T.C.

DOKUZ EYLÜL ÜNİVERSİTESİ

SOSYAL BİLİMLER ENSTİTÜSÜ

İNGİLİZCE İŞLETME ANABİLİM DALI

İNGİLİZCE FİNANSMAN PROGRAMI

YÜKSEK LİSANS TEZİ

THE INFLUENCE OF CORPORATE GOVERNANCE ON THE CAPITAL STRUCTURE DECISION

Hasan Atınç DİRİM

Danışman

Prof. Dr. Tülay YÜCEL

Yemin Metni

Yüksek Lisans Tezi olarak sunduğum "The Influence of Corporate Governance on the Capital Structure Decision" adlı çalışmanın, tarafımdan, bilimsel ahlak ve geleneklere aykırı düşecek bir yardıma başvurmaksızın yazıldığını ve yararlandığım eserlerin kaynakçada gösterilenlerden oluştuğunu, bunlara atıf yapılarak yararlanılmış olduğunu belirtir ve bunu onurumla doğrularım.

Tarih 17/12/2008 Hasan Atınç DİRİM İmza

YÜKSEK LİSANS TEZ SINAV TUTANAĞI

Öğrencinin						
Adı ve Soyadı	:					
Anabilim Dalı	:					
Programı	:					
Tez Konusu	:					
Sınav Tarihi ve Saati	:					
Yukarıda kimlik tarih Lisansüstü Yönetmeliği'nin	ve	sayılı toplantıs	ında oluştu	rulan jü	rimiz tara	afından
Adayın kişisel çalışı sonra jüri üyelerince gerek sorulan sorulara verdiği cev	tez konusu	gerekse tezin o				
BAŞARILI OLDUĞUNA DÜZELTİLMESİNE REDDİNE ile karar verilmiştir.	O**	_	İRLİĞİ OKLUĞU	O O		
Jüri teşkil edilmediği için sı Öğrenci sınava gelmemiştir		nıştır.	O*			
* Bu halde adaya 3 ay süre ** Bu halde adayın kaydı si *** Bu halde sınav için yen	linir.	rlenir.				
Tez burs, ödül veya teşvik p Tez mevcut hali ile basılabi gözden geçirildikten sonra t Tezin basımı gerekliliği yok	lir. pasılabilir.	(Tüba, Fulbrigh	t vb.) aday	olabilir.	Evet O O O O	Tez
JÜRİ ÜYELERİ					İMZA	
	□ Başarılı	□ Düzeltme	□ Red			
	…⊐ Başarılı	□ Düzeltme	□Red			
	□ Basarılı	□ Düzeltme	⊓ Red			

ABSTRACT

Master Thesis

The Influence of Corporate Governance on the

Capital Structure Decision

Hasan Atınç DİRİM

Dokuz Eylül University
Institute of Social Sciences
Department of Business Administration (English)
Finance (English)

Corporate governance is a very important topic in recent days. Every day investors, creditors and other parties are requesting better corporate governance applications from corporations.

The main purpose of this study is to analyze the relationship between corporate governance and capital structure decision of Turkish companies quoted at ISE 100 Index both theoretically and empirically. The sample of the study consists of 49 non financial firms with 2005-2007 data available on their websites and ISE website. Board size, outside manager ratio and ownership concentration for corporate governance variables are used.

General corporate governance topics are discussed in the first chapter. Also Turkish corporate governance structure is investigated in this chapter. Literature about corporate governance and capital structure is analyzed in the second chapter. Lastly, an empirical analysis about the relationship between corporate governance and capital structure is made in the third chapter.

The results show that the relationship between corporate governance and capital structure is statistically significant and the direction is positive for board size and ownership concentration and it is statistically insignificant and negative for outside manager ratio in Turkey.

Key Words: Corporate governance, Capital Structure, Characteristics of Corporate Governance

ÖZET

Yüksek Lisans Tezi

Kurumsal Yönetimin Sermaye Yapısı Kararına Etkisi Hasan Atınç DİRİM

Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü İngilizce İşletme Anabilim Dalı İngilizce Finansman Programı

Günümüzde kurumsal yönetim çok önemli bir konu olmuştur. Her geçen gün yatırımcılar, borç verenler ve diğer aktörler, firmalardan daha kaliteli kurumsal yönetim uygulamaları beklemektedir.

Bu çalışmanın amacı; Türkiye'deki İMKB 100 endeksine kotalı şirketlerin kurumsal yönetim ve sermaye yapısı kararları arasındaki ilişkiyi deneye dayalı ve teorik olarak analiz etmektir. Örnek 49 finansal olmayan şirketten oluşmaktadır ve veriler onların resmi internet siteleri ve IMKB sitesinden alınmıştır. Yönetim kurulu büyüklüğü, yabancı yönetici oranı ve sermaye dağılımı kurumsal yönetim değişkenleri olarak kullanılmıştır.

Birinci bölümde genel kurumsal yönetim konuları işlenmiştir. Türkiye'deki kurumsal yönetim yapısı da bu bölümde ele alınmıştır. Kurumsal yönetim ve sermaye yapısı arasındaki ilişkiyi inceleyen kaynak araştırması ikinci bölümde yapılmıştır ve son olarak üçüncü bölümde de kurumsal yönetim ve sermaye yapısı arasındaki ilişkiyi inceleyen deneysel bir çalışma yapılmıştır.

Elde edilen deneyin sonuçlarına göre Türkiye'de yönetim kurulu üye sayısı ve sermaye dağılımı ile sermaye yapısı arasında pozitif ve istatistiksel olarak anlamlı bir ilişki olmakla birlikte yabancı yönetici oranı ile sermaye yapısı arasında negatif ve istatistiksel olarak anlamsız bir ilişki bulunmaktadır.

Anahtar Kelimeler: Kurumsal Yönetim, Sermaye Yapısı, Kurumsal Yönetim Karakteristikleri.

INDEX

THE INFLUENCE OF CORPORATE GOVERNANCE ON THE CAPITAL STRUCTURE DECISION

YEMİN METNİ			
TUT	ANAK	iii	
ABSTRACT		iv	
ÖZEZ		v	
INDE	ZX	vi	
INTR	ODUCTION	1	
	CHAPTER I		
	CORPORATE GOVERNANCE		
1.1.	DEFINITION	2	
1.2.		4	
1.3.		5	
1.4.	MAIN CORPORATE ACTORS	7	
1	1.4.1. Employees	8	
	1.4.2. Shareholders	8	
	1.4.3. Board of Directors	9	
	1.4.4. Governments	10	
1.5.	OWNERSHIP STRUCTURE AND CORPORATE GOVERNANCE	10	
1.6.	CORPORATE GOVERNANCE SYSTEMS	11	
	1.6.1. United States	12	
	1.6.2. Britain	13	
	1.6.3. France	14	
	1.6.4. Germany	15	
	1.6.5. Japan	17	

1.7.	CORPORATE GOVERNANCE IN TURKEY	19
	1.7.1. The History of Turkish Economy	20
	1.7.2. The Characteristics of Corporate Governance in Turkey	22
	1.7.3. Corporate Governance Practices in Turkey	23
1.8.	THE PRINCIPLES OF CORPORATE GOVERNANCE	24
	CHAPTER II	
TH	E INFLUENCE OF CORPORATE GOVERNANCE ON CAPITAL ST	RUCTURE
	DECISION	
2.1.	AGENCY THEORY AND CORPORATE GOVERNANCE	27
	2.1.1. Agency Theory and Separation of Ownership and Control	29
	2.1.1.1. Combining Decision Management and Decision Control	31
	2.1.1.2. Separation of Decision Management and Decision Control	32
2.2.	RELATIONSHIP BETWEEN CORPORATE GOVERNANCE	
	CHARACTERISTICS AND LEVERAGE	34
	2.2.1. Board size and Leverage	34
	2.2.2. CEO Compensation and Leverage	35
	2.2.3. Tenure of CEO and Leverage	35
	2.2.4. CEO Duality and Leverage	36
	2.2.5. Board Composition and Leverage	37
	2.2.6. Ownership concentration and Leverage	37
2.3.	EMPIRICAL STUDIES ON CORPORATE GOVERNANCE AND	
	CAPITAL STRUCTURE DECISION	38

CHAPTER III

AN EMPIRICAL ANALYSIS OF THE INFLUENCE OF CORPORATE GOVERNANCE ON CAPITAL STRUCTURE DECISION

3.1.	RESEARCH DESIGN	45
	3.1.1. Sample selection	45
	3.1.2. Data Description	45
	3.1.3. Measuring Dependent Variable	46
	3.1.4. Measuring Independent Variables	46
3.2.	METHODOLOGY AND HYPOTHESES	47
	3.2.1. Hypotheses	47
	3.2.2. Specification of the Emprical Model	47
3.3.	EMPRICAL RESULTS: CORPORATE GOVERNANCE AND	
CAP	PITAL STRUCTURE	48
	3.3.1. Descriptive Statistics	48
	3.3.2. Emprical results	50
CON	NCLUSION	52
REF	TERENCES	54
APP	PENDIX	57

INTRODUCTION

Corporate governance is an internal system encompassing policies, processes and people, which serves the needs of shareholders and other stakeholders, by directing and controlling management activities with good business sawy, objectivity and integrity. Corporate governance is becoming more important everyday in this globalized world.

Corporate governance regulates and facilitates the business and it is for the goodness of all of the stakeholders, like employees, customers, investors, management, government and other related parties. Corporate governance describes how companies ought to be run, directed and controlled.

Perceived quality of corporate governance can affect company's share price and its cost of capital. In this point, the perceived quality is determined by all market forces and international organizational environment, how policies and processes are implemented and how people are led.

The aim of this study is to analyze the influence of corporate governance on Capital structure decision through an empirical analysis consisting of ISE 100 companies.

In the first chapter of the study, the definition, importance, principles and the actors of corporate governance are discussed. Also corporate governance systems and the history of corporate governance in pioneer countries of corporate governance are covered in this chapter. Turkish corporate governance is also explained in this chapter.

In the second chapter, influence of corporate governance on capital structure decision is investigated through related literature.

Lastly, an empirical analysis about relationship between corporate governance and capital structure is made in the third chapter.

CHAPTER I

CORPORATE GOVERNANCE

1.1. Definition

Corporate governance is an important topic in today's economy. Investors, creditors and all of other stakeholders of companies give more importance to corporate governance than past. Especially, recent corporate scandals have created high interest on corporate governance term.

The corporate governance term has been investigated and used for a few decades only. But corporate governance was always in life from ancient times. Governance issues arise whenever a corporate entity acquires a life of its own, whenever ownership of an enterprise is separated from its management. The Merchant of Venice, in Shakespeare's play (Act 1 Scene 1), feared for the safety of his commercial ships sailing out of sight on the high seas. Because at that time, the control of his business has separated from the owner and transmitted to the captain of the ships.

Colley (2003) explains how corporate governance term developed from past to today. According to him; the developed countries' economies have created high living standards and rich people who are working for these systems in the twenty-first century. Main reasons for this economic development are free enterprise, capitalism and high competition among corporations. Free enterprise gives sustained energy of competition to economies of developed countries in which many people are willing to pursue their own interests. Because of the scare resources (human capital, raw resources, customers and investment capital) the competition among corporations have increased and the weakest rivals have closed and the strongest corporations have continued their business. It promotes the survival of the most successful. The development of capitalism also promoted this economic development. With the development of capitalism, many investors could be united to

provide large amounts of investment capital needed to fund extensive projects and massive enterprises.

