



Corporate Governance and Firm Value

Does corporate governance affect firm value?

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Introduction and Overview

The last decades being in control is more and more important for large corporate firms. Best practice and good corporate governance are the key elements of recent introduced codes like the Sarbanes Oxley Act (SOx) in the US and the 'Code Tabaksblat' in the Netherlands.

Being in control is the answer to financial scandals like the Enron case. Being in control is no more a relationship of trust between management and stakeholder, but responsibility and statements of financial choices. Corporate firms are aware of the fact that well governed boards are essential for an efficient capital market. Therefore maximization of stakeholder value and economic efficiency are more important these days.

To realize this maximization of stakeholder value or market value we face the well known agency theory. The principals (stakeholders) are hiring the agents (management) to realize this maximization. The outcome of this cooperation is a system of mechanisms which prevents the management to violate the contracts or rules with the stakeholders and make sure that the agents are totally in line with the interests of the stakeholder. This system of mechanisms we call a corporate governance system.

The primary goal of this thesis is to investigate whether this system of rules and mechanisms, which we call corporate governance, affects the process of maximizing stakeholders value or the firm's value. The main question is: Does corporate governance affect the value of a firm?

After this introduction I will define corporate governance and investigate how it appears in companies and on the market. There are many systems of corporate governance. Therefore I will discuss some important systems and I will discuss corporate governance with an international perspective.

In the next chapter I will give a theoretical review of corporate governance in order to find an answer to the main question. For this I will make use of some fundamental financing theories. In the thesis I will only highlight the issue from the shareholder's point of view and not from the stakeholder primarily. However stakeholders do have a certain importance when discussing corporate governance I will restrict myself to the shareholder's point of view.

To give an answer to the main question I will make use of several empirical research done in the last decades concerning corporate governance and firm value. The red line will be two papers of Gompers, Ishii and Metrick (2003) and Bebchuk et. al. (2004). In these papers the shareholder rights and protection are the key elements in relating corporate governance and firm value. Using regression they investigate whether specific governance provisions affect firm value. I will analyse these papers and will compare these papers with other comparable investigation to check whether the found conclusions are consistent and are in line with other research.

Before we make use of these empirical papers relating corporate governance and firm value, I will shortly discuss two other important issues relating corporate governance and firm value. When writing this thesis I found many papers discussing the board composition, board structure and board typology but also the ownership structure of a firm. These factors seem to have a strong relation with corporate governance and firm value. Therefore I will give a short review on this literature concerning the board and the ownership structure of a firm. To conclude this thesis I will give a summary based on my findings.

Armand Wolfs

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Chapter 1: Corporate Governance

In this first chapter I will give a broad definition of corporate governance and I will find out how it takes place on the market. Next I will discuss corporate governance with an international perspective.

1.1 Definition

Corporate governance has been given various definitions by many authors. For example Gompers, Metrick and Ishii (2003) define corporate governance from the perspective of the investor who wants to have a fair return on his invested capital and the commitment that the firm is operated efficiently. The Cadbury Committee (1992) defines corporate governance as ‘the system by which companies are directed and controlled’. Mayer (1997) defines corporate governance as a way of bringing interests of investors and firm managers into one line and ensures that the companies are run for the benefit of the investor. Schleifer and Vishny (1997) define corporate governance as: ‘the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment. And last La Porta et. al. (2002) state that corporate governance is, to a large extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders.

Corporate governance is a combination of mechanisms with the purpose that the management runs the firm for the benefit of several stakeholders. Stakeholders are for example shareholders, employees, creditors and other investors who are involved in the companies business. These mechanisms are the outcome of a contracting process between the management (agents) and the stakeholders (principals). These mechanisms want to provide an economic efficiency and thus implying maximization of the firm value according to Jensen and Meckling (1976). This contracting process is a sort of constraint to management and stakeholder, resulting in a consensus between the different interests of management and stakeholders. Thus corporate governance refers to the clear establishment of how an organization ought to be run and controlled and ensure accountability on the part of management towards owners. And as we will see studies have shown that corporate governance enhances the performance of a firm.

1.2 Corporate governance and the market

There are different systems and mechanisms of corporate governance to ensure market efficiency. Examples are the market for corporate control, large shareholder monitoring, changes in block holdings, creditor monitoring, internal control mechanisms (e.g. executive compensation, accounting principles and codes and rules of conduct) and according to Goergen, Renneboog and da Silva (2005) also dividend policy. So, there are internal and external corporate governance mechanisms including mechanisms enforced by law.

These mechanisms of shareholder protection enforced by law are an important determinant in the development of its financial markets. Where law is protecting and provides less risk to investors, the investors are willing to finance firms and financial markets will be broader and more valuable than economies where laws are un-protective according to La Porta et. al. (2002).

Corporate governance is especially established in developed market and essentially in large listed corporate firms. Corporate governance is also very popular in developing economies. The reason is that corporate governance is important for the sustained growth of a company. The argument is that well governed firms have a stronger ability to respond to external factors and will be more profitable than firms with a weak governance system.

It is believed that good governance generates investor goodwill and confidence. Developing countries are now increasingly embracing the concept of corporate governance with the knowledge it will lead to a more profitable firm. An example is the Ghanaian research paper of Kyereboah-Coleman and Biekpe (2006).

1.3 Corporate governance with an international perspective

Corporate governance takes its place on the market and within a firm with many different mechanisms. What type of mechanisms a company should apply depends on multiple factors. For example the structure of the capital market, ownership structure, legislation and spirit of entrepreneurship (shareholder model and stakeholder model).

Corporate governance is a difficult issue when comparing different systems or mechanisms. The connection between macro- and micro economic factors, organizational and juridical from firm to firm and country to country make it hard to find or build the 'perfect system'.

So, there is no 'optimal' or 'perfect' corporate governance system. Dealing with factors mentioned above a firm will build their own 'perfect' system that will fit in their business and environment

I mentioned the differences in the structure of the capital structure market. Take a look for example to the German and Japanese capital structure which is dominated by a few large banks and industries. In Germany the large investors are the key to corporate governance.

For a long time the constituency model dominated but due to globalisation now a well established system of labour relations are an important factor in the economy. The German corporate governance system is a very national and specific system and not for outsider companies. There is also a tendency to protect their own system.

