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**CORPORATE GOVERNANCE AND STOCK RETURNS:  
EVIDENCE FROM THE S&P 500**

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**ABSTRACT**

This study analyses the correlation between stock returns, corporate governance, and difference in stock returns between the good and weak governance portfolios. The analysis is based on the updated corporate governance index of Gompers, Ishii and Metrick (2003) and the stock returns of the S&P 500 firms for year 2008.

The good and weak governance portfolio was built and had their stock returns average analysed and compared following the Gompers approach.

A cross-sectional analysis indicated that there was no significant difference in stock returns between the good and the weak governance portfolios. The analysis also reported that the level of corporate governance was insignificant in predicting stock returns. The report on stock returns correlation with corporate governance was negative, which revealed that returns were higher for the good governance firms. Consequently, the overall analyses report was contrary to the study hypotheses.

Finally, the relationship between stock returns, corporate governance, and control variables was also examined and the major findings were not consistent with the previous.

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**KEYWORDS:** Corporate Governance, Stock Returns, Corporate Governance Ratings, Good Governance Portfolio, Weak Governance Portfolio.





## 1. INTRODUCTION

As a result of the global corporate scandals, more attention was centered on corporate governance system, especially in the financial management and the role corporate governance should play in investment policies. This study argues that the differences in the quality of corporate governance are crucial to the firm's stock returns. An edition of the McKinsey and Company (2002) reported that institutional investors were willing to pay more for the shares of well-governed companies, especially, in emerging markets. They were also willing to reward companies that adopted good corporate governance practices. The McKinsey Global Opinion Survey (2002) also shows that 22 per cent of European institutional investors are willing to pay about 19 per cent more, for the shares of a well-governed company. They also considered corporate governance system to be more important than the firm's financial issues, such as profit performance or growth potentials. The argument, therefore, was whether well-governed firms were the key to higher future stock returns for investors or not. The risks returns patterns between corporate governance and future stock returns were investigated to ascertain the impact of corporate governance on the stock market in the US and worldwide.

Most academic debates focus on how corporate governance predicts stock returns. I believe that the study should also include ethical values. This is because the distinction and empirical studies between these three variables can lead to more stock market stability devoid of financial meltdown. Shleifer and Vishny (1997) describe corporate governance as a process that deals with the ways in which suppliers of finance, to corporation, assure themselves of getting a return on their investment. But the present challenge is to identify, clearly, what role corporate governance should play in the operation of the business policies to guarantee her future returns, especially, to the institutional investors. As a result, the correlation between corporate governance and stock markets in predicting future stock returns is very important. The recent US corporate scandals have shown the world the impact of corporate governance failures on the economy, through the collapse of the capital market. Some scholars blamed the corporate governance mechanism, since it shapes and determines how contracts are

administered. Thus, there is little understanding on how corporate governance affects the stock markets because of its complexity. Nonetheless, corporate governance issues should constantly be reviewed to meet the challenges of today. In business terms, corporate governance is associated with risk and many uncertain factors that seem to drive the reflection of future stock returns in the market. My aim in this research is to examine the reasons for the differences in stock returns through corporate governance ratings. However, the idea that corporate governance affects future stock returns and companies' performances can be determined only by continuous academic research and debates.

### **1.1. Background**

The traditional system of corporate governance was recently challenged by the corporate financial crisis due to the international impact as a result of globalisation. The experience shows that corporate governance correlation across markets affects the risk return pattern internationally. Hart (1995) argued that corporate governance refers to the existence of conflicts of interest between shareholders and managers, arising from the separation of ownership and control. This fact explains the recent financial crisis and fraud perpetrated by managers. Sullivan and Shkolnikov (2007) reported that corporate governance is concerned with creating the structure of decision making at the level of the Board of Directors and implementing those decisions. Thus, addressing corporate governance at the management level is vital for the firm's policy construction and implementation. But Gompers, Ishii & Metrick (2003) demonstrated how corporate governance directly affects stock returns through the corporate governance ratings. They discovered a positive correlation in their regression results. And their approach to the study of stock returns and corporate governance is employed in investigating the progress of this paper. Furthermore, there are ethical issues that drive the trends of transparency and corporate governance today. Gold and Dienhart (2007) argued that in this new era of corporate governance, new cultural and legal expectations increasingly promote the ethical goals of protecting shareholders, employees, consumers, and other stakeholders, by fostering ethical economic landscapes which build healthy markets, create fair play, and promote trust.

The essence of stock market and their functionality is based on both exchanges and trading that can be predicted by some market, accounting variables, and technical indicators. Van Landingham (1980) documented that the question on stock market efficiency had received great attention in the financial press over the years. This is so because stock market and corporate governance are not only topic of interest to national policymakers charged with monitoring and promoting market efficiency, but also served as important implications for the management of market participants portfolios. Therefore, corporate governance may be a vital technical indicator to describe overall market activity and predict future stock returns.

## **1.2. Purpose of the Study**

Using ratings from the Gompers et al. (2003) corporate governance index, the corporate governance system was grouped into two portfolios- The Good and the Weak Governance. Good governed portfolio is a reflection of good compliances to corporate governance standards, while the weak governed portfolio is a reflection of poor compliances.

In the United States and other parts of the world, corporate governance of individual companies has ratings. It is assumed that this rating is used to differentiate the firms as well-governed-that is associated with good corporate practices, or weak governed-that is associated with bad. The point is that corporate governance rating is supposed to provide confidence to their respective investors. It shows that some firms have a sense of management and business ethics. It also distinguishes the strength of the companies in their management capabilities. Core, Holthausen & Larcker (1999) stated that it is obvious that one would expect poor stock returns in weak governed firms, but in an efficient market investors should expect no relationship between governance and future stock returns. My objective, therefore, is to distinguish between this two competing explanations.

The main goal of this study is to investigate whether past corporate governance ratings and future stock returns are correlated, by using Gompers updated governance ratings to predict the firm's future stock returns, and to compare the stock returns, and differences between the good and the weak governance portfolios. This will further explain the reliability of the firm corporate governance ratings. In order to investigate these issues, this paper will examine only the firms from the Standard and Poor 500 (S&P 500) index that are represented in the Gompers et al. (2003) historical corporate governance ratings. The idea is to use the 2006 Gompers corporate governance rating to explain the S&P 500 future returns for 2008. This work will also show the empirical evidence between corporate governance, stock returns and the control variables, which is determined by the average and cross-sectional analysis. This study will be in-depth because the control variables are real determinant of systematic risk.

The index of Gompers et al. (2003) is divided into two portfolios (good and weak portfolios). The rating represents the corporate governance evaluation of the various firms that were determined by some set of 24 components. The market and the stock returns as well as the control variables are estimated by using the expected return model. The multifactor model and cross-sectional regression are employed between the estimated stock returns, the corporate governance index, and the control variables. The results are analysed to confirm whether the statistical report of the governance index and the control variables is significant to predict stock returns.

A regression model is an applicable tool in portfolio management, in order to predict the future correlations of stock returns in the stock markets (Solnik, Boucrelle & Fur, 1996). Also correlation is a method of investigating the differences in the return patterns of the stock market. It is the root of the diversification that gives an opportunity to reduce the risk without sacrificing return (Jacquier and Marcus, 2001). In order to find out the return patterns, this thesis concentrates in the selected control variables such as beta, market value, and book to market ratio. These variables are real determinant of systematic risk.