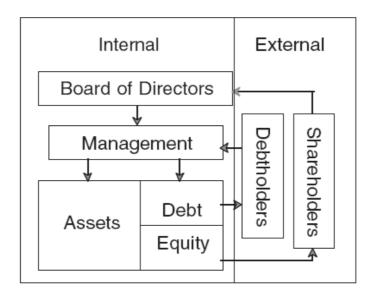
The enterprises became to very huge sizes and their management complexity increased, with the development of economic system. The most important thing for the investors of these enterprises is the economic value of the company. So managing the company in the best interest of the shareholders is a vital for the company. This situation brings the corporate governance term. Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs.

Corporate governance as a subject, as an objective, or as a regime should be followed for the good of shareholders, employees, customers, bankers and indeed for the reputation and standing of our nation and its economy" (Maw *et al.* [1994:1]). Corporate governance describes how companies ought to be run, directed and controlled. It is about supervising and holding to account those who direct and control the management. Gabrielle O'Donovan describes corporate governance as an internal system encompassing policies, processes and people, which serves the needs of shareholders and other stakeholders, by directing and controlling management activities with good business sawy, objectivity and integrity. According to O'Donavan perceived quality of corporate governance can affect company's share price and its cost of capital. In this point, the perceived quality is determined by all market forces and international organizational environment, how policies and processes are implemented and how people are led.

Consequently, it is obvious that corporate governance shows the best way of directing the company. Also, it sustains the regulation of the corporate actions towards its stakeholders. Corporate governance cares about all stakeholders of the corporations and it regulates the relationships between them.

1.2. Overview of Corporate Governance

Corporate governance is consisting of many mechanisms and actors. Researchers mostly divide corporate governance mechanisms into two groups. They are internal group and external group. As Gillan (2006:382) states, the simple balance sheet model of the firm uses these groups. This model can be seen on Figure 1.



(Source: Gillan (2006: 382)

Figure 1: Corporate governance and balance sheet model of the firm

Management is on the top part of the internal group on figure 1. As it can be understood from the figure, board of directors has responsibility of monitoring and advising the management. Also, board of director has power to hire or fire management. Management, as an agent of the shareholders, decides which assets to invest and how to finance this investment. In external group there are outside actors which are needed for the company in order to raise capital. Also this figure highlights

the separation of capital providers and capital users. Corporate governance structures are developed in order to solve this separation problem.

La Rocca (2007:316) gives descriptions of corporate governance according to external and internal corporate governance divisions. He states that corporate governance has basically two meanings depending on whether greater influence is given to instruments used to allocate and direct power within the company or to external institutions and mechanisms that control and regulate firm activity and efficiency. They are:

- A system of how decision making power is distributed within the firm, so to overcome problems of contract incompleteness between different stakeholders (managerial or internal corporate governance)
- A set of rules, institutions and practices developed to protect investors from entrepreneurial and managerial opportunistic behavior (institutional or external corporate governance)

In summary, balance sheet model of the firm basically explains the groups which have relation with corporation. There are direct and cross relations between these groups. Corporate governance exists in order to facilitate and regulate these relations.

1.3. Importance of Corporate governance

Corporate governance has evolved over years in response to significant economic crises and corporate failures. Maxell Corporation (1991), Barings Bank (1995), Enron (2001), Worldcom (2002) and Parmalat (2003) are examples of high corporate scandals and they created high financial loss for their investors and their financial markets were damaged. This situation decreased the confidence of investors. These failures in the world's history created demand for high quality corporate governance standards. It shows the importance of corporate governance.

Enron (2001) scandal is one of the most important corporate scandals. At the end of 1990s Enron was in a perfect position in American financial market. Business area of Enron was natural gas pipeline. In the mid-1990s Enron was making most of its profit from its intermediary function in natural gas business. Enron was selling long term gas contracts to its customers but it was buying the natural gas from spot gas market at volatile prices. So, Enron was taking price risk from its customers by making high profit. In order to offset this price volatility risk, Enron took positions in derivative contracts in high amount. This increased off balance sheet entries of the company. Also, at the same time, Enron entered into new business areas overseas. Another change of Enron was the adoption of illegal accounting practices. Enron created an off-balance-sheet company whose profits were double counted for both the company and Enron itself. This double counting hid the true financial situation from investors. The auditing firm of Enron, Arthur Andersen, failed in its auditing role and ignored the warning signs in Enron's financial statements. Enron's new business areas also failed and it made loss from these activities. When this problem was finally understood, Enron was required to take a \$1.4 billion write down. (Neal and Cochran, 2008:1-2)

Enron is a very dramatic corporate governance deficiency. There are both management and auditing problems. High corporate governance codes are employed to overcome these deficiencies. First reaction to Enron case was the Sarbanes-Oxley Act in 2002 in USA. This law was very necessary because corporate failures cost too much for corporations in USA. For example, the NASDAQ Composite Stock Index increased 180% from March 1998 to its maximum point in March 2000. Only in 2 years, all of the gains disappeared. In 2001 and 2002, 446 publicly traded firms with assets of \$628 billion went bankrupt. (Neal and Cochran, 2008: 2)

According to Sarbanes-Oxley Act,

- CEOs (Chief Executive Officers) and CFOs (Chief Financial Officers) have to personally verify the accuracy of financial statements.
- SEC (Security Exchange Commission) has to review financial statements in every 3 years.

- Off-balance-sheet disclosure requirement increased.
- Firms must disclose corporate governance ethics and assess internal audit.
- Criminal and civil penalties for senior management are established in the case of cheating shareholders.
- CEOs and CFOs may be required to sacrifice their compensation if firm has to restate its financial statements.

As a result, corporate governance has developed much especially in the last decade as a response to recent corporate scandals. Importance of corporate governance was realized by public when they lost their investment in the companies in these scandals

First, governments and its regulatory bodies issue laws in order to regulate the companies and draw guidelines for corporate governance. Secondly, firms follow these laws and issue their own corporate governance codes in order to protect the all stakeholders of the company and do their business in best way. This is the way that corporate governance follows from top to bottom, from government to public.

1.4. Main actors in Corporate Governance

Corporate governance regimes are mainly influenced by its actors. Corporate governance actors are consisting of the mechanisms and parties that have direct or indirect relationship with the corporations. Aguilera and Yip (2004:58) states that the main interior corporate governance actors are; shareholders, governments, employees and the board of directors. These actors are the representatives of different interests on corporate governance in the company.

1.4.1. Employees

Employee's effect on corporate governance in the company varies according to corporate governance regime on that company's home country. Employees can influence corporate governance by some mechanisms such as; equity ownership, consultation rights on working conditions and job security, work councils, unions and board representation. A strong role for employees in corporate governance, affects global market participation positively. This situation increases global sales and consequently with increasing profits of the company, employment in the home country is affected positively again.

Employees' high participation on corporate governance may have also negative effects especially in Multinational companies (MNCs). First of all, MNCs' global investments may decrease due to home country employees' strong voice in corporate governance. Home country employees do not want to lose their jobs while MNC is investing on a different country. Secondly, for MNC it may be difficult to relocate its business globally outside the home country. Lastly, strong home country employees may prefer marketing that retains national identity, so global marketing may be affected negatively. As a result, employees' strong role on corporate governance has both positive and negative effect on the corporation. (Aguilera and Yip, 2004:58)

1.4.2. Shareholders

Shareholders' role is different in every country. In USA and England, there are mostly neutral shareholders among big institutional shareholders. Their role is mostly passive and they are focused on shareholder wealth maximization only. But in Japan, big institutional shareholders are mostly active and they act as part of a network ('keiretsu') that supports the role of the company within the network and, hence, incumbent management. In Germany, there are many different corporations where different stakeholders, especially banks and institutional shareholders influence the corporate governance of the corporation.

According to Aguilera and Yip (2004:60), there are three types of shareholders; neutral shareholders, partial interest shareholders and employee shareholders. Neutral shareholders' main desire is to have maximum shareholder value and wealth. Employee shareholders have partial interest bias between maximizing shareholder value and employment conditions, level and pay. Banks and big instutional investors are partial interest shareholders. They have many additional interests in addition to shareholder value maximization.

In Japan, institutional shareholders hold maintenance of the overall keiretsu as a major objective. In Germany, institutional shareholders typically have close relations and loyalty to management. In all countries, state shareholders have other macroeconomic objectives such as maintaining national security, employment, competitiveness and prestige. Family shareholders also tend to be concerned with the family's legacy, loyalty to employees and tradition, and can also be risk averse. (Aguilera and Yip, 2004:60)

1.4.3. Board of Directors

Boards of directors vary importantly in terms of their structure, composition and activeness. German boards have a dual structure, with a supervisory board ('Aufsichsrat') above a management board ('Vorstand'). The supervisory board has various statutory duties, especially the appointment of the members of the management board and supervision of their actions. Among German companies, taking the form of GmbH is very rare and difficult. Only GmbHs can operate with only one board. In the UK, most boards adhere to the Cadbury Report's recommendation of having a non-executive chairman; in the other countries, the roles of chief executive (CEO) and chairman are often combined, especially in the USA. Another aspect of board structure is the role of committees, which varies depending on the strategic leadership of the board (Aguilera&Yip, 2004:62).

Compositions of boards among OECD countries vary from country to country by customs and law. In British companies, the boards have mostly internal directors and outsider chairmen. In contrast, US boards have mostly external directors and insider chairmen like past or current CEO. French boards are becoming Anglicized owing to foreign institutional investor pressures like US and UK. German supervisory boards are required by the Co-Determination Laws to have employee representatives, their number and proportion depending on the size of the company. In the other countries, labor representation and participation in firm decision making is rare, except where they are significant shareholders. State owned firms also tend to have higher labor representation. Japanese boards usually include representatives of other keiretsu members (Aguilera and Yip, 2004:62).

Major shareholders' board representation is different in each country. In USA and UK, large institutional shareholders are represented on boards for only a few years. Before, they were not represented on boards usually. In contrast, German and French boards mostly have members from their major institutional investors and financing banks.

1.4.4. Governments

Governments, affect business environment highly. Governments set general rules and regulatory regimes that apply to all companies in a country or all companies in a specific sector. Also, government can set rules or regulation for a specific case of a company in the country. Corporation must operate according to the rules that are established by governments. So governments are one of the main actors in corporate governance. Companies adopt their corporate governance policies towards governments' regulations and rules. There are big differences between the governing styles of the governments. These differences are also creating different corporate governance regimes across different countries. (Aguilera and Yip, 2004:64)

1.5 Ownership Structure and Corporate Governance

Corporate governance focuses on relationships between management and ownership. This focus is especially directed to the balance of power between shareholders and managers and the financial performance consequence of that power balance. In the literature, this balance is mainly explained by two property systems; concentrated and dispersed ownership. Concentrated ownership is characterized by controlling block holders, weak securities market, low market transparency and high private benefits of control. Dispersed ownership is characterized by strong securities market, high market transparency, and rigorous disclosure standards. (Coffee, 2001: 2, citied in Herrigel, 2006:3).

Corporate governance has organized between concentrated and dispersed ownership in the world. Three main actors have affected corporate property relations; financial systems (e.g. bank- versus market-driven); the governance role of stakeholders versus stockholders; and the political governance of the economy (e.g. state directed, associational, or market-driven) (Herrigel, 2006:3)

1.6. Corporate Governance Systems

During the history, corporate governance has dispersed from high developed countries to developing countries. Because of different cultures and living standards among countries, corporate governance systems are national and vary from country to country.

Despite the differences between countries, Rajan and Zingales 2003 (cited in Şençitak, 2007: 8) divide the corporate governance systems into two systems, as market-based and relationship-based system.