The Japanese system is dominated by political factors resulting in a closed economy and having trouble to get Japan into the globalisation. A large part of the public corporations are owned by so called stable and large shareholders; the block holder. The Japanese system is characterized by a strong constituency approach. Managers are employed for life. The firms interests directs in its policies and not primarily in those of its shareholders.

The United States and the United Kingdom are characterized by many listed companies owned by relatively small shareholders with a weak voting power. This system can lead to high liquidity and provides the existence of a takeover market, but also leads to agency and monitoring problems. Small shareholders can't bear the costs of monitoring, resulting in the free rider problem which will be discussed later.

Italy, Austria and France are owned by families who have large shares in companies. Concentrated ownership and strong voting power leads to conflicts between controlling block holders and the small shareholders.

The point of this section is to make clear that proposed measures or new rules for improvement of corporate governance will have different effects from market to market and from one corporation to another. Market oriented regimes (UK, US) and block holder based ones (Germany and Japan) have significant variation in corporate law, internal governance mechanisms, or the use of anti-takeover devices. So corporate governance differs from firm to firm and country to country.

Chapter 2: A theoretical framework on Corporate Governance

In this second chapter the issue of determining the value of the firm will be discussed. How do we calculate the value of a firm and on which factor's it is based on? Why should we maximize firm value and how is this value influenced? To answer this I will make use of some fundamental financing theories.

2.1 The value of the firm

In the introduction we discussed the importance of maximizing firm value. The basic idea is that investors¹ want to have a return as high as possible. Therefore the management should maximize the return on the investors' investment or equally maximize the firm's value.

To reach this optimum a manager should choose the capital structure which they believe will have the highest firm value, because this capital structure will be most beneficial to the firm's stockholders or investors². The question remains which factors will maximize the capital structure of a firm. To answer this we start from the fundamental capital structure theories of Modigliani and Miller.

Modigliani and Miller argue that the firm's value rises with leverage in the presence of corporate taxes. Because interest on debt is tax deductible and creates a tax shield which is positive for the firm's total market value. This implies that all firms should choose for maximum debt.

Unfortunately this theory does not hold in the real world since these theories are based on certain assumptions, no transaction or no bankruptcy costs for example.

Since debt means more risk there are limits to the use of debt. When debt becomes higher the risk of financial distress rises when bankruptcy exists. The effects of bankruptcy costs and related costs will result in a reduction of the value of the firm.

Combining the tax effects and the costs of financial distress result in a trade off which will lead to an optimum capital structure. This can be found in the static trade off theory.

This theory implicates an optimum amount of debt for any individual firm. This amount is called the firm's target debt level or debt capacity. In the real world there are more factors which have influence on the firms value.

¹ Investor stands equal for shareholder in this context.

² *Corporate Finance* Ross, Westerfield, Jaffe 7th edition. Mc-Graw Irwin, 2002.

It is clear that the value of a firm in the real world is dependent on factors like corporate taxes and costs of financial distress, but also other factors. In the context of this research the question arises whether the existence of corporate governance in a firm has an effect on the firm's total value. And if the answer is positive does it create value or does it destroy value.

2.2 Determining the firm's value

There are different methods in which firm value can be measured. We will discuss three methods. The first one is the market-to-book ratio or M/B. This ratio is calculated by dividing the market price per share by the book value per share. The second one is maybe the most important one in this context. This ratio is called the Tobin's Q ratio.

To calculate this ratio divide the market value of debt plus equity by the firm's replacement value of the firm's assets. If a firm has a Q higher than 1 it is probably willing to invest more than a firm with a Q below 1. Firms with high Q-ratios often have good investment opportunities.³ Tobin's Q is used in many papers dealing with corporate governance.⁴ The way calculating Tobin's Q also differs from the calculation mentioned above. The definition of Tobin's Q followed by most papers is the definition of Kaplan and Zingales (1997). They define Tobin's Q as the market value of assets divided by the book value of assets where the market value of assets equals the book value of assets plus the market value of common equity less the sum of the book value of common equity and balance sheet deferred taxes calculated at the beginning of the firm's fiscal year.

The third method is using the discounted cash flow. Modigliani and Miller see the firm as a sum of investment projects which provides cash flows to the providers of capital. This theory implies that the manager will simply divide the cash flow between these capital suppliers.⁵ One thing they do not take into account is that managers can use these cash flows for their own interests and benefits. This is also known as the free rider problem and the agency theory which brings us to the next paragraph.

2.3 The agency theory

The agency theory deals with dispersed ownership. The main problem is that the manager (agent) works for the shareholder (principal). The manager is not directly influenced by his own results but the shareholder the opposite.

One important key is the information asymmetry. If managers have access to information that is unknown to shareholders there is the possibility of adverse selection. Methods of financing or dividend policy can serve as a signal to the outside investor. This is also known as the signalling theory. Giving other information or more information could have led to a higher value. Another problem are the agency costs. Agency costs are generally defined as the costs from conflicts of interests among stockholders, bondholders and managers.⁶ These costs are the result of shirking,

³ *Corporate Finance* Ross, Weterfield, Jaffe 7th edition. Mc-Graw Irwin, 2002.

⁴ see, e.g., Kaplan and Zingales (1997), Lang and Stulz (1994), Yermack (1996), Daines (2001), LaPorta et al. (2002), and Gompers, Ishii, and Metrick (2003)

⁵ Modigliani and Miller (1958)

⁶ *Corporate Finance* Ross, Weterfield, Jaffe 7th edition. Mc-Graw Irwin, 2002.

perquisites and bad investments. Choices of a manager that are beneficial to him/herself are not for shareholders or bondholders.

Therefore corporate governance deals with the problem to bring the interests of manager and shareholder into one line. Solutions are the introduction of incentives like board compensation systems and measuring board performance continually (monitoring). The effectiveness depends on ownership structure. Referring to costs of monitoring, small shareholders will not monitor since the individual costs of monitoring are too high.

In the context of corporate governance agency costs have to be minimized by corporate governance mechanisms. Because agency costs are reducing the firms value and thus the shareholder value. Examples of mechanisms as mentioned are monitoring but also board composition and ownership structure have an important role in choosing the 'perfect' corporate governance structure for a firm. Well designed boards can have a strong influence on the decisions of management. Particular for corporate governance systems in which capital markets have little influence in the action of managers. This will be explained in the next chapter.