I hope to buttress the aim of this study using the models described above. More so, with respect to the hypothesis and the arguments raised by the subject under review, I hope to provide answers in the theoretical section of this work. Below are some of these questions.

1. Does the system of corporate governance affect the returns pattern?
2. How do the institutional investors affect corporate governance?
3. In the financial world, how reliable are these ratings to the institutional investors?
4. What relevance is business ethics in corporate governance practices?

### **1.3. Contribution**

The goal of corporate governance is to realize the best economic rate of return. The quality of such governance must reflect the firm's market and accounting variables such as beta, average returns, P/E ratio, liquidity ratio, firm value, book-to-market ratio, and equity of the firm. Therefore, different qualities of corporate governance would affect the firm stock returns. Such information is very important for investors and policy makers, as it is a form of investment strategy and portfolio management which can act as an instrument for policy regulation in the financial markets. And, it can determine an optimal market portfolio for an investor. Therefore, the major contributions of this study are as follows:

1. To ascertain the relationship between stock returns and corporate governance variable.
2. To ascertain the reliability and the relationship of the Gompers corporate governance index in explaining the S&P 500 stock returns.

3. To compare the stock returns and average difference between the good and the weak governance portfolios.

#### **1.4. Hypothesis**

The hypothesis is formulated from the theory and previous corporate governance empirical findings. The overview of the literature is provided in the theoretical section. The fundamental hypothesis has the same variables that previous researchers have deduced to have an impact on corporate governance.

The first hypothesis is derived as a result of the increasing awareness of corporate governance ratings. Gompers' et al. (2003) and Drobertz, Schillhofer and Zimmermann (2004) discovered a significant relationship between corporate governance and stock returns. Some economists claim that investors see corporate governance as a necessary building block for successful capital market while other investors see corporate governance not as a legal obligation they must comply with, but as a business imperative that gives edge over competition.

#### **H1:**

*The level of corporate governance predicts the firm's future stock returns.*

The second hypothesis is based on the good and the poor corporate governance portfolios emphasized by Gompers, Ishii and Metrick (2003). Their findings showed a surprising annual excess return based on the ratings of the corporate governance. The portfolios are grouped according to ranks, applications and compliances. Koehn and Veng (2007) assertion whether corporate governance ratings functions as reliable indicators of a company's returns or not was based on the argument as a result of the crisis that deeply eroded the reliability of the corporate governance ratings and their agencies as each agency has a different measurement and criteria.

**H2:**

*There is difference in stock returns between good and weak governance portfolios.*

A crucial question is whether these findings can be explained by market risk. And to achieve this, market variables in determining systematic risk is employed. These variables are beta, market value, and book-to-market-ratio. Beta will test the systematic risk, market value the size through market recapitalization, and book-to-market ratio the growth and value of the firms.

**1.5. Chapter Organization**

This research would be organised in the following sequence. There is the theoretical and the empirical part. The aim of the theoretical part is to introduce the research already done in this field and emphasize on their theoretical conception. Chapters One to Five dwell on the theoretical aspect while Chapters' Six to Seven are the empirical findings.

In Chapter One, an abstract of the entire work is provided to give a preview of this paper. The purpose of the study, which forms the framework of the theoretical findings, explains the research problems in brief.

Chapter Two discusses the previous studies of the problem field and offers a literature review on corporate governance studies. There is an extensive research on the subject under review, which centres on corporate governance and firm performance; corporate governance and business ethics; corporate governance and firm equity. However, this chapter will concentrate solely on corporate governance and stock returns.

Chapters Three and Four give an overview of the theoretical perspectives behind corporate governance practices and corporate governance structures. Others explain the theories behind corporate governance ratings, stock returns and business ethical conducts. It further explains the concepts of institutional investors, non-executive directors, disclosures and transparency. The understanding of the underlying theoretical



assumptions and business practices is essential. This helps to make a reliable conclusion about their values and development.

Chapter Five presents the data, samples and statistical models used in the empirical findings. These include the expected return model, the models for estimating the control variables, the regression model, and the Gompers index. The importance of this chapter is to demonstrate and illustrate, empirically, the objective of this paper.

Chapters Six and Seven are the summation of the empirical part of this thesis. The results are described in Chapter Six. The portfolios predictions are analysed through the mean test and cross-sectional regression. The results are determined by the statistical significance of governance index, and the control variables. The prediction of the T-statistics confirms the significance of the portfolios relationships using the multivariate model. Finally, Chapter Seven presents the conclusion and summation of arguments.

## 2. LITERATURE REVIEW

Corporate governance is a complex study on its own and has been a hot debated topic, mostly, between the shareholders and the principal agents, all looking for a common ground to satisfy agents and maximize shareholders profit. As a result of globalisation, new trend is growing within the corporate knowledge. For this reason, corporate governance has received a lot of attention in the academic literature. Therefore, this thesis is particularly interested on a segment in the past literature, which dealt with how corporate governance correlates with expected stock returns.

Fama and French (1992) described the cross-section of expected stock returns with the role of the market beta, size, E/P, leverage, and book-to-market equity matched with the cross-section of average returns of NYSE, AMEX, and NASDAQ stocks. Non-financial firms are used in their study because of the low leverage over financial firms that see high leverage as distressed. Also used, is the cross-section approach of Fama and MacBeth (1973). Each month a cross-section of returns on stock is regressed on the control variables to confirm the hypothesis in explaining the expected stock returns. The time series of the monthly regression slope provides standard tests of whether different explanatory variables are on average price. The size, E/P, leverages and BE/ME were measured precisely for individual stocks. The result produced a positive significance between the size effect and returns, and a negative significance between beta and average returns. They argued that the relation between beta and average return disappears when the size is controlled. The result also produced positive cross-sectional relationships between average returns and size, average return and book-to-market equity. The Fama and MacBeth regression confirm the importance of book-to-market equity in explaining the cross-section of average stock returns.

LaPorta, Lopez-de-Silanes, Shleifer, & Vishny (2000) provided evidence of expected stock returns with differences in shareholders standards within 27 countries. They investigated 539-firms from over 27 countries which had shareholders who controlled over 10 percent of the votes of the firm. Most of the firm were from the World Scope database from rich countries, based on the 1993 per capital income as well as an

efficient stock market. Firms with greater shareholders right, with low investors' protection, are grouped as firms with bad corporate governance standard; while firms with greater investors' protection and lower shareholders right, are grouped as firms with better corporate governance standards. More so, the good and bad firms' corporate governance standard were also selected on the bases of the laws and regulations of the countries. Their result showed that firms incorporated in countries with better governance standards tend to have a higher valuation.

Gompers, Ishii and Metrick (2003) investigated the impact of corporate governance in the United States to long-term equity returns, firm value, and accounting measures of performance. Their empirical work consists of 24 governance provisions on stock returns for about 1500 US firms from 1990 to 1999. The firms were grouped into dictatorship and democratic portfolio. They examined the returns of each portfolio by holding a long position on one and a short on the other. Their result yielded an average annual return of about 8.5 per cent. They also found out that investors who are investing in firms, which are ranked high, based on the index, are earning 8.5 per cent abnormal returns.

