The relation between corporate general counsel and quality of internal control

Abstract

This thesis presents an empirical analysis of the relation between the general counsel in top management and the quality of internal control. This thesis hypothesizes that since it is the general counsel’s duty to effectively guard the governance, risk and compliance of the firm, it will be in his best interest to try to improve the control environment. As a result of the improvement in the control environment, it will be more likely that the firm invests in improving the quality of internal control. By using six panel logistic regression models, this thesis finds that having a general counsel in top management does not significantly affect the quality of internal control. The most important implication of this thesis is that, at least from the perspective of internal control, the general counsel does not fully adhere to his duty of effectively guarding the firm’s governance, risk and compliance.

JEL codes: K00; M40. Keywords: general counsel; internal control.

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# Table of contents

Executive summary 1

1. Introduction 2
   2. Background & literature review 6

2. The corporate general counsel 6
   2.1. Responsibilities of the general counsel 6
   2.1.1. Empirical evidence regarding the role of the general counsel in corporate policies 9
   2.1.2. The relation between general counsel and voluntary disclosures 9
   2.1.2.1. The relation between general counsel and tax avoidance 10
   2.1.2.2. The relation between general counsel and firm credit risk 11
   2.1.3. Summary 12

2.2. Internal control 13
   2.2.1. The COSO report 13
   2.2.2. SOX Sections 302 and 404 14
   2.2.3. Empirical evidence regarding factors influencing the quality of internal control 16
   2.2.4. Summary 18

3. Hypotheses development 20

4. Research design 22
   4.1. Methodology 22
   4.2. Data 25
   4.3. Summary 30

5. Results 31
   5.1. Descriptive statistics 31
   5.2. Regression results – H1 – models one and two 32
   5.3. Regression results – H2 – models three, four, five and six 34
   5.4. Summary 36

6. Conclusion 37

7. Bibliography 40
Executive summary

This thesis examines whether having a general counsel in top management significantly affects the quality of internal control. This thesis aims at advancing both the understanding of the causes and consequences of internal control and the understanding of the role of the general counsel in corporate policies.

Over the last couple of years, the corporate general counsel has been subjected to extensive academic research. The general counsel is the chief attorney of a corporation and his duty is to be an effective guardian of the firm’s governance, risk and compliance (White, 2016). However, there is no consensus in the academic literature as to whether the general counsel fully adheres to his duty of effectively guarding governance, risk and compliance.

The assumption on which this thesis’ research question is built is that, ceteris paribus, it is easier to adhere to the duties of effectively guarding governance, risk and compliance when the firm is in control. Therefore, one would expect that the general counsel would voice his opinion regarding the importance of having a good quality of internal control. Or in other words, one would expect the general counsel to put effort into improving the control environment. As a result, it will be more likely that the firm will invest in improving the quality of internal control.

This thesis uses six panel logistic regression models to test the two hypotheses which are used to answer the research question. The models used to test the hypotheses are partially based on Kwak et al. (2012).

The most interesting result of this thesis is that there is no evidence supporting the claim that having a general counsel in top management significantly affects the quality of internal control. This finding shows that the general counsel, at least from the perspective of internal control, does not fully adhere to his duty of effectively guarding governance, risk and compliance. This is in accordance with the findings of Goh et al. (2014), Ham & Koharki (2016) and Nelson & Nielsen (2000). Nelson & Nielsen (2000) show that, over time, the general counsel has moved from being primarily focused on legal issues to being more involved with non-legal issues. This shift might explain why having a general counsel in top management does not lead to a better quality of internal control. The reason is that when the general counsel takes on more non-legal responsibilities, he will be more likely to be less able to execute his legal responsibilities correctly. This includes his responsibility of making the firm more aware of the importance of being in control.
1. Introduction

This thesis examines whether the composition of top management with general counsel is related to the quality of internal control. The general counsel is the chief attorney of a corporation and his duty is to be an effective guardian of the firm’s governance, risk and compliance (White, 2016).

The corporate general counsel has been subjected to extensive academic research over the last couple of years. E.g., Kwak, Ro & Suk (2012) have analyzed the relation between the general counsel and voluntary information disclosure and Ham & Koharki (2016) have analyzed the relation between the general counsel and firm credit risk. Kwak et al. (2012) find evidence that supports the claim that the general counsel is an effective guardian of the firm’s governance, risk and compliance, while Ham & Koharki (2016) find evidence that supports the opposite. Therefore, it seems that the previous literature is somewhat contradictory regarding the role of the general counsel. In other words: is the general counsel a friend or a foe (in terms of the quality of internal control)?

This thesis aims at examining the relation between the general counsel and the quality of internal control to get more insights into the question whether or not the general counsel adheres to his duty of being an effective guardian of the firm’s governance, risk and compliance. This relation is especially interesting given the important duties of the general counsel. It is the general counsel’s duty to make sure that the firm’s governance is adheres to the highest standards, that the firm’s litigation risk is within acceptable boundaries and that the firm is in compliance with all relevant laws and regulations.

Being in control of your firm has many benefits. E.g., the risk of fraud by employees is lower for firms that are in control compared to firms which are not in control, ceteris paribus (Vaassen, Meuwissen & Schelleman, 2009). Lowering such risks inherently lowers the litigation risk. Therefore, it is in the interest of the general counsel that the firm has a good internal control system, because having a good internal control system enables him to better adhere to his duties. However, since there is no consensus in the literature regarding the question whether or not the general counsel adheres to his duty of being an effective guardian of the firm’s governance, risk and compliance, it is important to actually research the relation between the general counsel and the quality internal control. Therefore, the research question reads as follows:
Does having a general counsel in top management significantly affect the quality of internal control?