Chapter 3: Research relating Corporate Governance and firm value.

In this chapter we take a look to corporate governance and financing decisions. Many papers investigated whether there was a relationship between firm value and on the other hand the board of directors and the ownership structure of a firm. I will briefly discuss some papers and their findings.

3.1 The Board

The board of directors is the most important decision making institute of a corporate firm. When discussing whether corporate governance has an effect on the value of a firm, many research indicates that board size has influence on firm value.

Firm value depends on the quality of monitoring and decision-making by the board of directors, and that the board's size represents an important determinant of its performance. Lipton and Lorsch (1992) and Jensen (1993) have criticized the performance of large boards, stating that problems of poor communication and decision-making overwhelm the effectiveness of those groups. Yermack (2006) finds also evidence consistent with this theory. Using a variety of regression models with data from 1984 till 1991 for 452 large public corporations, he found an inverse association between board size and firm value.

There are also studies indicating that the nature of the board also has a relationship with the financial; decisions of a firm. There is a 1-tier and 2-tier board typology. A firm is said to have a 1-tier typology if the CEO combines as the board chairperson. Where the CEO and the board chair positions are occupied by separate personalities the firm has a 2-tier typology.

When discussing whether the CEO duality has effect on the firm value research results are still divided. Fosberg (2004) shows us that a 2-tier board structure is characterized by higher leverage or debt. Inversely Abor (2006) shows in a Ghanaian study there is a negative relationship between 2-tier board structure and leverage. Abdullah (2004) investigated whether board independence and leadership structure is related to firm performance or firm value. His answer is negative.

3.2 Ownership structure

Another issue which is discussed often is the structure of ownership. The structure of ownership has different effects on the value of a firm according to research.

Admati et. al. (1994) indicates that in the presence of large shareholders there will be more costly monitoring. This is because of the pressure and effort of the shareholder to monitor the management. For smaller shareholders it is too costly to bear these costs of monitoring so they just won't monitor. According to Singh and Davidson (2003) outside block holders can serve as good monitors and eventually lead to better corporate performance. La Porta et. al. indicate that ownership structure is higher in countries where is less investor protection, compared to countries where there is more investor protection and therefore will be less ownership concentration.

When discussing the international differences of corporate governance I mentioned the different capital structures found in each country. The ownership structure can be seen in different ways. There is the concentration of ownership and the identity of the shareholders. Pallahitta (2005). The identity of shareholders can influence firm value because shareholders differ in their objectives and in the way they exercise their power, which is indirectly reflected in the strategy of the firm and also influences the firm value. Examples are individuals and families, banks, institutional, state, industrial companies, etc.

The effect of these identities depends also on how large the group is and if there is dispersed ownership. So the effect will be much larger in countries like France, Italy or Austria where ownership structure is largely dominated by large families. On the other hand the many small investors in the US. But research is still divided whether a certain ownership structure has a positive or a negative effect on firm value and if indeed families can create more value than small shareholders.

When looking at ownership structure it is clear that the existence of large shareholders will create higher agency costs because of more costly monitoring. Furthermore the objectives and power of a shareholder has influence on firm value. Crama et. al. (1999) analysed the impact of ownership structure on the share price for listed companies and found that the firm performance increases with the level of control held by the second largest shareholder. The logical explanation can be found in the micro-economics. In the case of one large shareholder (a monopolist) who has large control, there will be deadweight loss because of the maximization of the shareholders interest and not primarily of the company (the market). When a second large shareholder exists (oligopoly) this deadweight loss will be less because the expropriation of the large shareholder will be limited.

The main objective of this section was to make clear that when discussing the board of a firm, many research indicates that board size, board typology and other factors do have an effect on the firms performance and firm value. And also ownership structure seems to have an effect on the value of a firm. However evidence is divided, the conclusion can be made that board composition and ownership structure are important factors affecting firm value. But the effectiveness of these factors is still uncertain. In the next chapter I will investigate whether the existence of specific corporate governance mechanisms of provisions affect the firms value.

Chapter 4: Corporate Governance and firm value: An analysis

In this chapter we will discuss the effect of a number of corporate governance provisions on the value of the firm. The red line of this analysis will be a paper of Gompers Ishii and Metrick (2003) and Bebchuk et. al. (2004). First I will briefly discuss the content of the papers and will explain 2 indexes which do measure the presence of corporate governance in a firm. Next I will discuss the correlations and causality of their findings, the stock return and the effects on firm value.

4.1 Paper overview

Gompers et. al (2003) constructed a ‘Governance Index’ to proxy for the level of shareholder rights at about 1500 large firms during the period of 1990 till 1998. They derived data from the Investor Responsibility Research Centre. The IRRC follows 24 governance provisions that appear to be beneficial for the firms management and provisions that could be harmful to shareholders.⁷ The first remarks that can be made is that these data only contain US firms and the investigation does not take into account all stakeholders but only ‘the shareholder’ or synonymously ‘the investor’. In this research there is found some evidence that there is a negative relationship between these provisions and firm value measured by Tobin’s Q, as well as stockholder returns during the sample period.

The research of Bebchuk et. al. (2004) is largely based on the same data, but from a period of 1990 till 2003. Bebchuk et. al (2004) constructed an entrenchment index and investigated whether there is a correlation between this entrenchment index and firm value. They also found a negative relationship. More important is that Bebchuk et. al. provides evidence that only a few number of provisions are responsible for this relationship.

⁷ The IRRC is drawn from the Standard & Poor’s (S&P) 500 as well as the annual lists of the largest corporations in the publications of Fortune, Forbes, and Businessweek. The IRRC’s sample expanded by several hundred firms in 1998 through additions of some smaller firms and firms with high institutional-ownership levels

4.2 The ‘Governance Index’ and the ‘Entrenchment Index’

The governance index is based on 24 unique governance provisions categorized in five groups (delay, protection, voting, other and state). A full list with an explanation of each provision is attached in the appendix.

