

THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FIRM PERFORMANCE REVISITED: WHERE DO WE STAND?

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Abstract

How is corporate governance measured, and what is the relationship between corporate governance mechanisms and corporate performance? This paper aims to shed light on these questions by providing an overview of the most important research findings in this area with a focus on the USA and Germany. My analysis gives rise to the following remarks. First, studies examining the impact of single governance mechanisms are inconclusive and mixed in their findings, and especially the question of causality is still unanswered. Second, when a holistic approach is used, the proposition that good corporate governance enhances long-term performance is supported. However, corporate governance practices alone cannot assure long-term corporate performance and good standards of corporate governance are no substitute for the solidity of business models.

Keywords: corporate governance, corporate performance, ownership structure, board composition, takeover defenses, information disclosure

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1. Introduction

There is a widespread belief among investors that good corporate governance leads to superior corporate performance (Young, 2003). This belief is confirmed by opinion-based research, such as the Global Investor Opinion Survey published by McKinsey & Company in 2002. Undertaken in cooperation with the Global Corporate Governance Forum, this survey gathered responses from over 200 institutional investors about their specific investment intentions. As a result, it may be stated that for the majority of the institutional investors, corporate governance is of great concern. When evaluating an investment, three quarters of institutional investors consider corporate governance practices more or equally important than actual profit performance or growth potential of companies. In addition, about 80 % of them are willing to pay a premium for the shares of well-governed companies (Coombes & Watson, 2002).

Due to recent accounting scandals at prominent companies in the USA and Europe (e.g., Enron, WorldCom, Parmalat) and also as an outcome of the current financial and economic crisis, good corporate governance nowadays can be regarded as a means to restore trust. In addition to this, privatizations, pension fund reforms, the growth of private savings, and takeover waves led to an increased importance of corporate governance practices for the valuation of companies (El Mir & Seboui, 2006; Murphy & Topyan, 2005). A variety of empirical studies exist about the relationship between corporate governance and a firm's performance which have been mixed and

inconclusive in their findings (Ho, 2005). Using a diversity of approaches, most of the studies examined the impact of different factors of corporate governance. Furthermore, diverse indicators were used to define a company's performance. While many studies found a significant positive influence of corporate governance practices on performance, there are no uniform answers to this question. Some studies even came to the result of a non-relationship, so that it may also be argued that the value of governance procedures has only been established due to an increased confidence in those procedures (Patterson, 2001).

The objective of this paper is to provide an overview of the most important research findings about the influence of corporate governance on corporate performance. Therefore, I compare existing empirical studies, highlight common results and deviations, and thus aim to identify the most important mechanisms of corporate governance. Since studies vary for different systems of corporate governance in different countries, I focus in this paper on the USA and Germany. These two countries represent two successful market economies with two main systems of corporate governance: the Anglo-Saxon market-oriented system and the long-term investor system (Murphy & Topyan, 2005). The fact that the two systems are both very successful but also very different raises the question, whether only a few common aspects of corporate governance have a significant influence on performance and not the whole system in detail.

The further structure of the paper is as follows. First, I explain the origin and development of the concept of corporate governance and the two different systems of corporate governance, namely the Anglo-Saxon and the German system. Thereafter, I present and analyze major studies examining the impact of different factors of corporate governance on firm performance. Next, I describe and discuss studies using a holistic approach and conclude by summarizing and evaluating the major research findings. I also sketch out implications for companies and investors from my findings.

2. The Concept of Corporate Governance

2.1. Agency Problems and the Development of Corporate Governance

The question of how corporations should be governed is not new. Even though it is a popular topic in current press releases and academic studies due to diverse changes in corporate law and regulation over last years, there have always been discussions about corporate governance and efforts to improve it for as long as corporations have been in existence (Hermalin, 2005). There is not a unique definition of what corporate governance means. Joel Stern defines a corporate governance system as “the set of institutions and processes, both inside and outside the firm, that help capital providers oversee and influence the behavior of corporate managers” (Gillan, 2004). According to Cromme (2005), “corporate governance is a term describing good, efficient management and supervision of companies on the basis of internationally recognised standards in the interests of the company’s owners and its social environment”. Shleifer and Vishny (1997) provide a very short definition. For them, “corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment”. Although there are many more different definitions of the term corporate governance, there is consensus that it includes the prevailing conditions for the management and supervision of companies to handle conflicts of interests between various stakeholders (Bassen & Zöllner, 2007).

Companies nowadays care about corporate governance, as it is also a topic of growing concern for shareholders and other stakeholders. The principal-agent theory helps to explain this development and the actual importance for many firms (Fombrun, 2006). Agency problems arise due to a separation of security ownership and control in modern, especially publicly traded corporations. These corporations are owned by various shareholders, the principals, and run by managers, the agents (Fama, 1980). The shareholders have to ensure that managers act according to their interest, but between principals and agents partial conflicts of interests and information asymmetries usually occur.

As a result, stockholders have to solve both adverse selection and moral hazard problems. The adverse selection problems primarily deal with the selection of capable and reliable managers, whereas moral hazard problems can occur in many different ways (Pfaff & Zweifel, 1998). Agency problems lead to agency costs and potential losses of shareholders, although it is often difficult to assess the exact amount of those costs. Corporate governance mechanisms can help to mitigate principal-agent problems and thus reduce agency costs. To be more concrete, they can offer a considerable protection for stockholders against opportunistic behavior of the management team (Mueller, 2006).