Market-based system is also named as the outsider system, Anglo-American system, or stock-market capitalism. This system is characterized by the arm's length relationships between corporations and investors. Equity financing is important form for corporate finance and corporate shares widely held and easily traded (dispersed ownership). Shareholders have wide rights in market-based system. Institutional investors play important role. USA and UK are the main examples of market-based system.

Relationship-based system is also named as the insider system, the dedicated-capital system, and welfare capitalism (Jacoby 2001:2, cited in Şençitak, 2007: 8). Banks have dominant role in relationship-based system. Debt financing is mostly

used and banks try to make complex and long term relationships with their corporate clients. The name of the system comes from the relationship emphasis. Concentrated ownership is the most common ownership structure in this system. Korean chaebol, Japanese Keiretsu or European holding companies are the main concentrated ownerships. Germany and Japan are countries which have relationship-based corporate governance system. In Table 1 detailed comparison of these two systems are available.

Table 1: Comparison of Market-based and Relationship-based Corporate Governance Systems

The Characteristics	Market-based System	Relationship-based System		
Other Names	Anglo-American, outsider system and stock-market capitalism	Insider, dedicated-capital system and welfare capitalism		
Corporate Financing	Equity financing	Debt financing		
Dominant Actor	Institutional investors	Banks		
Applying Countries	pplying Countries USA and UK Germany and Japan			

(Source: Summarized from Sençitak, 2007: 8-13)

In the following sections, the pioneer countries' corporate governance histories and systems are discussed more detail according to Herrigel (2006).

1.6.1. United States

America's economic system is a good example of liberal economies in which financing is met by high liquid and well-developed securities market. Dispersed ownership is common and shareholders' number is much. Managers' aim is to maximize shareholder value and the government let the market relations drive the

economy by regulating the market and defending the rights of property and rules of contracts.

But the system is not always in this form. When unrestricted incorporation and limited liability became available in the mid-nineteenth century, closely-held family firms dominated the corporate form. This situation finished dispersed ownership, as the securities markets grew more robust and managerial control of enterprises increased. American banking was very regionally decentralized and fragmented. Much of its activities were consisting of the financing of trade. Banks did not affect industrial economy so much in the nineteenth century. Mostly young American corporations financed from bond issues. There were efforts to construct universal banking arrangements (involving both commercial and investment roles) allowing financial institutions to take equity stakes and intervene more directly in the internal governance of firms. Stakeholder views, especially in the guise of movements for manager autonomy, competed with stockholder views for much of the mid-twentieth century. Collective bargaining also regulated labor markets in important industrial sectors for much of this period, but stopped well short of union involvement in corporate governance. The government experimented with stronger forms of interventionism and collaboration with corporations and business associations during much of the Progressive and, especially, New Deal eras. But these mechanisms of intervention have been giving up since the 1980s (Herrigel, 2006:4).

1.6.2. Britain

Britain's corporate governance regime is very similar with United States. But the history of corporate governance system is quite different from America. In the nineteenth century, Britain was very negative to limited liability while it was opposite for Americans. Moreover, companies in Britain's economy were consisting from closely-held family companies. Not until the 1930s and a subsequent succession of merger waves, did dispersed ownership begin to predominate (Cheffins 2001, 2002, 2004; Toms & Wright 2002; Franks et al. 2004 a&b; Hannah1982, cited in Herrigel, 2006: 5). Corporate finance in Britain has always been characterized by

specialized in banking, and commercial and investment roles were widely dispersed from each other. The absence of universal banks, however, does not mean that bankindustry relations were purely arms-length. On the contrary, long-term and often quite intimate relations frequently occurred between commercial bankers and their clients. Close, performance-monitoring ties were produced and reproduced through cooperatively constructed short-term contracts—loans, overdrafts, etc. But this "relationality" in British banking stopped short of the strong form engaged in by continental universal banks: British banks did not become involved in the transfer of property and never strategically sought ownership stakes in their clients (though stock was sometimes accepted as collateral for loans). Securities markets were significant but often little utilized by domestic firms for much of the early period of industrialization. The London capital market grew significantly in both depth and liquidity over the course of the twentieth century (Ross 1996, Collins 1998, Capie & Collins 1999; Fohlin 1997, cited in Herrigel, 2006: 5). There is ambivalence in British corporate history about stakeholder rights. Labor governments supported unionization and worker rights relative to corporate actors for much of the twentieth century. Moreover, during the mid-twentieth century there were numerous nationalizations after which companies were run in stakeholders' interests, rather than according to strict market criteria. This stakeholderism has declined since the 1980s, as privatization and merger were accompanied by the dispersal of stockownership and political struggles weakened the labor movement (Herrigel, 2006; 5).

1.6.3. France

The main distinction between British- American case and France case is the role of state. The banking sector in France specialized in investment and commercial separately like Britain. In nineteenth and early twentieth century there were only a few large corporations which were closely-held. These firms were financed internally with earnings and they used banks only for short term loans. Banks did not have much equity stakes in firms. The securities market was used, especially during

1920s, but it was not a significant factor in corporate finance (Fridenson 1997, Levy-Leboyer 1978, Fohlen 1978, Murphy 2004, cited in Herrigel, 2006: 6).

With the beginning of World War I, French government encouraged the development of 'national champions' in some industries. The government supplied required capital and other resources for these companies and became a big customer of them. After World War II, government's influence had even increased and national plans developed and banks and firms nationalized. This influence affected also the composition of boards and corporate strategies of firms. The stock market weakened and firms became dependent on state- underwritten bank debt. In this period, the number of public corporate enterprises increased, and the ratio of large corporations in French economy increased. But the ownership remained concentrated. The main reason for this problem is firstly, the importance of public corporate enterprises is much. And the second reason for this situation is the engagement of managers in 'cross-shareholding'. Cross- shareholding is holding of shares between two or more publicly listed companies that give each company involved an equity stake in the other. Often employed as a means of preventing unsolicited takeovers. With high pressure from government, the corporate managers directed their companies towards stakeholder rather than stockholder interest. The rights of minority holders were not well protected in French Corporate law. Since the mid-1980s, following important financial system reforms, a series of Major selfdealing scandals involving prominent managers and state officials, and pressures from the European Union to reduce the economic role of the state, French corporations have become more exposed to market pressures. The size and role of the stock market has increased and shareholding has gradually become more dispersed (Herrigel, 2006:6).

1.6.4. Germany

Large scale corporate enterprises played an important role in German economy even earlier than USA (Kocka 1978, Dornseifer and Kocka 1993, cited in Herrigel, 2006:6). In 1870, Germans liberalized incorporation law and it was

reformed in 1884. Germans were very interested in limited liability and joint stock company form. But German laws were not sufficient for protecting minority shareholder rights. Closely held family enterprises have dominated German economy since the beginning of industrialization. But their share among all joint stock companies has varied over time. Between 1884 and 1933, it is decreased and after 1945 it is restabilized. And after 1990s it started to decline again. From 1884 to 1933, a gradual dispersal of shareholdings occurred. After 1945, this trend changed and concentrated holdings dominated ownership structure in Germany. Cross-shareholding, especially after 1945, became an important form of concentrated ownership.

From the beginning of industrialization, German finance was bank driven and universal banking was the norm (Gerschenkron 1962, cited in Herrigel, 2006: 7). Before World War II, it was not very significant. There were again banks in German finance, but their role was smaller than after World War II period. With the finishing of World War II, banks role increased. They created loans and credits, provided bridging finance, facilitated the transfer of ownership (securities underwriting) and participated in corporate governance through both the exercise of shareholders' proxy votes and direct equity holdings. In spite of great capacities of banks, this trend started to decrease after 1990s.

Stakeholders' role is important in German corporate governance. Broader attention to stakeholders was written into the obligations of enterprise management after 1945 by co-determination legislation requiring labor representation on the supervisory boards of all corporations employing a minimum number of people (Jackson 2001, Streeck 1984, cited in Herrigel, 2006: 8).

Except for the centralized National Socialist Dictatorship term, German state has been federally organized with highly dispersed authority, and a small central bureaucracy in order to protect market order and coordinate public associational debate.

Like France, Britain and USA, especially after 1990s in Germany there has been a great movement to greater dispersal of holdings, less usage of banking, greater importance to shareholder value, more liquidity in securities market and more emphasis on market solutions to public problems (Herrigel, 2006: 8).

1.6.5. **Japan**

Before the militarization in 1930s, there were three types of corporate governance in Japan business environment. The first type of corporate governance was consisting of limited partnership holding company structure where family owners controlled diversified networks of publicly quoted enterprises, ran by professional management known as zaibatsu. The second type was classical state ownership corporate governance with professional bureaucratic managers directing towards economic goals of the government. The third and the most common corporate structure was broadly-held joint stock companies with highly liquid securities market and professional managers acting in the interest of stockholders (Hoshi & Kashyap 2001, cited in Herrigel, 2006: 8).

Until 1930s, Japanese financial sector was very well diversified and equity financing was more dominant than debt financing. Banks were used mostly in short term financing and relational banking did not exist. But there were some zaibatsu banks with close relationships with zaibatsu holdings. However, zaibatsu banks were not the primary finance resource for zaibatsu holdings. In this era, professional managers directed their companies towards the interests of its shareholders. The state regulated the economy by creating guideline rules for private actors. But the system changed after 1930s with war, military government, occupation and economic recovery respectively.

Firstly, strong securities market broke up by military government which is against to private economic interests. They made high taxation on stockholdings and made dividends illegal. The military government forced private companies to use banking instead of securities financing. The bank dominated finance sector was continued in the postwar era also.

Secondly, inter-corporate shareholding expanded. After the defeat of Japan in the war, the occupation authorities forced Japanese government to make new laws for forbidding zaibatsu holdings, sending their family owners to other countries and protecting minority rights (Hoshi and Kashyap 2001, Morck and Nakamura 2003, cited in Herrigel, 2006: 9). These reforms improved the capital market and with the help of inflation in devaluing the price of existing stocks, the managers bought big amount of shares in friendly or related companies in order to prevent from takeovers.

During 1950s and 1960s, these situations produced loosely inter connected *keiretsu* in which related firms owned small amounts of shares in one another. These holdings were often small, but they summed up to a majority stake in the group by its own members—making it difficult for outsiders to enter into Japanese stock market.

Banks were the most important directors of these interconnected holdings. Though each group borrowed from many banks, they lastly relied on a "main bank" to coordinate their financing. Main banks in many ways made the inter-corporate shareholding strategy work as a defense against takeovers. Main banks could coordinate the strategic development of member firms and mobilize disparate stakes in the event of an outside challenge. They also used their central position as credit givers to monitor keiretsu firms and took responsibility for directing restructuring efforts within member enterprises in the event of a crisis (Aoki & Patrick 1994, cited in Herrigel, 2006: 10).

Thirdly, employees acknowledged in Japanese corporate governance system. The key mechanism for this was the "institution" of permanent lifetime employment. Japanese courts penalized many large Japanese companies for employing regular workers. As a result, enterprise managers were practically achieved to manage their firms in the interest of shareholders, bankers, and employees.

Lastly, the role of government in Japanese corporate governance changed significantly. The 1930s military government destroyed the securities market and the control of banks. In the postwar period, government control of banks got more indirect, but still remained significant. The Ministry of Finance rewarded banks which fostered investment in directions favored by state economic development

policies and penalized banks which do not follow these policies. This linkage between the public and private sector was reinforced through the effective abolition of the national corporate bond market. With their stock bound up in highly complicated cross shareholdings, postwar Japanese enterprises –unlike their prewar holdings—were extremely dependent on the banking system for finance. And the Japanese state was in a very strong position to direct the flow of investment funds from banks (Hoshi & Kashyap 2001, cited in Herrigel, 2006: 11).