In the following, this thesis refers to firms with a general counsel in top management as GC firms and firms without a general counsel in top management as non-GC firms. In order to be able to answer the research question, this thesis develops two hypotheses. The hypotheses read as follows:

*H$_1$*: GC firms are more likely to have a higher quality of internal control than non-GC firms.

*H$_2$*: The likelihood that GC firms with a general counsel in top management have a higher quality internal control is higher when the general counsel has more power relative to other top managers.

Both hypotheses are analyzed using panel logistic regression models. This thesis develops two panel logistic regression models to analyze the first hypothesis and four panel logistic regression models to analyze the second hypothesis.

This thesis finds that out of 4,978 firm-year observations, 44% have a general counsel in top management. This indicates that many firms acknowledge the importance of having a general counsel in top management.

Regarding the first hypothesis, since it is in the interest of the general counsel of having a good internal control system, because having a good internal control system enables him to better adhere to his duties, one would expect that the general counsel would exert effort to try to improve the control environment. As a result, the firm will be more likely to invest in improving the quality of internal control. However, models one and two present evidence which does not support the first hypothesis (i.e. the results show that GC firms are not more likely to have a higher quality of internal control than non-GC firms). Therefore, this thesis does not accept the first hypothesis.

The theory behind the second hypothesis is that if the general counsel has relatively more power, he will be relatively more able to influence the internal control policy. However, models three, four, five and six present evidence that does not support the second hypothesis (i.e. the results show that the likelihood that GC firms with a general counsel in top management have a higher quality of internal control is not higher when the general counsel has more power...
relative to other top managers). Therefore, this thesis also does not accept the second hypothesis.

Since both hypotheses are not accepted, this thesis finds that having a general counsel in top management does not significantly affect the quality of internal control. This finding shows that the general counsel, at least from the perspective of internal control, does not fully adhere to his duty of effectively guarding governance, risk and compliance. This is in accordance with the findings of Goh, Lee & Ng (2014) and Ham & Koharki (2016) who find that, respectively, the general counsel facilitates aggressive tax policies and that firms with a general counsel in top management run a higher credit risk. Also, this finding corresponds to the findings of Nelson & Nielsen (2000) who show that, over time, the general counsel has moved from being primarily focused on legal issues to being more involved with non-legal issues. This shift might explain why having a general counsel in top management does not lead to a better quality of internal control. The reason is that when the general counsel takes on more non-legal responsibilities, he will be more likely to be less able to execute his legal responsibilities correctly. This includes his responsibility of making the firm more aware of the importance of being in control.

This thesis is especially relevant for academics, regulators and practitioners. The relevance for academics stems from the fact that the findings of this thesis advance both the understanding of the causes and consequences of internal control and the understanding of the general counsel in corporate policies.

The relevance for regulators stems from the following. By introducing new regulations concerning internal control in the Sarbanes-Oxley (SOX) Act, the U.S. regulator has shown its willingness to contribute to good quality of internal control. The results of this thesis show that the quality of internal control cannot be enhanced by appointing a general counsel in top management. Therefore, the regulator now knows that there is no point in regulating internal control requirements by mandating the appointment of a general counsel. The regulator should focus on finding other ways to further regulate the requirements of good internal control.

Practitioners such as the board of directors and the management board are responsible for their firm’s internal control. For these actors, the results of this thesis could contribute to more understanding of the factors that affect the quality of internal control. Also here, bearing in mind the results of this thesis, the board of directors and the management board should focus
on other ways of improving their internal control, since this thesis shows that appointing a
general counsel in top management will not significantly affect the quality of internal control.

Last but not least, this thesis is also relevant for general counsels themselves. The results of this
thesis might induce general counsels to think about how to use their position to try to enhance
the control environment with the ultimate goal of enhancing the quality of internal control.

In the following of this thesis, one can read about the background & literature review, the
hypotheses development, the research design, the results of this thesis and finally the
conclusion. In the background & literature review section, this thesis discusses the aspects of
the general counsel and the aspects of internal control. In the hypotheses development section,
this thesis develops two hypotheses using insights from previous literature. In the research
design section, this thesis discusses the methods and techniques applied in this thesis.
Consequently, this thesis discusses the results of this thesis in the results section. Finally, in the
conclusion, this thesis summarizes the most important elements of this thesis. Also, in this this
section, this thesis answers the research question, discusses the limitations of this thesis and
lastly, presents a few recommendations for further research.
2. **Background & literature review**

This thesis adds to two streams of literature. Firstly, this thesis adds to the stream of literature regarding the role of the general counsel in corporate policies. Secondly, this thesis adds to the stream of literature concerning causes and consequences of the quality of internal control. In this section, this thesis first discusses the role of the general counsel in a firm. Second, the thesis discusses the relevant articles regarding the role of the general counsel in corporate policies. Third, the thesis discusses the concepts of internal control using the Committee of Sponsoring Organizations of the Treadway Commission (COSO) report and the institutional details of Sections 302 and 404 of the SOX Act. Finally, the thesis discusses the relevant articles regarding factors that influence the quality of internal control.

2.1. **The corporate general counsel**

As stated above, in this section this thesis discusses the role and the responsibilities of the general counsel in a firm. After that, this thesis discusses some empirical research to give a better view of how previous research has studied the role of the general counsel in a firm.