Various corporate governance codes and principles have been developed to define what is meant by good corporate governance practices, such as the Cromme Code in Germany or the Sarbanes-Oxley Act in the USA. Unless there are many differences between the codes of the Anglo-Saxon and the German system of corporate governance, most of the laws and recommendations focus on improving practices in the following areas: ownership structure and influence of the owners, board composition and leadership structure, shareholder rights and takeover defenses, and financial transparency and information disclosure (Fombrun, 2006). In the subsequent chapters, I analyze the impact of practices in these four areas as well as the impact of the whole system on corporate performance.

2.2. Comparison of the Anglo-Saxon and German System of Corporate Governance

Two main systems of corporate governance can be identified in western industrial countries: the Anglo-Saxon market or short-term shareholder oriented system and the long-term relation-oriented system (Murphy & Topyan, 2005; Kaplan, 1995). While a central objective of contemporary corporate law in the US is the protection of shareholder interests, German corporate law instead balances the interests of all stakeholders affected by a firm’s activities (Baums & Scott, 2005). These differences in corporate law can be explained by unequal ownership structures in the two countries. The shareholder orientation in the U.S. market emerged from the fact that the capital market can be regarded as a primary source of corporate funding. Securities are widely held and predominantly in the hands of various private households and mutual stock funds. In contrast, diverse intercorporate relationships exist in Germany because of large corporate stockholders such as banks, insurance companies, families, and other industrial companies. Many cross-holdings and linkages between industry and banks can be observed, which earned Germany the label of *Deutschland AG*. In addition, retained earnings and loans were regarded as the main sources of corporate funding for many years. In the light of

proceeding globalization and liberalization of financial markets, this situation has changed since the 1990s. Nevertheless, many of those cross-holdings still exist (Cromme, 2005).

With regard to the different orientations and ownership structures, the German system of corporate governance can be characterized to be insider-dominated, whereas the U.S. system is regarded as an outsider-dominated system. An indicator of this is a relatively high stock market capitalization as a percentage of the gross domestic product in the United States compared to Germany (Tylecote & Conesa, 1999). The external market for control in the German system is very small, and managers are monitored by large shareholders and banks. Another distinctive feature of the German governance structure is the two-tier board system of large companies, including a management board and a supervisory board, which consists of both shareholders and employee or trade union representatives. In contrast to this, managers' behavior in the USA is monitored by boards of directors, regularly dominated by outsiders, and an external market for control. A distinct managerial behavior can be concluded from these different systems. Researchers argue that the close financial ties and relationships in Germany can lead to reduced agency costs and a more effective monitoring process. On the condition that German companies are less concerned with short-term earnings, it should also be easier for managers to invest in value-increasing long-term projects. Furthermore, the ownership structure may help to avoid hostile takeovers. On the other hand, fees and interest rates may be abnormally high in cases of poor financial performance due to existing alliances between banks and managers (Kaplan, 1995).

When it comes to the implementation of corporate governance, various standards and new international or national codes of conduct exist. Most of them are not mandatory, so that their compliance can be regarded as a voluntary act of self-regulation. In Germany, a separate commission was built to draw up the German Corporate Governance Code (GCGC). Under the chairmanship of Gerhard Cromme, the results of the commission and the final version of the GCGC were published in 2002. The objective was to promote confidence of international and national investors, employees, and other stakeholders in the management and supervision of German companies through creating transparency. The GCGC contains recommendations only instead of mandatory rules, but German listed stock corporations must declare whether they comply or not in accordance with § 161 of the German Stock Companies Act (AktG). There is sufficient reason to believe that nowadays the German code is widely accepted (Bassen, Kleinschmidt, Prigge, & Zöllner, 2006; Cromme, 2005). According to Wooldridge and Pannier (2005), 96 % of the code recommendations were implemented by DAX-listed companies at the end of 2004. Besides, there is no Prime Standard corporation which rejects the GCGC

totally, and in 2004 there were even 13 DAX companies which complied without any exception.

In contrast to the non-mandatory recommendations in Germany, in 2002 a new law was introduced in the USA as a response to the Enron and WorldCom scandals called the Sarbanes-Oxley Act. The primary goal of this act is to prevent such insolvencies through tightening accounting and governance standards and forcing companies to pay more attention to internal controls. An opinion-based survey among the public shows a significant support for this act. Even though it is generally accepted that the new law helps to improve governance practices, it also has some shortcomings. Especially small-cap and foreign firms complain about the costs when complying with the new rules (Murphy & Topyan, 2005).

3. Impact of Ownership Structure

The ownership structure of a firm is often regarded as one of the main corporate governance mechanisms to solve principal-agent problems and thus to mitigate agency costs (De Miguel, Pindado & De la Torre, 2005). I analyze the impact of both ownership concentration and managerial ownership on corporate performance, as many empirical studies also make this distinction.

3.1. Ownership Concentration and Performance

One of the first empirical studies about the relevance of stock ownership concentration for the efficiency and strategic development of firms follows the seminal thesis of Berle and Means of 1932. In their research, Hill and Snell (1989) examined the impact of different factors on firm productivity. Among those factors are stock concentration and management stockholdings, whereas stock concentration is proposed to have both a direct and indirect influence on productivity. Hill and Snell aim to prove that concentrated stockholdings lead to lower information asymmetries between shareholders and managers, and thus facilitate the coordination of action and the demand of information from management. As a result, a positive significant relationship between stock concentration and productivity indicates the importance of large blocks of powerful shareholders. Moreover, it can be concluded that stock concentration also affects productivity indirectly through the mediators of unrelated diversification and Research and Development expenditures. Agrawal and Mandelker (1990) also found a positive relation between ownership concentration and corporate performance. In their empirical study, they support the active monitoring hypothesis that stock concentration leads to a better monitoring of managers. A significant positive relation between institutional ownership and changes in the wealth of shareholders around the announcement of anti

takeover charter amendments can be concluded from their research. Hence, institutional investors cannot be regarded as passive owners.