After reviewing the different countries' corporate governance structures, it is obvious that national and cultural differences created different corporate governance systems in each country. But, globalization is becoming more dispersed every day along the world. So, financial markets are getting more integrated to each other and this situation is creating a unique global financial market. At this point, corporate governance systems have been converging to each other in order to create the best corporate governance system that serves best for all investors all over the world.

1.7. Corporate Governance in Turkey

Corporate governance in Turkey is developing like all other developing countries' corporate governance but Turkey has a weak corporate governance regime. According to Gönenç (2003: 64) the main characteristic of Turkish corporate governance is it has very low shareholders' rights and very high creditor rights compared to developed countries. Bond market for private corporations is also not available. Turkey has almost all of the features of weak corporate governance regimes including concentrated family ownership, weak institutions (law enforcement, accounting standards, and shareholder and creditor protection), pyramidal business groups and dual class shares. In pyramidal structure, the family achieves control of the constituent firms by a chain of ownership relations: the family directly controls a firm, which in turn controls another firm, which might itself control other firms, and so forth (Almeida-Wolfenzon, 2004:1).

A strong corporate governance regime has high legal protection for minorities. Better legal protection leads to more valuable stock markets, to higher market valuation, greater dividend pay-out ratios, and to improved investment performance. The opposite of these consequences occurs in weak corporate governance regime. In weak corporate governance regime, equity markets become thinner. Thin security markets are expected to have slower economic growth. As a result, improving a country's corporate governance standards, in the same time, increases the economic growth and investment performance of that country. (Yurtoglu, 2003:1)

1.7.1. The History of Turkish Economy

State-business enterprises are the starting and the most important factor in Turkey's business environment. Modern Turkish economy existed from agriculture dominated and foreign fund dependent Ottoman economy. Early surveys of the manufacturing industries reveal that establishments around 1920 were concentrated in the Western parts of the country with two employees on average indicating production for regional markets with old technology (Kepenek and Yentürk, 1996).

In order to develop economy, domestic government directed strategies were followed until 1960s when a more conscious import substitution policy was started. During this period many state-owned enterprises were founded and controlled by the state. These failed to produce the desired degree of industrialization and rates of economic growth due to a number of reasons (Kepenek and Yentürk, 1996). The state had (and still has) a key role both as an owner of large industrial companies and by allocating resources to the private sector (Yurtoglu, 2003:4).

The import substitution policy was replaced in 1980 by an export-led stabilization and structural adjustment program implemented under a military regime. One major step of this program includes the liberalization of the capital market, which was carried out over the 1980-1989 period. The Capital Market Law was established in 1981 followed by the establishment of the Capital Market Board in 1982. After a five-year preparation process, Istanbul Stock Exchange was

reorganized and reopened in 1986. An important feature of a variety of government policies towards industry was the inconsistency among their various elements and the consequent uncertainty they introduced into the decision making process of the private sector (Bugra, 1994). Government intervention was in general oriented towards short-term measures instead of generating long-term solutions to the structural problems of the economy (Yurtoglu, 2003:4).

During 1980s and 1990s, Turkish corporate governance regime was charactized by opacity and was prone to corrupt practices. The capital market was charactized by low liquidity, high volatility, high cost of capital and limited new capital information. Controlling shareholders maintained large stakes and have leveraged cash flow rights due to privileged shares and pyramidal ownership structures. In addition, shortcomings in the legal and regulatory framework were contributing substantially to the risk of investing in Turkish equity market. These deficiencies affected negatively foreign direct investments to Turkey and development of an equity market in Turkey.

Financial crisis have important affect on the economies. Turkey experienced several financial crises during its history: The most recent ones were the 1994 financial crisis, the November 2000 and February 2001 financial crisis. These crises strongly affected the Turkish economy, capital markets and caused high inflation rates. Turkish governments tried to stabilize the economy after the 1994 financial crisis. However, these efforts in 1995, 1998 and 2000 failed to reduce the inflation rate to levels below 25 per cent per year. In 2002, the Government made an agreement with the International Monetary Fund to make minor changes in the program to restructure the Turkish economy. Turkish government achieved to decrease the high inflation rate from 29,7% in 2002 to 8,39% in 2007. With effort to joining European Union, systems are becoming more transparent among Turkish companies. The revision of the Turkish Commercial Code and the convergence to international accounting, auditing and valuation standards are the reforms of the Turkish capital market regulations. Also Turkey has been taking strong and significant steps towards applying internationally accepted corporate governance

practices for the last five years especially through Corporate Governance Principles of Turkish Capital Market Board (Arsoy and Crowther, 2008:410).

1.7.2. The characteristics of corporate governance in Turkey

Characteristics of Turkish corporate governance are very similar with Turkish Capital market features. First of all, only small part of companies are publicly listed and traded on Istanbul Stock Exchange (ISE). (Yurtoglu, 2003:5). Increasing of listed and traded companies is an explanation of improvement of Turkish corporate governance regime during this decade.

Secondly, there is not any active market for corporate control in Turkey. Because concentrated ownership is the most common ownership type in Turkey. In this ownership type, trading large blocks of sale (like hostile takeover) is not possible usually because of the required permission of the controlling owner of the company. In the last decade, transferring of large block of shares is very rare and only \$106 million on average (Yurtoglu, 2003:5). Controlling shareholders maintain large stakes and have leveraged cash flow rights due to pyramidal ownership structures (Ararat and Ugur, 2003: 71)

Thirdly, existence of business groups is another feature of Turkish corporate governance. Leff (1978) and Khanna and Palepu (1997, 1999) argue that business groups substitute for missing markets (e.g. labor and financial markets). Aoki (1984) argues that business groups act as a risk sharing mechanism. Ghatak and Kali (2001) explain business groups as an arrangement that alleviates external credit rationing through mutual debt guarantees, and Kim (2004) shows that these mutual debt guarantees increase the probability of a bailout. According to these arguments, business groups are more likely to arise in developing countries because these countries are characterized by poor institutional arrangements that prevent the creation of markets. BGs are common organizations in developing economies like Turkey. A single family or sometimes a coalition of a small number of families controls these BGs, which often include a bank. Scandals about these banks have risen for the last decade. Many of them were simple resource transfers of controlling

shareholders from their firms in the form of outright theft or fraud. In this situation, mostly minority shareholders lost (Yurtoglu, 2003:29).

1.7.3. Corporate Governance Practices in Turkey

The capital market law, Turkish commercial Code and Corporate Governance Principles of Turkish Capital Market Board and other regulations of Istanbul Stock Exchange are the main sources of corporate governance in Turkish legislation.

Capital Market Board's corporate governance principles are the most important topic in Turkish corporate governance history. In July 2003 Turkish Capital Market Board issued corporate governance principles with the aim of enhancing the corporate governance regulations in Turkish listed companies. By recognizing the fact that no single model is valid for every country, Turkish Capital Market examined the regulations of many countries and generally accepted and recommended corporate governance principles, primarily the OECD Principles of 1999 and revision drafts have been taken into consideration during the preparation of these principles. These principles were developed on the basis of "comply or explain" approach meaning that the implementation of Turkish Capital Market Principles is optional. But with law enforcement, after 2005 the companies are required to disclose their corporate governance practices and changes in their annual reports. Turkish Capital Market prepared the Turkish Capital Market Principles in order to fill the gaps in corporate governance practices. The Turkish Capital Market Principles have four main sections: shareholders, public disclosure and transparency, stakeholders and board of directors (Arsoy and Crowther, 2008:413).

In shareholders section, the rights of shareholders are explained. The principles about public disclosure and transparency concepts, information procedures and disclosure standards for all shareholders and the standards of information on financial reports are existed on public disclosure and transparency section. In the third section, the principles and standards in order to regulate the relationship between corporation and all of its stakeholders are explained. In board of directors section, the function of the board, the roles and responsibilities of the board and

some principles about establishing committees and delegating their managers in order to assist board of directors are found (Turkish Capital Market Board, 2003).

The importance of corporate governance is increasing in Turkey like all other countries around the world. But importance of corporate governance among countries is not the same. According to (Arsoy and Crowther, 2008:419) the evolution of new corporate governance standards is similar with UK but compliance of them is relatively smaller than UK. Main reason for this is cultural differences

1.8. The Principles of Corporate Governance

In this section, principles and guidelines in corporate governance are discussed. In the world, there are some big organizations that publish new guidelines and principles of corporate governance in every year in order to guide companies and governments in corporate governance field. OECD is one of the most accepted organizations in corporate governance field. In this section, OECD corporate governance principles will be investigated. The *OECD Principles of Corporate Governance* (2004) report will be used. The summary of the main principles are:

• Principle 1: Ensuring the Basis for an Effective Corporate Governance Framework

The corporate governance framework should facilate transparent and efficient markets. It should be consistent with laws and supervisory, regulatory and enforcement authorities should be separated efficiently and each authority should fulfill its own duty efficiently.

• Principle 2: The Rights of Shareholders and Key Ownership Functions

Shareholders should have right to get and transfer their shares easily and safely. They should easily get relevant information about the company that they had

invested and they should participate and vote in shareholder meetings. The most importantly, they should have right to get profit with dividend payments. Also shareholders should have right to participate in and get information about meetings in order to change business field of the company or some other extraordinary fundamental corporate changes. Any capital structure change that increases the wealth of someone or another shareholder should be disclosed. And lastly, ownership rights should be exercised for all shareholders.

• Principle 3: The Equitable Treatment of Shareholders

All shareholders of the same class of share should be treated equally. Minority shareholders should be protected. Insider trading and abusive self-dealing should be prohibited. Members of the board and key executives should be required to disclose whether they have any material interest in the company.

• Principle 4: The Role of Stakeholders in Corporate Governance

The rights of stakeholders that are established by law or through mutual agreements should be protected. Stakeholders should easily access information about the corporation whenever they participate in any process of the corporation. The employees and other stakeholders should be able to freely tell their concerns about illegal practices of the company to the board. More employee participation in corporate governance should be facilitated.

• Principle 5: Disclosure and Transparency

The corporate governance framework should ensure accurate and timely information on governance structures and policies, objectives, ownership and voting rights, financial performance, foreseeable risk factors and issues regarding the employees and other stakeholders of the corporation. This disclosed information should be in accordance with internationally accepted high quality standards of

accounting and other financial and non financial fields. An annual audit should be conducted by an independent and qualified auditor in order to get assurance about the financial performance of the corporation. Accessing to the required information by users should be easy and cost efficient.

• Principle 6: The Responsibilities of the Board

Board members should act on a fully informed basis in the interest of the company and the shareholders. The board should care for the stakeholders and apply high ethical standards. The board should treat equally for the all shareholders. When the boards are established, their composition and working procedures should be identified and disclosed clearly. Board members should exercise their duties carefully. In order to exercise their duties efficiently, the board members should have accurate and timely information access. Boards should consider assigning a sufficient number of non-executive board members capable of exercising independent judgment to tasks where there is a potential for conflict of interest. Examples of such key responsibilities are ensuring the integrity of financial and non-financial reporting, the review of related party transactions, nomination of board members and key executives, and board remuneration (OECD, 2004)

CHAPTER II

THE INFLUENCE OF CORPORATE GOVERNANCE ON CAPITAL STRUCTURE DECISION

In the previous chapters, corporate governance topics are discussed. In this chapter, the effect of corporate governance on capital structure decisions of the firms is analyzed. Capital structure is very important for corporations. It determines the cost of capital. According to Ross, Westerfield and Jordan (2003) and Gitman (1999) poor capital structure decisions result in high cost of capital and they lower projects' Net Present Values (NPVs) and make more of them unacceptable. Effective decisions lower the cost of capital and results in higher NPVs and more acceptable projects, thereby increase the value of the firm. As a result, firms target to have a capital structure that has a lower weighted average cost of capital. Capital structure decision is the decision of what proportion debt and equity financing will be used in investments of the firms. There is much literature that shows evidence of the relationship between corporate governance and capital structure. Leverage is mainly computed as debt of the company divided by total assets of the company.

