector(TBB, 2018a). Table 3.2 shows the regulation and supervision of financial sector.

Table 3. 3 The Regulation and Supervision of Financial Sector.

Regulation and Supervision of Financial Sector	
Financial institutions/instruments Regulatory Body	**Regulatory Body**
Banks and other credit institutions	BRSA
Banks	
Leasing companies	
Factoring companies	
Financial companies	
Assets management companies	
Capital market institutions	CMB
Mutual (investment) funds	
Intermediary institutions	
Real estate investment trusts	
Securities investment trusts	
Portfolio management companies	
Venture capital funds	
Pension funds	
Insurance companies **Reinsurance companies** **Unemployment insurance fund** **Individual pension funds**	Under secretariat of Treasury
Payment systems	The Central Bank of the Republic of Turkey
Savings insurance system	Saving and Deposit Insurance Fund
Prevention of money laundering and finance of terrorism	Financial Crimes Investigation Board

3.8 Capital Market Board's (CMB) Corporate Governance Principles

The CMB is the main institution involved in the capital market and regulates the operations of BIST. CMB is an independent, regulatory and supervisory authority which is empowered by the CML that was enacted in 1981 and CMB was founded in 1985. TCC empowers CMB to regulate CG practices for Turkish corporates. CMB main objective is to improve the development of Turkish capital markets, and enhancing their global competitiveness. Parallel with development of CG worldwide, and CG principles of OECD, the CMB has established the CG Principles (The Principles).

Since founded CMB take many reforms and issued important recommendations and guidance of CG principles. In 2003, CMB presented CG principles of Turkey as the guideline for future regulations. These principles periodically checked in order to confirmed that are updated.

According to the CMB principles, and "comply or explain" approach the listed corporates are obligated of issuing an annual CG compliance report showing the extent

of compliance to principles and explaining reasons if not. The Principles included four main parts; shareholders, disclosure and transparency, stakeholders and board of directors.

3.8.1 Shareholders

The first part related to the shareholders, since they are play an important role in the company and each shareholder owns some shares of the company, so that each shareholder is entitled to both financial and managing rights. The shareholders part explains the principles of shareholders rights such as their right to vote, to obtain dividend, to have minority rights, to obtain information, and right to participate in general shareholders meeting and transfer or sales of their shares and equal treatment of shareholders, as well as simplified the exercise of shareholders legal rights. These principles of shareholders rights encouraging shareholders follow their company's business and exercise their role to increase company effectiveness.

3.8.2 The Public Disclosure and Transparency

The second part related to the public disclosure and transparency discusses important need of shareholders and investors to obtain accurate information about the management, legal, and financial situation of the company.

The companies required to purplish and presented all activities and strategically information such as missions, visions goals, and annual reports by using different media forms in order to be clear for shareholders and investors.

The principle on public disclosure and transparency is focused to introduce complete, accurate, understood, and easy to analyze information have to be reachable at lower cost and in a timely manner.

To avoid using of unclear statements or terms that may result in confusion of shareholders and investors, company is recommended during disclosing information to use simple and most basic concepts and terms to be clear for everyone.

The corporate recommended to not allow to give any information disclosed to interest of a specific group of shareholders without others, and disclosed information should be unbiased. In any case a corporate should allowed to disclose information, that is required

to be publicly disclosed, even if this information may be harmful to the corporate except the trade secrets.

3.8.3 Stakeholders

In their principles CMB paid attention to the important role of stakeholders, and dedicated the third part for relation of stakeholders with the company. The aim of this part to introduce the main policies towards stakeholders.

CMB confirms contribution of stakeholder role in the corporate management and protect the corporate's capital, and provide information to employees in related issues, in addition to organize the relations between the corporate and stakeholders. By considering the cooperation between the company and its stakeholders is important and useful for the company in the long term, the stakeholder's rights that founded by law and mutual agreement should be respected by the corporate.

CMB noted that stakeholders of the corporate can include shareholders as well as employees, customers, creditors, suppliers, unions, various governmental and nongovernmental organizations and investors.

CMB confirms that the stakeholder's benefit from good management. Disclosure of the corporate business in clear and transparent manner enables the stakeholders to get complete information about the situation of the corporate.

Therefor practice of sound CG principles is important from the stakeholder's perspective. In the context of corporate policy on human resources, CMB confirms that corporate must provide equal chances to everybody who have similar qualifications during preparing employment policies.

3.8.4 The Board of Directors

The fourth and last part of CMB principles paid attention to the Board of Directors, and its role in the corporate. The board of directors who chosen by the corporate's shareholders is representing the most senior executive body of a corporate. They should fairly represent the corporate within the framework of the relevant legislation, and policies.

The mission, and vision of the corporate should be defined by the board of directors and disclose this to the public, they are also responsible for is the strategic decision-

making, as well as, accept the strategic plans and goals introduced by the executives. The board of directors during managing the corporate should guarantee that shareholders gain long-term and stable income, and should pay special attention to keep balance between the interests of the shareholders and the corporate's growth.

To achieve the maximum efficiency and to perform its decision-making, and management, the board of directors should be consisting members with high of skills, experience and degree of independence, which is reflect performance and success of the board of directors and therefore affects the success of the corporate.

CMB mention to the presence of the independent members in the board of directors of the corporate as one of the important elements that ensure CG practices are properly implemented. it was recommended that the board of directors be constituted from at least two independent members.

CMB suggested that the board of directors may form committees in order to increase its level of efficiency, such as audit, CG, strategic planning, human resources and remuneration, and ethics(CMB, 2005).

4. Research Methodology

4.1 Introduction

This chapter shows the main steps to achieves the research purpose. It includes methods of chosen sample, and the data collection as well as to describes the research questions, and hypotheses. In addition to definitions of the variables, and statistical analysis.

4.2 Research Purpose

As mention previously the purpose of this study is to identify the impact of implementing corporate governance rules on the financial performance of banks listed in BIST.

There are many previous studies tested the impact, and the relationship between CG and financial performance. Different methods, models, sectors, and variables were used from different views.

Therefor this study is attempt to investigate compliance of banks listed in BIST to applying CG principles through comparing the disclosures of these banks received in their annual reports with the disclosure requirements issued by CMB, and BRSA, in addition to understanding the influences of applying CG practice in banking sector in Turkey by using different perspective. Table 4.1 shows some previous studies that used various perspective to investigate the impact, and the relationship between CG and financial performance.

Table4. 1 Studies That Used Various Perspective to Investigate the Impact, and The Relationship Between CG and Financial Performance.

	Authors	Sample	Time period	CG Variables	Financial Variables	Model	Research Purpose
TURKEY							
1	(SOBA et al., 2016)	10 Banks	2005 - 2015	Board Size, Board Independence, Institutional Ownership, Major Shareholder, Number of Committees Free Float Rate,	Inputs: total deposits, interest expenses, and personnel expenses. Outputs; total loans, and interest income.	Data Envelopment Analysis, and panel regression analysis	To investigate the relationship between CG and the efficiency.
2	(Yilmaz & Buyuklu, 2016)	92 Listed firms	2007-2013	board size, board independence, share of foreign investors.	ROA, EBITDA, Leverage (LEV) and price to book value (PBV)	Panel regression techniques.	To examine the impact of CG variables on firms‟ financial performance,
3	(NEEDLES et al., 2012)	60 Listed firms	2010	The CG scorecard, four categories: Shareholders, Public Disclosure and Transparency, Stakeholders, Board of Directors	-	Paired Samples Test	To investigate the relationship between performance and CG practices.

4	(Kiliç, Kuzey, & Uyar, 2015)	25 Banks	2008 - 2012	Ownership structure, Board structure Free float rate.	CSR index	Panel regression techniques.	To analyze the nature, extent and trend of CSR in the banking industry, and to investigate the impact of ownership and board structure on CSR.
5	(Ozkan, Balsari, & Varan, 2014)	382 Banks	1998–2009	(REGUL) the effect of Banking Law no. 5411: (CEO) showing whether the CEO and chairman of the board are the same person.	ROA, nonperforming loans (NPL), loan ratio (LOAN), Capital adequacy ratio (CAPAD), The sector shares in terms of assets (ASSET), The natural logarithm of bank age (LOGAGE), Liquidity ratio (LIQUID)	The basic regression	Investigate the effect of regulation on banking sector performance in an emerging country context.
6	(De Jongh, Disli, & Schoors, 2014)	63 Banks	1988-2009	Internal governance mechanisms (CEO duality, board experience, political connections, and education profile) and external governance mechanisms (discipline exerted by	The returns (R) of the bank's portfolio risk (RK).	A stochastic frontier production model	Analyze how internal and external governance mechanisms determine efficiency of Turkish banks.

				shareholders, depositors, or skilled employees)			
7	(TIGREL, 2014)	11 Banks	2000 - 2012	Board Size, Board composition, CEO Duality, CEO Tenure, Committees	-	Correlation analysis.	To explore the institutionalization of board related CG practices in banking industry.
8	(Coşkun & SAYILIR, 2012)	31 Listed firms	2006-2010	CG Score (CGI)	Tobin's Q, ROA, ROE	Multiple panel regression models	To explore the relationship between firm value and CG and also the relationship between profitability performance and CG of Turkish companies
9	(Bayrakdaroglu et al., 2012)	41 Listed firms	1998-2007	CEO duality, SOTB, ownership concentration, manager ownership, and foreign ownership	EVA, MVA and CVA	Pooled regression models regression models	Investigate the relationship of value-based performance measures.
10	(Ergin, 2012)	69 Listed firms	2006-2010	The composite CG scores and sub-scores CGS.	The share price of firm P, book value of equity (BVE), current net income NI, market value MV	Panel regression models	To investigate whether or not investors take the CG rankings into account in their evaluation of stock price.
11	(Büyükşalvarci & Abdioğlu, 2010)	27 Listed firms	2009-2010	Corporate Governance Index	liquidity ratios, financial structure ratios, activity ratios, profitability	Parametric (independent t-test) and non-parametric	To determine the differences between companies effecting transactions in CG index and companies not included in this

					ratios and stock market performance ratios	(Mann Whitney U test)	index in terms of financial ratios
12	(Bektas & Kaymak, 2009b)	27 Banks	2001-2004	Board structure, ownership concentration, and ownership type	ROA, asset size (LNA), the interest margin to total assets ratio (NIMTA), liability management, and, the ratio of liquid assets in total assets (LIQATA)	Cross-sectional regression equation	Investigates the relations of board structure, ownership concentration, and ownership type with the performance.
13	(Kaymak & Bektas, 2008)	27 Banks	2001–2004	Board composition, board size, board tenure, and duality.	ROA, Asset Growth (ASGR), provision for loan losses (PLLTA) ratio, net interest margin to total assets ratio (NIMTA), liquid assets to total assets ratio (LIQATA), total assets (TA).	A cross-section regression method	Investigates the association of board independence, CEO duality, board size, and board tenure with bank performance.

Other Countries							
1	(Ahmed et al., 2017)	29Banks-Bangladesh	2011-2014	CCG Corporate governance score	ROA, Size of bank, Risk, efficiency ratio Macroeconomic variables GDP, inflation, and real interest rate	(OLS) regression models	To identify impact of CG on the performance of private banks.
2	(A Zagoub, 2016)	25 Interviews, and 124 questionnaires in Libya	2009-2010	Bboard members (BM); executive managers (EM); outside stakeholders (OS); and regulators (R)	-	Percentages of frequencies and means	Investigates and provide a general picture of how different stakeholders perceive concept and practices of CG.
3	(El-Chaarani, 2014b)	40 Banks -Lebanon	2006 - 2010	(BDSIZE) Board of Director Size, (BDINDP) the percentage of independents in the board of directors, (BDUAL) takes the value of one if the CEO is also chairman of the board and zero otherwise.	ROA, ROE, deposits collected by the bank over total assets (DEPSTS).	Multivariable regression	Examines the impact of CG on financial performance.
4	(AlManaseer, 2013)	153Public compani	2009 - 2011	Board council rules, general assembly meetings rules, shareholder equity	ROA, ROE, (EPS), (M/B) (P/E)).	Multiple linear regression	To assess the effect of implementing CG on the performance of public

		es - Jordan		rules, and disclosure and transparency rules.			shareholding service companies.
5	(Ajanthan et al., 2013)	4 banks in Sri Lanka	2002 to 2011	Board Size (BS), Board Diversity (BD), Outside Directors Percentage (OSDP) & Board Meeting Frequency (BMF).	ROE, ROA.	Multiple regression analysis	To find out the impact, and the relationship between CG and banking Performance.
6	(Erkens, Hung, & Matos, 2012)	296 financial firms from 30 countries	2007–2008	Board independence, Institutional ownership, large shareholder	Buy-and-hold stock returns, Writedowns	The basic regression	Investigates the influence of CG on financial firms' performance.
7	(Mohammed , 2012)	9 Banks - Nigeria	2001-2010	(AQ)asset quality, and (LDR) loan deposit ratios	ROA	Multiple regression analysis	Study the impact of CG on the performance.
8	(Sarkar, Sarkar, & Marg, 2012)	500 listed firms in India	2003-2008	The board of director, ownership structure, audit committee, and the external auditor.	Average rate of return	The basic regression	Construct a CG Index ,and examine the relation with the market performance
9	(Al-Manaseer, Al-Hindawi, Al-Dahiyat, & Sartawi, 2012)	15 banks - Jordan	2007-2009	Board Size, Board Composition, Chief Executive Officer (CEO) Status, and Foreign Ownership	ROA, ROE, Profit Margin (PM), Earning per share (EPS), LTA: the natural logarithm of the bank total assets	Multiple regression analysis	Investigates the impact of CG dimensions on the performance.