Two other studies about the relationship between ownership concentration and corporate performance for the U.S. market come to distinctive results. First, Holderness and Sheehan (1988) investigated the role of large block-ownership by analyzing 114 publicly listed corporations with majority shareholders and found no relation between majority ownership and firm performance. Second, Fuerst and Kang (2004) examined the relation between ownership structure and firm performance and show that the presence of a controlling shareholder with more than 50% of the shares is neutral for operating performance, but negative for the market value of the company. In addition, they assert that large external stockholders cannot be regarded as active monitors, because large blockholdings above five per cent are negatively related with the expected residual income (ERI).

One of the first studies examining the influence of banks' ownership concentration on the performance of German firms was published by Gorton and Schmid (2000). Gorton and Schmid show that when using the market-to-book ratio (MTB) as a performance measure, a bank's control rights from equity ownership have a positive influence on firm performance. When Return on Equity (ROE) is the performance measure, codetermination leads to a decrease in firm performance. To sum up, concentration of control rights from equity ownership leads to improved firm performance, banks affect performance beyond the effects of non-bank blockholders, and codetermination reduces firm performance. Finally, banks in Germany can be regarded as an important part of corporate governance mechanisms. Januszewski, Köke, and Winter (2002) examined the impact of product market competition and corporate governance on productivity growth in Germany. The results of their regression analysis indicate that companies operating in markets with intense competition experience higher productivity growth. This productivity growth is even higher for firms controlled by a strong ultimate owner, if this owner is a non-financial firm. For firms under the control of a private owner, no significant different productivity growth is realized, and firms under the control of a financial institution even experience a lower productivity growth. With this study, Januszewski et al. prove the impact of ownership concentration on firm performance, but they also refute the above-mentioned results of Gorton and Schmid. Another study by Edwards and Weichenrieder (2004) also comes to the result of a positive and linear relationship between ownership concentration and performance.

In contrast to the above-mentioned studies, Lehmann and Weigand (2000) found a significantly negative impact of ownership concentration on Return on Assets (ROA). Results vary for different time-horizons as well as for the identity of the majority

shareholders. For instance, a positive relationship between ownership concentration and profitability is found for corporations with financial institutions as largest shareholders.

Summing up, studies about the relationship between ownership concentration and performance are inconclusive and mixed in their findings. Different data sets and the use of diverse measures of shareholder concentration and performance lead to significant discrepancies. There is no consensus about the effects of ownership concentration. While some studies show the existence of a positive relation (Table 1), other studies show no impact or even a negative relationship. It is therefore hard to suggest whether ownership concentration leads to a better monitoring of managers or harmful effects of greater private benefits of control. Undoubtedly, further research in this area is needed, especially with regard to the identity of the different large shareholders.

3.2. Managerial Ownership and Performance

Several studies exist about the relationship between management ownership and corporate performance, and one of the first important investigations was published by Morck, Shleifer, and Vishny (1988). Their regression analysis resulted in a cubic relationship between managerial ownership and performance, measure by Tobin's Q. This means that levels of insider ownership below 5% and above 25% lead to a performance increase. However, at moderate levels of managerial ownership between 5% and 25%, performance decreases. The entrenchment of managers may help to explain this experienced decline, while the increases of Tobin's Q can be interpreted as reflecting the convergence of interests between stockholders and managers. Many other studies come to similar results of a cubic relationship between insider ownership and market value (Chen, Hexter, & Hu, 1993; Cho, 1998; Griffith, 1999; Holderness, Kroszner, & Sheehan, 1999) or find quite different results, but also support the hypothesis that managerial ownership has a significant impact on firm performance (Fuerst & Kang, 2004; Han & Suk, 1998; Wruck, 1989).

In comparison to the above-mentioned research findings, Demsetz and Villalonga (2001) come to contrasting results. With their study, they aim to counter the arguments that ownership structure and managerial ownership have an impact on a firm's performance. Ownership structure should rather be regarded as an endogenous than an exogenous variable, which is also influenced by a company's value and not vice versa. The econometric model of Demsetz and Villalonga has two equations, whereas the first has performance and the second has fraction of shares owned by management as a dependent variable.

Table 1. Impact of Ownership Concentration on Performance

	Positive findings	Neutral or negative findings
USA	Wruck (1989) Hill & Snell (1989) Agrawal & Mandelker (1990) Han & Suk (1998) Core, Holthausen & Larcker (1999)	Holderness & Sheehan (1988) Demsetz & Villalonga (2001) Fuerst & Kang (2004)
Germany	Gorton & Schmid (2000) Januszewski, Köke & Winter (2002) Edwards & Weichenrieder (2004)	Lehmann & Weigand (2000)

Table 2. Impact of Managerial Ownership on Performance

	Positive findings	Neutral or negative findings
USA	<u>Cubic relation:</u> Morck, Shleifer & Vishny (1988) Chen, Hexter & Hu (1993) Cho (1998) Griffith (1999) Holderness, Kroszner & Sheehan (1999) <u>Other positive relation:</u> Wruck (1989) Agrawal & Knoeber (1996) Han & Suk (1998) Core, Holthausen & Larcker (1999) Coles, McWilliams & Sen (2001) Fuerst & Kang (2004)	Demsetz & Villalonga (2001)

As a result, the study provides evidence for the endogeneity of ownership structure and thus shows that studies using single equation models of the impact of ownership structure on performance are biased. Moreover, no statistically significant relation between ownership structure, especially managerial ownership, and firm performance is found.