Another assessment by Bauer, Guenster, and Otten (2003) confirms Gompers et al. (2003) position, that good corporate governance is associated with better stock returns. They compare the returns of portfolio consisting of well-governed companies to the return of a portfolio with badly governed companies. They took samples from the FTSE Euro top 300 index which consists of the Euro zone companies matched with Deminor ratings which were stable over time from period 1997-2002. They took a long position in the well-governed portfolio and a short in the badly governed. They discovered positive differences between the two portfolios which suggested that the Deminor rating has a relatively positive influence in determining the share return of a company. They found out that the good governance portfolio outperformed the bad. The difference in the performance, after adjustment of the sector influences, is approximately three percent annually.

Drobertz, Schillhofer and Zimmermann (2004) investigated the impact of corporate governance on stock returns between the periods of 1998-2002 in Germany. Their data was limited to one observation and they assume constant historical ratings. They first sent out questionnaires to 253 German firms in different market segments and received answers from about 36 percent of these firms to enable them to construct their sample between well-governed firms and poorly governed. After accounting for different factor exposures of the portfolios, their result corresponds with the findings of Gompers, Ishii and Metrick (2003); it showed a surprising annual excess return of 16.4 percent.

Core, Guay & Rusticus (2006) examined how weak governance causes weak stock returns from the angle of the firm operating performance and investor's expectation. They constructed their samples by using the G-index score and the IRRC data that contain large companies from the S&P 500. They matched the G-index to stock return data for over 12, 584 firms-years. Missing data reduced the sample size. Their result was quite different from the Gompers et al. (2003), Bauer, et al. (2003) and Drobertz, et al. (2004). Cores et al. (2006) findings show no evidence that the stock underperformance surprises the market. Their overall results do not support the hypothesis that weak governance causes poor stock returns.

From the foregoing, it is evident that there is a continuous debate among scholars on the relationship of stock returns with corporate governance. This means that extensive and rigorous research is needed on such matters. However, in an efficient market there should be no relationship between corporate governance and stock returns. But the 2008 financial crisis reveals that stock returns and corporate governance were rigorously affected through interactions with macro-economic news (McQueen and Roley 1993; Vähämaa, 2009).

### **3. GOVERNANCE STRUCTURE AND STOCK RETURNS**

The US has unambiguously shareholder-oriented management and investor culture, known as the shareholder system. This system ushered a better economic output during booming stock periods. This is the setting from which the support for global convergence on shareholders system was built. Commentators from other part of the world, especially Japan and Germany with stakeholder systems, credited the shareholder-oriented corporate governance of the US and Britain for strong economy and stock market (Hansmann & Kraakman ,1992). A vibrant and booming stock market is very important because it is impressive to the investing public, media and policymakers. Thus the market based shareholder's system was the engine to the American stock market bubble of the 1990s. That set the precedent for wider support and emulations (LaPorta, Rafael, Lopez de Silance, Florencio, Shleifer, Andrei, Vishny & Robert, 2000).

#### **3.1. Stock Returns over Historical Periods**

The shareholder's governance system of the US has been in place only since the 1980s. Therefore stock returns prior to that period would not be relevant in evaluating the effectiveness of the shareholder's system because the US corporate governance has changed over time. For instance, in the 1980s, power shifted from managers to shareholders when corporate takeover market arose, but with a relative constant strong social democratic tradition (Hansmann & Kraakman ,1992).

From 1980-2000, the US stock market experienced falling interest and inflation rates (Binswanger, 1999). The US historical record from 1902 to 2001 shows that the stock market return rose to 11.2 percent annually from 6.9 percent annual return rate. The US also enjoyed historical high stock returns from 1946 – 1965, a period during which the now criticized manager –oriented model characterized American corporate governance. This led to the belief that managers' pursuit of multiple interests lowered the overall efficiency of corporate governance. However, at the same period (1980-2000) the stakeholders corporate governance stock markets in France, Sweden, the Netherlands,

Spain, Denmark, and Belgium all outperformed the US stock market. The argument posits that there is no one system of corporate governance that is attributed to high stock returns. So, caution must be observed when using historical periods in ranking national stock returns since stock markets need time to recover from prolonged depressed stock prices. This arises due to social, political, and economic factors that have little to do with corporate governance (Hansmann & Kraakman, 1992).

**Table 1 Stock Returns in 10 Countries (1980-2000)**

<b>Country</b>	<b>Annual Stock Returns (1980-2000)</b>	<b>Corporate Governance</b>
Sweden	17.3	Stakeholder
Netherlands	16.1	Stakeholder
Spain	13.5	Stakeholder
France	12.7	Stakeholder
Britain	12.2	SH
Denmark	12.0	Stakeholder
Belgium	11.4	Stakeholder
US	11.2	SH
Germany	10.5	Stakeholder
Switzerland	10.4	Stakeholder

Dimson, Marsh & Staunton (2002).

### **3.2. Minority Shareholder**

There are differences in equating high stock returns in countries with less legal protection for minority shareholders to high returns in countries with greater minority shareholder's protection. There is big concern in countries with weak shareholders rights, where the controlling shareholders' expropriate minority shareholders. Thus, in these countries, the minority shareholders may not enjoy the high returns if their shares are heavily discounted in value due to the risk of appropriation, even if the stock market is making good profit. The increase in stock prices only accrued to shares in the controlling Stakeholders. Germany, Sweden, France, Netherlands provide minority shareholders right than the US and Britain (La Porta et al. (1998, 2000). The argument is that those countries with greater minority shareholders right enjoy high returns during high stock market performance. While, those with less minority shareholders right in the stakeholder economy may not actually enjoy high returns during rising stock market performance. Hence, the comparison between minority shareholders right in different countries is misleading in ascertaining the true values of stock returns. To balance this argument, there must be provisions to show that the appropriation, which exists in both shareholder economy are comparable (Nenova, 2003).

#### **3.2.1. The Role of Institutional Investors**

Institutional investors have become important participants in the US equity markets, especially in the past two decades. The number of institutional investors and the amount of funds they manage have grown dramatically. Institutional ownership has grown from 35 per cent of the equity market in 1981 to 58 per cent by the end of 2002. This increase represents a substantial shift in the investment preferences of American households. Only 19 per cent of the US households invested in equities in 1983, the percentage increased to 36.6 per cent by 1992 to 49.5 per cent by the end of 2002. Most household investment is channelled into equity markets through institutional investors such as mutual funds and retirement accounts. Institutional investors have proven to be successful in managing client's money. They have been able to deliver significantly

risk-adjusted excess returns. Significant stock selection skills have helped institutional investors to enhance their overall portfolio performance (Binay, 2005)

The Council of Institutional Investors (CII) is an organization of over 120 public and private pension funds with a total asset of its member funds exceeding £1 trillion. The objective of the organization is to encourage member funds, as major shareholders, to take an active role in protecting plan assets. They direct their activism towards the boards of directors and managers of listed firms for the purpose of inducing them to make changes necessary to improving firm performance. The council releases its focus list of under performing firms yearly. This marks the rise of the shareholder's activism and explains corporate takeover due to the decline of the stock market. The rise of the institutional investors provided effective bills for anti-takeover stratagems by firms and anti-takeover legislation passed by state governments. It becomes imperative to ask a vital question that to what extent can shareholder activism substitute for an active market for corporate control, in disciplining firms that deviate from shareholders wealth maximization? (Song & Szewczyk, 2003).