10	(Aebi, Sabato, & Schmid, 2011)	372 Banks - North America	2006	CEO ownership, board size, and board independence, (CRO in executive board), (Ln Board size), (Risk committee), (Board independence), (% directors w. finance background).	Buy-and-hold returns, ROE, ROA, Market to- book ratio, Tier 1 capital ratio, Deposits/assets, and Loans/assets	The basic regression	Investigates whether risk management-related CG mechanisms, during the financial crisis of 2007/2008.
11	(Beltratti & Stulz, 2009)	98 Banks from 20 Countries	2007–2008	Regulation and institution (Official, Capital, Restrict, Independence, Institution, anti-director index ADRI), CG (Ownership, Board, Audit, Takeover, Compensation)	Stock returns, Bank characteristics (Tier 1, Equity, Tangible equity, Deposits, Money market debt, Loans, Liquid assets, Log assets, Profit rate), and GDP	The basic regression	Investigate whether bank performance is related to bank-level governance, country-level governance, country-level regulation, and bank balance sheet and profitability characteristics before the crisis.
12	(Rb Adams & Mehran, 2005)	32 Banks-USA	1959-1999	Board size, Ratio of outside directors to board size	Tobin's Q, ROA, Total assets, Capital ratio, Volatility	The basic regression	Examine the relation between board structure (size and composition) and firm performance.

13	(Sanda, 2005)	93 Nigerian listed firms	1996–1999.	Director shareholding (DIRSHARE), number of directors on the board (BOARDSIZE), the proportion of outside directors sitting on the board (OUTSIDE) and the extent of ownership concentration (CONCENT)	ROA, ROE, PE ratio and Tobin's Q	Multiple linear regression	To examine the relationship between CG mechanisms and firm financial performance.

The previous table shows some studies during different period that investigated the impact and relationship of CG and financial performance. These studies are mixed from Turkey context in its first part, and from other countries in the second part.

In Turkey context, the studies chosen in this table from 2008 to 2016. The sample size, the time period, the industry activity, the variables used, and the test model are all different. No study similar to another. All studies investigate the relationship of applying CG principles with firm performance. The studies used various CG, and financial performance variables according to the point a view of each study.

(NEEDLES et al., 2012), (Coşkun & SAYILIR, 2012), (Ergin, 2012), (Büyükşalvarci & Abdioğlu, 2010), these studies are used CG score to measure the CG variables, which are similar to our study.

The second part of the table introduce studies from various countries from 2005 to 2017. Same as in Turkey context, the sample size, the time period, the industry activity, the variables used, and the test model are all different.

(Ahmed et al., 2017), The only study that used CG score to measure the CG variables, which are similar to our study.

Over all, the criteria used to evaluate and investigate the impact of applying CG principles on the firm financial performance is various from study to another, and based on the point a view of the researcher

4.3 Research Questions

In order to achieve the purpose, and objective of the research, there are questions stated in section 1.9. The research is expected to provide answers to the questions that are also stated in this section as follow:

- What are the corporate governance principles and rules in banks in turkey, and have they all applied the same rules or are there any differences? If so, why?
- What are the variables that represent the corporate governance rules and banking performance?
- Is there any relationship between corporate governance rules and banking financial performance in banking sector in Turkey?
- Do corporate governance rules have any impact on banking financial performance in banking sector in Turkey?

4.4 Measuring Corporate Performance

As discussed, in section 3.4 there are many studies, and researchers are support that the implantation of CG principles, and applying sound CG contribute to enhances firm value and performance. The association between CG and financial performance were examined from different views by using different financial and CG variables.

4.4.1 Financial Performance Variables (Dependent Variables)

(Kiel & Nicholson, 2003) are divided the financial performance measurements into two groups as accounting-based and market-based measures. As proposed by(Daily, Dalton, & Cannella, 2003) the accounting-based measures are related to the present financial performance of the firm, and the market-based measures are related to the investor perception of the firm.

(Haniffa & Hudaib, 2006) stated that every measure or indicator of financial performance has its own advantage and disadvantage, and there is no specific indicator or measure to be the best proxy for financial performance.

Table 4.2 shows the definition of the financial performance variables used in this research as (dependent variable), where are ROA and ROE are chosen as accounting based, while (EPS), and (PE Ratio) are chosen as market based.

Table4. 2 The definition of The Financial Performance Variables

Variable	**Definition**	**Measurement**
ROA	Returns on assets	Net profit divided by the total assets.
ROE	Returns on equity	Net profit divided by total equity.
EPS	Earnings Per Share	The bank net profit divided by its number of shares.
PE Ratio	Price–Earnings ratio	Ratio of share price to earnings per share.

4.4.2 Governance Variables (Independent Variables)

Based on the CMB principles issued in 2003 of Turkey with the aim of improving the corporate governance regulations for listed companies and revised in 2005. The firms in their annual report should disclose applying of the principles under the title of Corporate Governance Compliance Report as a separate section.

The method that chosen in the beginning of the study to collect data related to the CG variables was by using a questioner prepared based on CG principles of CMB to be distributed to investor relations department for every bank in the sample. After communicated with some banks by emails, and phone calls, unfortunately there are no response from these banks to response for the questioner.

The alternative method that used in this study to collect required data related to the CG variables by using Corporate Governance Rating Report.

In 2007 BIST established Corporate Governance Index (CGI). The corporate governance rating of minimum 7 over 10 as a whole and minimum of 6.5 for each main section. The rating determined and evaluated by institutions that are approved by CMB under the Communiqué on Principles Regarding Ratings and Agencies (Serial: VIII, No: 51). Ratings shows to which extent the firms comply with principles and rules of CMB.

In this study, our target sample is listed banks in BIST. The CG variables to be used as (independent variable) were selected similar to the main four sections of CMB which are as follow:

- Shareholders (SHHOL)
- Public Disclosure and Transparency (PDT)
- Stakeholders (STH)
- Board of Directors (BOD)

4.5 Proposed Model of The Research

The research aim is to examine the relationship between CG rules and banking financial performance, in addition to explore the impact of applying the CG principles in listed banks in BIST.

In order to answer the research questions described previously, Figure 4.1 describe the research proposed model.

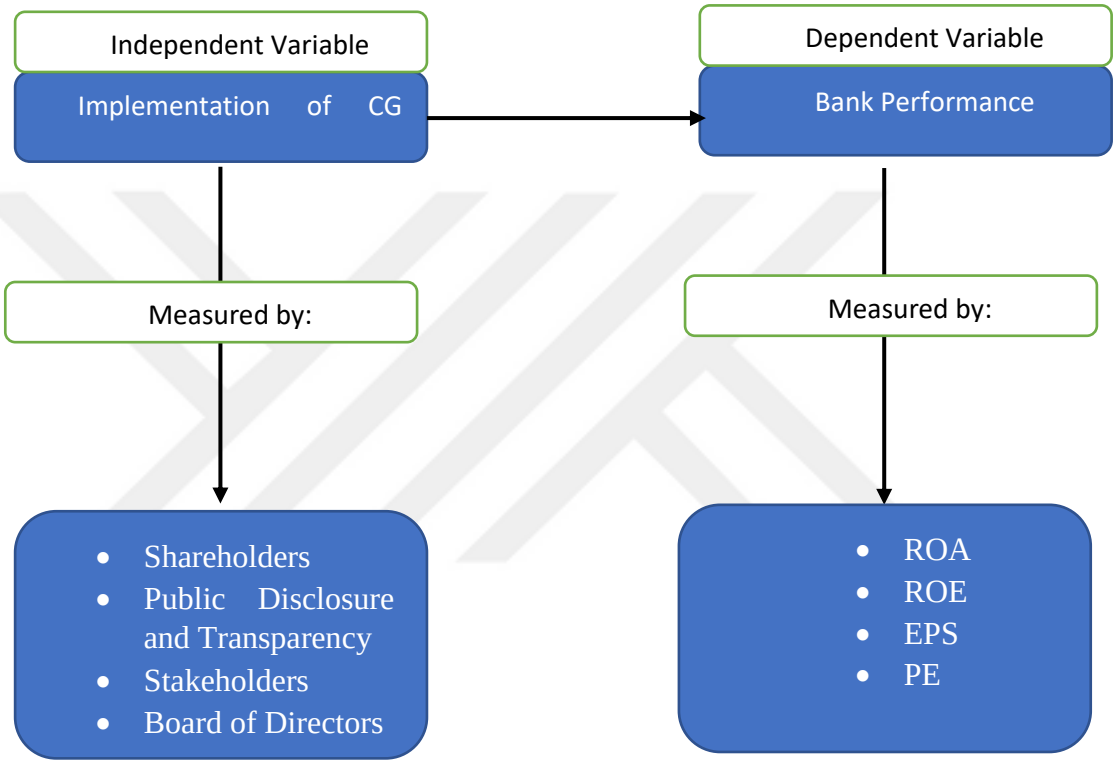

Figure 4. 1 Research Model

4.6 The Research Hypotheses

The researches and studies that examine the relationship between CG and firm performance are various all over the world. In Turkey the attention to applying and enhance CG principles increased since 2000 after the economic crisis that caused failures in many firms.

By reviewing many studies that examine the relation between the CG and firm performance in Turkey, we concluded that there is a variety in selecting financial and CG variables that be used to investigate that relationship.

In this study we used different financial and CG variables for first time, and there is no study examined the relation between the CG and firm performance before by using these variables together a specially in banking sector.

In order to answer research questions, and achieve the objective of the research, the hypotheses to be tested in this study are formed as below:

H1: There is no relationship between corporate governance rules and banking performance.

H_{1a}: There is no relationship between corporate governance rules and ROA.

H_{1b}: There is no relationship between corporate governance rules and ROE.

H_{1c}: There is no relationship between corporate governance rules and EPS.

H_{1d}: There is no relationship between corporate governance rules and PE.

H2: There is no impact of corporate governance rules on banking performance.

H_{2a}: There is no impact of corporate governance rules on ROA.

H_{2b}: There is no impact of corporate governance rules on ROE.

H_{2c}: There is no impact of corporate governance rules on EPS.

H_{2d}: There is no impact of corporate governance rules on PE.

4.7 Data Collection & Sampling

The suggests sample in this research are 13 Turkish banks listed in BIST. But due to unavailable CG rating report of some banks, since it is not mandatory, the target sample for this research as in Table 4.3 consists only 6 banks listed in BIST.

These banks are rated by the agencies authorized by CMB. The sample covered the time period 2014-2018.The remaining 7 banks that listed in BIST were exclude from the sample since they are not rated by any rating agency. The statistical program STATA12 is used to analysis the data in this research.

Table4. 3 Turkish banks listed in BIST

BANKS AND SPECIAL FINANCE CORPORATIONS	
1	ALBARAKA TÜRK KATILIM BANKASI A.Ş.
2	ŞEKERBANK T.A.Ş.
3	TÜRKİYE GARANTİ BANKASI A.Ş.
4	TÜRKİYE HALK BANKASI A.Ş.
5	TÜRKİYE SINAİ KALKINMA BANKASI A.Ş.
6	YAPI VE KREDİ BANKASI A.Ş.

The secondary data collected of this research are divided into two types of data. First, banks' financial data that includes ROA, ROE, EPS, and PE Ratio as dependent variables over the period 2014-2018. The source of this data extracted from annual reports that published in banks websites during the period of study.

Second, the banks' corporate governance data that includes CG rating report (Appendix 4.1) of shareholders, public disclosure and transparency, stakeholders, and board of directors as independent variables. The source of this data collected from the web sites of the rating agencies, and from annual reports of the banks.

4.8 Descriptive Statistics

The CG principles are divided into four main sections; Shareholders, Public Disclosure and Transparency, Stakeholders, and Board of Directors. The mean and standard deviation results of each main section were calculated. Descriptive statistics contains the number of observations, the mean, standard deviation, minimum and maximum values of each variable for the period of 2014-2018.

Table 4.4, summarizes the descriptive statistics results for CG main section rating scores, and overall CG principles rating scores in the sample.in addition to the financial variables ROA, ROE, EPS, and PE of the sample.

Table4. 4 Descriptive Statistics for Variables

Variable	Obs	Mean	Std.Dev.	Min	Max
shhol	30	9.268	0.343	8.31	9.59
pdt	30	9.324	0.251	8.89	9.69
sth	30	9.42	0.424	8.3	9.92
pod	30	9.07	0.358	8.21	9.76
Over all CG		**9.261**			
roa	30	1.279	0.62	0.28	2.6
roe	30	12.411	4.493	3.63	18.4
eps	30	0.758	0.76	0.08	2.98
pe	30	6.927	4.283	2.19	19.78

The results show that the mean stakeholder section score rating is the highest value 9.42. The second highest mean value was public disclosure and transparency section score rating is 9.324, followed by shareholder section score rating with mean value 9.268, and the lowest mean value was board of directors section score rating with mean value 9.07.