In next part, some literature about agency theory and the relationship between corporate governance and capital structure decision is discussed. After this literature review, an empirical analysis of corporate governance and capital structure is made on next Chapter.

2.1. Agency Theory and Corporate Governance

Many theories have built in order to find the determinants of capital structure. Several hypotheses have been advanced in the past couple of decades.

Agency theory is one of these theories and its main importance is its relation with corporate governance. Agency theory explains that capital structure is determined by agency costs, which causes from conflicts of interests. Agency

problems arise because contracts are not costlessly written and enforced. Agency costs include the costs of structuring, monitoring and bonding a set of contracts among agents with conflicting interest (Fama and Jensen, 1983:5).

Jensen and Meckling (1976:308) defines an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationship are utility maximizers there is good reason to believe that the agent will not always act in the best interests of the principal. In other words, agency theory assumes that, because of the separation of corporate management and ownership, shareholders require protection because managers will not solely act to maximize the shareholders' wealth. For instance, managers can show better financial performance by changing financial records, which may maximize their own wealth under compensation and reward incentive schemes. To deal with this agency problem, good corporate governance is required. An actor in corporate governance, the board of directors, exists to protect the interests of the shareholders. The board of directors gets an oversight role that typically involves monitoring the managers. The board of directors is also responsible from approving the corporation's business strategy, and monitoring the corporation's reporting and control systems. Given its diverse responsibilities, the board of directors delegates some of its oversight to the Audit Committees and other committees of the board (Chen, Duh and Shiue, 2008: 34)

Many solutions have developed in order to solve agency problem. One of these solutions is leverage, a capital structure decision. Leverage has been argued to decrease agency problem in many ways. One way to reduce agency conflicts is to cause managers to increase their ownership in the firm (Jensen and Meckling, 1976). By increasing the use of debt financing, effectively, displacing equity capital, firms shrink the equity base, thereby increasing the percentage of equity owned by management. In addition, the use of debt increases the probability of bankruptcy and job loss. This additional risk may further motivate managers to decrease their consumption of perks and increase their efficiency. Finally, the obligation of interest payments resulting from the use of debt helps resolve the free cash flow problem

(Jensen, 1986). Because leverage is related to agency costs and agency costs, in turn, are related to governance quality (Chiyachantana, Jiraporn and Kitsabunnarat, 2005:4)

Agency problem and corporate governance are very interrelated topics. Agency problem causes from suffering of shareholders' rights by management. This problem may result in lack of confidence of shareholders on management and consequently, shareholders investment may decrease. This problem must be solved because equity financing is necessary and debt financing is usually more expensive for the firm. The rights of shareholders and shareholder wealth maximization must be provided. In briefly, good corporate governance is required in order to solve this agency problem.

2.1.1. Agency Theory and Separation of Ownership and Control

Separation of management and control is an important topic in modern theory of the firm. While organizations are increasing in size and activities, managing the company and its activities is becoming a more difficult task. Separation of management and control is creating many advantages at this point while creating serious agency problems. Corporate governance is used as an controlling tool of agency problems as stated at previous part.

Fama and Jensen (1983) analyze the survival of organizations in which decision agents do not bear a major share of wealth effects of their decisions. According to them, separation of ownership and control, separation of decision and risk bearing function, survives in the organizations because of specialization of management and risk bearing and an effective common approach to controlling the agency problems caused by separation of decision and risk bearing functions. Controlling the agency problem is important when decision managers who initiate and implement important decisions are not the major claimants and they do not bear a major share of the wealth. Without effective control procedures, such managers are more likely to take actions that deviate from the interests of residual claimants.

The residual risk is the risk of the difference between stochastic inflows of resources and promised payments to agents and it is borne by those who contract for the rights to net cash flows. These agents are the residual claimants. Common stocks of large corporations are the least restricted residual claims. Shareholders are not required to have any other role in the organization; their residual claims are alienable without restriction and it allows unrestricted risk sharing among many numbers of shareholders. Main advantages of common stock residual claims according to Fama and Jensen (1998:5) are:

- Common stock allows residual risk to be shared among many residual claimants who individually choose his risk level and who can diversify across other organizations.
- 2) Large corporations have contracts with many types of agents or factors of production like different raw materials, labor and managers. Default risk on these contracts increases contracting costs. Common stocks allow efficient accommodation of large scale specialized risk bearing by residual claimants. (Fama and Jensen, 1998:4)
- 3) Common stocks supply high amount of wealth from residual claimants (shareholders) in order to buy organization specific risky assets.
- 4) Common stock residual claims allow specialization of management. In big and complex organizations, coordinating the activities of agents, production and distribution activities tasks are specialized activities and managers must have specialized managerial skills. Incompetent managers who are important residual claimants can be difficult to remove and these managers' activities may harm the organization.

Fama and Jensen (1983) have two hypotheses about the relations between risk bearing and decision process of organizations:

 Separation of residual risk bearing from decision management leads to decision systems that separate decision management from decision control. • Combination of decision management and decision control in a few agents leads to residual claims largely restricted to these agents.

According to them, an effective system for decision control separates control (ratification and monitoring) of decisions from management (initiation and implementation) decisions to some extent. Individual managers can be involved in the management of some decisions and the control of others. The important problem is to determine when separation of decision management, decision control and residual risk bearing is more efficient when it is not.

2.1.1.1. Combining Decision Management, Decision Control and Residual Risk Bearing

In noncomplex organizations combining of decision management, decision control and risk bearing is more efficient than separating them. Noncomplex means specific information (detailed information that is costly to transfer among agents) relevant to decisions is concentrated in one or a few agents (Fama and Jensen, 1983:6). Without separation of decision management from decision control, residual claimants have little protection against opportunistic actions of decision agents and this lowers the value of unrestricted residual claims. Restricting these residual claims to the important decision agents solves agency problem. Restricting residual claims to decision makers controls agency problem but it sacrifices the benefits of unrestricted risk sharing and specialization of decision functions. In combining management and control case, decision makers assign lower values to uncertain cash flows (risky projects) if they are also residual claimants. This may decrease company's future cash flows.

Small noncomplex organizations do not have demands for a wide range of specialized decision agents; instead, when management and control decisions are combined to in one or a few agents, efficiency gains have been seen. The amount of risk sharing benefits forgone when residual claims are restricted to one or a few decision agents is less serious, because total risk of net cash flow to be shared is generally smaller in small organizations. Also small organizations do not demand

much amount of wealth to bond the payoffs promised to other agents and to purchase risky assets.

Consequently, small organizations can control the agency problem caused by combination of decision management and control in one or a few agents by restricting residual claims to these agents. This combination of decision and control is efficient in small noncomplex organizations because the benefits of unrestricted risk sharing and specialization of decision functions are less than the costs that would be incurred to control resulting agency problem. Closed corporations, the proprietorships and partnerships are small noncomplex organizations that favor combination of decision management and decision control (Fama and Jensen,1983:9).

2.1.1.2. Separation of Decision Management, Decision Control and Residual Risk Bearing

Large open corporations, large professional partnerships, nonprofits and financial mutuals control the agency problems that result from separation of decision management from residual risk bearing by separating the management (initiation and implementation) and control (ratification and monitoring).

In these complex organizations specific knowledge relevant to different decisions is diffused among agents at all levels of the organization. So diffusion of decision management can reduce costs by delegating the initiation and implementation of decisions to the agents with valuable relevant knowledge. Separation of management and control can reduce agency problems of diffuse decision management. (Fama and Jensen, 1983: 10)

Residual claimants are diffused among many agents in complex organizations. Total risk of net cash flows to be shared is generally large and demands of funds from residual claimants to bond the payoffs promised to many agents and purchase risky assets are high in these complex organizations, so having many residual claimants has advantages in large complex organizations. It is very

costly to make all of the residual claimants involve in decision control and delegating decision control is more efficient when there are many residual claimants like large complex organizations. Delegation of decision control is observed even in large professional partnerships in public accounting and law, where the residual claimants are expert internal decision agents. Nearly complete separation and specialization of decision control and residual risk bearing is common in large open corporations and financial mutuals.

According to Fama and Jensen (1983) seperation and diffusion of management and decision control have many advantages

- It limits the power of individual decision agents to expropriate the interests of residual claimants.
- It allows valuable knowledge to be used at the points in the decision process
 where it is most relevant and it helps control the agency problem of diffuse
 residual claims.

There are three mechanisms for diffusing and separating the management and control of decisions in organizations.

Decision Hierarchies

It is a common feature of decision management and control systems of complex organizations. In decision hierarchies, higher level agents ratifying and monitoring the decision initiatives of lower level agents and evaluating their performance. Hierarchical partitioning of the decision process makes it more difficult for decision agents at all levels of the organization to take action that benefit themselves at the expense of residual claimants.

• Mutual Monitoring Systems

When agents interact to produce outputs, they acquire low cost information about collagues, information not directly available to higher level agents. Mutual monitoring systems use this information in control process.

• Boards of Directors

A board of directors helps to ensure separation of decision management and control even at the top of organizations. It is on the top of decision control systems among different kind of organizations. Agents in these boards do not bear major share of the wealth effects of their decisions. Boards have the power to fire, hire and compensate top level managers and to monitor and ratify important decisions.

Separation of ownership and control leads to agency problems between decision agents and residual claimants. These agency problems require modern corporate governance solutions.

2.2. Relationship between Corporate Governance Characteristics and Leverage

Main characteristics of corporate governance include; board size, board composition, CEO duality, tenure of the CEO, ownership concentration and CEO compensation. The relationship between each corporate governance variable and leverage is analyzed by Abor and Biekpe (2007: 2-4) as follows:

2.2.1. Board size and Leverage

Board size is a main characteristic of corporate governance. The board of directors' main responsibility is directing the firm and its operation efficiently. Berger et al (1997) find that firms which have larger board size have low leverage or debt ratio. They assume that larger board size turns to strong pressure from the corporate board to make managers follow lower leverage capital structure strategy in order to increase firm performance. On the other hand, Jensen (1986) argues that firms with high leverage or debt ratio rather have larger boards. The results of Wen et al (2002) and Abor (2007) also show a positive relationship between board size and financial leverage (capital structure). Their findings show that large boards, which are monitored and directed more by regulatory mechanisms, pursue higher

leverage to raise company value. Another reason is that larger board membership could more difficultly agree at a common decision. These conflicts arising from bigger board size can weaken corporate governance and increase debt ratio. Anderson et al (2004) also show that the cost of debt is lower for larger boards, presumably because creditors view these firms as having more effective monitors of their financial accounting processes.

2.2.2. CEO Compensation and Leverage

Ceos with attractive fixed compensation might follow lower leverage strategy in order to reduce the financial risk and keep their job for the attractive compensation. Though, empirical evidence has shown both positive and negative relationships. Jensen and Meckling (1976), Leland and Pyle (1977) and Berger et al (1997) show positive relation between Ceo's compensation and capital structure of the firm. Wen et al(2002), Friend and Hasbrouck (1988) and Friend and Lang (1988) also find a negative relationship between fixed compensation and financial leverage.