For every firm they add one point for every provision that restricts shareholder rights. The governance index is just the sum of one point or the existence of each provision. We can remark that this index does not take into account the relative effect of each provision. If the index results in a high G value there is a weak shareholder protection and reversal if there is a low G value there is a strong shareholder protection. In table 1 the results of Gompers et. al. can be seen. In table 2 the results of the Bebchuk et. al.(2004) paper. On average the number of provisions are 9.15 per company.

Table 1

	1990	1993	1995	1998	%
G<5 Democracy	158	139	120	215	36,08
G=6	119	88	108	169	42,02
G=7	158	140	127	186	17,72
G=8	165	139	152	201	21,82
G=9	160	183	183	197	23,13
G=10	175	170	178	221	26,29
G=11	149	168	166	194	30,20
G=12	104	123	142	136	30,77
G=13	84	100	110	106	26,19
G=14 Dictatorship	85	93	87	83	-2,35
<i>Total</i>	<i>1357</i>	<i>1343</i>	<i>1373</i>	<i>1708</i>	<i>25,19</i>
Mean	9	9,3	9,4	8,9	
Standard deviation	2,9	2,8	2,8	2,8	

(source: Gompers et.al.2003)

Bebchuk et. al. construct an entrenchment index. Starting with hypothesizing which provisions can be expected to play a significant role in driving the correlation between IRRC provisions and firm valuation. They came to six provisions: classified board, golden parachute, limits to amend bylaw, limits to amend charter, supermajority and poison pills. Each company is given a score from zero to six, based on the number of provisions the company has. In table 2 the percentage of firms having an entrenchment provision.

We can see a decrease of 44% in the number of companies with zero provisions in the entrenchment index. There is a slow shift towards more provisions. Considering the other provisions there is also a decrease in the number of companies with less than 4 provisions with an average of 58%.

Table 2

Entrenchment Index E	%	1990	1993	1995	1998	2000	2002
0		13,0	11,0	11,0	10,7	7,9	7,3
1		18,2	17,3	17,6	19,0	18,0	15,4
2		24,3	25,0	25,4	25,9	24,0	26,8
3		25,4	25,7	25,3	25,1	27,6	27,2
4		14,7	16,3	16,7	15,9	18,2	18,3
5		3,7	4,3	3,8	2,8	3,8	4,6
6		0,7	0,4	0,2	0,6	0,5	0,4
		100,0	100,0	100,0	100,0	100,0	100,0
<i>Mean</i>		2,25	2,34	2,31	2,27	2,44	2,49
<i>Mean incl. other provisions</i>		9,05	9,37	9,43	8,92	9,17	9,23

(Source: Bebchuk et.al.2004)

4.3 Correlations

4.3.1. Provisions

When discussing correlation between different provisions the two papers remark that there is an positive relation between the provisions. This includes not the correlation between provisions driven by law. Gompers et. al. think a possible explanation is that firms view some of the state laws as a substitute for other provisions, but they doubt this because of causality.

Table 3

	Delay	Protection	Voting	Other
Protection	0,22**			
Voting	0,33**	0,10**		
Other	0,43**	0,27**	0,19**	
State	-0,08**	-0,04	-0,07*	0,05

Pairwise correlations in 1990. Significance level at 5 percent and 1 percent level is indicated by * and ** respectively. (Source: Gompers et.al.)

Also remarkable is the high correlation between poison pills and golden parachutes. The second highest correlation, at .24, is that between limits on ability of shareholders to amend the corporate bylaws and limits on shareholders' ability to amend the corporate charter.

Table 4

	A.	B.	C.	D.	E.	F.
A. Classified Board	1					
B. Golden Parachutes	.167	1				
C. Limits to Amend Bylaw	.202	.063	1			
D. Limits to Amend Charter	.093	.018	.24	1		
E. Supermajority	.176	.037	.047	.092	1	
F. Poison Pill	.225	.31	.079	.018	.062	1

Correlations of entrenchment provisions. (source: Bebchuk et.al.)

4.3.2. Other correlations

Gompers also finds a positive relationship between the Governance Index G and firm size, share price and institutional ownership in 1990 (using data of the past 5 years). They also find that firms with weaker shareholder rights tend to be larger firms with relatively high share prices and institutional ownership. Also containing a positive correlation between G and listed firms on S&P 500⁸. This could be explained by the fact that there are relative less hostile bids. Very large firms do not need any protecting provisions. In 2002 there seems to be no difference in the entrenchment level between firms listed and not listed in the S&P 500. Also firms of different ages do not seem to have large different indexes as you can see in the table below.

Table 5

<u>Firms in Year 2002</u>	<u>Mean E-Level</u>	<u>Standard Deviation</u>
S&P 500	2.58	1.29
Not in S&P 500	2.46	1.30
Went Public in 1990s	2.30	1.28
Went Public in 1980s	2.35	1.29
Went Public Before 1980	2.82	1.27

E level stands for Entrenchment index level (source: Bebchuk et.al.)

4.4 Corporate Governance and stock return

Before we look at firm value it is interesting to look at stock return. If corporate governance matters in a financial way for firm performance and if it is priced by the market then a stock price should react on any changes in the corporate governance system of a firm.

Gompers et.al. examined the relationship between the index G and stock return of a dictatorship portfolio (weak shareholder protection, high G value) and a democracy portfolio (strong shareholder protection, low G value). An investment of \$1,- during the investigation period (September 1990 till December 1999) resulted in a return of 14% for the dictatorship portfolio and a return of 23.3% for the democracy portfolio.

Gompers et.al. uses the four factor model of Cahart (1997)⁹ and the 48 industry classifications of Fama and French (1997) to adjust the portfolio return for the industry the portfolio is part of. In this model they try to find an answer to the differences in return between the democracy portfolio and the dictatorship portfolio.

⁸ S&P is an index in the United States which provides the most accurate picture of the developments on the stock exchange and is seen as a very reliable index. The 500 largest firms as measured on their market capitalisation are absorbed in this index which is developed by Standard & Poors, a credit rating agency.

⁹ In this model the excess return to some asset in a month is measured by the month t value weighted market return minus the risk-free rate and the terms *SMB_t* (small minus big), *HML_t* (high minus low), and *Momentum* are the month t returns on zero-investment factor-mimicking portfolios designed to capture size, book-to-market, and momentum effects, respectively.

$$R_t = a + \beta_1 * RMRF_t + \beta_2 * SMB_t + \beta_3 * HML_t + \beta_4 * Momentum + \varepsilon$$

They found significant evidence that the democracy portfolio performed better than a dictatorship portfolio, but there is weak evidence that there is a sort of causality between G and stock return, because when expanding the portfolio with middle G score firms they found no significant evidence that G and stock return are related.