Figure 4.2 shows that 6 listed banks rating scores for all CG sections are increase with time during the selected period, and that indicate these banks are compliance to the CG principles that issued by CMB. As well as these banks are encouraging implementation and applying CMB principles.

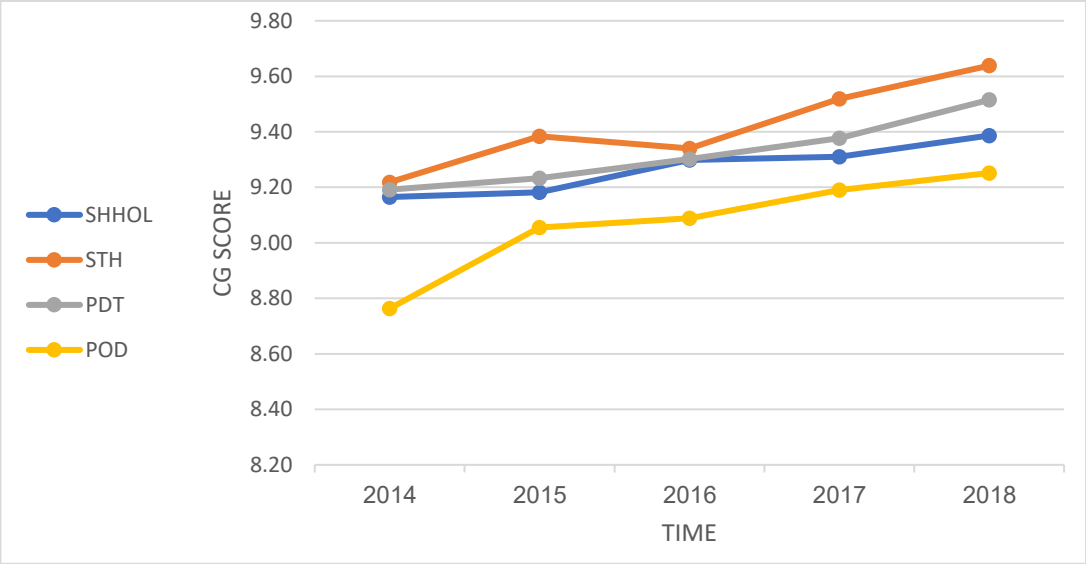

Figure 4. 2 The listed banks CG Rating Scores 2014-2018.

In general, the mean value of overall CG rating score is 9.261 of the sample 6 listed banks in BIST. That indicate that these banks perform very good according to the CMB principles, and rating definition scores. The banks applying 92.61% of CMB principles in all rated sections.

For financial performance variables, the table shows that ROA ranges from a minimum of 0.27% to a maximum of 2.6% with an average of 1.279%, and ROE ranges from a minimum of 3.63% to a maximum of 18.40% with an average of 12.411% for the sampled banks.

Figure 4.3 shows changes of ROA, and ROE comparing with banking sector (ROABS & ROEBS) (TBB, 2018c)over the same years. Both of them can be consider as an acceptable ratio, and compatible with the banking sector changing in the same period.

They are decreases after 2014, and increases from2015 to 2017, and decreases again in 2018, this could be explaining due to unstable financial situation during 2014-2018. The last two variables in the table present the mean of EPS, and PE ratio are 0.758%, and 6.927% respectively.

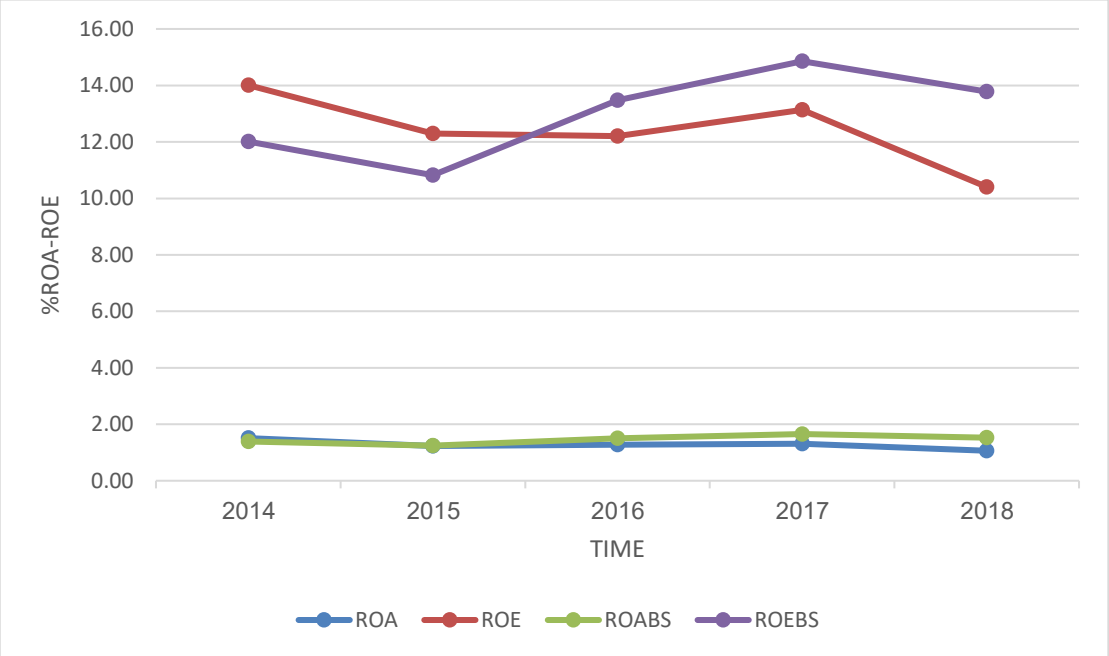

Figure 4. 3 Changes of ROA, ROE, ROABS, ROEBS Over Years.

4.9 Statistical Analysis

The methodologies to test hypotheses and analyze the relationships between variables are various in the CG studies as mention previously in Table 4.1. The research data have

both time dimension and cross-sectional dimension which is known as panel data. To examine the hypotheses of the study two different methods were used;

The first method used to examine the relationship between corporate governance rules and banking financial performance by using Pearson correlation. While the second method used to examine the impact of corporate governance rules on banking financial performance by using the panel regression techniques.

4.9.1 Correlation Matrix

The results of Pearson correlation test are presented in Table 4.5 to examines the association between all CG variables and banks financial performance variables in the model. To examine the relationship between corporate governance rules and banking financial performance, many of variables have been used in this research. ROA, ROE, EPS, and PE ratio variables were used as bank financial performances, while (shol, pdt, sth, and pod) were used as CG variables.

Table4. 5 Correlation Matrix of Variables

Variables	roa	roe	eps	pe	shhol	pdt	sth	pod
roa	1.000							
roe	0.912*	1.000						
eps	0.151	0.300	1.000					
pe	-0.507*	-0.673*	-0.330	1.000				
shhol	0.210	0.057	0.276	-0.166	1.000			
pdt	0.542*	0.362*	0.268	-0.216	0.662*	1.000		
sth	0.291	0.071	0.101	-0.028	0.855*	0.797*	1.000	
pod	0.204	0.145	0.268	-0.042	0.532*	0.516*	0.627*	1.000

* Shows significance at the 0.05 level

4.9.1.1 The Relationship Between Corporate Governance Rules and Banking Financial Performance ROA.

H_{1a}: There is no relationship between corporate governance rules and ROA.

The correlation table shows that CG variables (shhol, sth, and pod) sections are positively weak correlated with ROA. But this relationships between these variables and ROA are statistically not significant (P-value > 0.05), which mean we cannot reject the null hypotheses H_{1a}, there is no relationship between corporate governance rules (shhol, sth, and pod) and ROA.

In case of (pdt) CG section, the results show that is a positive strong correlation with ROA. The relationships between (pdt) CG section and ROA is statistically significant (P-value < 0.05). This result contrary with the hypotheses H_{1a}, which means we reject the null hypothesis and accept alternative hypothesis there is a relationship between corporate governance rules(pdt) and ROA.

Over all we conclude there is a relationship between corporate governance rules and ROA, this lead to reject null hypotheses H_{1a}, and accept alternative hypothesis there is a relationship between corporate governance rules and banking performance ROA.

4.9.1.2 The Relationship Between Corporate Governance Rules and Banking Financial Performance ROE.

H_{1b}: There is no relationship between corporate governance rules and ROE

The correlation table results show that the correlation between CG variables (shhol, sth, pdt, and pod), and banking performance ROE is weaker than that in case of ROA.

The correlation table indicates that CG variables (shhol, sth, and pod) sections are positively very weak correlated with ROE. But this relationships between these variables and ROE are statistically not significant (P-value > 0.05), which mean we cannot reject the null hypotheses H_{1b}, there is no relationship between corporate governance rules and ROE.

The CG rules (pdt) section, the results indicate that is a positive correlation with ROE. The relationships between (pdt) CG section and ROE is statistically significant (P-value < 0.05). This result contrary with the hypotheses H_{1b}, which means we reject the null hypothesis and accept alternative hypothesis there is a relationship between corporate governance rules and ROE.

Over all we conclude there is a relationship between corporate governance rules and ROE, this lead to reject null hypotheses H_{1b}, and accept alternative hypothesis there is a relationship between corporate governance rules and banking financial performance ROE.

4.9.1.3 The Relationship Between Corporate Governance Rules and Banking Financial Performance EPS.

H_{1c}: There is no relationship between corporate governance rules and EPS.

The results of correlation of CG rules variables (shhol, pdt, sth, and pod) with EPS are all positive correlated with EPS, and stronger than that in case of ROE. But this relationships between these variables and EPS are statistically not significant (P-value > 0.05), which mean we cannot reject the null hypotheses H_{1c}, there is no relationship between corporate governance rules and EPS.

4.9.1.4 The Relationship Between Corporate Governance Rules and Banking Financial Performance PE.

H_{1d}: There is no relationship between corporate governance rules and PE.

The last variables correlation results of CG rules variables (shhol, pdt, sth, and pod) with PE are all negative correlated with PE. But this relationships between these variables and PE are statistically not significant (P-value > 0.05), which mean we cannot reject the null hypotheses H_{1d}, there is no relationship between corporate governance rules and PE.

4.9.1.5 The Relationship Between Corporate Governance Rules and Banking Financial Performance.

H1: There is no relationship between corporate governance rules and banking financial performance.

The conclusion for previous results to investigate the relationship between corporate governance rules and banking financial performance, it's clear that there are various results. All of correlations shows that a positive, and negative relationship between corporate governance rules and banking financial performance. In addition, some of correlations are statically significant, and some of them were statistically not significant.

Since the results indicates there is a relationship between corporate governance rules and banking financial performance, even its positive or negative, strong or weak, statically significant or not significant, we conclude that there is a relationship between corporate governance rules and banking financial performance when we use accounting base which are ROA, and ROE. While there is no relationship between corporate

governance rules and banking financial performance when we use market base which are EPS, and PE. Table 4.6 summarized the hypotheses results.

Overall, the main hypothesis H1is rejected when ROA, and ROE are used as banking financial performance. While accepted when EPS, and PE used as banking financial performance.

Table4. 6 Summary of The Hypotheses Results.

Null hypothesis	**Reject/Accept**
H1: There is no relationship between corporate governance rules and banking financial performance ROA, ROE.	Reject
H1: There is no relationship between corporate governance rules and banking financial performance EPS, PE.	Accept
H1a: There is no relationship between corporate governance rules and ROA	Reject
H1b: There is no relationship between corporate governance rules and ROE	Reject
H1c: There is no relationship between corporate governance rules and EPS.	Accept
H_{1d}: There is no relationship between corporate governance rules and PE.	Accept

4.9.2. Panel Regression Results

The second method used to examine the impact of corporate governance rules on banking financial performance by using the panel regression techniques. The variables ROA, ROE, EPS, and PE ratio used as dependent variables, while the rating scores of shareholders (shhol), public disclosure and transparency (pdt), stakeholders (sth), and board of directors (pod) used as independent variables over the period 2014-2018.

To choose the appropriate panel regressions model, the fixed or random effects model to be use for our data, the Hausman specification test which is one of the main tests in panel data studies checked for all dependent variables.

In Hausman test If the result statistically significant (P-value < 0.05) we can choose fixed effects model. Otherwise, fixed effects model is chosen. Table 4.7 summarized the Hausman test results, while random effects regression is preferred in Model 1, 3, and Model 4, fixed effects regressions are preferred in Model 2.

Table4. 7 Summary of The Hausman Test Results.

Model	**P-value**	**Reg Model**	**Dependent Variable**
Model-1	0.4899	Random effects	ROA
Model-2	0.000	Fixed effects	ROE
Model-3	0.9884	Random effects	EPS
Model-4	0.6443	Random effects	PE

4.9.2.1 The Impact of Corporate Governance Rules on Banking Financial Performance ROA.

H_{2a}: There is no impact of corporate governance rules on ROA.