2.2.3. Tenure of the CEO and Leverage

Another corporate governance characteristic affecting capital structure is the tenure of the CEO. Tenure of the CEO shows length of years the CEO remains in that position. The daily running of the firm is the responsibility of the CEO and management who are accountable to the board of directors. The decisions of the management, especially the CEO, therefore have an impact on the performance of the firm. Empirical evidence suggests a negative relationship between the tenure of CEO and leverage. Berger et al (1997) and Wen et al (2002) investigate the tenure of the CEO and find that the tenure of the CEO is negatively related to the leverage. Leverage is lower when the CEO has a long tenure in company. Long time worked CEOs and directors prefer low leverage to reduce performance pressures associated with high debt.

2.2.4. CEO duality and Leverage

CEO duality is the situation when The CEO is also the chairman of the board. This situation also influences the capital structure decisions of the firm. A two-tier leadership structure is one in which the chair of the board of directors and the CEO position are not held by the same person. The explanation for this was suggested first by Fama and Jensen (1983). Fama and Jensen (1983) define decision management as the right to initiate and implement new proposals for the expenditure of the firm's resources and decision control as the right to ratify and monitor those proposals. By not allowing an insider to have both decision management and decision control authority over the same proposals, a series of checks and balances are imposed that make it more difficult for managerial insiders to engage in any type of opportunistic behavior. At the highest levels, this implies that the person with the senior decision management authority (the CEO) should not be allowed to exercise the senior decision control authority as well. Since the board of directors is the highest level decision control structure in the firm, this requires that the board must not be under the control of the CEO. If the board is controlled by the CEO, "this signals the absence of separation of decision management and decision control ..." (Fama and Jensen, 1983). Since the chairman has the greatest influence over the actions of the board, the separation of decision management and decision control is in danger when the chairman of the board is also the CEO of the firm. Thus, the chairman and the CEO positions should be held by different people (a two-tier leadership structure) in order to solve the agency problem efficiently. According to Fosberg (2004), firms with a two-tier leadership structure should be more likely to have the optimal amount of debt in their capital structures than firms in which the CEO is also the board chair (a unitary leadership structure or CEO duality). He finds that, firms with a two-tier leadership structure have higher leverage ratios. However, the relationship is not statistically significant.

2.2.5. Board Composition and Leverage

Board composition is mainly used for classifying the board members as external or internal members for the company. According to the resource dependence approach, developed from Pfeffer (1973) and Pfeffer and Salancick (1978), external directors improve firm's protection from the external environment, reduce uncertainty, or use resources that increase the firm's ability to raise funds or increase its position and recognition. More outside directors increase debt ratio. Wen et al (2002) find a significantly negative relationship between number of outside directors on the board and debt financing. They assume that outside directors prefer to monitor managers more actively, so these managers prefer to use less debt to get better financial performance. Also, firms with higher proportion of outside directors tend to follow low financial leverage strategy with a high market value of equity. On the other hand, Jensen (1986), Berger et al (1997) and Abor (2007) argue that firms with higher leverage rather have relatively more outside directors, whiles firms with low percentage of outside directors experience lower leverage.

2.2.6. Ownership Concentration and Leverage

Madurga et al (2001) states that monitoring and disciplining managers may be prohibitively expensive for small shareholders. Thus, monitoring will only be effective if a single party becomes large enough to internalize the costs of control. So when large amounts of shares held by one person or institution, more influence occurs on managers to use less debt financing that creates borrowing and bankruptcy costs for the company. They used fraction of shares held by the largest shareholders at the end of the fiscal year as ownership concentration variable. But in their study they did not find any statistical evidence about the relation between ownership concentration and leverage.

2.3. Emprical Studies on the Corporate Governance and Capital Structure Decision

Most of the empirical studies about the relationship between corporate governance and capital structure decision focus on either corporate governance quality or corporate governance variable-leverage interaction.

Corporate governance quality is measured by Corporate Governance Indices. These indices include some questions that measure how much corporate governance codes are applied in the firm. For each code that is applied in the firm, 1(one) point is given to company's score and 0(zero) point is given if it is not applied. Companies' corporate governance scores are developed according to these results.

The main corporate governance variables like board size, board composition, CEO duality, tenure of the CEO and CEO compensation are tested if there is a relation between them and leverage in the other type of literature. Some researches about the relationship between corporate governance and leverage are analyzed in the following paragraphs.

Madurga et al (2001) investigate the relation between firms' corporate governance structure and capital structure decision among the whole firms listed in Madrid Stock Exchange in Spain from 1991 to 1997.

They use leverage as dependent variable and the following variables as explanatory (independent) variables: ownership related variables (managerial ownership, ownership concentration and banks and institutional investors ownership), and variables related to the structure of the Board of Directors (the proportion of inside directors and board size).

Madurga et al (2001) find a non-linear relationship between managerial ownership and firms' leverage, a negative relation between board size and leverage, no significant influence of the proportion of inside directors on firms' leverage and no significant influence of ownership concentration on debt level.

Wen et al (2002) examine the relationship between corporate governance variables and firms' capital structure in China. They use board size, board composition, tenure of the CEO and CEO compensation as corporate governance variables. Return on Asset, company size (measured as log of total assets), collateral value of assets (the ratio of net property, plant and equipment plus inventory over total assets), and two variables that measure the uniqueness of assets (research and development (R&D) expense over sales and selling and general and administrative expenses over sales) are their control variables.

They have a sample of 180 observations for 60 Chinese listed firms between 1996 and 1998. They find that there is a statistically significant negative relationship between leverage and board composition and tenure of the CEO and on the other hand, they find that there is a statistically insignificant negative relationship between CEO compensation and leverage. The relationship between board size and leverage is positive but it is statistically insignificant.

Chiyachantana, Jiraporn and Kitsabunnarat (2005) investigate how capital structure is influenced by corporate governance quality. They suggest agency costs as an explanation of capital structure and corporate governance exists to mitigate agency problems. They use the newly developed governance score in order to measure corporate governance quality (Brown and Caylor: 2005, cited in Chiyachantana, Jiraporn and Kitsabunnarat, 2005:8). The governance score (Gov-Score) is developed based on a new dataset provided by Institutional Shareholder Services. Gov-Score is a composite measure of 51 factors encompassing eight corporate governance categories: audit, board of directors, charter/bylaws, director education, executive and director compensation, ownership, progressive practices, and state of incorporation. Detailed information is on Appendix 1. Brown and Caylor (2005) find that firms with better governance quality as measured by the governance score are more profitable and more valuable (higher Tobin's q). Their results infer that firms with better governance quality have lower agency costs.

Chiyachantana, Jiraporn and Kitsabunnarat (2005) develop two hypotheses in order to find the effect of corporate governance quality on capital structure: The outcome hypothesis and the substitution hypothesis.

Outcome hypothesis assumes that capital structure is determined as an "outcome" of corporate governance quality. Firms with low governance quality have more serious agency problems. Managers of these companies prefer to direct the company towards their own benefits instead of shareholder benefits. As argued by agency theory and shown by empirical evidence, debt plays an important role in controlling agency costs, making it more difficult for opportunistic managers to misbehave.

In firms with poor governance, managers experience less monitoring and are more likely to behave opportunistically. These managers are more likely to have debt financing at lower level because they do not want to have additional constraints on themselves like fixed interest payments or be deprived of "free" cash flow that they have control over. Therefore, this hypothesis says that poor corporate governance means low debt financing. In other words, there is a positive relationship between governance quality and leverage

Substitution hypothesis assumes leverage as a 'substitute' of corporate governance. Corporate governance helps to decrease agency problem. In the same time, debt also mitigates agency conflict. So, debt and corporate governance play the same role and they may substitute for each other. In firms with weak corporate governance, the need for using debt as a controlling tool in agency conflict is more than in firms with strong corporate governance.

There is another way in explaining substitution hypothesis. Each firm, at least occasionally, need external fund from external capital markets. To be able to raise external funds with attractive terms, a firm must establish a reputation for moderation in expropriating shareholders. One way to establish such a reputation is by having debt and making interest payments, which reduces what is left for expropriation.

A reputation for good treatment of shareholders is very necessary for the most of firms with weak corporate governance. As a result, the need for debt to establish a reputation is the greatest for such firms. By contrast, for firms where governance quality is high, the need for a reputation mechanism is weaker, and, thus, so is the need for leverage. Shortly, according to substitution hypothesis, leverage should be

higher in firms with weaker governance quality. In other words, an inverse relationship should be observed between leverage and corporate governance.

In their analysis, Chiyachantana, Jiraporn and Kitsabunnarat, (2005) develop a broad based governance score to represent governance quality. Their final sample consists of 1206 firms' governance scores. They use regression analysis and t test in order to test their sample. Leverage is dependent variable and Gov-Score is independent variable in their regression.

Consequently, they find that there is a relation between capital structure and corporate governance. But this relationship is not linear, it is parabolic and convex. The relationship is negative up to a certain point. So substitution hypothesis is valid in this interval. This reversal point is the point when Gov-score is nearly 25. After this point, the relationship turns to positive. It means in higher corporate governance scores after reversal point, corporate governance and leverage both increase. Outcome hypothesis is valid for this interval.

Shareholder rights protection is one of the main principles of corporate governance according to OECD reports. So, high shareholder right protection is a projection of high corporate governance quality.

Jiraporn and Gleason (2005) examine how strength of shareholder rights influences capital structure. They also investigate how regulation affects the relationship between shareholder rights and capital structure. They use the Governance Index (Gompers, Ishii, and Metrick: 2003, cited in Jiraporn and Gleason, 2005:1) to measure the strengths of shareholder rights. The Governance Index determines how many corporate governance provisions exist that restrict shareholder rights. The detailed information about Governance Index is on Appendix 2. Gompers, Ishii, and Metrick (2003) demonstrate that firms with stronger shareholder rights earn average abnormal returns of 8.5% per year. This is caused from stronger shareholder rights and lower agency costs, which result in higher firm value.

They get sample data from Investor Responsibility Research Center (IRRC) and COMPUSTAT database. Their total sample consists of 4638 firm-year

observations from 1993, 1995, 1998, 2000, and 2002. They use ordinary least squares method in order to test their sample.

They find an inverse relationship between capital structure and the strength of shareholder rights. This is an example of substitution hypothesis and shareholder rights substitute with debt in solving agency problem. Consequently, the debt ratio is positively related to the degree of restrictiveness of corporate governance – the more suppressive the governance, the weaker the shareholder rights and the higher the debt ratio. Their finding is that regulation substitutes for shareholder rights to reduce agency costs. Specifically, there is no relationship between leverage and shareholder rights in regulated firms.

Abor and Biekpe (2007) investigate how the adoption of corporate governance structures among Ghanaian SMEs influences their financing decisions. They examine how main characteristics of corporate governance influence capital structure of Ghanaian Small Medium Size Enterprises.

They use a sample of 150 SMEs drawn from the Association of Ghanaian Industries' database of firms and that of the National Board for Small Scale Industries. The selection of sample is based on criteria set by Regional Project on Enterprise Development (RPED) for SMEs in Ghana. The data is taken from financial statements of these companies from 1998-2003. Their study uses a panal data model like Wen et al. (2002) with some modifications. Capital structure is their dependent variable and Board Size, Board Composition, Board Skill and CEO Duality are their independent variables. Age of the firm, Size of the firm, Profitability and Growth are their control variables for firms' attributes. Regression analysis is used in order to analyze the relationship between corporate governance and leverage.

Abor and Biekpe (2007) conclude that there is a positive relationship between capital structure and board skill, board composition and CEO duality. At the same time, they find significant negative relationship between capital structure and board size among Ghanaian SMEs. This means that the companies which have more

talented CEOs, more external directors, CEO and chairman as the same person and the companies which have smaller boards employ more debt financing.