2.1.1. **Responsibilities of the general counsel**

According to many scholars, in general, the general counsel’s role is that of being the corporate gatekeeper (Coffee, 2003; Cutler, 2004; Lowenfels, Bromberg, Sullivan, 2006; Hopkins et al., 2015). Hopkins et al. (2015) state that the general counsel basically serves two interests. First, the general counsel serves the interest of the firm by, e.g., monitoring the firm to make sure that it is in compliance with all regulations and professional standards of conduct. Second, the general counsel serves the interest of the shareholders by, e.g., monitoring the accuracy of the firm’s disclosures and by monitoring management behavior to check whether it is in line with shareholder interest (Coffee, 2003; Kwak et al., 2012).

The need for such monitoring can be explained by Jensen’s and Meckling’s (1976) agency theory. The agency theory can be explained as follows. An unique factor of public firms is that, usually, people that own the firm are not the people that manage the firm. This creates information asymmetry between management (i.e., the agent), who has an information advantage, and the shareholders (i.e., the principal), who have an information disadvantage. Management has the option to focus on two interests, namely either focus on increasing firm net worth or focus on increasing personal net worth (which comes at the cost of firm net worth). When there is no corporate governance in the firm, management will be tempted to focus on
increasing their personal net worth. However, when the firm puts in place a good corporate governance system, with e.g., a good system of internal control and monitoring by the general counsel, it is much harder for management to increase personal net worth at the expense of firm net worth (Dey, 2008).

In general, one could say that the general counsel’s duties are to be an effective guardian of the firm’s governance, risk and compliance (White, 2016). This explains why the general counsel is being referred to as the corporate gatekeeper. The duty to monitor the governance of the firm is explained by the above which states that the general counsel partly serves the interest of the shareholders by making sure that management behavior is in line with what is expected from them by shareholders. More specifically, Vaassen et al. (2009) explain that (corporate) governance is about securing the continuity of organizations by maintaining good relations with stakeholders. This boils down to a system of checks and balances in order to make sure that managers are not able to act in their personal interest at the cost of the stakeholders. Governance deals with internal control, decision-making power, responsibility, oversight, integrity and accountability (Vaassen et al., 2009).

The duty to monitor the firm’s risk relates to the firm’s litigation risk. Litigation risk can be affected by many factors such as aggressive disclosures (Kwak et al., 2012). The general counsel discusses with other managers the content of the firm’s disclosures. Too aggressive disclosures (e.g., when the firm depicts an unrealistically good picture of the firm) could come at the cost of claims against the firm by shareholders in the future. Another factor that affects litigation risk is how the firm’s operations might be a source of litigation risk. For example, the oil spill of British Petroleum in the Gulf of Mexico was caused by the firm’s operations (which are inherently risky) and it resulted in large claims by, among others, the US government. Here it is vital that the general counsel has access to the firm’s ongoing operations so that he can estimate the litigation reserve (Hopkins et al., 2015).

Finally, the duty to monitor compliance relates to the above where it is stated that the general counsel focuses on making sure that the firm is in compliance with all regulations and professional standards of conduct.

Over the past years the general counsel has evolved from being primarily focused on effectively guarding the firm’s governance, risk and compliance to taking on other (non-legal)

Nelson & Nielsen (2000) identify three types of roles that the general counsel can play within firms (the cop, the counsel and the entrepreneur). First, when the general counsel assumes the role of the cop, he focuses primarily on effectively guarding governance, risk and compliance (White, 2016). Cops interact with business people and business units within their firm almost exclusively through approving contracts, imposing and implementing compliance programs and responding to legal questions. Cops devote almost all of their time to effectively guarding the governance, risk and compliance. Second, when the general counsel assumes the role of the counsel, he is still primarily focused on his duty of effectively guarding governance, risk and compliance, but he is willing to think strategically with business people and business units within the firm about business issues. The counsel is somewhat in the middle between the cop and the entrepreneur. Third, when the general counsel assumes the role of the entrepreneur, he focuses less on his duty of effectively guarding governance, risk and compliance in comparison with the cop and the counsel. The entrepreneur is actively involved in business issues.

Nelson & Nielsen (2000), but also other scholars like Ham & Koharki (2016), identify a shift from times that the general counsel was primarily focused on his duty of being an effective guardian of governance, risk and compliance (i.e., being a cop) to contemporaneous times where the general counsel is becoming more and more involved with non-legal issues (i.e., becoming a counsel and entrepreneur). For example, Nelson & Nielsen (2000) find that most general counsels that participated in their survey acted as counsel, followed by the entrepreneur and lastly followed by the cop.

Furthermore, a survey of the Association for Corporate Counsel indicates that 60% of the respondents (which are general counsels) demonstrate a strong interest to expand their entrepreneurial roles as being a partner of the CEO in key strategic decision making (Ham & Koharki, 2016). Only 14% of the respondents expressed their focus on governance, risk and compliance issues. This evidence seems in line with Ham & Koharki’s (2016) and Nelson & Nielsen’s (2000) argument that contemporary general counsels are becoming more interested in taking on the role of the counsel or entrepreneur rather than the role of the cop. This is not desirable from the perspective of effectively guarding governance, risk and compliance. The shift is a worrying development from the perspective of effectively guarding governance, risk.
and compliance, because when the general counsel takes on more non-legal responsibilities, this might come at the cost of being less able to correctly execute his legal responsibilities.