Based on the Hausman test results (Appendix 4.2), the Random effect regression is preferred for Model-1, where ROA is dependent variable that used to measure bank financial performance.

The first model used in this thesis to examine the impact of corporate governance rules on banking financial performance variables by using Random Effects GLS Regression analysis is:

Model 1: ROA= β0+ β1shhol+β2pdt+β3sth+βpod+u

Regression results of Model-1 are presented in Table 4.8. In this model R^2 value of the model is 0.0098 or 0.98% which indicate a weak explanatory power for ROA.

Table4. 8 Random Effects GLS Regression: Dependent Variable ROA (Model 1)

```
. xtreg roa shhol pdt sth pod, re

Random-effects GLS regression                   Number of obs      =        30
Group variable: bankcode                        Number of groups   =         6

R-sq:  within  = 0.3630                         Obs per group: min =         5
       between = 0.0697                                        avg =       5.0
       overall = 0.0098                                        max =         5

                                                Wald chi2(4)       =      8.39
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0784
```

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
shhol	-.8973817	.3938796	-2.28	0.023	-1.669372	-.1253919
pdt	.223147	.4843464	0.46	0.645	-.7261545	1.172449
sth	.2667197	.4156552	0.64	0.521	-.5479494	1.081389
pod	-.3356562	.2285722	-1.47	0.142	-.7836494	.1123371
_cons	8.04723	3.460659	2.33	0.020	1.264463	14.83
sigma_u	.58648524					
sigma_e	.2324313					
rho	.86425686	(fraction of variance due to u_i)				

To check autocorrelation in the Model-1, Wooldridge test for autocorrelation in the model have been used. Test results in table 4.9 suggest there is serial correlation problem in the model (Prob > F = 0.5693).

Table4. 9 Wooldridge Test for Autocorrelation Model-1

```
. xtserial  roa  shhol pdt sth pod

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F(  1,        5) =      0.370
           Prob > F =      0.5693
```

Also, Likelihood – ratio test for heteroscedasticity in table 4.10 indicate to the exist of heteroscedasticity problem (Prob>chi2 = 0.0014).

Table4. 10 Likelihood – Ratio Test for Heteroscedasticity Model-1

```
. local df = e(N_g) - 1

. lrtest hetero . , df(`df')

Likelihood-ratio test                           LR chi2(5)  =     19.76
(Assumption: . nested in hetero)                Prob > chi2 =    0.0014
```

To avoid serial correlation and heteroscedasticity exists in the model, robust estimators can be preferred. The test results of Model-1 Random - effects GLS regression(robust) is presented in Table 4.11.

Table4. 11 Random - Effects GLS Regression(robust): Dependent Variable ROA

```
. xtreg roa shhol pdt sth pod, re vce(robust)

Random-effects GLS regression                   Number of obs      =        30
Group variable: idcode                          Number of groups   =         6

R-sq:  within  = 0.3630                         Obs per group: min =         5
       between = 0.0697                                        avg =       5.0
       overall = 0.0098                                        max =         5

                                                Wald chi2(4)       =    254.58
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000

                                 (Std. Err. adjusted for 6 clusters in idcode)
------------------------------------------------------------------------------
             |               Robust
         roa |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |  -.8973817   .0860762   -10.43   0.000    -1.066088   -.7286755
         pdt |    .223147   .6315422     0.35   0.724    -1.014653    1.460947
         sth |   .2667197   .3375928     0.79   0.429      -.39495    .9283895
         pod |  -.3356562   .1880956    -1.78   0.074    -.7043167    .0330044
       _cons |    8.04723   3.746791     2.15   0.032     .7036551    15.3908
-------------+----------------------------------------------------------------
     sigma_u |  .58648524
     sigma_e |   .2324313
         rho |  .86425686   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The Robust estimation regression results show that there is a statistically significant (P-value < 0.05), and negative impact of CG rules of (shhol) section on ROA.

The (pdt)section, and stakeholder (sth) section shows that there is a statistically insignificant (P-value > 0.05) and a positive impact on bank performance ROA, the (pod) section results show negative statistically insignificant (P-value > 0.05) and a negative impact on bank performance ROA.

The model results show that there is only an impact of CG rules (shhol) on ROA. This result means reject the null hypotheses H_{2a}, and accept alternative hypothesis there is an impact of corporate governance rules on ROA. While the CG rules (pdt, sth, and pod) accept the null hypotheses H_{2a}.

The results of the Robust estimation regression show that the Overall model is significance with the Wald test (Prob > chi2 = 0.000) unlike the previous without Robust estimation, and there is an impact of corporate governance rules on ROA.

4.9.2.2 The Impact of Corporate Governance Rules on Banking Financial Performance ROE

H_{2b}: There is no impact of corporate governance rules on ROE.

The Hausman test results (Appendix 4.3), provide that the Fixed effect regression is preferred for Model-2, to examine the impact of corporate governance rules on banking financial performance, where ROE is dependent variable that used to measure bank financial performance as follows;

Model 2: ROE= β0+ β1shhol+β2pdt+β3sth+βpod+u

Table 4.12 summarized Fixed Effects Regression Model-2 results.

In this model R^2 value of the model is value of the model is 0.0004 or 0.04% which indicate a very weak explanation ratio for ROE.

Table4. 12 Fixed Effects Panel Regression: Dependent Variable, ROE (Model -2)

```
. xtreg roe shhol pdt sth pod, fe

Fixed-effects (within) regression               Number of obs      =        30
Group variable: idcode                          Number of groups   =         6

R-sq:  within  = 0.5947                         Obs per group: min =         5
       between = 0.0366                                        avg =       5.0
       overall = 0.0004                                        max =         5

                                                F(4,20)            =      7.34
corr(u_i, Xb)  = -0.7003                        Prob > F           =    0.0008

------------------------------------------------------------------------------
         roe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |  -14.25618   2.954367    -4.83   0.000    -20.41888   -8.093483
         pdt |   4.157235   3.618836     1.15   0.264    -3.391525    11.70599
         sth |   .3654314   3.110039     0.12   0.908    -6.121995    6.852858
         pod |   -.551248   1.685578    -0.33   0.747    -4.067302    2.964806
       _cons |   107.3388   26.15986     4.10   0.001     52.77027    161.9073
-------------+----------------------------------------------------------------
     sigma_u |  6.3996694
     sigma_e |  1.7795758
         rho |  .92822531   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(5, 20) =    22.86                 Prob > F = 0.0000
```

To check autocorrelation in the Model-2, Wooldridge test for autocorrelation in the model have been used. Test results in table 4.13 suggest there is serial correlation problem in the model (Prob > F = 0.8818).

Table4. 13 Wooldridge Test for Autocorrelation Model-2

```
. xtserial  roe  shhol pdt sth pod

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F(  1,       5) =      0.024
           Prob > F =      0.8818
```

Also, Modified Wald test result in table 4.14 for groupwise heteroskedasticity in fixed effect regression model indicate to the exist of heteroscedasticity problem (Prob>chi2 = 0.0000).

Table4. 14 Modified Wald Test for Groupwise Heteroskedasticity Model-2

```
. xttest3

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (6)  =       30.80
Prob>chi2 =      0.0000
```

The robust estimator's regression used again in Model-2 as well to avoid serial correlation and heteroscedasticity exists in the model, Table 4.15 provide the test results of Model-2 Fixed effect regression(robust).

The Robust estimation regression results are similar to the non-robust estimates. In both models there is a statistically significant (P-value < 0.05), and negative impact of CG rules of (shhol) section on ROE.

The (pdt)section, and (sth) section shows that there is a statistically insignificant (P-value > 0.05), and a positive impact on bank performance ROE.

The (pod) section results show statistically insignificant (P-value > 0.05), and a negative impact on bank performance ROE.

Table4. 15 Fixed Effects Panel Regression(robust): Dependent Variable ROE.

```
. xtreg roe shhol pdt sth pod, fe vce(robust)

Fixed-effects (within) regression               Number of obs      =         30
Group variable: idcode                          Number of groups   =          6

R-sq:  within  = 0.5947                         Obs per group: min =          5
       between = 0.0366                                        avg =        5.0
       overall = 0.0004                                        max =          5

                                                F(4,5)             =     428.22
corr(u_i, Xb)  = -0.7003                        Prob > F           =     0.0000

                                 (Std. Err. adjusted for 6 clusters in idcode)
------------------------------------------------------------------------------
             |               Robust
         roe |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |  -14.25618    .829576   -17.18   0.000    -16.38868   -12.12369
         pdt |   4.157235   3.860951     1.08   0.331    -5.767657    14.08213
         sth |   .3654314   2.580386     0.14   0.893    -6.267663    6.998526
         pod |   -.551248   .6815127    -0.81   0.455    -2.303132    1.200636
       _cons |   107.3388    15.3914     6.97   0.001     67.77393    146.9036
-------------+----------------------------------------------------------------
     sigma_u |  6.3996694
     sigma_e |  1.7795758
         rho |   .92822531   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The model results show that there is an impact of CG rules (shhol) on ROE. This result means reject the null hypotheses H_{2b}, and accept alternative hypothesis there is an impact of CG rules on ROE. While the CG rules (pdt, sth, and pod) accept the null hypotheses H_{2b}.

The results of the Robust estimation regression confirmed that the Overall model is significance with the F test (Prob > F = 0.000), and there is an impact of corporate governance rules on ROE.

4.9.2.3 The Impact of Corporate Governance Rules on Banking Financial Performance EPS

H_{2c}: There is no impact of corporate governance rules on EPS.

In this model the Hausman test results (Appendix4.4), indicated that the Random effect regression is preferred for Model-3 to examine the impact of corporate governance rules on banking financial performance, where EPS is dependent variable that used to measure bank performance by using Random Effects GLS Regression analysis is:

Model 3: EPS = β0+ β1shhol+β2pdt+β3sth+βpod+u

Table 4.16 summarized Random Effects Regression Model-3 results. The value of R^2 in this model is 0.0139 or 1.39% which indicate a poor explanatory power for EPS.

Table4. 16 Random Effects GLS Regression: Dependent Variable EPS (Model -3)

```
. xtreg eps shhol pdt sth pod, re

Random-effects GLS regression                   Number of obs      =        30
Group variable: bankcode                        Number of groups   =         6

R-sq:  within  = 0.2596                         Obs per group: min =         5
       between = 0.0002                                        avg =       5.0
       overall = 0.0139                                        max =         5

                                                Wald chi2(4)       =      7.50
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.1116

------------------------------------------------------------------------------
         eps |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |  -.4753502   .3917144    -1.21   0.225    -1.243096    .2923959
         pdt |   .5076247   .4807317     1.06   0.291    -.4345921    1.449842
         sth |   .2487513   .4128104     0.60   0.547    -.5603421    1.057845
         pod |   .2217821   .2251639     0.98   0.325    -.2195311    .6630953
       _cons |  -3.924197   3.475279    -1.13   0.259    -10.73562    2.887224
-------------+----------------------------------------------------------------
     sigma_u |  .99844469
     sigma_e |  .24893209
         rho |   .9414774   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The Wooldridge test for autocorrelation in the Model-3 have been used to examine the autocorrelation problem in the model. Test results in table 4.17 suggest there is serial correlation problem in the model (Prob > F = 0.9138).

Table4. 17 Wooldridge Test for Autocorrelation Model-3

```
. xtserial   eps shhol pdt sth pod

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
    F(  1,        5) =      0.008
           Prob > F =      0.9318
```

Also, Likelihood – ratio test result in table 4.18 for heteroscedasticity indicate to the exist of heteroscedasticity problem (Prob>chi2 = 0.0000).

Table4. 18 Likelihood – Ratio Test for Heteroscedasticity Model-3

```
. local df = e(N_g) - 1

. . lrtest hetero . , df(`df')

Likelihood-ratio test                                 LR chi2(5)  =     40.49
(Assumption: . nested in hetero)                      Prob > chi2 =    0.0000
```

The robust estimator's regression used again in Model-3 as well to avoid serial correlation and heteroscedasticity exists in the model. Table 4.19 provide the test results of Model-3 Random effects regression(robust).

The CG rules of (shhol) section result is changed from non-significant in non-robust estimates to significant (P-value < 0.05) in robust estimation, with a negative impact of CG rules of (shhol) section on EPS.

The Robust estimation regression results are similar to the non-robust, the (pdt, sth, pod) section shows that there is a statistically insignificant (P-value > 0.05), and a positive impact on bank performance EPS.

The model results show that there is an impact of CG rules (shhol) on EPS. This result means reject the null hypotheses H_{2c}, and accept alternative hypothesis there is an impact of corporate governance rules on EPS. While the CG rules (pdt, sth, and pod) accept the null hypotheses H_{2c}**.**

Table4. 19 Random Effects GLS Regression(robust): Dependent Variable EPS.