To sum up, there seems to be a close connection between managerial ownership and corporate performance. Various empirical studies (Table 2) suggest a cubic relation, and it can be argued that both low and high managerial ownership has a positive influence on performance, as it reflects the convergence of interests between stockholders and managers. The decrease in performance for a moderate insider ownership is often explained through the entrenchment of managers. Despite the fact that much empirical evidence exists for a positive relationship, critics argue that corporate value and performance affect the ownership structure of a company, and not vice versa. Thus, it cannot be regarded as exogenously determined, and many studies are biased. More research is needed in this area as well, although there seems little doubt that at least some positive effects of managerial ownership exist. On top of that, no important studies are published for the German market, which implies that one cannot draw any conclusions for that market and here more research is needed as well.

4. Impact of Board Composition and Leadership Structure

The effectiveness of board of directors is a global concern due to recent corporate collapses and fraud cases. In the light of board composition and leadership structure, many corporate governance recommendations and codes of conduct exist. It is often suggested, that a separation between the chair and the chief executive officer (CEO) position leads to more independent boards, and that boards should also be dominated by outside directors to increase independency. Those suggestions are supported by agency theory. Therefore it is necessary to raise the question of whether those suggestions really have a positive influence on corporate performance or not (Heracleous, 2001). Several studies exist which examine the impact of board composition or leadership structure on corporate performance, especially for the Anglo-Saxon system of corporate governance. As described in chapter 2.2, the German two-tier board system contains by law a management board and a supervisory board. Hence, board composition and leadership structure will only be analyzed for the U.S. market here.

Millstein and MacAvoy (1998) published an important study proving the hypothesis that a professional board which is active and independent from management should increase corporate performance. Support for the hypothesis – that independent boards which are dominated by outsiders increase corporate performance – is also provided by Rosenstein and Wyatt (1990), who show that appointments of outside directors have a significant positive effect on shareholder wealth and increase firm value, despite the fact that the increase in stock price is very small and most boards are numerically dominated by outsiders before appointing new directors. This implies that outside directors are selected in the interests of shareholders.

The relation between board composition and the likelihood of financial statement fraud is examined by Beasley (1996). One finding of his study is that the board of director composition differs between fraud and no-fraud firms. On average, fraud firms have significantly fewer (50.2 %) outside directors than no-fraud firms (64.7 %), and the univariate and multivariate logit results suggest that outside directors are important monitors of management, because the probability of financial statement fraud is significantly influenced by the board composition. Additionally, other factors affect the likelihood of fraud, such as board size and certain outside director characteristics. In contrast to Beasley, Farber (2005) investigates firms' responses to fraud detection, which means the magnitude and economic consequences of fraud firms' changes in corporate governance practices during a three-year period after fraud detection. The results of this study support Beasley's findings, because one year before fraud detection, the fraud firms had a fewer percentage of outside directors, fewer audit committee meetings, and a higher percentage of chairmen of the board who were also CEO of the company. Farber also finds that all fraud companies take actions to improve governance systems after detection and have superior stock price performance after implementing the improvements.

In the light of leadership structure, Rechner and Dalton (1991) argue in favor of an independent structure where different individuals serve as CEO and chairperson of the board of directors. Using ROE, ROI, and profit margin as performance indicators, Rechner and Dalton found that firms with independent leadership structures outperformed those with CEO duality structures during the observed period. While many empirical studies come to the result that board composition and leadership structure have a positive impact on corporate performance, there are also studies countering this hypothesis. Bhagat and Black (1999) found that board independence correlates negatively with different performance measures. Nevertheless, Bhagat and Black state that such a relationship is hard to prove. Moreover, they point out that board composition could be an endogenous variable, which means that different companies need different kinds of boards. In

addition, it could be valuable for firms to have at least a moderate number of inside directors than to have a majority of independent directors, but more research is needed to explore this.

With regard to CEO duality and firm performance, Baliga, Moyer, and Rao (1996) come to distinctive results than the above mentioned study of Rechner and Dalton. In their study, Baliga et al. considered the announcement effects of changes in leadership structure, accounting measures of operating performance after changing the leadership structure, and long-term measures of performance for firms with CEO duality. It can be concluded from the results that the market is indifferent to changes in a company's leadership structure, because no significant share price reactions are observed around the announcement period. Moreover, the study provides little evidence that changes in duality status have an impact on operating performance, measured by ROE, ROA, operating cash flow to total assets, and operating cash flow to sales in the period after changing the structure.