### **3.2.1. Non-Executive Owners**

Non- executive owners can play a proactive role and still bring wider perspective through their actions that can significantly improve a company's corporate governance arrangements. They do this by expressing an independent viewpoint on conflicts of interest; protecting the rights of minority interest while ensuring that they act in the interests of the company. Recently, non-executive directors face increasing pressure to demonstrate the above benefit especially at this time when corporate failure is marked with corruption. Irish law makes no distinction between executive directors and non-executive directors. The reason is that they would be subjected to the same liability as any other director, when compensating their company for loss, as a result of the breach of contract by directors. They are also subjected to the same rules in relation to restriction and disqualification (Semple, 2009).



### **3.3. The Importance of Corporate Governance Ratings**

In recent times, markets are embracing the norm of corporate governance, which helps to checkmate the lag in investment risk while enhancing corporate reputation. Corporate governance becomes essential in the face of a prolonged bull market and overheated market phenomenon.

Chief Executives and Chief Financial Officers of any corporation are invested with power and authority to carry out functions in the best interest of the organisation. However, with regards to finances belonging to the public, especially in Public Limited companies, laws are stipulated which act as checks and balances for the market. These laws ensure that the share holders and public's interest are protected. And these checks and balances involve the following: the Board of Directors, Accountants, Lawyers, Securities Analysts, Proxy Advisors, Investment Bankers, Audit Committees, Regulators and even the Press. Some of these professionals have carried out their jobs with great level of professionalism while others have failed. There are still loopholes in this system. It is impossible for the private sector to monitor corporate governance at publicly held companies on a regular basis. Therefore, to help institutional investors to measure the rate of a company's performance, and assess their governance practices to ascertain when there is a real investment risk, a numerical rating system was invented. (Sherman, 2004).

Some companies involved with rating of firms offer cross-border or domestic rating services. For example, the Deminor is a domestic rating service of an independent consulting which focuses on Western Europe. Its services include investment advice on corporate transactions, proxy voting recommendations, litigation support and shareholder activism. The Deminor Rating Service is available to both corporations and investors. They offer a soliciting corporate governance analysis, ratings and investor report to the company. And the company decides whether the rating and investor report should be made public or not. Deminor also sells subscriptions to investors for unsolicited ratings. Their services currently cover the FTSE Eurotop 300 and they adopt a methodology based on approximately 300 corporate governance indicators.

Most of these rating firms whether solicited or unsolicited, have the same applications, but uses different methodology and corporate governance indicator to measure a company's corporate governance system (Sherman, 2004).

Sherman, (2004) recommended the efforts of the rating initiatives but still asserts that the real reform must take place inside the boardroom and the company itself.

Koehn and Veng (2007) questioned whether corporate governance ratings have functioned as reliable indicators of a company's shareholder's returns. This is so, because after the wave of accounting and corporate governance scandals of corporations like Enron, WorldCom, Hollinger, Nortel, Xerox, Cendant, Royal Ahold, to mention but a few, investors began to demand more information about how major companies are actually being managed. For instance, Moody's, Fitch and Standard & Poor's are rating agencies that have failed to give accurate report of the state of these companies even when dangers loomed. It was only after the press licked out the problems of Parmalat did S & P downgraded the company's debt of eight notches. This matter was a huge failure at the credit ratings agencies and has raised several questions about the reliability of corporate governance ratings.

### **3.4. Reliability of Corporate Governance Ratings**

Koehn and Ueng (2007) argued that corporate government ratings agencies have not agreed in their assessment of particular companies. For example, in November 2002 before disclosures about the accounting problems of Freddie Mac and Fannie Mae, Governance Metrics International had assigned both companies a "well below average ratings." In the spring of 2004, S & P gave Fannie Mae, a top governance rating of 9.0. Moody's, at the same time, granted both Fannie Mae and Freddie Mac AAA ratings. Even the Corporate Library praised Fannie Mae, recommending the company's rigorous approach to corporate governance. But within a lag of two years, the performances of these agencies were puzzling, given that a lot changed at either company. Furthermore, while Corporate Library awarded Citigroup an "F", GMI ranks the company's governance "above average". Honeywell got an "F" from Corporate Library, but GMI

ranked it “above average”, (Duffy, 2003). Thus a clear indication of very conflicting results. It becomes pertinent to ask: Whose ranking is correct?

The credibility of the evaluators was in doubt and the mode of evaluation needed to be reviewed. However, Koehn and Ueng (2007) discovered that credit ratings agencies in America and Europe are powerful, but doubt whether the GRAs that focus exclusively on governance will be able to obtain the same degree of influence. They stressed that those companies wishing to tap the equity markets suffer if they do not obtain a credit rating. Some investment funds in America and Europe are prohibited from investing in a company’s debt, or equity, that does not bear a GRA rating of investment grade, regardless of how good that company’s governance rating is. However that seems, at present, the market does not appear to impose any penalty on firms with low governance ratings. They also maintain that although some mutual and pensions funds look at governance ratings, but have not made their investment decisions contingent upon such. For instance, In Europe, stock appreciation of firms shows no significant positive correlation with CGQ ratings as well as has several reasons which doubt the value and viability of governance rating systems.

### **3.5. Business Ethics, Disclosures and Transparency**

The perception of the public on corporate business ethics changed dramatically after the discovery of the unethical acts by management of WorldCom and Enron. The scandal reduced consumer confidence and portfolios investment. The faith of the accounting profession was undermined. Since then, corporate stakeholders have called for more transparent financial reporting and evidence of better ethical conduct. Restoring the public confidence becomes vital and efforts to do this entail adopting best practices of ethical conduct. One example of a good practice in transparency is for a corporation to make its code of ethics readily available for public scrutiny, on its website. The close down of Andersen and the collapse of Enron was a total blow in the corporate world that shook corporate America. As a result, stockholders adjusted their decision-making processes to reflect their concerns over unethical business practices. For instance, in 2003, PricewaterhouseCoopers white paper went beyond current requirements in order

to achieve a deeper level of transparency in corporate reporting. In 1988, defense contractor, Sundstrand, was fined \$227 million for ethical violation. Sundstrand stocks fell by 25 per cent and its image was tarnished by the incident. Sundstrand was successful in changing its ethical culture through internal initiatives and parallel to the ethical growth process or spectrum (Bernardi & LaCross, 2005).

Ethical spectrum is a mode of managing morality (Rossouw & Van, 2003). This spectrum includes immoral mode, reactive mode, compliance mode, integrity mode, and totally aligned organisation mode. The immoral mode is concerned with the company's bottom line, which overlooks and alienates the company's stakeholders, hence stakeholders agitation over this trend. In the reactive mode, the corporation tries to protect themselves against the dangers of unethical behaviour. The compliance mode is the company's desire to have a good ethical reputation that focuses on a rule based approached to ethics. The integrity mode requires the firm to become more proactive in the promotion of ethical behaviour while engaging all of its stakeholders in walking the ethics talks. The integrity mode deals with a company's environment and a responsibility that rest at the very heart of the company's obligation to create a corporate culture of transparency and accountability.