```
. xtreg eps shhol pdt sth pod, re vce(robust)

Random-effects GLS regression                   Number of obs      =         30
Group variable: idcode                          Number of groups   =          6

R-sq:  within  = 0.2596                         Obs per group: min =          5
       between = 0.0002                                        avg =        5.0
       overall = 0.0139                                        max =          5

                                                Wald chi2(4)       =      28.78
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =     0.0000

                                 (Std. Err. adjusted for 6 clusters in idcode)
------------------------------------------------------------------------------
             |               Robust
         eps |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |  -.4753502   .1453362    -3.27   0.001     -.760204   -.1904965
         pdt |   .5076247   .3518037     1.44   0.149    -.1818979    1.197147
         sth |   .2487513   .3560685     0.70   0.485    -.4491302    .9466329
         pod |   .2217821   .3061871     0.72   0.469    -.3783336    .8218978
       _cons |  -3.924197   3.092375    -1.27   0.204     -9.98514    2.136746
-------------+----------------------------------------------------------------
     sigma_u |  .99844469
     sigma_e |  .24893209
         rho |   .9414774   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The results of the Robust estimation regression show that the Overall model is significance with the Wald test (Prob > chi2 = 0.000) unlike the previous without Robust estimation, and there is an impact of corporate governance rules on EPS.

4.9.2.4 The Impact of Corporate Governance Rules on Banking Financial Performance PE

H_{2d}: There is no impact of corporate governance rules on PE.

In this model the Hausman test results (Appendix4.5), indicated that the Random effect regression is preferred for Model-4, to investigate the impact of corporate governance rules on banking financial performance, where, PE is dependent variable that used to measure bank performance by using Random Effects GLS Regression analysis is:

Model 4: PE = β0+ β1shhol+β2pdt+β3sth+βpod+u

The results of Random Effects Regression Model-4 presented in Table 4.20. The value of R^2 in this model is 0.0036 or 0.36% which indicate a weak explanatory power for PE.

Table4. 20 Random Effects GLS Regression: Dependent Variable PE (Model -4)

```
. xtreg pe shhol pdt sth pod, re

Random-effects GLS regression                   Number of obs      =        30
Group variable: bankcode                        Number of groups   =         6

R-sq:  within  = 0.1547                         Obs per group: min =         5
       between = 0.1259                                        avg =       5.0
       overall = 0.0036                                        max =         5

                                                Wald chi2(4)       =      2.97
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.5630

------------------------------------------------------------------------------
          pe |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |    4.813203   3.960497     1.22   0.224    -2.949229    12.57564
         pdt |   -3.010898   4.878402    -0.62   0.537    -12.57239    6.550594
         sth |   -2.317045   4.186692    -0.55   0.580    -10.52281    5.888721
         pod |    -1.02973   2.328509    -0.44   0.658    -5.593523    3.534064
       _cons |      21.554   34.44186     0.63   0.531    -45.95081    89.05881
-------------+----------------------------------------------------------------
     sigma_u |   4.4864931
     sigma_e |     2.56871
         rho |   .75312239   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The Wooldridge test for autocorrelation in the Model-4 have been used to examine the autocorrelation problem in the model. Test results in table 4.21 suggest there is serial correlation problem in the model (Prob > F = 0.5652).

Table4. 21 Wooldridge Test for Autocorrelation Model-4

```
. xtserial pe shhol pdt sth pod

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
     F(  1,        5) =      0.379
           Prob > F =      0.5652
```

Also, Likelihood – ratio test result in table 4.22 for heteroscedasticity indicate to the exist of heteroscedasticity problem (Prob>chi2 = 0.0000).

Table4. 22 Likelihood – Ratio Test for Heteroscedasticity Model-4

```
. local df = e(N_g) - 1

. . lrtest hetero . , df(`df')

Likelihood-ratio test                                 LR chi2(5)  =     37.54
(Assumption: . nested in hetero)                      Prob > chi2 =    0.0000
```

The robust estimators regression used again in Model-4 as well to avoid serial correlation and heteroscedasticity exists in the model. Table 4.23 provide the test results of Model-4 Random effects regression(robust).

The CG rules of (shhol) section result is changed from non-significant in non-robust estimates to significant (P-value < 0.05) in robust estimation, with a positive impact of CG rules of (shhol) section on PE.

The Robust estimation regression results are similar to the non-robust, the (pdt, sth, pod) section shows that there is a statistically insignificant (P-value > 0.05), and a negative impact on bank performance PE.

The model results show that there is an impact of CG rules (shhol) on PE. This result means reject the null hypotheses H_{2d}, and accept alternative hypothesis there is an impact of corporate governance rules on PE. While the CG rules (pdt, sth, and pod) accept the null hypotheses H_{2d}**.**

Table4. 23 Random Effects GLS Regression(robust): Dependent Variable PE.

```
. xtreg pe shhol pdt sth pod, re vce(robust)

Random-effects GLS regression                   Number of obs      =        30
Group variable: idcode                          Number of groups   =         6

R-sq:  within  = 0.1547                         Obs per group: min =         5
       between = 0.1259                                        avg =       5.0
       overall = 0.0036                                        max =         5

                                                Wald chi2(4)       =     33.97
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000

                                (Std. Err. adjusted for 6 clusters in idcode)
------------------------------------------------------------------------------
             |               Robust
          pe |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       shhol |    4.813203   1.141509     4.22   0.000     2.575886     7.05052
         pdt |   -3.010898   3.275333    -0.92   0.358    -9.430432    3.408636
         sth |   -2.317045   2.322788    -1.00   0.319    -6.869626    2.235537
         pod |    -1.02973   1.479044    -0.70   0.486    -3.928602    1.869143
       _cons |      21.554   25.71664     0.84   0.402    -28.84969    71.95769
-------------+----------------------------------------------------------------
     sigma_u |   4.4864931
     sigma_e |     2.56871
         rho |   .75312239   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

The results of the Robust estimation regression show that the overall model is significance with the Wald test (Prob > chi2 = 0.000) unlike the previous without Robust estimation, and there is an impact of corporate governance rules on PE.

4.9.2.5 The Impact of Corporate Governance Rules on Banking Financial Performance

H2: There is no impact of corporate governance rules on banking financial *performance.*

The analysis of regression test of four models provided different results. It shows various impact of corporate governance rules on banking financial performance, this impact sometimes positive or negative, strong or weak, statically significant or not significant.

Overall, the results show that there is an impact of corporate governance rules on ROA, ROE, EPS, and PE that used in this research as banking financial performance, and that is led to reject the main hypotheses H2, and accept the alternative hypotheses stated that there is an impact of corporate governance rules on banking financial performance. Summary of the hypotheses results presented in Table 4.24.

Table4. 24 Summary of The Hypotheses Results.

Null hypothesis	**Reject/Accept**
H2: There is no impact of corporate governance rules on banking financial performance.	**Reject**
H_{2a}: There is no impact of corporate governance rules (shhol) on ROA	**Reject**
H_{2a}: There is no impact of corporate governance rules (pdt, sth, pod) on ROA	**Accept**
H_{2b}: There is no impact of corporate governance rules (shhol) on ROE	**Reject**
H_{2b}: There is no impact of corporate governance rules (pdt, sth, pod) on ROE	**Accept**
H_{2c}: There is no impact of corporate governance rules (shhol) on EPS.	**Reject**
H_{2c}: There is no impact of corporate governance rules (pdt, sth, pod) on EPS.	**Accept**
H_{2d}: There is no impact of corporate governance rules (shhol) on PE.	**Reject**
H_{2d}: There is no impact of corporate governance rules (pdt, sth, pod) on PE.	**Accept**

Chapter 5 Research Findings

5.1 Introduction

This chapter present summary of research findings of the study by analysis the results to achieve the purpose of the study.

In addition to the contribution of this research, that introduces the impact of implementation of corporate governance rules and principles of listed banks in BIST during a period of 2014-2018 on the performance of banking sector due to its important role in the economy of the country.

The significance of the study comes from using sub groups of corporate governance as independent variables to measure the impact of corporate governance rules on financial performance that make difference from previous studies that majority focused on internal and external corporate governance variables.

This study used corporate governance rating index of sub groups of corporate governance is another contribution to the literature specifically, in listed banks in BIST.

Finally, the chapter introduce some important recommendations for future research studies, by using different methods and variables that can add value to the corporate governance area in Turkish literature.

5.2 Summary of Research Findings

This research investigates the impact of application of CG rules on the financial performance with respect to banking industry for listed banks in BIST in Turkey during 2014 -2018.In addition the study examined the relationship between CG rules and banking financial performance.

The main points of research finding that led to achieve the objective of the study, and answering the research questions stated in section 1.9, are summarized as below:

1. The literature review part in chapter one shows the CG principles and rules that applied in Turkish listed companies as presented in 2003, and revised it in 2005, by the (CMB), in addition to the CG Communiqué number II-17.1 published by CMB in 2014 according to the relevant articles of the Turkish Commercial Code, Banking legislation, CMB legislation. Due to special nature of banking industry,

(BRSA) was created according to Banks Act Nr. 4389 and started activity in August 2000, that organize regulations on banks. The research finds that:

- All banks in turkey applied to the same CG principles and rules mention above, and no difference between banks activity.
- Only 13 banks are listed in BIST.
- Six listed banks are contracted with CG rating agency, target sample of this study.
- CG principles and rules that applied in the banking sector are differ from other sectors, due to the special nature of banking industry.

The CG principles that investigated by the study in 6 listed banks in BIST during 2014-2018, according to the CMB are divided into four main sections; Shareholders, Public Disclosure and Transparency, Stakeholders, and Board of Directors.

The study finding that the 6 listed banks in BIST compliance to the CG principles with various degrees. In addition, the study finding that 6 listed banks rating scores for all CG sections are increase with time during the selected period, and that indicate the selected sample of 6 listed banks in BIST are compliance to the CG principles that issued by CMB, and these banks are encouraging implementation and applying CMB principles.

In general, the mean value of overall CG rating score is 9.261 of the sample 6 listed banks in BIST. That indicate that these banks perform very good according to the CMB principles, and rating definition scores. The selected sample banks applying 92.61% of CMB principles in all rated sections.

2. The variables that represent CG rules and banking performance are different from study to another. Each study or research used different variables according to its purpose, and views as presented in Table4.1.

   In this research the financial variables that used to represent bank performance are, ROA, ROE, EPS, and PE. While the CG variables that used are shareholders, public disclosure and transparency, stakeholders, and board of directors. These variables are defined, and explained in section 4.4.1, and section 4.4.2. This choice makes this study different from others by using these variables for first time together a specially in banks listed in BIST.
3. In the literature, there are many studies support the relationship between CG and financial performance, while others do not (Coşkun & SAYILIR, 2012).

Our results indicate that there is a relationship between CG rules and banking financial performance when measured by ROA, and ROE. While there is no relationship between CG rules and banking financial performance when measured by EPS, and PE. (Ergin, 2012) in his study by using CG ranking, for listed firms in BIST, concluded that the effects of the sub-components of the CG are different. He found only the sub-components of CG stakeholders, and public disclosure and transparency are having relationship with the financial performance, and the accounting performance. In another study by (Ajanthan et al., 2013) Corporate Governance and Banking Performance in Sri Lanka conclude that some CG variables are correlated with ROA, ROE, while some others not.

In general some studies shows that there is a relationship between CG principles and financial performance such as, (Klapper, 2002), (Al-Manaseer et al., 2012), (Ahmed et al., 2017). While some other studies do not support the relationship between CG and financial performance such as, (Bauer, Guenster, & Otten, 2004), (Büyükşalvarci & Abdioğlu, 2010), (Coşkun & SAYILIR, 2012).

4. To investigate the impact of CG rules on banking financial performance in listed banks in BIST, the panel regression techniques were used. The financial variables ROA, ROE, EPS, and PE ratios used as dependent variables, while the corporate governance rating scores of shareholders (shhol), public disclosure and transparency (pdt), stakeholders (sth), and board of directors (pod) used as independent variables. The random effects regression model used with ROA.EPS, and PE, while the fixed effects regression model used with ROE.

   The results analysis of panel regression test of all models of the study provided different results. It shows various impact of corporate governance rules on banking financial performance, this impact sometimes positive or negative, strong or weak, statically significant or not significant. These variations in the impact of corporate governance rules on banking financial performance are in the line with previous studies.

   Some studies show that there is impact of CG rules on banking financial performance, while some others not, such as studies done by(Ergin, 2012), (Al-Manaseer et al., 2012), (Coşkun & SAYILIR, 2012), (Najjar, 2012), (AlManaseer, 2013), (El-Chaarani, 2014a), (Yilmaz & Buyuklu, 2016).

By reviewing the literatures that related to this research, the impact of CG rules on firm financial performance varies from study to another based on the CG variables, and financial performance variables that used in the study, in addition to some other factors, such as the sample selection, data collection, analysis method.

Overall, the selected sample of 6 listed banks in BIST, indicate that these banks applying sound corporate governance according to the CMB, and BRSA principles, and rating definition scores. The banks applying 92.61% of CMB principles in all rated sections, and the panel regression results show that there is an impact of corporate governance rules specifically shareholder sub-group on banking financial performance ROA, ROE, EPS, and PE ratios that used in this research.