In short, the general counsel’s role within a firm has evolved over time. Whereas the general counsel was used to focus primarily on effectively guarding governance, risk and compliance, in current times he/she becomes more and more focused on other non-legal activities.

2.1.2.  Empirical evidence regarding the role of the general counsel in corporate policies

The purpose of this thesis is to examine whether having a general counsel in top management has an effect on the quality of internal control. To my knowledge, this relation has not been addressed in previous literature. Previous literature has addressed the role of the general counsel in other types of corporate policies. In the following, this thesis discusses some relevant previous literature regarding the role of the general counsel in corporate policies.

2.1.2.1. The relation between general counsel and voluntary disclosures

Kwak et al. (2012) were among the first to empirically examine the role of the general counsel in corporate policies. They examine whether having a general counsel in top management affects properties of (voluntary) management earnings forecasts disclosures. Kwak et al. (2012) find, among other things, that GC firms are more likely to issue forecasts (which are also less aggressive). Furthermore, Kwak et al. (2012) find that investors regard the earnings forecasts of GC firms to be more informative than the earnings forecasts of non-GC firms. Recall that the general counsel partly serves the interests of shareholders by monitoring management behavior to check whether it is in line with shareholders’ interests. According to Kwak et al. (2012), one of the measures that the general counsel can use to harmonize management behavior and shareholders’ interests is to advocate to top management to decrease the information asymmetry between management and shareholders. The general counsel can advise the CEO and other top managers to regularly issue voluntary information disclosures such as earnings forecasts. This reasoning can explain why GC firms are more likely to issue forecasts. Recall that one of the responsibilities of the general counsel is to take care of the firm’s litigation risk. Voluntary information disclosure and litigation risk are two related concepts (Kwak et al., 2012). Aggressive voluntary information disclosures increase litigation risk and conservative voluntary information disclosures decrease litigation risk. Now, since it is the general counsel’s duty to keep litigation risk within a certain limit, one can expect that he/she will advocate to
issue conservative, instead of aggressive, voluntary information disclosures. This can explain why GC firms issue less aggressive voluntary information disclosures.

As stated above, Kwak et al. (2012) also find that the stock price reaction to earnings forecasts of GC firms is stronger relative to non-GC firms. This result can be explained by the following reasoning. Kwak et al. (2012) find that on average the earnings forecasts of GC firms are more likely to contain bad news. Kwak et al. (2012) argue that this makes the earnings forecasts more credible. Since Kwak et al. (2012) argue that GC firms issue more credible earnings forecasts, the market should perceive these earnings forecasts as being of higher quality (i.e., as being more informative). As a result, the stock price reaction to earnings forecasts of GC firms should be (and actually is) stronger relative to earnings forecasts of non-GC firms. Overall, the results of Kwak et al. (2012) suggest that the general counsel plays an important role in corporate voluntary disclosure policies.

2.1.2.2. The relation between general counsel and tax avoidance

Kwak et al. (2012) conclude that further research should try to examine the role of the general counsel in other types of corporate policies. Many academics have responded to the suggestion of Kwak et al. (2012). Goh et al. (2014), for example, examine whether having a general counsel in top management is related to corporate tax avoidance. Goh et al. (2014) argue that, theoretically, the effect of having a general counsel in top management on tax avoidance is ambiguous.

On the one hand, one could argue that having a general counsel in top management enables top management to benefit more from the general counsel’s legal expertise. As a result, top management can engage in tax avoidance while being fairly certain that the tax policy will not lead to legal proceedings. Under this view, there is a positive association between having a general counsel in top management and tax avoidance.

On the other hand, one could argue that the general counsel, instead of using his legal expertise to set a sustainable tax avoidance policy, focuses on setting a conservative ‘tone at the top’ and advise other managers to be cautious regarding the firm’s tax policy. This corresponds to the general counsel adhering to his duty to effectively guard the firm’s governance, risk and compliance. Vaassen et al. (2009) state that tone at the top is about management setting the right example to their subordinates (or their equals). Under this view, there is a negative association between having a general counsel in top management and tax avoidance.
The results in Goh et al. (2014) indicate that the first view prevails. They find that GC firms have more aggressive tax policies. They also argue that the results indicate that the general counsel uses his legal expertise to facilitate top management in avoiding taxes. This is the opposite of what is expected from a general counsel who is focused on effectively guarding governance, risk and compliance. A general counsel who is focused on effectively guarding governance, risk and compliance would rather act as a gatekeeper who exerts a conservative influence on the firm’s tax policies (Goh et al., 2014).

Furthermore, Goh et al. (2014) examine whether the influence of the CEO relative to the general counsel moderates the relation between having a general counsel in top management and tax avoidance. According to Goh et al. (2014), the CEO is likely to be under the greatest pressure to maximize firm value. As a result, it is in the CEO’s interest to decrease taxes (i.e., adopt an aggressive tax policy). Furthermore, when the CEO has relatively more power than the general counsel in the management board, the CEO is better able to exert influence over the general counsel to facilitate aggressive tax policies (Goh et al., 2014). The results are consistent with the above reasoning. Goh et al. (2014) find that the relation between having a general counsel in top management and tax avoidance is stronger for firms where the CEO has relatively more power over the general counsel.

Overall, Goh et al. (2014) indicate that the general counsel plays an important role in setting a firm’s tax policy. The above evidence seems to suggest that the general counsel is quite loose in his responsibilities to effectively guard governance, risk and compliance regarding the firm’s tax policy. This is not what one would expect from someone whose duty it is to effectively guard the firm’s governance, risk and compliance.