Bebchuk investigated whether these correlations between returns and the G index of Gompers et.al. attributes to the provisions in the entrenchment index during the periods 1990-1999 and 1990-2003. He finds significant evidence as well that low entrenched firms (democracy) have abnormal returns in both periods. He also finds evidence that portfolios in the middle of the entrenchment index have lower abnormal returns and these portfolios have some significance at the 99% level. The provisions not included in the entrenchment index have no further key role in explaining the relation. The other provisions have very little residual explanatory for the returns once the entrenchment index is used.

The story of Gompers and Bebchuk is consistent with a prior research done by J. Karpoff et. al. (1994). According to J. Karpoff et. al. on average the firms stock price decreases when its corporate governance structure becomes more restrictive. Conclusion is that the restrictive structure harms the managers' accountability to shareholders, which is expected to harm the firms long term financial performance.

When discussing corporate governance and stock return it is clear that corporate governance plays a role. When a firm has a restrictive and dictatorship like portfolio it will perform less than a firm with a democracy portfolio. We can also conclude that for a large part the entrenchment provisions of Bebchuk et. al. are responsible for this effect. However there remains the issue of causality. Does lower return create an incentive to adopt more restrictive provisions or is adding an restrictive provision the cause of lower returns? Both papers can not give a clear answer to this issue. We will discuss this issue of causality later.

Another remark that can be made is that the sample data only contain US listed firms. The US market is a developed market where corporate governance mechanisms sometimes are enforced by law. The question remains if we can find the same results in other countries and other markets with a different stage of market development.

4.5 Corporate governance and firm value

In this section an answer to the question whether corporate governance has an effect on the value of the firm is discussed. Gompers et. al studied whether variation in firm-specific governance is associated with differences in firm value. They analysed whether there was a change in the governance/value. As a measure for firm value Tobin's Q is used¹⁰. This measurement for firm value is used in many prior research between corporate governance and firm value as discussed in a previous chapter.

The regression equation:

Gompers et.al. follow the next regression equation partly based on prior research.

$$Q'_{it} = a_t + b_t X_{it} + c_t W_{it} + e_{it}$$

Where:

- Q'_{it} is industry-adjusted Q (Fama and French 1997)
- a_t , b_t and c_t are the coefficients.
- X_{it} is a vector of governance variables (G , its components, or inclusion in one of the extreme portfolios)
- W_{it} is a vector of firm characteristics including log of book value, log of firm age (Shin and Stulz 2000), Delaware firm Dummy (Daines 2001) and S&P inclusion dummy (Morck and Yang 2001)
- e_{it} stands for standard error.

The Bebchuk paper also uses an industry adjusted Tobin's Q as measure for firm value with the same firm characteristics as Gompers et.al.. They add the level of ownership, return on assets, capital expenditures on assets, research and development expenditures and leverage to the regression equation. Inclusion of the factors mentioned above is the result of prior research as mentioned. These factors seem to be important in determining Q. For example Morck and Yang (2001) proved that inclusion in the S&P 500 has a positive effect on Q and Daines (2001) proved that a firm incorporated in Delaware has a different Q. Remarkable is that we earlier discovered that the number of provisions used in a S&P 500 firm is not different from non S&P 500 firms.

¹⁰ Gompers and bebchuk follow the Tobin's Q definition of Kaplan and Zingales (1997)

4.6 Regression results.

In this paragraph we discuss the results of the regression models discussed in the previous paragraph. In table 6 the results of the regression equation of Gompers et. al. are displayed.

Table 6

	(1) G	(2) Democracy Portfolio	(3) Delay	(4) Protection	(5) Voting	(6) Other	(7) State
1990	-0,022** (0,008)	0,186 (0,127)	-0,015 (0,022)	-0,035 (0,018)	0,015 (0,03)	-0,031 (0,026)	-0,004 (0,02)
1991	-0,04** (0,012)	0,302* (0,143)	-0,033 (0,034)	-0,048 (0,028)	-0,012 (0,047)	-0,059 (0,04)	0,003 (0,031)
1992	-0,036** (0,01)	0,34* (0,151)	-0,041 (0,027)	0,039 (0,023)	0,021 (0,038)	-0,054 (0,032)	-0,011 (0,025)
1993	-0,042** (0,011)	0,485* (0,204)	-0,023 (0,029)	-0,055* (0,026)	0,009 (0,038)	-0,06 (0,035)	-0,062* (0,027)
1994	-0,031** (0,009)	0,335* (0,161)	-0,032 (0,023)	-0,012 (0,02)	-0,032 (0,031)	-0,029 (0,028)	-0,047* (0,022)
1995	-0,039** (0,011)	0,435* (0,217)	-0,046 (0,03)	-0,062* (0,027)	-0,086* (0,041)	0,023 (0,036)	-0,022 (0,028)
1996	-0,025* (0,011)	0,299 (0,195)	-0,029 (0,031)	-0,03 (0,028)	-0,078 (0,041)	0,018 (0,037)	-0,024 (0,028)
1997	-0,016 (0,013)	0,21 (0,196)	-0,017 (0,0350)	-0,007 (0,032)	-0,055 (0,047)	-0,001 (0,042)	-0,017 (0,032)
1998	-0,065** (0,02)	0,203 (0,404)	-0,023 (0,052)	-0,096* (0,049)	-0,132 (0,07)	-0,058 (0,066)	0,012 (0,052)
1999	-0,114** (0,027)	0,564 (0,602)	-0,067 (0,071)	-0,171* (0,067)	-0,294** (0,098)	-0,006 (0,09)	-0,033 (0,073)
mean	-0,043** (0,009)	0,336** (0,04)	-0,033** (0,005)	-0,056** (0,015)	-0,065 (0,03)	-0,025* (0,01)	-0,02* (0,007)

The coefficients and standard errors from each annual regression are reported in each row, and the averages and standard errors are given in the last row. * and ** indicate significance at the 5 percent and 1 percent levels, respectively. (source: Gompers et.al.)