In the light of both the impact of leadership structure and board composition on corporate performance, an important study was published by Dalton, Daily, Ellstrand, and Johnson (1998), which is a meta-analytic review of existing research addressing this topic. Their overview of existing studies clearly demonstrates that there is little consistency in the research findings. All articles were concluded for the meta-analyses which examined the relationship between board composition/leadership structure and financial performance, and it was necessary that a Pearson product-moment correlation was available or derivable between the variables. Afterwards, each observed correlation was weighted by the sample size of the study to calculate the mean weighted correlation across all studies. For the board structure attitude, Dalton et al. found 54 empirical studies with 159 usable samples and 40,160 organizations involved, whereas for CEO duality 31 empirical studies with 69 usable samples and 12,915 organizations involved were identified. Dalton et al. found no support for the hypothesis that board composition and leadership structure lead to superior corporate performance.

Table 3. Impact of Board Composition and Leadership Structure on Performance

	Positive findings	Neutral or negative findings
USA	Rosenstein & Wyatt (1990) Rechner & Dalton (1991) Beasley (1996) Millstein & MacAvoy (1998) Core, Holthausen & Larcker (1999) Farber (2005)	Agrawal & Knoeber (1996) Baliga, Moyer & Rao (1996) Dalton, Daily, Ellstrand & Johnson (1998) Bhagat & Black (1999)

It can be summarized that several studies addressing the relationship between board or leadership structure and performance exist (Table 3). Nevertheless, those studies are mixed and show little consistency. There is no convincing evidence that an increase in board independence through an increase of the outside director proportion will improve firm performance. In addition, there is also no clear support that leadership structure positively affects performance. One explanation for the mixed findings could be that it is impossible to make general recommendations regarding those governance structures, because different firms may benefit from different board structures. Moreover, other factors could influence performance over time, which are more important than board composition or leadership structure, and the complexity of those factors impedes to find significant relationships in narrow studies (Heracleous, 2001). Researchers also often argue that independent boards and a separation of the chairman and the CEO lead to a better monitoring. However, this is only one of a many roles of a board. While independence may improve the monitoring process and thus corporate performance, it could also be counterproductive for other board tasks (Young, 2003).

5. Impact of Shareholder Rights and Takeover Defenses

Corporate governance provisions, which are related to shareholder rights and takeover defenses, vary across firms. There also seems to be a close connection between those provisions and corporate performance, and several studies examining this relationship exist. For instance, a restrictive governance structure is expected to decrease managers' accountability to stockholders and thus to harm a firm's financial performance (Karpoff, Marr, & Danielson, 1994).

Karpoff et al. (1994) examine the correlation between the corporate governance structure of a company with regard to 20 different governance provisions and two performance indicators: industry-adjusted ROA and MTB. Their tests are based on governance profiles compiled by Institutional Shareholder Services, Inc. (ISS) of the Standard & Poor's (S&P) 500 index for the period 1984-1989. Karpoff et al. found that governance structures significantly influence performance. In detail, for firms with the most liberal governance structures, the highest financial performance is observed, and their

assets are also relatively highly valued. This confirms the managerial entrenchment hypothesis, which states that companies with liberal structures perform better because managers are more accountable to shareholders. In addition, Karpoff et al. investigated the effects of the different provisions. After testing for causality and sensitivity, the most consistent finding is that the existence of a poison pill, which is one of the internal control mechanisms, negatively correlates with both ROA and MTB.

The relationship between shareholder rights and corporate performance is also confirmed by Gompers, Ishii, and Metrick (2003). Due to the fact that many corporations added takeover defenses and other restrictions of shareholder rights in the 1980s and afterwards, their research is designed to examine the performance effects by taking a long-horizon approach. Gompers et al. found that corporate governance provisions are strongly correlated with stock returns. Even though unobservable firm characteristics may influence the results and one cannot draw strong conclusions about causality with regard to the used data set, the study suggests that stronger shareholder rights and less restrictive governance structures have a positive impact on firm value, profits, and sales growth of a company. Further insight into the relationship between different governance provision and performance is provided by Bebchuk, Cohen, and Ferrell (2004) who also found a positive impact of single corporate governance provisions on corporate performance. Nevertheless, Bebchuk et al. state that future research is needed regarding the question of causation.

In contrast to the above-mentioned research findings, Klock, Mansi, and Maxwell (2005) examined the relation between governance provisions and the costs of debt financing. While anti-takeover governance provisions are regarded to be shareholder unfriendly, it could also be necessary to raise the question whether they are viewed favorably in the bond market or not. It follows from various regression analyses that anti-takeover governance provisions lower the cost of debt financing, while weak provisions with the strongest shareholder rights are associated with higher costs of debt financing.

Table 4. Impact of Corporate Governance Provisions on Corporate Performance

	Positive findings	Neutral or negative findings
USA	Karpoff, Marr & Danielson (1994) Gompers, Ishii & Metrick (2003) Bebchuk, Cohen & Ferrell (2004)	Klock, Mansi & Maxwell (2005) Nelson (2005) Lehn, Patro & Zhao (2005)

A further anti-takeover provision in the sample leads to a significant decrease in the costs of about four basis points, and the results are robust to various measures of provisions and tests of endogeneity. Hence, it may be concluded that anti-takeover amendments can be viewed as an effective tool to protect interests of bondholders, although not favorably for shareholders. It is therefore recommendable to look at the total effects of governance systems when evaluating them and before drawing conclusions. In the light of the endogeneity of the relationship between corporate governance provisions and performance, Nelson (2005) examined the impact of performance changes on governance practices and found that the adoption of governance provisions is also influenced by a firm's prior performance, among other factors, and especially poorly performing companies are more likely to adopt poison pills, since no shareholder approval is needed. The question of causation is also examined by Lehn, Patro and Zhao (2005) who also support the view that causation runs from corporate performance to governance systems, and not vice versa. As an explanation, Lehn et al. maintain that poorly run firms are more likely targets of hostile takeovers, which makes them adopt takeover defenses and thus affecting the value of their indices.