## **4. STOCK RETURNS AND MARKET EFFICIENCY**

Investors monitor, closely, how major markets react and they apply this knowledge as part of their investment strategies in their interested stock markets. The US market is regarded as the most influential market, and predicts other national market returns - the United Kingdom, Germany, Japan and Canada. Some economists found out that the US market react to some fundamental factors or news at a faster rate. Shackman (2006) and, Nandha and Hammoudeh (2007) researched further on the economic variables or world news that might explain the movement in national stock markets. They found out that observed economic variables, such as exchange rates, world market portfolios, dividend yields, interest rates, industrial production index and commodity prices, could explain only small parts of the movements in a national stock market returns. Connolly and Wang (2003) also examined this theory and discovered that macroeconomic news announcements made in the US, the UK, and Japan accounted for a very small part in explaining the return co-movements within national markets.

### **4.1. Operation of the Stock Market**

Keane (1983) “defined the operation of the stock market as a system that involves some processes which are made up of three distinct markets”: The first is the Capital Allocation Market. This is a centre where funds from savers are distributed amongst productive users of capital. The second system is the Financial Securities Markets and it involves securities owned by the suppliers of capital traded by them. Lastly, there is the Financial Information Market. In this market, information is transmitted from the productive users of capital to the suppliers. The relationship with the stock market operations are the suppliers of capital, the users of capital and the informative markets to which the operation revolves. The stock market operations have changed drastically due to modern technologies while maintaining their basic function- which is to provide and allocate capital market primary roles. The primary roles are to provide and allocate capital funds to firms with profitable investment opportunities; to offer an avenue of

liquidity for individuals to invest current income, or borrow against future income, which enables them to achieve their preferred pattern of investment.

The investment in capital market involves a great deal of uncertainty and risk. It has a way of transferring such risks among the parties involved in these transactions. Today, credit crisis explains the transfer of risk amongst parties involved. For instance, the credit crisis in the US spread to other financial institutions all over the globe, in such related financial transactions (Financial Times Online 2008, September 30). The capital market has proven that stock prices are meaningful in the sense that it reflects real economic variables and not simply random numbers. This also explains why the stock market makes headlines in the media and is closely monitored by investors all over the world (Lorie, Dodd & Kimpton, 1985).

#### **4.2. Market Efficiency Theory**

The premise on Market efficiency has no validity assumption. It cannot be based on a condition of a certain proportion, or that there are talented or skilled investors. It cannot be ascertained that most or indeed any investor has access to all available information or can comprehend all information. There is no consensus among scholars on the significance of such information (Keane, 1983). Some economists describe efficient market with respect to a set of information, but assert that it is impossible to make profits by trading on the basis of such sets of information (Kaplan & Roll, 1973).

Capital market efficiency relies on the ability of arbitrageurs to recognise the lapses in prices and, then, use this opening to make a profit. (Copeland, Weston & Shastri, 2005). Capital market is of the assumption that security prices fully reflect all the available information at all times. The competition among investment analyst lead to a stock market in which prices at any time reflect true values (Brealey & Myers, 1996).

#### **4.2.1. Weak Form of Market Efficiency**

The weak form of market efficiency states that current securities prices fully reflect all the information implied by the historical sequence of price and returns, so that the knowledge of that sequence is of no value in forming expectations about future prices. The early investigations of weak market were in two major forms: test of serial independence in security returns and test of the performance of trading rules based only on prior performance. Boldt and Arbit (1984), found out that the monthly price change, in the future markets, are very close to random and the distributions are very close to those expected that can signal profit opportunities on the assumption that each month's changes independently from the previous months, with a 0.57 probability of a monthly rise and 0.43 of a decline. But, Osborne (1959) documented that certain amount of irrationality exists in stock price movement in the structure of price behaviour. For example, the tendency of closing prices concentrated at the highs or lows for a trading day, did not detect any inefficiencies that would open profit opportunities to anyone other than the exchange specialists (Boldt & Arbit, 1984).

#### **4.2.2. Semi-Strong Form of Market Efficiency**

The semi-strong form of market efficiency emphasizes that securities prices fully reflect all generally available public information, so that investors cannot profit abnormally from acting on such information. Lorie et al. (1985) agrees to this assertion and stated that the semi strong form of market is where the current prices fully reflect public knowledge, on the underlying companies. And the efforts to acquire and analyse this knowledge, cannot be expected to produce superior investment results. The analysis on semi-strong form of market focuses on the adjustment of securities prices to a particular kind of information. For example, a stock split, dividend change or earnings report. Each of the tests contributed to the findings on the validity of the market, but they were not conclusive. Fama, Fisher, Jensen and Roll's (1969) test the semi-strong form of market. Their investigation was on stock price performance on stock split announcement dates to detect any unusual return patterns. Since the split changes the

denomination of ownership, announcement of a split does not necessarily provide the market with new information. However, Fama, Fisher, Jensen and Roll (1969) presumed that the splits may be associated with the appearance of more fundamental information involving dividend (Boldt & Arbit, 1984).

#### **4.2.3. Strong Form of Market Efficiency**

Strong form of market efficiency shows that, not even those with privileged information can make use of it to secure superior investment results (Lorie et al. 1985). The strong form of market securities is where the prices fully reflect all information, public proprietary and even, in extreme interpretation, monopolistic. It means that even investors with special information cannot profit from its use. There is very little support for the existence of the strong form of market, Osborne (1959) findings contradicts a strict interpretation of the strong form efficiency with monopolistic information. Testing the strong form of market is to verify whether there is a group of professional managers who have consistently outperformed the market average. Unfortunately, it is impossible to answer this question conclusively, given available data and statistical techniques. Tests were conducted by various economists but none has strong evidence on the strong form of market (Boldt & Arbit, 1984).

Another source of information that can be calculative is the inside information. This information strongly contradicts the strong form of market. Lorie et al. (1985) warns that insider trading is illegal. He further reveals that it exists as a result of the announcements by corporate officials who pass information to the stock market. These insiders can make profit by trading before making the announcements. Another example reveals that there is evidence that public earnings announcement forecasted by corporate managements are associated with positive stock price movements. The corporations' management could earn substantial positive returns by trading in their firm stock prior to announcing forecast.



## **5. RESEARCH METHODOLOGY**

This work is theoretical and empirical as well as quantitative based. Information and data for this research is source from several scholarly documentations. University of Vaasa possess a financial market data bank as a source for the S&P 500 data. The Yahoo finance possesses internet data web as a source for all vital accounting information on the S&P 500 firms. The internet is the source for all market information. The Gompers index is source directly from Gompers website. Other information is source from the University of Vaasa library and data banks in which journal articles and text books are consulted.

### **5.1. Data Description**

This research utilizes the historical information index values of the S&P 500 and Gompers et al. (2003) corporate governance ratings. The corporate governance index and the control variables will represent my explanatory variables while the dependent variable represents the future stock returns values. The market returns and the stock returns are estimated using the expected return model. The control variables are beta and are estimated from the excel slopes model (known\_Y's, known\_X's). It is the returns slope of the linear regression line through the given data points (market returns, stock returns). The Yahoo finance provided the information and the data for the market-value (size) from the daily market summary that represents the recapitalization values. Also, the Yahoo finance provided the values for the book-to-market equity through the net tangible assets (book equity), and the ratio are estimated using the model mentioned below. The stock price and common shares outstanding are also from the Yahoo finance. These control variables are useful tools in analysing the future stock returns.