The first column of this table presents the coefficients on G , the Governance Index, from regressions of industry-adjusted Tobin's Q on G and control variables. The second column restricts the sample to firms in the Democracy and Dictatorship Portfolios and includes a dummy variable for the Democracy Portfolio and the controls. The third through seventh columns show the coefficients on each sub index from regressions where the explanatory variables are the sub indices *Delay*, *Protection*, *Voting*, *Other*, and *State*, and the controls.

When we take a look at the results of the Gompers et. al. regression we can see that the coefficient of G is negative and in 9 of the 10 years it is significant at the different significance levels.

In 1999 this negative relation is the strongest.

In the second column only firms in the dictatorship portfolio or the democracy portfolio are used. Firms in the democracy portfolio have a Q that is 56 percent points higher in 1999 than firms in the dictatorship portfolio. In 1990 this was only 19 percent point. Overall democracy portfolios have a positive relation with G. However in 5 out of 9 years it is not significant at the 5 percent level or the 1 percent level. But on average a democracy firm significantly performs better with 33,6 percent points.

The other columns give the results for a single regression using the 5 indices delay, voting, protection, other and state. The table shows that all sub indices except *Voting* have average coefficients that are negative and significant. Over the full period, *Delay* and *Protection* have the most consistent impact, while the largest absolute coefficients are for *Voting* at the end of the sample period. In table 7 the results of the Bebchuk et. al. regression is displayed.

table 7

Variable	(1)	(2)
Entrenchment Index E	-0,044 *** (0,004)	
Entrenchment Index 1		-0,092 *** (0,023)
Entrenchment Index 2		-0,146 *** (0,022)
Entrenchment Index 3		-0,155 *** (0,022)
Entrenchment Index 4		-0,206 ** (0,023)
Entrenchment Index 5-6		-0,282 *** (0,027)
Other Provisions Index	0,01 *** (0,003)	0,01 *** (0,003)
Log(Assets)	0,015 *** (0,004)	0,015 *** (0,004)
Log(Company Age)	-0,048 *** (0,008)	-0,047 *** (0,008)
Delaware Incorporation	-0,03 *** (0,01)	-0,028 *** (0,01)
Insider Ownership	0,001 (0,001)	0,001 (0,001)
Insider Ownership Square	-0,00003 (0)	-0,00003 (0)
ROA	0,008 (0,009)	0,008 (0,009)
CAPEX / Assets	0,994 *** (0,09)	1 *** (0,09)
Leverage	-0,544 *** (0,046)	-0,553 *** (0,046)
R&D per Sales	0,002 ** (0,001)	0,001 * (0,001)

(Source: Bebchuk et.al.) Significance levels are indicated by *, **, and *** for 10%, 5%, and 1% respectively.

This table reports pooled OLS regressions of log (industry-adjusted Tobin's q) on various controls and two specifications of the entrenchment index. Insider Ownership is equal to the fraction of shares held by officers and director. ROA is the ratio of net income to assets. CAPEX/assets is the ratio of capital expenditures to assets. R&D per Sales is the ratio of research and development expenditures to total sales. Leverage is the ratio of long-term debt plus debt due in one year to assets. Year dummies and a dummy for missing R&D data are included in all regressions, but their coefficients (as well as the constant) are omitted.

Table 7 presents parts of the Bebchuk et. al. regression for the period 1992-2002. In addition to the financial variables and others provisions index they use as independent variable the firms' entrenchment index score. As column 1 indicates, the coefficient on the entrenchment index is negative (with a value of -.044) and statistically significant at the 1% level. The coefficient of the other provisions index is also significant at the 1% level, but it is positive (with a value of .01). Bebchuk also finds a peak in the coefficients of E in 1999.

In the second column they used dummy variables for the different levels the entrenchment index can take. As the results indicate, the coefficient for any level of the index above 0 is negative and significant at the 1% level. Moreover, the magnitude of the coefficient is increasing in the level of the entrenchment index. A higher entrenchment index score results in a stronger effect on Q.

When considering the effect of each provision from the entrenchment index on Q each provision seems to be significant. Several checks provide enough evidence to conclude that each provision significantly contributes to the negative relation with Q.

When discussing the other provisions we can see a small positive but significant effect on Q. So, the sum of the other 18 provisions provides an increase in value. However this does not imply that none of the other provisions are harmful for the firm's value. Bebchuk et. al. give more details about which provision in the other provision index is harmful or not.

4.7 Simultaneity and Causality

The regression points out that in both papers there is an inverse significant correlation between the entrenchment index, the G index and firm valuation on the other hand.

The point in this section is to make clear that there is indeed a significant relationship, but these findings, do not prove that having a higher index score is the cause of having a lower firm value. It is possible that having a low value is a reason to adopt more provisions leading to a higher index. So, there can be a certain correlation, but there is still the case of causality or simultaneity to resolve.

Gompers and Bebchuk give no clear answers to the issue of causality but gives possible explanations and admits that more research has to be done. They both find weak evidence that poor management at or prior to 1990 was responsible for the existence of entrenching provisions in the 1990's and for the firm's valuation. Having a higher index score brings partly about (and not merely reflects) lower firm valuation. But there is still a case of simultaneity and causality to resolve.

4.8 Comparable research.

In this last paragraph the findings of the two papers are used to see whether these findings are consistent with other comparable research. When discussing the effect of corporate governance on stock return I remarked that only US firms were used which are listed and part of a developed economy where corporate governance is grown adult. Therefore it is interesting to check if the same results show up in other economies. An interesting paper to make clear this issue is the paper of Bernard Black (2001). Dealing with international differences in corporate governance this paper maybe explains differences in results.

Most papers discussed so far contained data of US firms. Most papers using US data show weak evidence if corporate governance behaviour affects the market value of its shares. Black states that the cause for this is in the small variation of firm's behaviour. Corporate governance is grown adult and is set by law. Any company in the US had already a standard of Corporate Governance. As we have seen the data used by Bebchuk et. al (2004) and Gompers et al. (2003) companies with no corporate governance provisions are scarce in the US these days.