To sum up, many studies examining the link between governance provisions and corporate performance prove a correlation between the two variables (Table 4). This could support the managerial entrenchment hypothesis, which states that companies with liberal structures perform better because managers are more accountable to shareholders. On the other hand, research about the causation shows evidence for the endogeneity of both corporate governance systems and corporate performance, so that a firm's corporate governance provisions, which are related to shareholder rights and takeover defenses, may rather be affected by prior corporate performance. More research about the causation is therefore necessary, as well as further research with regard to the different kinds of provisions. For instance, provisions such as poison pills are considered to have the most significant impact on performance. In addition, it can also be shown that corporate governance provisions have an impact on a company's costs of debt financing. Hence, the effects of provisions should be analyzed with regard to both

shareholders and bondholders. Finally, no major studies examine the link between corporate governance provisions and performance for the German market, which is also a consequence of the different systems of corporate governance and the small market for control in Germany.

6. Impact of Information Disclosure and Governance Commitment

Corporate governance codes and recommendations also contain information about the quality, accessibility, and timeliness of financial and operational disclosure. Besides, the GCGC does not contain mandatory rules and German listed stock corporations have to declare whether they comply or not in their annual reports (Cromme, 2005). Such commitments to certain codes of conduct as well as a firm's financial transparency and information disclosure might influence the market value of a company, which will be analyzed in this chapter.

Both for the German and the U.S. market no major studies about the relationship between financial transparency and shareholder wealth exist. Assuming that shareholders are willing to pay a premium for well-governed and transparent companies, this would positively influence stock prices. However, more research is needed to prove this assumption, but it is clear that information disclosure or reporting about corporate governance can affect investor behavior. For instance, the Business Week publication of ratings of boards of directors led to positive abnormal returns for companies mentioned in those ratings (Johnson, Ellstrand, Dalton & Dalton, 2005).

In the light of commitment to corporate governance codes and practices, a few studies about the German market exist investigating the impact of compliance with the GCGC on corporate performance. Zimmermann, Goncharov, and Werner (2004) analyzed 61 German companies of the DAX and MDAX with observations in 2002 and 2003 and found that the degree of compliance can be regarded as value relevant information for investors. This implies that there is at least some capital market pressure or some incentives which lead to a broad adoption of the GCGC recommendations. Finally, Zimmermann et al. state that future research is useful regarding the compliance with single recommendations and its performance effects.

Table 5. Impact of Compliance with the GCGC on Corporate Performance

	Positive findings	Neutral or negative findings
Germany	Zimmermann, Goncharov & Werner (2004)	Nowak, Rott & Marr (2005) Bassen, Kleinschmidt, Prigge & Zöllner (2006)

Two other studies about the relationship between compliance with the GCGC and performance come to distinctive results. Nowak, Rott, and Mahr (2005) used an event study to investigate whether compliance declarations lead to positive or negative abnormal returns, and the event window are two days before and five days after the publication of those declarations. They found that abnormal deviations in compliance with the recommendations (both positive and negative) do not result in statistically and economically significant abnormal returns. Bassen, Kleinschmidt, Prigge, and Zöllner (2006) also examined the relationship between compliance with the GCGC and corporate performance and conclude that a general significant relation between compliance with the GCGC and performance cannot be observed in 2003. However, compliance with some specific rules regarding the management board, such as publication of individual remuneration, positively influences corporate performance.

Research findings about the impact of compliance with the GCGC on corporate performance are very rare, inconclusive and mixed, so that the hypothesis that capital market pressure leads to a broad adoption of the recommendations cannot be proved (Table 5). Nevertheless, there is sufficient reason to believe that nowadays the German code is widely accepted and most recommendations are adopted by German listed companies, which also impedes the analysis (Bassen et al., 2006). Further research should focus on single recommendations and not compliance with the whole code over a longer time horizon. Additionally, more research about the performance effects of financial transparency and information disclosure is needed for the German and the U.S. market, because until now no important studies about this relationship exist.

7. Impact of the Overall System of Corporate Governance

Most of the studies described in previous chapters focus on single mechanisms of corporate governance, such as the ownership structure of a company, the board composition, or the compliance with specific codes of conduct. While some studies found a positive relationship between certain parts of corporate governance and performance, others refuted this hypothesis, so that it is difficult to draw general conclusions. It is therefore necessary to examine the impact of corporate governance on corporate performance on a holistic basis. The fact that inter-relationships may exist between different attributes

and mechanisms of corporate governance supports this holistic approach (Ho, 2005).

One of the first studies examining the impact of several mechanisms of corporate governance on corporate performance was published by Agrawal and Knoeber (1996). First of all, a regression analysis shows existing interdependencies among the corporate governance mechanisms. Following this, Agrawal and Knoeber examined the relationships between firm performance and the use of single control mechanisms. It turns out that a higher proportion of outside directors in the board, more debt financing, and more corporate control activity all lead to poorer corporate performance, whereas greater insider shareholdings enhance performance. As a result of simultaneous equations estimation, only a negative relation between the proportion of outside directors and performance can be observed. Agrawal and Knoeber claim that these findings are consistent with corporate governance mechanisms being chosen optimally, except for the outside director representation.