### 5.1.1. Standard and Poor 500 (S&P 500)

The Standard and Poor 500 index represents the capitalization-weighted index of 500 stocks. It began in 1957 and represents the best single US equities market that includes 500 leading companies from leading industries of the US economy. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. They are traded on either the New York Stock Exchange or NASDAQ. They consist mainly with the large cap segment of the market. This work makes use of the entire 500 firms that have up-to-date available data at the time of this research.

**Table 2 Sample of S&P 500 Stock Returns**

<b>Name</b>	<b>2007</b>	<b>2008</b>
3M	0.082	(-0.304)
Abbott	0.153	(-0.044)
AK-Steel	1.736	(-0.791)
Altria Group	0.173	(-0.348)
American Express	(-0.143)	(-0.637)
Avery Dennison	(-0.218)	(-0.376)
Family Dollar Store	(-0.344)	0.392

### **5.1.2. Gompers, Ishii & Metrick 2003 Corporate Governance Index**

This index is constructed using the 24 governance rules derive from the publications of the Investor Responsibility Research Center (IRRC). The IRRC is the main data source for Gompers index constructions. This is because they published detailed listings of corporate governance provisions for individual firms in Corporate Takeover Defenses. The governance index acts as a proxy for balance of power between shareholders and managers. The 24 governance rules is a provision derived from variety of public sources such as the annual reports and the proxy statements from the Fortune 500 companies, Forbes and Business week publications. The 24 governance rules also consist of other sources that include corporate by laws and charters, by law provisions, firm-level rules, and state laws. The 24 provision is further grouped into five major corporate governance categories. A point is reduced from every firm that has provision to reduce shareholders right and a point is awarded to firms which increase shareholder's right. The firm with the strongest shareholder's right is awarded G-score of 1 point and the firm with the weakest shareholder's rights is awarded G-score of 19 points.

The firm with the strongest shareholder's right or having lowest management power are grouped into well-governed portfolio and the firm with the weakest shareholder's rights or highest management control are group into bad-governed portfolio. The firm with the highest point are therefore the weak stocks, and the firm with the weakest points are thus, the good governed stocks. The data is from 1990 to 2006 and consist of 14000 firms' observations and ratings. This thesis will make use of the same 500 data representing the S&P 500, to form a portfolio between the better governed and the weak governed firms. Firms from S&P 500 were matched with the same firms from the Gompers index from the lower score range to represent the portfolio of the strongest corporate governance. The bottom firms with the higher score range will represent the portfolio of the weakest corporate governance. This strategy separates the two portfolios under review. The Gompers index only provided data up to 2006. Therefore, the 2006 ratings were matched with the 2008 stock returns data of the S&P 500 firms. This way, the strength of the corporate governance in 2006 should be able to reflect in the future stock returns for 2008 year period. This is because corporate governance

structures change slowly and the implications of the governance index can be seen with a significant lag.

**Table 3 Gompers Governance Provisions and Selections**

Percentage of Firms with governance provision

<b>Provisions</b>	<b>1993</b>	<b>1995</b>	<b>1998</b>
<b><i>Delay</i></b>			
Classified board	80.0	85.7	87.9
Blank check	60.4	61.7	59.4
<b><i>Protection</i></b>			
Compensation plans	65.8	72.5	62.4
Contracts	15.2	12.7	11.7
<b><i>Voting</i></b>			
Bylaws	16.1	16.0	18.1
Charter	3.4	3.1	3.0
Cumulative voting	16.5	14.9	12.2
Secret ballot	9.5	12.2	9.4
<b><i>Other</i></b>			
Directors duties	7.4	7.2	6.7
Fair price	35.2	33.6	27.8
<b><i>State</i></b>			
Business combination law	88.5	88.9	89.9
Directors duties laws	5.0	5.0	4.4
<b>Number of firms</b>	1343	1373	1708

Sources: Sample table lifted from Gompers et al. (2003). It contains selected governance provision between 1993 and 1995. The data are drawn from IRRC corporate Takeover Defenses Publications.

### 5.1.3. Good Governance Portfolio

The objective of this study is to empirically distinguish the good governance portfolio from the weak, with the help of the Gompers index, beta, market value and book-to-market variables. The governance portfolio was constructed after the Gompers governance ratings were matched with the S&P 500 firms. In this study, the Good Governance Portfolio consists of 250 firms. The good governance portfolio of Gompers ratings are between 3 and 9 points. The good governance sample size is represented as follows:

**Table 4 Good Governance Distribution Size**

Good governance index	No. of Firm's
CG =3	3
CG =4	4
CG= 5	14
CG =6	35
CG =7	47
CG =8	65
CG =9	82
Total No. of Firm's	250

The above 250 firms consists of all the samples for the good governance portfolio.

**Table 5 Sample of the Good Governance Portfolio**

This is the sample representation of the good governance portfolio during the empirical testing.

<b>Name of Firm</b>	<b>Gompers et al. 2005 CG-index</b>	<b>Gompers et al. 2006 CG-index</b>
Wal-mart	5	6
Du Pont de Numours	5	6
PepsiCo	4	4
Amazon	3	4
South Company	5	7

#### **5.1.4. Weak Governance Portfolio**

The weak governance portfolio in this study consists of 216 of the S&P 500 firms. Incomplete data reduced the sample size. The Gompers ratings of between 10 and 16 points were matched with the correspondence S&P 500 firms. The sample size of the weak governance portfolio is represented as follows:

**Table 6 Weak Governance Portfolio Distribution Size**

<b>Poor governance ratings</b>	<b>No. of Firm's.</b>
CG =10	62
CG =11	67
CG =12	39
CG =13	26
CG =14	11
CG =15	8
CG=16	3
<b>Total No. of firm's.</b>	<b>216</b>

In this study, the 216 firm's represents the weak governance portfolio.

**Table 7 Sample of the Weak Governance Portfolio**

The table below represent the selected sample of the weak corporate governance index.

<b>Name</b>	<b>Gompers et al. 2005 CG-index</b>	<b>Gompers et al. 2006 CG-index</b>
Ameren	10	10
Amerisource	10	11
Mylan Lab	14	14
PPG Industries	14	15
Exelon	16	16

The above tables show the good and weak governed portfolios as posited by the Gompers et al. updated (2006) ratings. The total number of the portfolios is 466. They represent the total number of complete available data at the time of this research. As I mentioned earlier, the lower the CG-index value the better the corporate governance ratings of the firm, while the higher the CG-index values the poorer the corporate governance ratings of the firm.