That is may be indicate that the listed banks are focusing on the corporate governance shareholder sub-group more than other corporate governance sub-groups, to encourage investors for more investment, and increase shareholders confidence for their investment. Another reason may be due to the lately starting of implementation of corporate governance rules and principles in Turkey.

In the future more attention to the important of corporate governance rating scores may be help to better understanding to the impact of corporate governance rules on firm financial performance in Turkey.

5.3 The Contributions of the Study and Suggestions for Further Studies

This study is a continuation to the previous studies, which investigated the impact of application of corporate governance rules on the performance of banking sector in Turkey.

The study by using sub groups of corporate governance as independent variables to measure the impact of corporate governance rules on financial performance is attempt to fill the gap in previous studies that majority focused on internal and external corporate governance variables.

The study in general add value to the previous studies in corporate governance area in Turkey, and particularly in the banking sector. What distinguishes this study from previous studies that it used corporate governance rating index of sub groups called shareholders, public disclosure and transparency, stakeholders, and board of directors for listed banks in BIST for first time with financial performance namely ROA, ROE, EPS, and PE ratios. As well as, the study reviewed the corporate governance principles and rules in banking industry in Turkey issued by CMB, and BARSA, due to the special nature of corporate governance in banking industry. In addition, the results of this study would contribute to more understanding about corporate governance principles and rules applying in Turkish banking sector.

The research indicates important dimensions of corporate governance for firms. It shows that there is impact of some dimensions of corporate governance on the performance that can led to improve corporate business. That’s encourage to apply corporate governance not only because of regulations, but also for sustain, and grow in the market.

Finally, the study recommended some proposals for further researches summarized as below:

- More studies may be done by using the same variables in this study with other industries, and comparing the results to find out the impact of applying corporate governance principles on financial performance.
- Other performance indicators can be introduced to measure financial performance, in further study with current CG variables used in this study.

- Future research may be carried out to investigate the impact of applying corporate governance principles on financial performance for larger sample size, and over a longer period of time.
- Future studies by collecting data using surveys and interviews is another method to give more understanding of the relationship between CG implementation and financial performance.
- Further studies may be including the main sub groups of corporate governance compliance reports, and corporate governance rating reports of the firms as corporate governance variables, since it's less using in the previous studies.
- Comparative study may be carried out between listed banks in BIST that provide corporate rating reports, and non-listed banks that not provide corporate rating reports to understanding the impact of applying corporate governance principles on financial performance.

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Appendixes

Appendix 2. 1 The Code of Best Practice, *Source*: Cadbury Code (1992)

1. The Board of Directors
1.1 The board should meet regularly, retain full and effective control over the company, and monitor the executive management.
1.2 There should be a clearly accepted division of responsibilities at the head of a company, which will ensure a balance of power and authority, such that no one individual has unfettered powers of decision. Where the chairman is also the chief executive, it is essential that there should be a strong and independent element on the board, with a recognized senior member.
1.3 The board should include non-executive directors of sufficient caliber and number for their views to carry significant weight in the board's decisions.
1.4 The board should have a formal schedule of matters specifically reserved to it for decision to ensure that the direction and control of the company is firmly in its hands.
1.5 There should be an agreed procedure for directors in the furtherance of their duties to take independent professional advice if necessary, at the company's expense.
1.6 All directors should have access to the advice and services of the company secretary, who is responsible to the board for ensuring that board procedures are followed and that applicable rules and regulations are complied with. Any question of the removal of the company secretary should be a matter for the board as a whole.
2. Non-executive Directors
2.1 Non-executive directors should bring an independent judgement to bear on issues of strategy, performance, resources, including key appointments, and standards of conduct.
2.2 The majority should be independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgement, apart from their fees and shareholding. Their fees should reflect the time which they commit to the company.
2.3 Non-executive directors should be appointed for specified terms and reappointment should not be automatic.
2.4 Non-executive directors should be selected through a formal process and both this process and their appointment should be a matter for the board as a whole.
3. Executive Directors
3.1 Directors' service contracts should not exceed three years without shareholders' approval.
3.2 There should be full and clear disclosure of directors' total emoluments and those of the chairman and highest paid UK director, including pension contributions and stock options. Separate figures should be given for salary and performance-related elements and the basis on which performance is measured should be explained.
3.3 Executive directors' pay should be subject to the recommendations of a remuneration committee made up wholly or mainly of non-executive directors.
4. Reporting and Controls
4.1 It is the board's duty to present a balanced and understandable assessment of the company's position.
4.2 The board should ensure that an objective and professional relationship is maintained with the auditors.
4.3 The board should establish an audit committee of at least three non-executive directors with written terms of reference which deal clearly with its authority and duties.
4.4 The directors should explain their responsibility for preparing the accounts next to a statement by the auditors about their reporting responsibilities.
4.5 The directors should report on the effectiveness of the company's system of internal control.
4.6 The directors should report that the business is a going concern, with supporting assumptions or qualifications as necessary.

Appendix 2. 2 OECD Principles of Corporate Governance (2004).

Principle	**Narrative**
I. Ensuring the basis for an effective corporate governance framework	The corporate governance framework should promote transparent and efficient markets, be consistent with the rule of law, and clearly articulate the division of responsibilities among different supervisory, regulatory, and enforcement authorities.
II. The rights of shareholders and key ownership functions	The corporate governance framework should protect and facilitate the exercise of shareholders' rights.
III. The equitable treatment of shareholders	The corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for violation of their rights.
IV. The role of stakeholders in corporate governance	The corporate governance framework should recognize the rights of stakeholders established by law or through mutual agreements and encourage active co-operation between corporations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises.
V. Disclosure and transparency	The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company.
VI. The responsibilities of the board	The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders.

Source: Principles of Corporate Governance (OECD, 2004)

Appendix 2. 3 Corporate Governance Principles of Turkey CMB (2005).

Part I - Shareholders
1. Facilitating the Exercise of Shareholders' Statutory Rights
2. Shareholders Right to Obtain and Evaluate Information
3. The Right to Participate in the General Shareholders' Meeting
4. Voting Rights
5. Minority Rights
6. Dividend Rights
7. Transfer of Shares
8. Equal Treatment of Shareholders
Part II –Public Disclosure and Transparency
1. Principles and Means for Public Disclosure
2. Public Disclosure of Relations between the Company and Its Shareholders, The Board of Directors and Executives
3. Periodical Financial Statement and Reports in Public Disclosure
4. Functions of External Audit
5. The Concept of Trade Secret and Insider Trading
6. Significant Events and Developments That Must Be Disclosed to the Public
Part III Stakeholders
1. Company Policy Regarding Stakeholders
2. Stakeholders' Participation in the Company Management
3. Protection of Company Assets
4. Company Policy on Human Resources
5. Relations with Customers and Suppliers
6. Ethical Rules
7. Social Responsibility
Part IV – Board of Directors
1. Fundamental Functions of the Board of Directors
2. Principles of Activity and Duties and Responsibilities of the Board of Directors
3. Formation and Election of the Board of Directors
4. Remuneration of the Board of Directors
5. Number, Structure and Independence of the Committees Established by the Board of Directors.
6. Executives

Source: CAPITAL MARKETS BOARD OF TURKEY (CMB, 2005)

Appendix 3. 1 Sound corporate governance principles Basel Committee on Banking Supervision (2006)

Principle 1:	Board members should be qualified for their positions, have a clear understanding of their role in corporate governance and be able to exercise sound judgment about the affairs of the bank.
Principle 2	The board of directors should approve and oversee the bank's strategic objectives and corporate values that are communicated throughout the banking organization.
Principle 3	The board of directors should set and enforce clear lines of responsibility and accountability throughout the organisation
Principle 4	The board should ensure that there is appropriate oversight by senior management consistent with board policy.
Principle 5	The board and senior management should effectively utilise the work conducted by the internal audit function, external auditors, and internal control functions
Principle 6	The board should ensure that compensation policies and practices are consistent with the bank's corporate culture, long-term objectives and strategy, and control environment.
Principle 7	The bank should be governed in a transparent manner
Principle 8	The board and senior management should understand the bank's operational structure, including where the bank operates in jurisdictions, or through structures, that impede transparency (i.e. "know-your-structure").

Source: Basel Committee on Banking Supervision (2006)

Appendix 3. 2 summary of the regulation of CG under the New Law. PwC (2011)

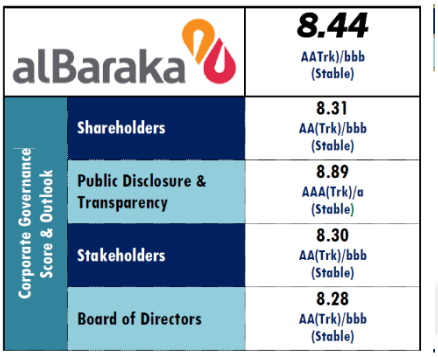
1	The corporate governance approach of the New Law is based on four pillars that have universal characteristics within the context of corporate governance. (1) full transparency, (2) fairness, (3) accountability, (4) responsibility.
2	Full transparency has been sought in (1) financial statements, (2) boards of directors' (BoD) annual reports, (3) independent audits, (4) transactional auditors, (5) all audit reports of individual companies and group of companies.
3	Fairness has been ensured by establishing a balance of interests and by objective justice.
4	Accountability has been embodied in the BoD reports, flow of information, right to information and oversight.
5	Responsibility has been regulated in parallel with accountability.
6	The rights of shareholders to sue, obtain information and perform oversight have been created along with smooth-running legal mechanisms.
7	The minority rights list has been expanded.
8	Privileged shares have been restricted.
9	Representation opportunities for group of shareholders and the minority in the BoD, have been increased.
10	The Capital Markets Board (CMB) has been provided with exclusive authority to regulate corporate governance. This authorization will ensure it remains dynamic and up-to-date.
11	The BoDs of publicly held companies are now obliged to publish corporate governance reports.
12	Professionalism and specialisation in bodies has been emphasised.

Source: New Turkish Commercial Code - A blueprint for the future PwC (2011)

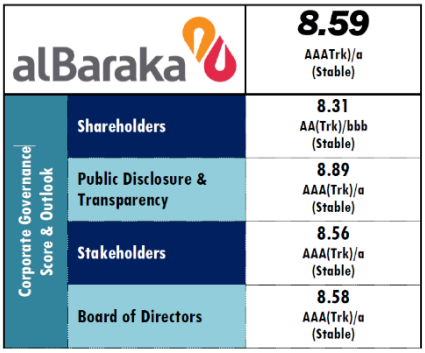
Appendix 4. 1 CG rating reports of sample listed banks in BIST.

ALBARAKA TÜRK KATILIM BANKASI A.Ş.

2014



2015



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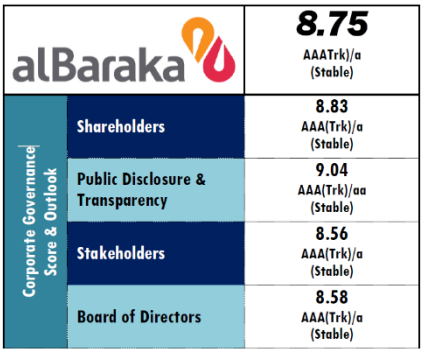

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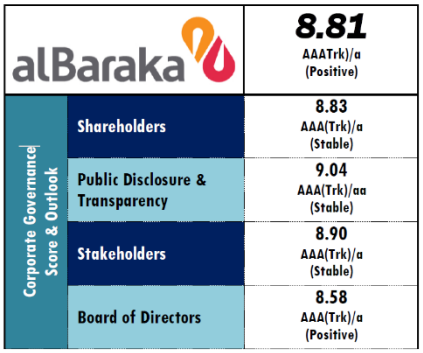

2018

ALBARAKA TÜRK KATILIM BANKASI A.Ş.

Ratings

Overall Score	8.92	AAA(Trk)/a (Positive)
Shareholders	9.05	AAA(Trk)/aa (Stable)
Public Disclosure & Transparency	9.04	AAA(Trk)/aa (Stable)
Stakeholders	8.90	AAA(Trk)/a (Positive)
Board of Directors	8.76	AAA(Trk)/a (Positive)

ŞEKERBANK T.A.Ş.

2014

The composition of the Şekerbank's rating scores by subcategories since the year 2007 is stated below:

CATEGORIES	WEIGHT	SCORE						WEIGHT	SCORE		
		2007	2008	2009	2010	2011	2012		2012	2013	2014
Shareholders	0,25	67.61	74.00	85.08	85.43	86.31	93.21	0,25	95.53	97.79	91.05
Public Disclosure and Transparency	0,35	71.07	87.04	88.95	89.42	89.45	91.07	0,25	89.44	85.78	90.68
Stakeholders	0,15	90.83	92.26	97.89	97.89	99.14	96.40	0,15	92.40	94.39	94.67
Board of Directors	0,25	57.29	74.24	78.21	81.04	81.82	85.25	0,35	87.53	88.17	89.93
TOTAL	1,00	70.16	81.36	86.64	87.60	88.21	90.95	1,00	90.74	90.91	91.10

2015

Şekerbank

ŞEKERBANK T.A.Ş.