Core, Holthausen, and Larcker (1999) used a distinctive approach to measure the impact of governance structures on corporate performance. Using a cross-sectional multiple regression, they show that the level of total CEO compensation is related to firm size, investment opportunities, prior performance, and firm risk. Moreover, the eight variables related to the board structure as well as the four variables of ownership structure have a significant influence on total CEO compensation. With regard to specific board composition variables, it can be observed that less independent outside directors and the existence of CEO duality are associated with greater CEO compensation. On top of that, a higher proportion of outside directors above the age of 69 or serving in more than one board also increase total CEO compensation. This implies that weak corporate governance structures in terms of board composition enable the CEO to extract additional compensation. When it comes to ownership structure variables, it is shown that inside ownership of the CEO as well as the existence of large blockholders reduces the total remuneration, which also implies that less effective governance structures are related with increases in CEO compensation. Core et al. then investigated whether the observed associations between ownership or board structure and CEO compensation can be regarded as proxies for the effectiveness of a firm's governance structure.

Thus, the impact of CEO compensation on performance is measured. As a result, excess compensation of the CEO has a significant negative association with subsequent operating performance (measured by ROA) and subsequent firm stock returns.

The findings suggest that greater agency problems occur in firms with weaker governance structures, which leads to a higher compensation of the CEO and negative effects on corporate performance.

Using both Market Value Added (MVA) and Economic Value Added (EVA) as measures of performance, Coles, McWilliams, and Sen (2001) provide further insights into the relationship between various factors of corporate governance and performance. They found that some corporate governance variables, such as CEO ownership, positively influence performance. However, the most important driver of a firm's performance is industry performance, both for MVA and EVA. Furthermore, Coles et al. conclude that there is little evidence for the relationship between corporate governance practices and performance, and more research is needed in measuring this relationship within industries.

A very comprehensive analysis of the relationship between different governance structures and various outcome variables was undertaken by Larcker, Richardson, and Tuna (2004). Multiple regression analyses about the impact of 14 different governance factors on ten dependent variables show that all corporate governance constructs only have a modest explanatory power for explaining managerial behavior or organizational performance. Larcker et al. state that typical indicators of corporate governance have a very limited ability to explain managerial decision and firm valuation. This implies either that corporate governance is not as important as expected or that the used indicators are not very useful for measuring corporate governance. Besides, only one year data is used in the analysis, which restricts the ability to generalize. Finally, corporate governance factors and managerial behavior can be regarded as endogenous variables, and other measurement errors may exist.

Brown and Caylor (2004) also created a broad measure of corporate governance using detailed corporate governance data of the year 2003 and computing a so-called Gov-Score. They found positive and significant correlations between their Gov-Score and various performance measures. In detail, it is shown that better governed firms have higher dividend yields, a higher ROE and net profit margin, and a higher firm value as measured by Tobin's Q. However, also one significant negative correlation exists between Gov-Score and sales growth. Brown and Caylor argue that sales growth is the least reliable of all performance indicators, so that this result is not of relevance. The results of Brown and Caylor suggest that well-governed companies are

usually more profitable, more valuable, and pay out more cash dividends. Nevertheless, Brown and Caylor state that more research is needed regarding causality and using data of a longer period.

In contrast to the above-mentioned studies, Ho (2005) used a different approach to examine the impact of overall corporate governance practices on performance. Using primary data from a questionnaire, Ho provides evidence that most international companies accept good corporate governance practices and conform to them. As a result of correlation analysis between the overall scores of corporate governance and measures of competitiveness, it can be concluded that a high level of conformance to good governance practices leads to a high level of competitive potential, better management processes, and a significant higher ROE. However, differences between these relationships are observed for different regional groups. It can be suggested that a high conformance to good corporate governance enhances corporate competitiveness. Furthermore, Ho shows that corporate governance factors are interdependent, and their impact on corporate performance is much stronger when it is evaluated on a holistic basis.

With regard to the overall impact of corporate governance on corporate performance for the European and especially for the German market, two major research findings exist. Bauer, Guenster, and Otten (2004) examined the impact of corporate governance practices on stock returns and firm value in Europe and provide evidence for a positive correlation for both the UK and the European Monetary Union. However, results are statistically insignificant and further research is suggested using a longer time-series of governance ratings. Secondly, multivariate regression analysis is employed to measure the relationship between corporate governance and Tobin's Q as a measure of performance. It can be concluded that the impact of corporate governance on firm value is very strong, while it is much stronger for the European Monetary Union than for the UK. Bauer et al. state that the reason for this are poorer governance standards in the Eurozone than in the UK, and prior research provides evidence that the lower the governance standards are, the stronger the impact on firm value.

Constructing broad corporate governance ratings as well, Drobetz, Schillhofer, and Zimmermann (2004) investigated the relationship between corporate governance and corporate performance for the German market. The sample is based on a survey and the results of Drobetz et al. provide evidence that firms with a higher governance rating also tend to have a higher firm value. Moreover, it can be concluded that good corporate governance enhances firm value for German corporations, because investors are willing to pay a premium, and bad standards of corporate governance lead to valuation discounts.