## **5.2. Methodology**

The purpose of this study is to examine stock returns relationship with corporate governance. Cross-sectional analysis was employed to determine stock returns average and the significant level of the independent variables that explain stock returns. The multivariate model through the cross-sectional analysis explains the relationship between stock returns, corporate governance and control variables. The empirical test begins with simple mean test of each estimated sample. The correlation test determines if stock returns are higher for firms' with lower values of CG-index. The cross-sectional analysis is use to ascertain the difference in returns between the portfolios, and whether the level of the CG-index or the control variables would predict stock returns or not. The control variables consist of the market value, book-to-market ratio and beta, which are used to measure the economic characteristic of the firm in relation to the risk of the stock, and they are real determinants of systematic risk. They are widely discussed and used by past scholars: for example (Fama and French 1992; Datta and Dhillion 1993; Kallunki 1996; Kothari and Warner 1997). Cross-sectional analysis shows the correlation between stock returns and corporate governance, it is a tool for estimating how the future stock returns performance are linked to corporate governance, beta and other control variables.



### 5.3. Market Beta

The beta variable represents the systematic risk for the S&P 500 stock returns, and they are calculated from the Microsoft Excel application, with the help of the slope formula. The market beta was estimated from the Excel slopes model.

$$B_i = (\text{Market returns } R_{mt}, \text{ Stock returns } R_{it}) \quad (1)$$

It is the returns slope of the linear regression line through the given data points (market returns, stock returns)

This study used the beta coefficient to predict returns through the regression. According to capital asset pricing model (CAPM), the beta coefficient captures the systematic risk of a firm. The empirical correspondence of the beta can be regarded as a measure of the systematic risk, and it can be used to make risk adjustment.

### 5.4. Expected Return

This involves the estimation of the S&P 500 firm's stock returns and the market returns. In this thesis, they are calculated as follows:

$$\text{Returns} = E(r) = \frac{P_1 - P_0}{P_0} \quad (2)$$

Where;

$P_1$  = Price at the end of the year.

$P_0$  = Price at the beginning of the year.

### 5.5. Book-to-market-Ratio

Book-To-Market-Equity Ratio is one of the control variables that determine whether a security is undervalued or overvalued. It explains the relative distress nature of the firm

(Fama and French, 1993). When the ratio is greater than 1, the company is considered undervalued because its assets are worth more than its value in the stock market. When the ratio is less than 1, the company is said to be overvalued- the assets are worth less than its market value in the stock market. It is calculated thus:

$$\text{Book-to-market ratio} = \frac{\text{Book Equity or Net Tangible Assets}}{\text{Market Value of the Equity}} \quad (3)$$

### 5.6. Market Value of the Firm (size)

Market Value of the Firm is used to measure the size of the firm. It is the market recapitalization that is calculated by the number of shares outstanding and the current stock price.

Market Value = Current Stock Price x Total Common Shares Outstanding (Fama and French, 1992).

### 5.7. Multivariate Model

The multivariate model is one of the most important models used in this study to carry out the empirical test through cross-sectional analysis. The corporate governance and the study control variables predict stock returns. The control variables are beta, market value and book-to-market ratio. The hypotheses are tested with the multivariate model to ascertain the significance of the level of corporate governance to explain stock returns with the measures of the t-statistics instrument. See table 10 and 14.

$$R_{it} = \alpha_i + \beta_1 cg + B_2 B + +B_3 mv + B_4 bmr + e_t \quad (4)$$

Where;

$R_{it}$  = Stock returns 2008

$\alpha$  = Constant (intercept)

$Cg$  = Corporate governance index

$B$  = Beta

$Mv$  = Market value (size)

$Bmr$  = Book-to-Market Ratio

$E_t$  = Error term

The multivariate regression model determines whether the corporate governance index has any relationship with stock returns. Also, it will identify which control variables best explain future stock returns.

## 6. EMPIRICAL RESULTS

The primary goal of this paper is to study the relationship between corporate governance and stock returns. The other is to establish whether stock returns are higher for firms' with better governance portfolio. This is to ascertain that the level of corporate governance may predict stock returns. This paper examines the 2008 S&P 500 returns, and the updated Gompers 2006 past governance index.

**Table 8 Descriptive Statistics of the Corporate Governance Portfolio**

	<b>Stock Returns</b>	<b>CG-index</b>	<b>Beta</b>	<b>Market value</b>	<b>BMR</b>
Mean	-0.36	9.4	0.5	21.8	2.9
Median	-0.37	9.0	0.5	8.5	0.5
Maximum	0.39	16.0	1.1	904.8	97.1
Minimum	-0.97	3.0	0.1	1.2	-69.9
Std. Dev.	0.2	2.4	0.2	53.6	12.0
Skewness	0.1	0.1	0.3	10.8	2.9
Kurtosis	2.8	2.8	2.7	163.3	31.6
Observations	466	466	466	466	466

Table 8 gives the overview of the samples average, skewness and the kurtosis. The stock returns measure of skewness is positive. This implies that stock returns

distributions is non-symmetric. The kurtosis has low value less than 3, indicating high thinner tails distribution, high volatility, and larger degree of variance from the mean. The stock returns mean is negative while the median is greater than the mean. It confirms that the data are skewed. The table reveals that CG-index has a minimum value of 3, which represents the lowest level of CG-index and the maximum value of 16, which reveals the highest level of the CG-index, the median is 9. The standard deviation explains how the distributions are spread closer to the mean. The control variables have positive mean with varying standard deviations, skewness and kurtosis. It confirms that the samples are non-symmetric. The sample mean test is based on the cross-sectional average for each variable. The sample data are not in logs.

### 6.1. Correlation of Stock Returns and the Independent Variables

In order to investigate whether corporate governance has relationship with stock returns, I examined the pair-wise correlation relationship between stock returns and corporate governance and the control variables. The correlation coefficient explains the linear relationship with the variables.

**Table 9 Pair Wise Correlation Matrix**

	RETURNS	CG-INDEX	BETA	MARKETVALUE	BMR
RETURNS	1.				
CG-INDEX	-0.03	1.			
BETA	0.55	0.004	1.		
MARKETVALUE	0.02	-0.12	0.09	1.	
BMR	-0.06	-0.04	-0.14	-0.03	1.

Stock returns relationship with corporate governance is negative. It reveals that stock returns are higher for firms with better governance. Beta has positive relationship with stock returns and more significantly correlated than other variables. The BMR represents book-to-market equity.

**Table 10 Cross-Sectional Analysis of Governance Portfolio**

To ascertain the relationship between corporate governance and stock returns, a cross-sectional analysis and the multivariate model was employed to test the significance of the governance index.

<b>Variable</b>	<b>Coefficient</b>	<b>T-statistic</b>
CG-Index	-0.003876	-1.052276
Beta	0.641469	14.08271**
Market Value	-0.000129	-0.773796
Book-To-Market Equity	0.000256	0.343290

\*\* represent 1% statistical significant level

Table 10 shows the results of the cross-sectional analysis between stock returns, corporate governance and the control variables. Corporate governance coefficient is negative but statistically insignificant. The analysis suggests that corporate governance do not have significant relationship with stock returns. Therefore the level of 2006 Gompers index was not significant in predicting 2008 S&P 500 stock returns. The beta variable has significant relationship with stock returns and can predict stock returns at 1% statistical significant level. The multivariate model describes how corporate governance and the control variables are connected to stock returns. The dependent

variable is stock returns and the independent variables are corporate governance, beta; market-value and book-to-market ratio. This regression employed the multivariate model in equation (4), described in chapter 5.