BIST 3. GRUP BANKA

SPK KURUMSAL YÖNETİM İLKELERİNE UYUM NOTU

9.11

Kobirate A.Ş. İletişim :

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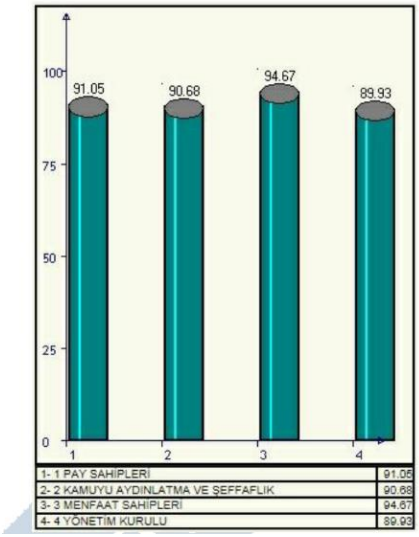

2016

Şekerbank

ŞEKERBANK T.A.Ş.

CMB CORPORATE GOVERNANCE PRINCIPLES COMPLIANCE GRADE

BIST SECOND GROUP COMPANY

9.17

Kobirate Uluslararası Kredi Derecelendirme ve Kurumsal Yönetim Hizmetleri A.Ş

Contact:

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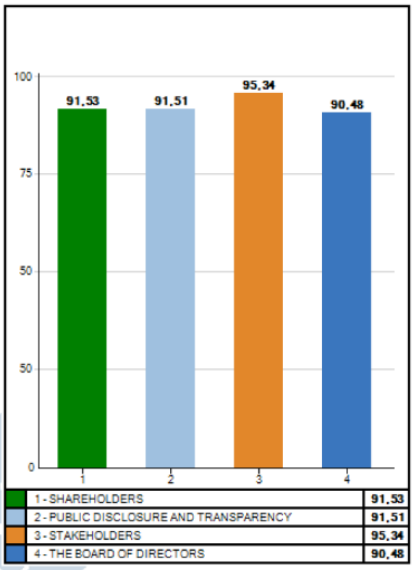
serapcembertas@kobirate.com.tr



2017

ŞEKERBANK T.A.Ş.

CMB CORPORATE GOVERNANCE PRINCIPLES COMPLIANCE GRADE

BIST SECOND GROUP COMPANY

9.19

Kobirate Uluslararası Kredi Derecelendirme ve Kurumsal Yönetim Hizmetleri A.Ş

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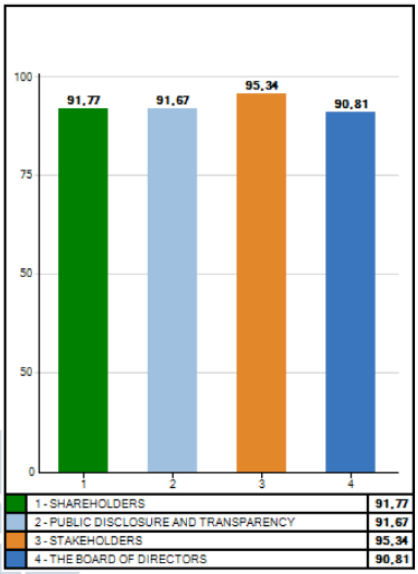
serapcembertas@kobirate.com.tr



2018

ŞEKERBANK T.A.Ş.

CMB CORPORATE GOVERNANCE PRINCIPLES COMPLIANCE GRADE

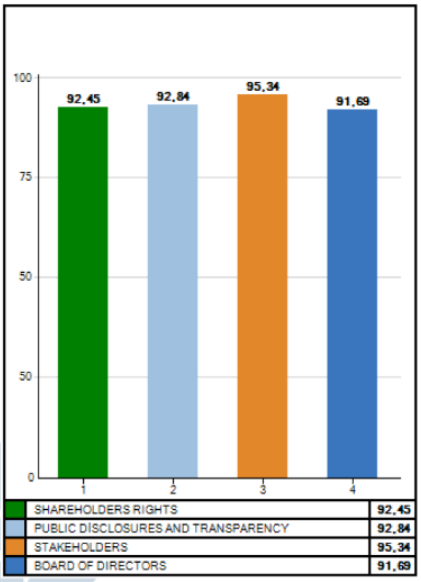
BIST SECOND GROUP COMPANY

9.27

Kobirate Uluslararası Kredi Derecelendirme ve Kurumsal Yönetim Hizmetleri A.Ş

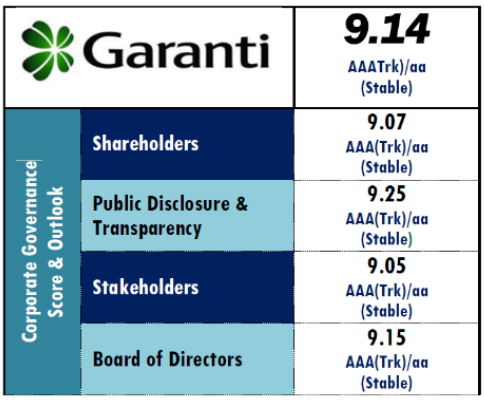
Contact:
Serap Çembertaş (216) 3305620 Pbx

serapcembertas@kobirate.com.tr
www.kobirate.com.tr

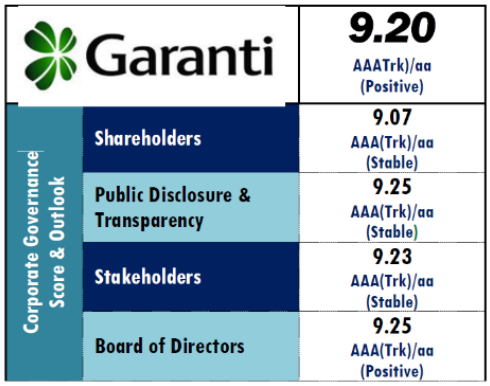


TÜRKİYE GARANTİ BANKASI A.Ş.

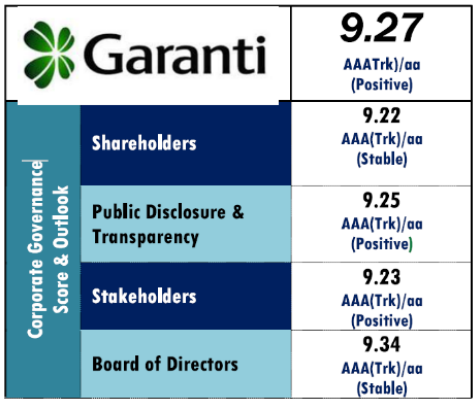
2014



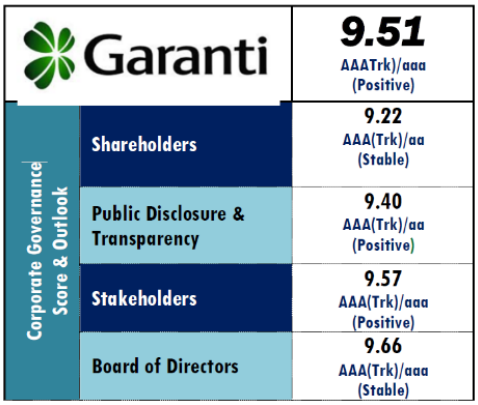
2015



2016



2017



2018

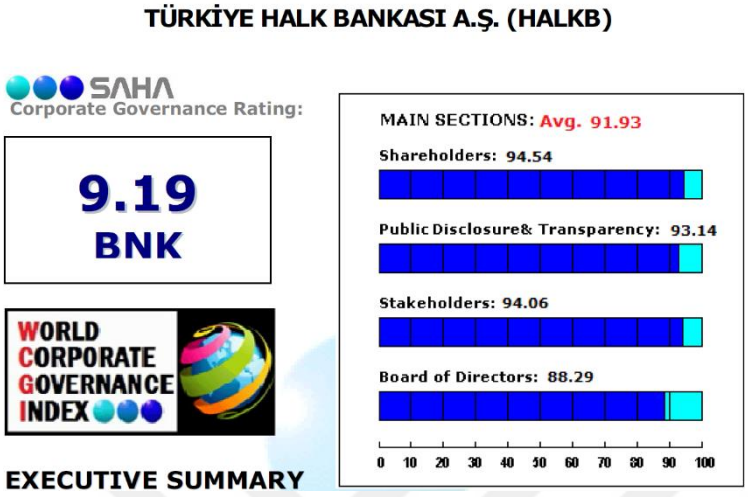
T. GARANTİ BANKASI A.Ş.

Ratings

Overall Score	9.60	AAA(Trk)/aaa (Positive)
Shareholders	9.22	AAA(Trk)/aa (Positive)
Public Disclosure & Transparency	9.67	AAA(Trk)/aaa (Stable)
Stakeholders	9.72	AAA(Trk)/aaa (Positive)
Board of Directors	9.76	AAA(Trk)/aaa (Stable)

TÜRKİYE HALK BANKASI A.Ş.

2014



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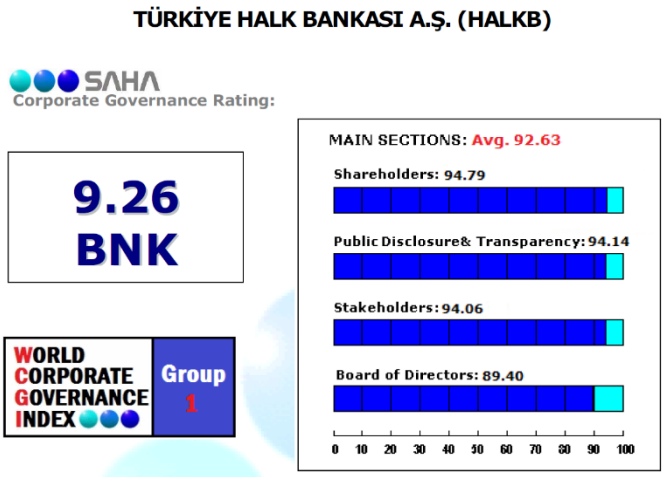

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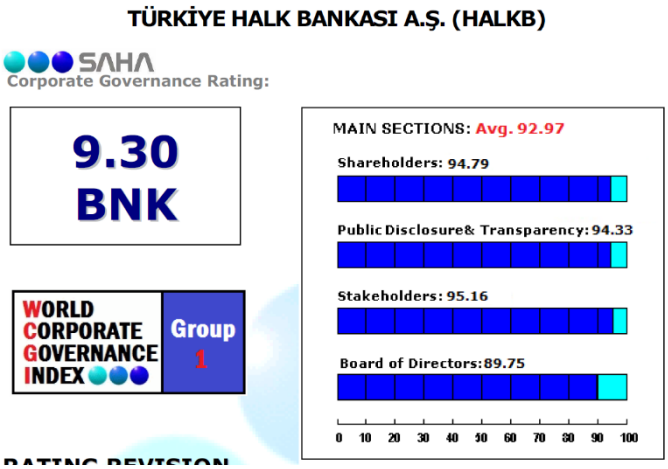


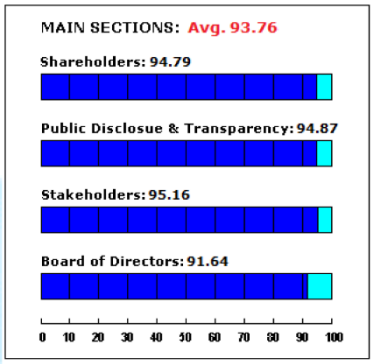
2017

TÜRKİYE HALK BANKASI A.Ş. (HALKB)

SAHA
Corporate Governance Rating:

9.38
BNK

WORLD CORPORATE GOVERNANCE INDEX Group 1



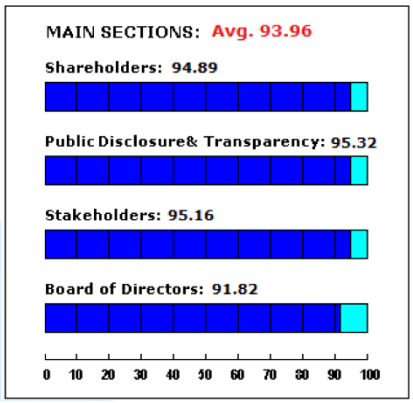
2018

TÜRKİYE HALK BANKASI A.Ş. (HALKB)

SAHA
Corporate Governance Rating:

9.40

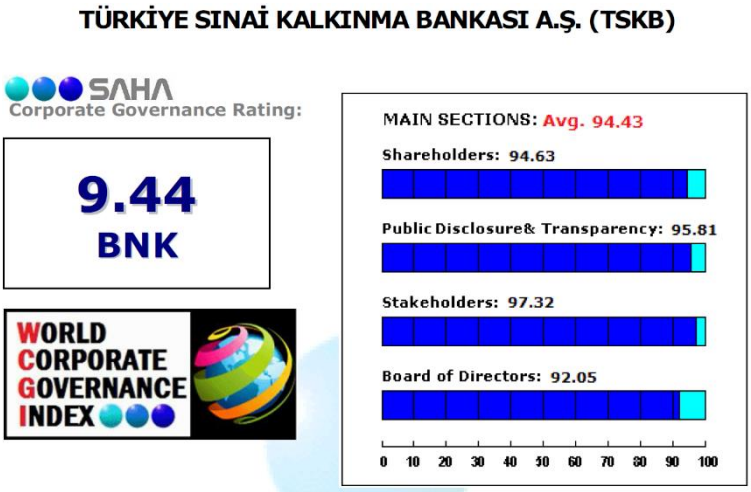
WORLD CORPORATE GOVERNANCE INDEX Group 1



RATING REVISION

TÜRKİYE SINAİ KALKINMA BANKASI A.Ş.