2.1.2.3. The relation between general counsel and firm credit risk

Ham & Koharki (2016) examine whether the overall (firm) credit risk of firms that promote a general counsel to top management increases or decreases. Recall that according to Ham & Koharki (2016) and Nelson & Nielsen (2000), the general counsel has evolved from his traditional role of being the corporate gatekeeper to a role in which he assumes more entrepreneurial activities.

Ham & Koharki (2016) argue that when a general counsel is promoted to top management, or when the general counsel moves up in the hierarchy of the firm, he takes on more and more entrepreneurial activities. As a result, he may perform his gatekeeping responsibilities worse
than before. Ham & Koharki (2016) mention a few examples of entrepreneurial activities including ensuring that certain business divisions meet key sales goals and advising CEO’s in identifying key business transactions.

However, according to Ham & Koharki (2016) it is uncertain whether general counsels which take on the role of counsel and entrepreneur perform there gatekeeping responsibilities worse than general counsels that take on the role of the cop. They mention that the Securities and Exchange Commission (SEC) has reinforced the responsibilities of the general counsel in SOX Section 307 by personally holding the general counsel liable for corporate negligence and/or malfeasance. The general counsel also has to report any such behavior ‘up-the-ladder’ to the CEO, audit committee, and/or board of directors (Ham & Koharki, 2016). So one could question whether the increased regulation mitigates the potential decrease of gatekeeping quality by the general counsel after a promotion to top management.

The results indicate that bond market participants view GC firms as being more risky than non-GC firms. Further analysis indicates that the increased regulation regarding the personal liability of the general counsel partially reduced credit risk. However, there still exists a positive association between GC firms and credit risk. Thus, one could conclude that the effect of general counsels taking on responsibilities which relate to the role of the counsel and entrepreneur affect the performance of effectively guarding the firm’s governance, risk and compliance negatively. Increased SEC regulation weakens this effect marginally.

Overall, it appears that the higher the general counsel moves up in the hierarchy of the firm, the less successful he/she executes his gatekeeping role (proxied by an increase in firm credit risk).

2.1.3. Summary

The above literature shows that there are some inconsistencies regarding the role of the general counsel in corporate policies. On the one hand, Kwak et al. (2012) show that firms with a highly ranked general counsel have on average more voluntary disclosures. Furthermore, these disclosures seem to be on average more truthful than the disclosures of firms without a highly ranked general counsel. Kwak et al. (2012) state that the general counsel basically adds to making the firm more cautious regarding voluntary disclosures since aggressiveness can be very costly. On the other hand, Ham & Koharki (2016) show that firms with a highly ranked general counsel have on average a higher credit risk. Ham & Koharki (2016) state that this result can be rationalized by arguing that when general counsels are promoted to top
management, they start to embrace more non-legal responsibilities. Subsequently, they have less time to perform the legal activities correctly, which results in a lower quality of the gatekeeping function. Ham & Koharki (2016) state that due to the lower quality of the gatekeeping function, investors view firms with a highly ranked general counsel to be more risky, resulting in a higher credit risk for these firms. The results of Kwak et al. (2012) and Ham & Koharki (2016) are contradicting, because Kwak et al. (2012) show that firms with a highly ranked general counsel have better disclosure quality whereas Ham & Koharki (2016) show that firms with a highly ranked general counsel have a higher credit risk.

In short, following the suggestion by Kwak et al. (2012) for further research to focus on the relation between the general counsel and other corporate policies, many academics have responded. The previous literature regarding the role of the general counsel in corporate policies is described above. It seems that the previous literature is somewhat contradictory regarding the role of the general counsel (e.g., Kwak et al., 2012; Ham & Koharki, 2016). In other words: is the general counsel a friend or a foe? As can be seen from the above, this thesis fits into a stream of research focusing on the role of the general counsel in corporate policies. Next, this thesis discusses the concepts and the previous literature regarding internal control.

2.2. Internal control

The second stream of literature that this thesis adds to relates to the causes and consequences of the quality of internal control. Over the past decades, many academics have conducted research regarding the causes and consequences of the quality of internal control. Before discussing that research, this thesis first explains the concept of internal control using the report issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). After that, this thesis explains the role of internal control in Sections 302 and 404 of the SOX Act.

2.2.1. The COSO report

The COSO report was issued in 1992. The goal of the COSO report was “to have management report on the effectiveness of its internal controls, to create greater management awareness that the control environment, the audit committee, codes of conduct and the internal audit are important elements in an internal control system” (Vaassen et al., 2009, p. 30). Also, it was needed to arrive at a consensus regarding the different internal control concepts and definitions that were in use until that time (Vaassen et al., 2009). The COSO framework defines internal control as follows: “internal control is a process effected by an entity’s board of directors,
management, and other personnel designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance” (Hayes, Gortemaker & Wallage, 2014, p. 235). In other words, a good quality of internal control helps the firm to achieve its goals smoothly.