Table 6. Impact of the Overall System of Corporate Governance on Corporate Performance

	Positive findings	Neutral findings
USA	Core, Holthausen & Larcker (1999) Brown & Caylor (2004) Ho (2005)	Agrawal & Knoeber (1996) Coles, McWilliams & Sen (2001) Larcker, Richardson & Tuna (2004)
Germany	Ho (2005) Bauer, Guenster & Otten (2004) Drobetz, Schillhofer & Zimmermann (2004)	

Research findings about the overall impact of corporate governance systems on corporate performance seem to be mixed and inconclusive upon first glance, especially with regard to the U.S. market (Table 6). However, there are no results providing evidence for a negative relationship between governance practices and performance when a holistic approach is used, and most neutral studies experience the lack of statistical significance. This does not necessarily mean that no link between the two variables exists. It is more the outcome of different study designs, because diverse measures of corporate governance and performance are used. With regard to the German market, major research findings show a positive relationship between corporate governance and corporate performance. Moreover, it can be concluded that substantial differences exist between this relationship in Germany compared to other countries, especially Anglo-Saxon markets. As a result of important research findings using a holistic approach, the proposition that good corporate governance enhances performance is supported. Nevertheless, critics argue that still the causality problem exists, so that future research should also focus on that topic.

8. Summary and Concluding Remarks

Corporate governance is a topic of growing concern and the term has entered the vocabulary of students and practitioners over the last years. Advocates argue that corporate governance mechanisms can help to mitigate principal-agent problems which arise due to a separation of ownership and control (Mueller, 2006). In addition, surveys amongst investors show that they are willing to pay a premium for the shares of well-governed companies, while bad standards of corporate governance can lead to valuation discounts (Coombes & Watson, 2002). It is therefore necessary to raise the question of whether a relationship between corporate governance and performance can be empirically proven. This paper presents and analyzes various research findings about the influence of both individual corporate governance mechanism and the whole system of corporate governance on corporate performance. The analysis can be summarized as follows.

First, studies examining the impact of ownership concentration on performance are inconclusive and mixed in their findings. For Germany as well as for

the U.S. market, one cannot draw general conclusions. Critics argue that large blockholders even negatively influence performance due to greater private benefits of control of those large owners. When it comes to the performance effects of managerial ownership, various empirical studies for the US provide evidence of a cubic relation. This means that low and high managerial ownership are regarded favorably, whereas moderate insider shareholdings lead to negative effects due to an increased entrenchment of managers. Nevertheless, more research is needed focusing on the causality problem, because it can also be argued that managerial ownership is rather the outcome of superior performance than the influence. Second, there is no clear support that board composition or leadership structures positively affect firm performance. While advocates argue that both mechanisms lead to increased board independence, there is also sufficient reason to believe that no one-fits-all model exists. Besides, more independent boards and a separation of the CEO and the chairman function are associated with a better monitoring of managers, which is only one of the board’s roles. It follows that the impact on other roles should also be examined to draw general conclusions. Third, several empirical studies investigating the link between corporate governance provisions and corporate performance support the managerial entrenchment hypothesis. Thus, companies with liberal and shareholder friendly structures should perform better because managers are more accountable to stockholders. However, corporate governance provisions could also be regarded as endogenous variables. Hence, future research should focus on this causality problem as well as effects on other stakeholders than owners have to be analyzed. Fourth, research findings about the impact of compliance with corporate governance codes and financial transparency on corporate performance are very rare. For the German market, there is no consensus whether capital market pressure leads to a broad adoption of the GCGC recommendations. On the other hand, there seems little doubt that the code is widely accepted among German corporations. Sixth, when a holistic approach is used to measure the impact of corporate governance on corporate performance, the proposition that good corporate governance enhances long-term performance is supported. Nevertheless, the causality question still exists and results differ for various studies.

When assessing the above-mentioned research findings it follows that study designs and results vary for different countries. The fact that the Anglo-Saxon market oriented system and the German relation-oriented system are both very successful makes it hard to draw general conclusions. Most studies examining the relationship between corporate governance and performance for the German market focus only on ownership structure or compliance with the GCGC, while shareholder rights and takeover defenses are not investigated. An explanation is that the market for control in the German system is very small compared to the US. Moreover, all studies are based on standards and performance in the past and thus on historic data, and the investigated time horizon varies between one year and several years. Furthermore, different measures of corporate governance and diverse indicators of performance are employed, which can lead to measurement errors. It is recommendable for future research not to focus on only one or few indicators, but to examine the relationship between various indicators of both corporate governance and performance to draw general conclusions. Finally, it is necessary to examine the causality between factors of corporate governance and long-term performance. Critics often argue that corporate governance cannot be regarded as an exogenous variable, but rather one that is influenced by performance and not the other way round. Future research should also focus on this causality question.

Overall, I conclude that no one-size-fits-all model of corporate governance exists. Different companies and different market structures may need distinctive mechanisms of corporate governance to improve performance. Nevertheless, large corporations face more pressure than ever before to attract investors by adopting best practices of corporate governance (Young, 2003). It is also quite wrong to suggest that corporate governance practices alone can assure long-term corporate performance. In fact, corporate values, corporate cultures, or strategies are equally vital drivers of success. Additionally, good standards of corporate governance cannot be regarded as a substitute for the solidity of business models. Thus, it is recommendable for future research to integrate those drivers of performance as well as a firm's external environment measured in terms of growth opportunities (Hutchinson & Gul, 2004; Yoshimori, 2005). On top of this, it can also be argued that corporate governance is advocated for reasons such as fairness, equity, and appearance of propriety, and not only for expected performance effects (Brown & Caylor, 2004). To sum up, there seems to be a connection between corporate governance and long-term corporate performance, both in Germany and the US. However, there are still many unanswered questions and more research is needed for a final assessment.

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