2014



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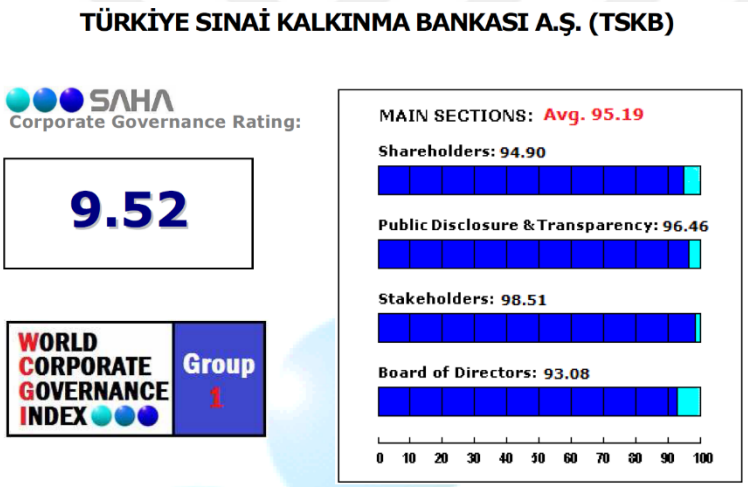
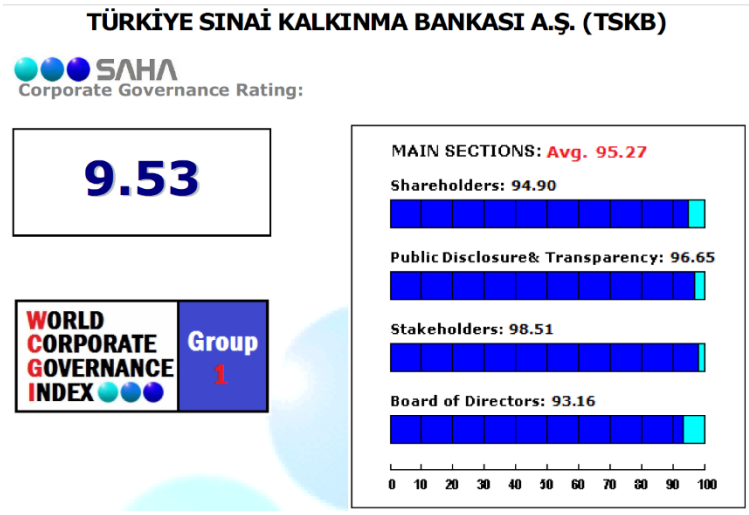
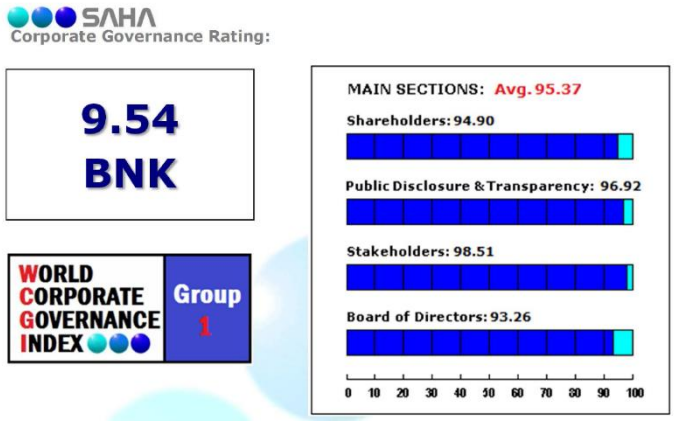


2016



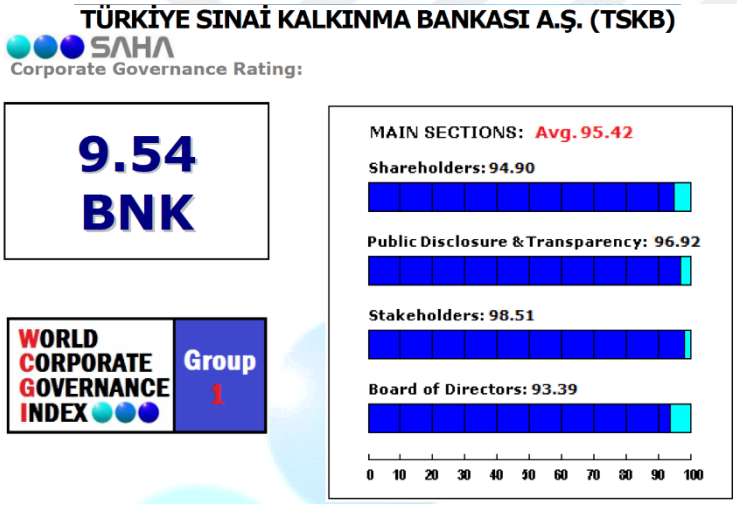
2017

TÜRKİYE SINAİ KALKINMA BANKASI A.Ş. (TSKB)



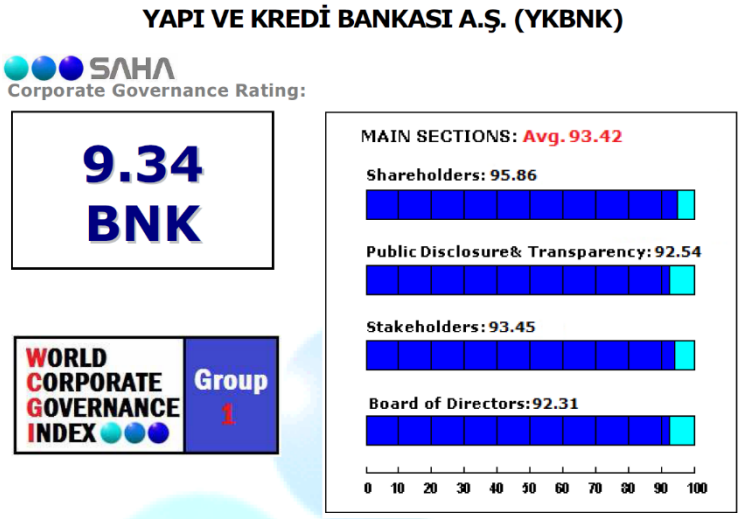
2018

TÜRKİYE SINAİ KALKINMA BANKASI A.Ş. (TSKB)

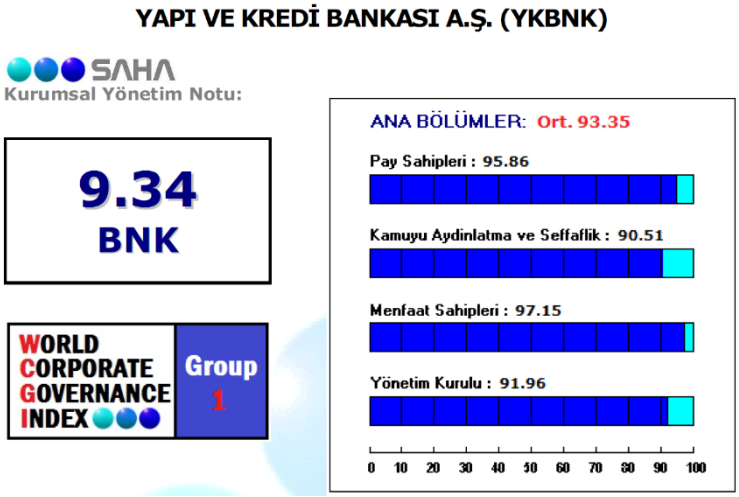


YAPI VE KREDİ BANKASI A.Ş.

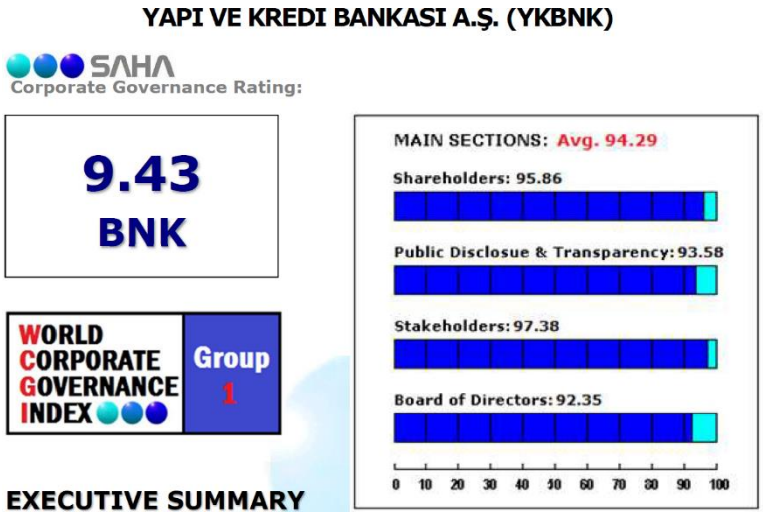
2014



2015



2016



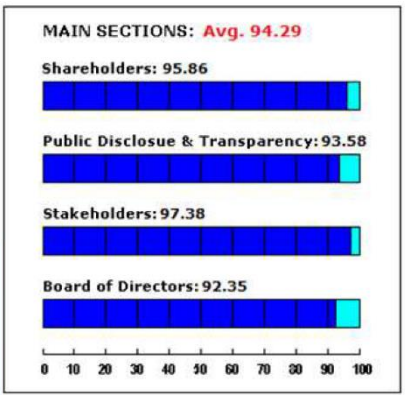
2017

YAPI VE KREDİ BANKASI A.Ş. (YKBNK)

SAHA
Corporate Governance Rating:

9.43
BNK

WORLD CORPORATE GOVERNANCE INDEX Group 1



EXECUTIVE SUMMARY

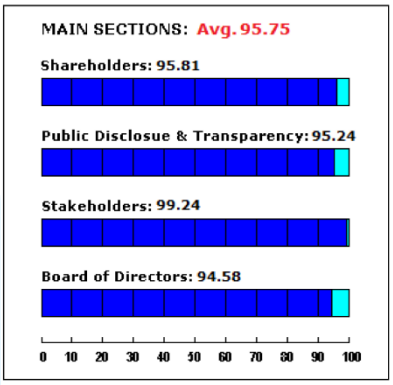
2018

YAPI VE KREDİ BANKASI A.Ş. (YKBNK)

SAHA
Corporate Governance Rating:

9.58
BNK

WORLD CORPORATE GOVERNANCE INDEX Group 1



Appendix 4. 2 Hausman Test Model-1

```
. hausman Fixed .

                 ---- Coefficients ----
              |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
              |     Fixed        Random       Difference          S.E.
--------------+----------------------------------------------------------------
        shhol |  -1.031292    -.8973817       -.1339102                .
          pdt |   .1350511     .223147       -.0880959                .
          sth |   .2410792    .2667197       -.0256405                .
          pod |  -.3419788    -.3356562       -.0063226                .
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =         3.42
                Prob>chi2 =       0.4899
                (V_b-V_B is not positive definite)
```

Appendix 4. 3 Hausman test Model-2

```
. hausman Fixed1 .

                 ---- Coefficients ----
              |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
              |    Fixed1      Random1       Difference          S.E.
--------------+----------------------------------------------------------------
        shhol |  -14.25618    -12.46563       -1.790555             .
          pdt |   4.157235     4.383924       -.2266897             .
          sth |   .3654314     .6032561       -.2378247             .
          pod |   -.551248    -.5048078       -.0464403             .
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       43.59
                Prob>chi2 =      0.0000
                (V_b-V_B is not positive definite)
```

Appendix 4. 4 Hausman Test Model-3

```
. hausman Fixed2 .

                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |    Fixed2       Random2       Difference          S.E.
-------------+----------------------------------------------------------------
       shhol |   -.5350257    -.4753502       -.0596754        .1317113
         pdt |    .4804798     .5076247       -.0271449         .158583
         sth |    .3061672     .2487513        .0574158         .137289
         pod |    .2091503     .2217821       -.0126318        .0699645
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =         0.32
                Prob>chi2 =       0.9884
```

Appendix 4. 5 Hausman Test Model-4

```
. hausman Fixed3 .

                 ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |    Fixed3      Random3       Difference          S.E.
-------------+------------------------------------------------------------
       shhol |   6.502069     4.813203        1.688866        1.581136
         pdt |  -2.070947    -3.010898        .9399516        1.867319
         sth |  -3.811341    -2.317045       -1.494296        1.619907
         pod |   -1.09562     -1.02973       -.0658899        .7054655
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =         2.50
                Prob>chi2 =       0.6443
```