Therefore Black used no US data but makes use of Russian firms. Russia has weak laws, governing behaviour by firms and governance differences are much larger than in the United States. He finds very strong evidence that the Governance behaviour of Russian firms have a strong effect on firm value. Statistically he has a very strong model, but because the small sample of 21 and the one month sample period he used, the results are tentative. More important is to make clear that when investigating the pure effects of corporate governance on firm value the market must show a larger variation in governance to measure stronger effects and to improve the issue of causality. The results are less diffuse.

A paper more similar research to Bebchuk et. al. (2004) and Gompers et. al. (2003) is the paper of Karpoff et. al (1994). They used data compiled from the Institutional Shareholder Services, which contains governance profiles for the Standard & Poor's 500 Index. They also built an index based on whether or not a firm has each of the 20 governance provisions in the period 1984-1989. They found that a firm with an unusually low number of restrictive governance provisions compared with other firms in their industries have the highest return on assets ROA and market to book ratio M/B. This is consistent with the Bebchuk et. al and Gompers et. al. paper which holds that firms with liberal governance structures or the democracy portfolio perform better. This is because their managers are more accountable to shareholders and are more easily disciplined by market forces. Important to mention is the connection with the story of Black (2001). Karpoff et.al. (1994) do indeed find evidence, but also mention that the data are diffuse and noisy.

They found a stronger and significant relation between provisions similar to the entrenchment index of Bebchuk et. al.. The negative relationship between firm value and the existence of poison pills in particular. They find weak evidence that poor performance leads to the adoption of poison pills, but they do find strong evidence a negative correlation exists between poison pills and performance for recently adopted pills and pills that have been in place for a longer period.

To conclude this chapter several points can be made. The first thing is that there is indeed a certain relationship between corporate governance and firm value. Firms with strong shareholder protection do perform better than firm's with a low shareholder protection. From the shareholder's point of view the answer to our main question whether corporate governance affects firm value seems to be positive. But the evidence of the used papers is far from perfect. Evidence of a certain relationship is still not accompanied by answers of causality and simultaneity issues. A possible explanation is the diffuseness of the markets. Pure effects are hidden or covered, especially in developed markets. A possible suggestion for future research is to make use of data from more transparent markets or developing markets which are now embracing and adopting the concept of corporate governance.

Summary and Conclusion

More and more corporate firms are aware of the fact that well governed boards are essential for an efficient capital market. Maximization of stakeholder value and economic efficiency are more important these days. Realizing this maximization of value requires a system of mechanisms that keeps the interests of management and stakeholder into one line. This system we call corporate governance. These mechanisms are the outcome of a contracting process between the management (agents) and the stakeholders (principals). Thus corporate governance refers to the clear establishment of how an organization ought to be run and controlled and ensure accountability on the part of management towards owners.

Corporate governance has many mechanisms and is especially established in developed markets and essentially in large and listed companies. Also developing economies are more and more embracing the concept of corporate governance because it creates investor goodwill and confidence and turns firms into more profitable ones.

Corporate governance is a difficult issue when comparing systems or mechanisms. The connection between macro- and micro economic factors, organizational and juridical from firm to firm and country to country make it hard to find or build the perfect system. In each country or firm the proposed measures or new rules for improvement of corporate governance will have different effects from market to market and from one corporation to an other.

The following issue discussed was the value of a firm and the measurement of a firm. Using some fundamental financing theories it is made clear that the value of a firm in the real world is dependent on factors like corporate taxes, agency and costs of financial distress, but also other factors like the use of corporate governance mechanisms.

In the last chapter some empirical literature was used. The red line were two papers of Gomper, Ishii and Metrick (2003) and Bebchuk et. al. (2004). Following the effects of 24 unique governance provisions they tried to distinguish governance provisions that appear to be beneficial for the firms management and provisions that could be harmful to shareholders. They used data from the IRRC (Investor Responsibility Research Center) which collects data from the S&P 500 for a period from 1990-2003. Gompers built an index to measure the presence of corporate governance provisions. For every firm they add one point for every provision that restricts shareholder rights.

The Bebchuk et. al. paper constructs an entrenchment index. Starting with hypothesizing which provisions can be expected to play a significant role in driving the correlation between IRRC provisions and firm valuation. They came to six provisions. Each company is given a score from zero to six, based on the number of provisions the company has.

Data indicates that in the sample period firms are adopting more corporate governance provisions. Firm's with zero provisions at the end of the sample period are more scarce then in 1990.

Gompers et. al. find that the G index is positively related with firm size, age, share price and institutional ownership and listing in the S&P 500. This is consistent with the findings that corporate governance can be found in large en developed firms. Also ownership structure seem to play a role. However Bebchuk et. al. find no differences in 2002 concerning listing in S&P 500 and age.

If corporate governance matters in a financial way for firm performance and if it is priced by the market then a stock price should react on any changes in the corporate governance system of a firm. When a firm has a restrictive and dictatorship like portfolio it will perform less than a firm with a democracy portfolio. Gompers et. al., Bebchuk et. al and Karpoff et. al. find evidence which is consistent with this story. We can also conclude that for a large part the entrenchment provisions of Bebchuk et. al. are responsible for this effect. However there remains the issue of causality. Does lower return create an incentive to adopt more restrictive provisions or is adding an restrictive provision the cause of lower returns? Both papers can not give a clear answer to this issue.

Using several regression models both papers investigate the relationship between their governance index and firm value, measured in Tobin's Q (Kaplan and Zingales 1997). Gompers finds a negative relation which is significant in 9 of 10 years with a peak in 1999. He also finds evidence that the firms in the democracy portfolio have a Q that is 56 percent points higher in 1999 than firms in the dictatorship portfolio. In 1990 this was only 19 percent point. Overall democracy portfolios have a stronger positive relation with the G-Index. Bebchuk also finds that the Entrenchment index has a negative significant relationship with firm value. He also shows evidence that the 6 provisions in the E-Index are responsible for this relationship. The other 18 provisions do have a very small positive relationship with firm value.

The main research objective was to find evidence that corporate governance affects firm value. After studying the meaning of corporate governance and analysing some empirical literature we can answer the main question positively.