According to the COSO framework, there are five interrelated components of internal control. These five components of internal control form the system of internal control:

1. Control environment
2. Risk assessment
3. Control activities
4. Information and communication
5. Monitoring

As stated above, the first component of internal control is the control environment. The control environment concerns the firm’s culture with regard to the importance of internal control (Vaassen et al, 2009). A good control environment is one where people are aware of the importance of internal control and behave accordingly. Second, risk assessment focusses on detecting the risk that control problems cannot be avoided (Vaassen et al, 2009). Third, after having detected the risk that control problems cannot be avoided, one should assess whether it is important to the firm to minimize the risk from realizing. If that is the case, i.e., if the firm decides that the risk should not realize, one should focus on putting in place control measures. Fourth, in order to facilitate good quality of internal control, information and communication are vital. Information is both subject of internal control (i.e., how to improve the quality of information) and the object of internal control (i.e., how can one use the information to better control the firm). Finally, the fifth and last component states that one should assess the quality of internal control systems over time. Nowadays firms are very dynamic, because of the dynamic contemporary business setting. Therefore, the control environment, risk assessment, control activities and information and communication are subject to change over time. In order to keep the quality of internal control high, one should adapt the system of internal control over time so that it matches the changes in the business setting.

2.2.2. SOX Sections 302 and 404

This thesis now continues discussing the role of internal control in Section 302 and Section 404 of the SOX Act. In 2002, after many major corporate scandals, such as Enron and WorldCom,
US Congress has passed the SOX Act to, among other things, restore confidence in the capital markets and the audit profession (Vaassen et al., 2009).

Section 302 of the SOX act states that, regarding internal control, management must first declare that they are responsible for internal controls. Second, they must test the effectiveness of these internal controls. Third, they must report the results of the tests on the internal controls in a report. Finally, management must disclose all material weaknesses in internal control, significant internal control deficiencies and any fraud to their auditors and audit committee (Vaassen et al., 2009). The Public Company Accounting Oversight Board (PCAOB, 2004) defines a material weakness in internal control as follows: “a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected”. Regarding Section 302, it is unclear whether the identified material weaknesses have to be made public (Ashbaugh-Skaife, Collins & Kinney Jr., 2007), because Section 302 only states that management must disclose material weaknesses to their auditors and audit committee.

Section 404 of the SOX Act extends the requirements stated in Section 302 (Vaassen et al., 2009). Section 404 states that management must file annually an internal control report to the SEC where it is stated that, among other things, management acknowledges its responsibility for the internal control systems and management further elaborates on the assessment of the internal controls system. Furthermore, Section 404 states that a firm’s internal control audit should be part of the annual financial statement audit and that the material weaknesses found in the internal controls system must be disclosed in the internal control report. So here one can see that as a result of the SEC filing, the public is informed about any material weaknesses in the firm’s internal control. This also suggests that managers had more discretion in disclosing internal control weaknesses in the period after Section 302 was implemented but before Section 404 was implemented (Ashbaugh-Skaife et al., 2007). In the following, this thesis focusses on internal control as explained by Section 404 of the SOX Act.

Regarding the effectiveness of internal control, the SEC has stated that management is not allowed to judge the internal control system as being effective when one or more material weaknesses are found. Thus, one could state that a firm’s internal controls system is of low quality when the firm discloses at least one material weakness in its internal controls system.
2.2.3. *Empirical evidence regarding factors influencing the quality of internal control*

The above shows how strict the SEC is regarding the quality of a firm’s internal control, namely when a firm has at least one material weakness, the internal controls system is of low quality. This brings about the question what causes internal controls systems to be of low quality (i.e. when is a firm more likely to report a material weakness in its system of internal controls)?

Previous literature has identified several factors which influence the quality of internal control over financial reporting. Ge & McVay (2005) were the first to examine material weakness disclosures after the implementation of the SOX Act. Ge & McVay (2005) regress material weaknesses on firm characteristics. They find that more complex firms (complexity is measured by, among other things, the number of segments the firm operates in) are more likely to disclose a material weakness. Balsam, Jiang & Lu (2014) also find that more complex firms (complexity is here measured by, among other things, whether or not a firm reported restructuring charges in any of the two previous years) are more likely to disclose a material weakness. These results are not surprising as one can imagine that, ceteris paribus, it is easier to be in control of a non-complex firm than to be in control of a complex firm.

Furthermore, Ge & McVay (2005) find that firm size and firm profitability are negatively associated with disclosing a material weakness. Ge & McVay (2005) confirm the hypothesized relation in Kinney & McDaniel (1989) and DeFond & Jiambalvo (1991) (they hypothesized that firm size is a determinant of good quality of internal control). Although large firms have more assets that must be controlled for, they likely also have more processes in place for accounting and control purposes (Ge & McVay, 2005). Large firms are also likely to have more resources to spend on accounting and control purposes. The last argument also holds for good performing firms (i.e. profitable firms).

Finally, Ge & McVay (2005) find that an audit by a big four firm is positively related to disclosing a material weakness. Ge & McVay (2005) rationalize this result by stating that big four firms have more incentives to actively search for material weaknesses, because they are exposed to a greater legal liability. One could also rationalize this result by stating that big four firms perform, in general, better quality audits and therefore they are also more likely to find a material weakness. The notion that big four firms perform better quality audits is confirmed in Francis & Yu (2009).
Ashbaugh-Skaife et al. (2007) also try to find factors associated with firms disclosing material weaknesses. Unique about Ashbaugh-Skaife et al. (2007) is that their research is focused on the period after Section 302 was implemented and before Section 404 of the SOX Act was implemented. Recall from the above that management had more discretion in disclosing internal control weaknesses in the period after Section 302 was implemented but before Section 404 was implemented, because Section 302 does not explicitly state that management must disclose material weaknesses to the public (whereas Section 404 does explicitly state that by requiring firms to file an internal control report to the SEC). Ashbaugh-Skaife et al. (2007) research whether the following factors are associated with firms disclosing material weaknesses: the complexity of firm’s operations, changes in firm’s organizational structure, lack of firm resources to devote to internal control and the number of auditor resignations.