Ariff, İbrahim and Othman (2007) investigate the relationship between Malaysia's first corporate governance ratings and some characteristics of Malaysian firms (leverage, profitability, market valuation, size, age, ownership structure and growth).

They use the ranking of 95 Public Listed Companies based on Corporate Governance Reporting Initiative 2004. From the Corporate Governance rating, two portfolios are constructed; the "Top 50 percent" and "the bottom 50 percent" of the ranking. They use two kinds of data, financial and non-financial data. Financial data such as the measures for profitability, leverage and company's size are gathered mainly from Thompson Financial Database. The non-financial data such as age and percentage of shareholders ownership are collected from WorldDatabase.

They find only firm size has a strong relationship with corporate governance ratings but there is not any relationship between corporate governance ratings of Malaysian firms and their firm characteristics of profitability, leverage, growth, market valuation, age, ownership structure and countries of operation. This is an empirical evidence that there is not a statistically significant relationship between leverage and corporate governance ratings in Malaysia.

Khanchel (2007) investigates the determinants of corporate governance among American firms. He assumes that the audit committee, the board committees and the board of directors characterize a firm's corporate governance structure. He divides the determinants of corporate governance into four sub-indices: sub-index of the audit committee, sub-index of the board committees, sub-index of the board of directors and an overall index.

Internal control and audit system index has five indicators as existence of audit committee, their members' financial expertise, existence of the external auditor as a member of Big 4, audit committee size and their meeting frequency. He uses a percentile ranking for this index in which each firm is ranked on the five measures.

Compensation and nominating committees' corporate governance efficiencies are measured on board committees index. The existence and meeting frequencies of board committees are main indicators in this index. Presence of CEO in any of these committees is a negative indicator because strength of corporate governance decreases if CEO is a member or director of these committees. Percentile ranking is also used in this index.

Board size, frequency of board meeting, separation of CEO and chairman positions and independence of directors are four indicators in board of directors index. According to index, decreasing the number of board members, increasing the number of board meetings, separating CEO and chairman positions and increasing the independence of directors strengthen the corporate governance.

The last index of Khanchel (2007) is total governance index. Khanchel (2007) takes the average ranking of other three indices.

Khanchel (2007) testes some firm attributes in order to find the relationship with corporate governance quality. In this process, he uses investment opportunities, intangible assets, firm performance, firm size, managerial ownership, external financing need and growth opportunities and institutional ownership as firm attributes. He has a sample of 624 US firms. Their firm specific data comes from EDGAR. He uses multiple regression analysis in his sample. He shows a significant relationship between firms' attributes and governance rating according to indices. He finds that large companies with high external financing need, high investment opportunities and high intangible assets tend to have stronger corporate governance. Also, he concludes that higher managerial and institutional ownership increases corporate governance quality.

CHAPTER III

AN EMPIRICAL ANALYSIS OF THE INFLUENCE OF CORPORATE GOVERNANCE ON CAPITAL STRUCTURE DECISION

3.1. Research Design

This study is prepared in order to analyze how corporate governance affects capital structure decisions of the companies on ISE 100 index. First aim of this study is to find statistical evidence if there is a relationship between corporate governance and leverage (capital structure decision). Second aim of this study is determine the direction of this relationship.

Capital structure is the dependent variable and board size is the first independent variable as a measure of corporate governance. Outside manager concentration is the second independent variable in the overall research design. Ownership concentration and return on asset ratio are other variables in the research.

3.1.1. Sample Selection

The sample of this study consists of 49 Turkish firms that quoted at Istanbul Stock Exchange 100 Index from 2005 to 2007. Banks, insurance firms and firms in finance sector are excluded because of their special capital structure and other special characteristics.

3.1.2. Data description

Data for board size, ownership concentration and outside manager ratio is gathered from the official web sites of the firms, annual reports, corporate governance compliance reports and other publicly available information. Investor relations and corporate governance sections in the web sites of the firms are used mostly for this data.

Data for capital structure and return on asset (ROA) is obtained from balance sheets and income statements of the sample firms in ISE official website. Arithmetic average values of data from 2005 to 2007 are used in this research.

3.1.3. Measuring Dependent Variable

Total debt to total assets (total equity plus total debt) ratio is used as a measure of capital structure. Abor (2007) and most of the researchers use this ratio for measuring capital structure. This measure shows how much debt financing used in the total investments of the firm. Capital structure measure is calculated from balance sheet of the companies. This variable is the dependent variable in this research.

3.1.4. Measuring Independent Variables

There are some characteristics of corporate governance like board size, tenure of CEO, CEO duality, CEO compensation, ownership concentration and board composition. These have positive and negative relationships with capital structure according to related literature as discussed in the previous chapter. Independent variables are chosen among them

Board size is used as an independent variable. Board size variable is calculated as logarithm of number of board members of the companies.

Outside manager concentration is other independent variable. It is calculated as the number of outside (independent) board members divided by the number of all board members.

Ownership concentration variable is the fraction of shares held by the largest shareholders at the end of the fiscal year.

Return on asset (ROA) is calculated as Earnings before interest and taxes divided by the book value of total assets. It is control variable in this study.

3.2. Methodology and Hypotheses

Ordinary Least Square (OLS) model is used as a multivariate test in order to analyze each independent variable's effect on dependent variable; capital structure in this study. Multiple regression analysis is used in this study.

3.2.1. Hypotheses

There are two hypotheses in this study:

Ho: There is no relationship between corporate governance and capital structure.

H1: There is a relationship between corporate governance and capital structure

3.2.2. Specification of the Empirical Model

Model in this study is a modified form of the model of Abor (2007). In equation it is as follows:

 $LEV = \alpha 0 + \beta 1*LBOARD + \beta 2*OUTSIDE + \beta 3*ROA + \beta 4*OWNER + \epsilon$ Where,

LEV: Capital Structure as Total Debt / (Total Debt + Total Equity) (Dependent Variable)

 $\alpha 0$: constant term

LBOARD : Log of total number of board members of company (Independent

variable)

OUTSIDE : The number of outside (independent) board members / The number

of all board members (Independent variable)

ROA : EBIT / Total asset of the company (Control variable)

OWNER : The fraction of shares held by the largest shareholders (Independent

variable)

: Error term 3

 β 1, β 2, β 3 and β 4 are corresponding coefficients of the variables. They show

the direction of the relationship and the ratio of the relationship.

3.3. **Empirical Results: Corporate Governance and Capital Structure**

Empirical results of this study are summarized in this part. In first part of this

sections descriptive statistics of the results are given. In the second section, more

detailed empirical results and hypothesis testing is analyzed.

3.3.1. Descriptive Statistics

Table 2 summarizes the descriptive statistics of the variables in the study.

Average of companies in ISE 100 employ 45, 81% debt financing whereas maximum

48

debt financing as 87,72% and minimum debt financing 9,2% and with 0,18 standard deviation.

Table 2: Descriptive Statistics

	LEV	LBOARD	OUTSIDE	OWNER	ROA
Mean Median	0.458067 0.429799	0.874893 0.845098	0.087331 0.000000	0.478740 0.505533	0.094557 0.086640
Maximum	0.877203	1.156347	0.428571	0.845800	0.372062
Minimum Std. Dev.	0.092314 0.182848	0.698970 0.109417	0.000000 0.131735	0.089033 0.163085	-0.109750 0.090689
Skewness	0.219044	0.395325	1.078034	-0.071419	0.627392
Kurtosis	2.378008	2.851623	2.633717	3.130907	4.534826
Jarque-Bera Probability	1.181705 0.553855	1.321248 0.516529	9.764860 0.007579	0.076643 0.962404	8.024100 0.018096
Observations	49	49	49	49	49

Average of log of board size among Turkish companies is 0,8749 with minimum 0,6990 and maximum 1,1563. Outside (independent) director ratio is 8,73% and this is below the recommendation of Turkish Capital Market Board as 33% for Turkish companies. Maximum outside director ratio is 42,86 %. It is relatively much and it is a good indicator of modern corporate governance application.

Largest shareholders in Turkish companies have averagely 47,87% share of the company. The minimum largest share holder has 8,9% share and the maximum largest shareholder has 84,58%. This ratio is showing the common Turkish ownership structure as concentrated ownership characterized by controlling block holders, weak securities market, low market transparency and high private benefits of control.

Companies averagely earn 9,46% of their assets. Maximum return on asset ratio is 37,21% and the minimum return on asset ratio is -10,98% loss.

3.3.2. Empirical Results

The regression results are on Table 3. The estimated equation in the regression is as follows:

LEV = -0.02904525637 + 0.4088839054*LBOARD - 0.2004428227*OUTSIDE - 0.7726585966*ROA + 0.4594300894*OWNER + ε

p values of board size and ownership concentration are below α at 10%. They are in rejection region for null hypothesis. So these variables are statistically significant. On the other hand, there is a positive relationship between board size and leverage. Also the relationship between ownership concentration and leverage is positive. Because of coefficients' signs are positive.

Increase in board size result in increase in leverage. This is consistent with the findings of Abor (2007) and Wen et al (2002) while it is inconsistent with the findings of Madurga et al (2001). This relation suggests that larger boards adopt high debt policy to raise the value of the company. The reason of this may be large boards are more stable and fixed and therefore through stringent monitoring tend to adopt high debt policy to increase the value of the firm.

According to empirical results, the relationship between largest shareholder ratio and leverage is positive. The possible reason for this may be the larger a company or a person have the control right of the company the easier it gets at a consensus. So largest share holder influences the board and manager to employ high debt policy for creating more value for the company.

p value of outside manager ratio is above α at 10%. So this variable is statistically insignificant in this study. It may be because averagely Turkish companies do not fulfill Turkish Capital Market Board requirement as minimum 33% of outside directors on board. The relationship between outside directors ratio and leverage is negative. This is consistent with Wen et al (2002). The reason for this situation may be outside directors prefer to monitor managers more actively, so these managers prefer to use less debt to get better financial performance. Also, firms with

higher proportion of outside directors tend to follow low financial leverage strategy with a high market value of equity.

Control variable ROA is statistically significant at 10% confidence level since their p values are below α at 10% confidence interval. They are in the rejection area for null hypothesis. The relationship between ROA and capital structure is negative. This means profitable firms prefer less debt financing and they use their internal resources and high profits for financing their investments. It is consistent with pecking order theory.

Since R2 of the regression is 34,33%, 34,33% of change in capital structure is explained by independent variables. F statistic of the model is statistically significant.

Table 3: Regression Results

Dependent Variable: LEV Method: Least Squares

Sample: 1 49

Included observations: 49

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.029045	0.208853	-0.139070	0.8900
LBOARD	0.408884	0.218328	1.872795	0.0678
OUTSIDE	-0.200443	0.186275	-1.076061	0.2878
ROA	-0.772659	0.256005	-3.018144	0.0042
OWNER	0.459430	0.138472	3.317853	0.0018
R-squared	0.343324	Mean dependent var		0.458067
Adjusted R-squared	0.283627	S.D. dependent var		0.182848
S.E. of regression	0.154760	Akaike info criterion		-0.797431
Sum squared resid	1.053829	Schwarz criterion		-0.604388
Log likelihood	24.53706	F-statistic		5.751039
Durbin-Watson stat	1.899904	Prob(F-statistic)		0.000820

As a conclusion from this regression results, it can be said that Turkish companies which have larger boards, have less outside directors, have more concentrated ownership structure, and which are less profitable employ more debt financing

CONCLUSION

Corporate governance is an attractive topic for investors all over the world because it protects the rights of shareholders and creditors. It regulates the business.