Most papers do indeed acknowledge the relationship between governance and firm value. When reasoning from the shareholders point of view we see that firms with a stronger shareholder position (democracy) prove to perform better and having higher firm value than firms with weak shareholder protection (dictatorship). The regression points out that in both papers there is an inverse significant correlation between the entrenchment index, the G index and firm valuation on the other hand. But their evidence is far from perfect. Their evidence does not prove that having a higher index score is the cause of having a lower firm value. It is possible that having a low value is a reason to adopt more provisions leading to a higher index. So, there can be a certain correlation, but there is still the case of causality or simultaneity to resolve. Having a higher index score brings partly about (and not merely reflects) lower firm valuation.

The conclusion that can be made is that corporate governance indeed affects firm value and firm performance, but the evidence is weak. To uncover the issue of causality more research needs to be done. Also studying the corporate governance effects in different countries and economies could help to provide stronger evidence to unveil the true effect of corporate governance on firm value.

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Appendix A: List of provisions

Below a list with the 24 IRRC provisions that are used in the papers of Gompers et. al. (2003) and Bebchuk et. al. (2004). The entrenchment provisions of Bebchuk et.al. are in bold italic.

Antigreenmail. Greenmail refers to a transaction between large shareholder and a company in which the shareholder agrees to sell his stock back to the company, usually at a premium, in exchange for the promise not to seek control of the company for a specified period of time. Five US states have specific **Antigreenmail laws**, and two other states have “recapture of profits” laws, which enable firms to recapture.

Blank Check preferred stock is stock over which the board of directors has broad authority to determine voting, dividend, conversion, and other rights. While it can be used to enable a company to meet changing financial needs, its most important use is to implement poison pills or to prevent takeover by placing this stock with friendly investors.

Business Combination laws impose a moratorium on certain kinds of transactions (e.g., asset sales, mergers) between a large shareholder and the firm, unless the transaction is approved by the Board of Directors.

Bylaw and **Charter** amendment limitations limit shareholders’ ability to amend the governing documents of the corporation. This might take the form of a supermajority vote requirement for charter or bylaw amendments, total elimination of the ability of shareholders to amend the bylaws, or the ability of directors (beyond the provisions of state law) to amend the bylaws without shareholder approval.

Control-share **Cash-out laws** enable shareholders to sell their stakes to a “controlling” shareholder at a price based on the highest price of recently acquired shares.

A **Classified Board** (or “staggered” board) is one in which the directors are placed into different classes and serve overlapping terms. Since only part of the board can be replaced each year, an outsider who gains control of a corporation may have to wait a few years before being able to gain control of the board.

Compensation Plans with changes-in-control provisions allow participants in incentive bonus plans to cash out options or accelerate the payout of bonuses if there should be a change in control. The details may be a written part of the compensation agreement, or discretion may be given to the compensation committee.

Director indemnification Contracts are contracts between the company and particular officers and directors indemnifying them from certain legal expenses and judgments resulting from lawsuits pertaining to their conduct.

Control-share Acquisition laws (see Supermajority, below).

Cumulative Voting allows a shareholder to allocate his total votes in any manner desired, where the total number of votes is the product of the number of shares owned and the number of directors to be elected. By allowing them to concentrate their votes, this practice helps minority shareholders to elect directors.

Directors' Duties provisions allow directors to consider constituencies other than shareholders when considering a merger. This provision provides boards of directors with a legal basis for rejecting a takeover that would have been beneficial to shareholders. Thirty-one US states have **Directors' Duties laws** allowing similar expansions of constituencies, but in only two of these states (Indiana and Pennsylvania) are the laws explicit that the claims of shareholders should not be held above those of other

Fair-Price provisions limit the range of prices a bidder can pay in two-tier offers. The goal of this provision is to prevent pressure on the target's shareholders to tender their shares in the front end of a two-tiered tender offer, and they have the result of making such an acquisition more expensive. Also, 25 states had **Fair-Price laws** in place in 1990, and two more states passed such laws in 1991. The laws work similarly to the firm-level provisions.

Golden Parachutes are severance agreements that provide cash and non-cash compensation to senior executives upon an event such as termination, demotion, or resignation following a change in control.

Director **Indemnification** uses the bylaws, charter, or both to indemnify officers and directors from certain legal expenses and judgments resulting from lawsuits pertaining to their conduct.

Limitations on director **Liability** are charter amendments that limit directors' personal liability to the extent allowed by state law.

Pension Parachutes prevent an acquirer from using surplus cash in the pension fund of the target to finance an acquisition. Surplus funds are required to remain the property of the pension fund and to be used for plan participants' benefits.

Poison Pills provide their holders with special rights in the case of a triggering event such as a hostile takeover bid. If a deal is approved by the board of directors, the poison pill can be revoked, but if the deal is not approved and the bidder proceeds, the pill is triggered.

Under a **Secret Ballot** (also called confidential voting), either an independent third party or employees sworn to secrecy are used to count proxy votes, and the management usually agrees not to look at individual proxy cards. This can help eliminate potential conflicts of interest for fiduciaries voting shares on behalf of others, and can reduce pressure by management on shareholder-employees or shareholder-partners.

Executive **Severance** agreements assure high-level executives of their positions or some compensation and are not contingent upon a change in control.

Silver Parachutes are similar to Golden Parachutes in that they provide severance payments upon a change in corporate control, but differ in that a large number of a firm's employees are eligible for these benefits.

Special Meeting limitations either increase the level of shareholder support required to call a special meeting beyond that specified by state law or eliminate the ability to call one entirely. Such provisions add extra time to proxy fights, since bidders must wait until the regularly scheduled annual meeting to replace board members or dismantle takeover defences.

Supermajority requirements for approval of mergers are charter provisions that establish voting requirements for mergers or other business combinations that are higher than the threshold requirements of state law.

In practice, these provisions are similar to **Control-Share Acquisition laws**. These laws require a majority of disinterested shareholders to vote on whether a newly qualifying large shareholder has voting rights.

Unequal Voting rights limit the voting rights of some shareholders and expand those of others. Under time-phased voting, shareholders who have held the stock for a given period of time are given more votes per share than recent purchasers.

Limitations on action by **Written Consent** can take the form of the establishment of majority thresholds beyond the level of state law, the requirement of unanimous consent, or the elimination of the right to take action by written consent. Such requirements add extra time to many proxy fights, since bidders must wait until the regularly scheduled annual meeting to replace board members or dismantle takeover defences.