Ashbaugh-Skaife et al. (2007) first find that firms that disclose material weaknesses are more complex (complexity is again proxied by, among other things, the number of reported business segments). This result corresponds to Ge & McVay (2005). Second, firms that disclose material weaknesses more often engage in organizational reforms (e.g. acquisitions and restructurings). This corresponds to the findings of Balsam et al. (2014). Because of the organizational reforms, the internal controls system must be adapted. As a result, the change in internal control may not perfectly fit the change of the firm which increases the risk that the firm must disclose a material weakness. Third, Ashbaugh-Skaife et al. (2007) find that firm size and firm profitability are negatively related to firms disclosing a material weakness. This result corresponds to Ge & McVay (2005). Finally, Ashbaugh-Skaife et al. (2007) find that firms that change auditors frequently are also more likely to disclose material weaknesses. If a firm changes auditors frequently (especially auditor resignations), it may signal that the auditor is unwilling to accept the high engagement risk, because e.g., the potential client’s performance and internal control are so weak that it would be difficult to audit the client (Ashbaugh-Skaife et al., 2007).

Doyle, Ge & McVay (2007) also try to find factors that are associated with firms disclosing material weaknesses. More specifically, Doyle et al. (2007) investigate whether the following factors are associated with firms disclosing material weaknesses: firm size, firm age, financial health, financial reporting complexity, rapid growth, restructuring charges and corporate governance. Doyle et al. (2007) find that firms are more likely to disclose material weaknesses when they are smaller, financially weaker, more complex, growing rapidly and undergoing restructuring. This corresponds to Ge & McVay (2005), Ashbaugh-Skaife et al. (2007) and Balsam et al. (2014). Furthermore, Doyle et al. (2007) state that, ceteris paribus, they expect a
well governed firm to have less material weaknesses. The results confirm this, because Doyle et al. (2007) find that the quality of corporate governance is negatively related to the likelihood that firms disclose a material weakness.

Finally, Zhang, Zhou & Zhou (2007) find that auditor independence is also a determinant of internal control weaknesses. The rationalization behind this result is that when there is a strong economic bond between the client and the auditor, the auditor might be inclined to ignore potential problems and issue a clean opinion on the client firm’s internal control system.

The above discusses previous literature regarding the factors influencing the quality of internal control. Ashbaugh-Skaife, Collins, Kinney Jr. & LaFond (2009) study the consequences of material weaknesses in internal control on firm risk and cost of equity. Ashbaugh-Skaife et al. (2009) find that information risk (proxied by the quality of internal control) is an important determinant which affects a firm’s cost of equity. The idea behind this is that ineffective internal controls result in less reliable financial reporting, which increases the information risk faced by investors. This is then reflected in an increase in the firm’s cost of equity. According to Ashbaugh-Skaife et al. (2009), firms that report that they have remediated previous internal control problems exhibit a decrease in their cost of equity.

Costello & Wittenberg-Moerman (2011) study the effect of reporting a material weakness in internal control on the cost of debt. Costello & Wittenberg-Moerman (2011) find that firms that report a material weakness in internal control have on average a higher cost of debt than firms that do not report a material weakness in internal control. The reasoning here is quite similar to the reasoning used in Ashbaugh-Skaife et al. (2009), namely that ineffective internal controls result in less reliable financial reporting, which increases the information risk faced by lenders. This is then incorporated in an increase in the firm’s cost of debt. Ashbaugh-Skaife et al. (2009) and Costello & Wittenberg-Moerman (2011) show the importance of having a good quality of internal control. Low quality of internal control is associated with higher cost of capital and this is detrimental for any firm that focuses on being profitable.

2.2.4. Summary

The above discusses the concepts of internal control using the COSO report and Sections 302 and 404 of the SOX Act. Also, the above discusses the previous literature regarding the factors influencing the quality of internal control and the consequences of having a bad quality of internal control. Previous literature seems to suggest that the following factors influence the
quality of internal control: firm size, firm profitability, firm’s financial health, complexity of operations, big four audit firm, firms undergoing restructuring and firm’s corporate governance. The consequences of having a bad quality of internal control can be very detrimental for firms, because previous literature shows that bad quality of internal control is associated with higher cost of capital.
3. **Hypotheses development**

Having discussed the background and literature review, this thesis now continues with developing two hypotheses. These hypotheses are developed using the information given in the background and literature review.

Recall that the general counsel serves two interests, namely the interest of the firm and the interest of the shareholders. Important when serving these interests is that the general counsel monitors the degree to which the firm is in compliance with regulations and professional standards of conduct. Additionally, it is important that the general counsel monitors whether or not the behavior of management is in line with what is expected from them by the shareholders.