**Table 11 Test of Fitness of the Multivariate Model**

Adjusted R-Squared	0.301405
F-Statistic	51.15538
Prob(F-Statistic)	0.000000

The adjusted R-square presents the strength of the relationship between stock returns and the control variables. The significant large value of the F-statistic suggests that the model is very fit. The multivariate model in equation 4, described in chapter five was employed in this regression.

## **6.2. Comparison between Good and Weak Governance Portfolios**

This is to examine whether there is difference in stock returns between good governance portfolio and weak governance portfolio. Cross-sectional average of all the samples was estimated and compared, and cross-sectional regression was carried out to ascertain the significance of the difference in returns between the portfolios.

**Table 12 Descriptive Statistics of the Good Governance Portfolio**

	<b>Stock Returns</b>	<b>Good CG-index</b>	<b>Beta</b>	<b>Market value</b>	<b>BMR</b>
Mean	-0.36	7.5	0.52	25.25	3.28
Median	-0.35	8	0.52	9.3	1.05
Minimum	-0.97	3	0.08	1.21	-69.92
Maximum	0.39	9	1.12	334.34	65.66
Skewness	0.07	-0.9	1.4	3.60	0.3
Kurtosis	2.7	3.3	2.8	18.55	20.44
Standard Dev	0.2	1.3	0.2	43.48	11.94
No. of firms	250	250	250	250	250

Table 12 shows the cross-sectional average of stock returns and the independent variables of the good governance portfolio. The table indicate that stock return is negative. The average return of the good governance portfolio is -36%. Stock returns distribution is non-symmetric and the kurtosis is thin tails distribution. The lower standard deviation indicates that the distributions are spread closer to the mean, which is very important for investors as it indicates that the stocks are low risk securities. The table shows that the CG- index has minimum of 3 and maximum of 9, which represents the range of the good governance portfolio. The market value and the book to market equity reported high standard deviation, kurtosis and skewness. It indicates that the samples are non-symmetric. The model used in the analysis was equation 4, presented in chapter 5.



**Table 13 Descriptive Statistics of the Weak Governance Portfolio**

	<b>Stock</b>	<b>CG-index</b>	<b>Beta</b>	<b>Market</b>	<b>BMR</b>
	<b>Returns</b>			<b>Value</b>	
Mean	-0.37	11.5	0.55	17.85	2.46
Median	-0.38	11	0.54	8.05	0.23
Maximum	0.24	16	1.05	904.77	97.12
Minimum	-0.92	10	0.13	1.39	-30.94
Standard Dev	0.2	1.4	0.2	63.2	12.2
Skewness	0.2	1.0	0.2	12.9	5.9
Kurtosis	2.7	3.5	2.4	181.2	44.7
No. of Firms	216	216	216	216	216

The weak governance portfolio is in the range between 10-16 as indicated by the minimum and the maximum CG-index statistics. The stock returns average shows negative returns of -37% and the median is higher than the mean; this shows that the distribution is non-symmetric as indicated by the skewed value. The stock return kurtosis is thin tail distribution, but the standard deviation reveals that the values are closely distributed to the mean. In furtherance to the above analysis, both the mean and the median stock returns are slightly more negative in table 13 than in table 12. This shows that the good governance portfolio slightly outperformed the weak governance portfolio in 2008. The beta control variable has lower mean and lower standard deviation than the market value and book-to-market equity. However, the control samples are

non-symmetric distributed. The results are cross-sectional average between weak governance portfolio, stock returns and the control variables.

**Table 14 Cross-Sectional Analysis of Good and Weak Governance Portfolio**

Variable	Good governance portfolio		Weak governance portfolio	
	Coefficient	T-statistic	Coefficient	T-statistics
CG-Index	0.004953	0.529251	0.000380	0.045512
Beta	0.667713	9.329704**	0.639236	10.48289**
Market Value	-0.000175	-0.555379	-0.000103	-0.0542722
Book-To-Market	-0.000884	0.001120	-0.000366	-0.371180

\*\* represent 1% statistical significant level

The regression reports the cross-sectional analysis between the good and the weak governance portfolio. Both the good and the weak corporate governance coefficients are positive, but statistically insignificant. The analysis reveals that there is no significant difference in stock returns between the good and the weak governance portfolios. The beta was confirmed again, a better predictor in this analysis. The estimated model was equation 4, presented in chapter 5.

**Table 15 Test of the Empirical Model**

	Good governance portfolio	Weak governance portfolio
Adjusted R-Squared	0.267248	0.338178
F-statistics	23.70369	28.46517
Prob(F-statistics)	0.000000	0.000000

Table 15 present the test of the goodness of fitness of the regression model. Both portfolios reveal that the data fit the model in testing the study hypothesis. The regression model used was presented in equation 4, described in chapter 5.

## 7. SUMMARY AND CONCLUSION

On a general note, this paper analysed the level of relationship between future stock returns and past corporate governance. It also examined whether there was difference in stock returns between good and weak governance portfolios. In order to carry out the regression process to test the study hypotheses, this paper employed the cross-sectional analysis and multivariate model. Cross-sectional analysis ascertained the sample averages. The multivariate model explained the relationship between stock returns, corporate governance, and the control variables.

There was sufficient evidence to ascertain that the level of corporate governance was insignificant in predicting 2008 stock returns in this study, and that there was no significant difference in returns between the good governance and the weak governance portfolios. The cross-sectional regression analysis did not provide meaningful evidence to support the hypotheses in this study. However, there is need for more research on many aspect of corporate governance especially between the firms' and market variables. The reason is that the debate on corporate governance is an on-going process and more rigorous research is needed to establish understanding in the changes of corporate governance, as it affects the dynamic firm-level environment.

The major finding in this study was established with regards to the study hypothesis.

*H1 null: The level of corporate governance cannot predict stock returns.*

In this study, the null hypothesis was accepted. There was no sufficient evidence that the level of corporate governance could predict stock returns. This report was confirmed in table 10. Although the governance index coefficient was negative, the cross-sectional analysis indicated that the CG-index was also insignificant; which means that there was no relationship between the two variables. The finding revealed that the CG-index cannot predict stock returns. The beta variable had positive relationship with stock returns and significant at 1% statistical level. The beta variable was confirmed a better predictor than other control variables. However, in table 9,

stock returns relationship with corporate governance was negative and it revealed that returns were higher for firms with better governance.

The second part of the regression provided conclusive evidence that was against this study hypothesis.

*H2 null: There is no difference in stock returns between good governance portfolio and weak governance portfolio.*

The null hypothesis was again accepted. This analysis was confirmed in table 14. The analysis reports that both the good and the weak corporate governance has positive coefficients, but statistically insignificant. This result reveals that there was no significant difference in stock returns between the good and weak governance portfolios. But, the mean and the median analysis in table 12 and table 13 indicated that the stock returns of the good governance portfolio slightly outperformed the weak governance portfolio in 2008.

Finally, the analyses in this study were based on one year S&P 500 data. Therefore, future researchers should extend the scope of data to several years especially for the S&P 500 firms with Gompers index. Another way to strengthen the argument that the good governance portfolio outperforms the weak is when future researchers compare the firm performance between the good and the weak governance portfolio of the S&P 500. On the other hand, future researchers can extend the scope of research by comparing the corporate governance correlations and volatility from data that includes both European and emerging markets.

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