There are many obligations that are issued by regulatory bodies like OECD or CMB in Turkey about corporate governance codes. These organizations are trying to facilitate business fairly and maintain justice.

Every country is employing different kind of corporate governance systems. Cultural and national differences are determining the differences but with the globalization everyday these different systems are converging.

This study is trying to investigate the relationship between corporate governance and capital structure both theoretically and empirically.

Corporate governance terms and definitions are explained in the first chapter. History, main governance models around the world and corporate governance structure in Turkey are also covered in this chapter.

In the second chapter, a review of the literature about the relationship between corporate governance and capital structure is made. The characteristics of corporate governance are explained in this chapter.

Empirical analysis is made in the third chapter. 49 firms on ISE 100 Index with data from 2005 to 2007 are analyzed through regression to find the relationship between corporate governance and capital structure.

The results show that the relationship between board size-leverage and ownership concentration-leverage are statistically significant and positive in Turkey according to 2005-2007 data. On the other hand, outside director ratio is statistically insignificant and its relation direction is negative in Turkey.

There are some limitations of this study. First of all, independent variables of corporate governance are restricted to board size, outside manager ratio and ownership concentration. Other variables like CEO tenure, CEO duality and CEO compensation can be added to regression in order to have more statistically

significant relationship. Secondly, time interval is limited to 3 years, this may be increased and time series analysis could be added in order to see the time effect on the relationship. Thirdly, companies from different industries are in the sample and this may affect the results negatively. Lastly, companies' data are not in the same quality and they do not disclose their corporate governance related information in a common standard. Especially it is valid for relatively small and less institutional companies. This problem may decrease the confidence of the data.

For further studies:

- Other corporate governance characteristics variables can be added to the study,
- Time period can be increased,
- Time series analysis may be added to research,
- Industry affect can be analyzed through samples,
- Confidence of the data may be increased through setting more rigid standards for public disclosers by regulatory bodies.

REFERENCES

- Abor, J. (2007). Corporate governance and financing decisions of Ghanaian listed firms. *Corporate Governance*. Emerald Group Publishing Limited, Vol. 7 No. 1, pp. 83-92.
- Abor, J. and Biekpe, N. (2007). Does Corporate Governance Affect the Capital Structure Decisions of Ghanaian SMEs'? http://www.essa.org.za/download/2005Conference/Abor2.pdf (31.08.2008).
- Aguilera, R. and Yip, G. S. (2004). Corporate Governance and Globalization: Toward an Actor- Centred Institutional Analysis. http://www.business.uiuc.edu/aguilera/pdf/Aguilera&Yip-Cha05-2004.pdf (28.08.2008).
- Ararat, M. and Uğur, M. (2003). Corporate Governance in Turkey: An Overview and Some Policy Recommendations. *Corporate Governance*. Vol. 3 No.1, pp. 58-75.
- Ariff, A., İbrahim, M. and Othman, R. (2007). Determinants of Firm Level Governance: Malaysian Evidence. *Corporate Governance*. Vol. 7 No. 5 2007, pp. 562-573.
- Arsoy, A. and Crowther, D. (2008). Corporate governance in Turkey: reform and convergence. *Social Responsibility Journal*. Vol. 4 No.3, pp. 407-421
- Berger, P.G., Ofek, E. and Yermack, D.L. (1997), Managerial entrenchment and capital structure decisions. *Journal of Finance*, Vol. 52 No. 4, pp. 1411-38.
- Chen, J. Duh, R. and Shiue F. N. (2008). The Effect of Audit Committees on Earnings–Return Association: Evidence from Foreign Registrants in the United States. *The Authors Journal compilation*, Vol. 16 No. 1, pp.32-40.
- Chiyachantana, C. N., Jiraporn, P. and Kitsabunnarat, P. (2005). Capital Structure and Corporate Governance Quality.

http://www.fma.org/SLC/Papers/Capital_Structure_and_Corporate_Governance_Qu_ality.pdf (30.08.2008).

Colley, J. L. J., Doyle, J. L., Logan, G. W. and Stettinius, W. (2003) Corporate Governance.

http://books.google.com/books?hl=tr&lr=&id=WnK2o1GvEt0C&oi=fnd&pg=PP18 &dq=John+L.+Colley,+Corporate+Governance+Book,+2003&ots=McbkcoMn14&s ig=0HvN7OJxO_I6ygtAEKCmGH6FuEQ#PPP16,M1 (29.08.2008).

Fama, E. and Jensen M. (1983). Separation of Ownership and Control. *Journal of Law and Economics*. Vol.26, pp. 1-32.

Fama, E. and Jensen M. (1998). Agency Problems and Residual Claims. Foundations of Organizational Strategy Chapter 6, Harvard University Press, pp.1-29.

Gillan, Stuart L. (2006). Recent Developments in Corporate Governance: An Overview. *Journal of Corporate Finance* 12 (2006) pp. 381–402.

Gitman, L. J. (1999). *Principles of Managerial Finance (Ninth Edition)*. USA: Addison Wesley Publishing Company.

Gönenç, H. (2003). Capital Structure Decisions Under Micro Institutional Settings: The Case of Turkey. *Journal of Emerging Market Finance* 2(1), pp.57-82.

Herrigel, G., (2006). Corporate Governance: History Without Historians. http://www2.e.u-tokyo.ac.jp/~sousei/Herrigel.pdf (29.08.2008).

Jensen, M. and Meckling, W. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*. 3(1976), pp. 305-360.

Jiraporn, P. and Gleason, K. C. (2005). Capital Structure, Shareholder Rights, and Corporate Governance.

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=792604 (29.08.2008).

Khanchel, Imen,2007, 'Corporate governance: measurement and determinant analysis', *Managerial Auditing Journal*, Vol. 22 No. 8, pp. 740-760.

La Rocca, Maurizio (2007). The influence of corporate governance on the relation between capital structure and value. *Emerald Group Publishing Limited* Vol. 7 No. 3 2007, pp. 312-325.

Madurga, J., Alonso, E. and Anson, S. (2001). Corporate Control and Capital Structure Decisions Considering Unobserved Heterogeneity. *IFAC Modeling and Control of Economic Systems, Klagenfurt, Austria, 2001*, pp. 201-206.

Neal, R. and Cochran, P. L. (2008). Corporate social responsibility, corporate governance, and financial performance: Lessons from finance. *Business Horizons* - 709; pp. 1-6.

Organizational for Economic Co-Operation and Development (OECD). (2004). OECD Principles of Corporate Governance. http://www.oecd.org/DATAOECD/32/18/31557724.pdf (29.08.2008).

Ross, S. A., Westerfield, R. W. and Jordan, B. D. (2003). Fundamentals of Corporate Finance (Sixth Edition). USA: McGraw-Hill/Irwin.

Turkish Capital Market Board. (2003). Corporate Governance Principles. http://www.ecgi.org/codes/documents/kyytr.pdf (16.12.2008).

Şençitak, P. (2007). An Empirical Analysis of the Relationship Between Corporate Governance and Firm Performance at Istanbul Stock Exchange. Unpublished Master Thesis. İzmir: Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü.

Wen, Y., Rwegasira, K. and Bilderbeek, J. (2002). Corporate Governance and Capital Structure Decisions of the Chinese Listed Firms. *Corporate Governance: An International Review*. Vol. 10 No. 2, pp. 75-83.

Yurtoglu, B. B., (2003). Corporate Governance and Implications for Minority Shareholders in Turkey.

http://www.tek.org.tr/dosyalar/tek dp.pdf (29.08.2008).

APPENDIX

Appendix 1

Governance Standards Included in the Construction of the Governance Score by Brown and Caylor (2005).

Governance Standards

A. Audit

- 1. Audit committee consists solely of independent outside directors
- 2. Auditors were ratified at the most recent annual meeting.
- 3. Consulting fees paid to auditors are less than audit fees paid to auditors
- 4. Company has a formal policy on auditor rotation

B. Board of Directors

- 1. Managers respond to shareholder proposals within 12 months of shareholder meeting
 - 2. CEO serves on no more than two additional boards of other public companies.
- 3. All directors attend at least 75% of board meetings or had a valid excuse for nonattendance.
 - 4. Size of board of directors is at least 6 but not more than 15 members.
 - 5. No former CEO serves on board.
 - 6. CEO is not listed as having a "related party transaction" in proxy statement.
 - 7. Board is controlled by more than 50% independent outside directors.
 - 8. Compensation committee is comprised solely of independent outside directors.
 - 9. The CEO and chairman duties are separated or a lead director is specified.
 - 10. Shareholders vote on directors selected to fill vacancies.

- 11. Board members are elected annually.
- 12. Shareholder approval is required to change board size.
- 13. Nominating committee is comprised solely of independent directors.
- 14. Shareholders have cumulative voting rights to elect directors.
- 15. Board guidelines are in each proxy statement.
- 16. Policy exists requiring outside directors to serve on no more than five additional

boards.

C. Charter/Bylaws

- 1. A simple majority vote is required to approve a merger (not a supermajority).
- 2. Company either has no poison pill or a pill that was shareholder approved.
- 3. Shareholders are allowed to call special meetings.
- 4. A majority vote is required to amend charter/bylaws (not a supermajority).
- 5. Shareholders may act by written consent and the consent is non-unanimous.
- 6. Company is not authorized to issue blank check preferred stock.
- 7. Board cannot amend bylaws without shareholder approval or can only do so under

limited circumstances.

D. Director Education

1. At least one member of the board has participated in an ISS-accredited director education program.

E. Executive and Director Compensation

1. No interlocks exist among directors on the compensation committee.

- 2. Non-employees do not participate in company pension plans.
- 3. Option re-pricing did not occur within last three years.
- 4. Stock incentive plans were adopted with shareholder approval.
- 5. Directors receive all or a portion of their fees in stock.
- 6. Company does not provide any loans to executives for exercising options.
- 7. The last time shareholders voted on a pay plan, ISS did not deem its cost to be excessive.
- 8. The average options granted in the past three years as a percentage of basic share

outstanding did not exceed 3% (option burn rate).

- 9. Option re-pricing is prohibited.
- 10. Company expenses stock options.

F. Ownership

- 1. All directors with more than one year of service own stock.
- 2. Officers' and directors' stock ownership is at least 1% but not over 30% of total shares

outstanding.

- 3. Executives are subject to stock ownership guidelines.
- 4. Directors are subject to stock ownership guidelines.

G. Progressive Practices

- 1. Mandatory retirement age for directors exist.
- 2. Performance of the board is reviewed regularly.
- 3. A board-approved CEO succession plan is in place.
- 4. Board has outside advisors.
- 5. Directors are required to submit their resignation upon a change in job status.

- 6. Outside directors meet without the CEO and disclose the number of times they met.
 - 7. Directors term limits exist.

H. State of Incorporation

1. Incorporation in a state without any anti-takeover provisions.

Appendix 2

Individual Governance Provisions Included in the Construction of the Governance Index by Gompers, Ishii, and Metrick (2003)

Delay Other

Blank Check Anti-greenmail
Classified Board Directors' duties
Special Meeting Fair Price
Written Consent Pension Parachutes

Poison Pill

Protection Silver Parachutes

Compensation Plans

Contracts State

Golden Parachutes Anti-greenmail Law Indemnification Business Combination Law

Liability Cash-out Law
Severance Directors' Duties Law
Fair Price Law

Voting Control Share Acquisition Law Bylaws

Bylaws Charter

Cumulative Voting

Secret Ballot (Confidential Voting)

Supermajority Unequal Voting

Note: The detailed explanation for each governance provision is available in the Appendix of Gompers, Ishii, and Metrick (2003).