Recall that internal control is part of a firm’s governance system and that the quality of internal control is positively related to the quality of corporate governance. Thus, on average, when a firm exhibits a good quality of internal control, the firm also exhibits a good quality of corporate governance. Now, since it is the duty of the general counsel to effectively guard governance, risk and compliance, one would expect that having a general counsel in top management would translate into a better quality of internal control. The mechanism through which this could work is the control environment. This is because the general counsel in top management is in the position to voice his ideas about the importance of having a good quality of internal control. He may be able to make other top managers in the firm more aware of having a good quality of internal control. As a consequence, it will be more likely that the firm will invest in improving the quality of internal control. Therefore, the first hypothesis reads as follows:

\[ H_1: \text{GC firms are more likely to have a higher quality of internal control than non-GC firms.} \]

A variable that might moderate the relation postulated in the first hypothesis is the power that the general counsel has relative to other top managers in the firm’s decision-making process. Kwak et al. (2012) state that the firm’s decision-making process is affected by the relative power of the top managers. This means that when manager A has more power than manager B, manager A will have more influence in the firm’s decision-making process. As such, this means that if the general counsel has relatively more power, he will be relatively more able to influence the internal control policy. Goh et al.’s (2014) evidence seems to be in line with the above reasoning. Their evidence seems to suggest that when the other top managers, such as the CEO, have much power over the general counsel, the other top managers can influence how the general counsel performs his tasks. Goh et al. (2014) show that from a perspective of tax policy,
the CEO influences the general counsel to be more facilitative regarding aggressive tax policies. Therefore, the second hypothesis reads as follows:

\[ H_2: \text{The likelihood that GC firms with a general counsel in top management have a higher quality internal control is higher when the general counsel has more power relative to other top managers.} \]

The above hypotheses enable this thesis to answer the research question postulated in the introduction. As can be seen from the above, the hypotheses are developed using previous literature.
4. **Research design**

The use of data and methodologies is of vital importance for this thesis as it enables this thesis to make conclusions concerning the above postulated hypotheses. Therefore, this thesis first discusses the research methods which are used to test the above postulated hypotheses. Afterwards, there is an extensive presentation of where the data are found; how the data are modified to enable analysis with the statistical software programme STATA. One can also find the tests regarding the assumptions of logistic regression.

4.1. **Methodology**

In this section, this thesis discusses the methodology which is used to test the above postulated hypotheses. This thesis makes use of six panel logistic regression models to test the hypotheses. The first hypothesis is tested using a panel logistic regression which combines information regarding whether or not firms have a general counsel and the quality of internal control within firms. The first model looks as follows:

1) \( \Pr(MW)_{it} = \beta_0 + \beta_1 GC_{it} + \varepsilon_{it} \)

The dependent variable in model one is the probability of a firm disclosing a material weakness in its internal control. Thus, the quality of internal control is proxied by whether or not a firm has disclosed one or more material weaknesses in the system of internal control. If a firm has disclosed one or more material weaknesses, then the quality of internal control is regarded to be low. The independent variable in model one is a dummy variable which equals one when a firm has a general counsel in top management and zero otherwise.

The most important regression coefficient in model one is \( \beta_1 \). Recall that the general counsel’s duties are to be an effective guardian of the firm’s governance, risk and compliance (White, 2016). From this perspective, one would expect the general counsel to focus on setting a conservative ‘tone at the top’. Among other things, this means that the general counsel advocates investing in achieving a high quality of internal control. Therefore, if the general counsel is indeed an effective guardian of the firm’s governance, risk and compliance, one would expect the sign of coefficient \( \beta_1 \) to be negative.

In order to make more reliable inferences, this thesis includes a few control variables to model one. This results in model two:
2) \[ Pr(MW)_{i,t} = \beta_0 + \beta_1 GC_{i,t} + \beta_2 BIG4_{i,t} + \beta_3 FEERATIO_{i,t} + \beta_4 LNSIZE_{i,t} + \beta_5 RESTRICTURE_{i,t} + \epsilon_{i,t} \]

Model two is basically an extended version of model one. Model two contains four control variables, which are correlated with the probability of the occurrence of internal control weaknesses. The control variables are included following, amongst others, Balsam et al. (2014).

**BIG4** is a dummy variable which equals one when the firm is audited by a big four auditor (i.e. PwC, EY, Deloitte or KPMG) and zero otherwise. Recall that Ge & McVay (2005) find that an audit by a big four firm is positively related to firms disclosing a material weakness. Ge & McVay (2005) rationalize this result by stating that big four firms have more incentives to actively search for material weaknesses because they are exposed to a greater legal liability. Furthermore, Francis & Yu (2009) find that big four firms perform better quality audits and therefore they are also more likely to find a material weakness. Therefore, this thesis expects the sign of coefficient \( \beta_2 \) to be positive.

**FEERATIO** is calculated as the ratio of non-audit fees to total fees. This control variable is included in model two because when there is a strong economic bond between the client and the auditor, the auditor might be inclined to ignore potential problems and issue a clean opinion on the client firm’s system of internal control (Zhang et al., 2007; Balsam et al., 2014). Therefore, this thesis expects the sign of coefficient \( \beta_3 \) to be negative.

The control variable **LNSIZE** is included because Ge & McVay (2005) find that firm size is negatively associated with firms disclosing a material weakness. It is calculated by taking the natural logarithm of total assets. Although large firms have more assets that must be controlled for, they likely also have more processes in place for accounting and control purposes (Ge & McVay, 2005). Large firms are also likely to have more resources to spend on accounting and control purposes. Therefore, this thesis expects larger firms to be more in control than smaller firms. This thesis expects the sign of coefficient \( \beta_4 \) to be negative.

Finally, the control variable **RESTRICTURE** is included in model two because, amongst others, Balsam et al. (2014) find that firms with material internal control weaknesses are more likely to have experienced a restructuring than firms without material internal control weaknesses. Balsam et al. (2014) use **RESTRICTURE** as a proxy for firm complexity. **RESTRICTURE** is equal to one when a firm reported restructuring charges in any of the two previous years (Balsam et al., 2014). Recall that Ge & McVay also find that more complex firms (they measure
complexity by, among other things, the number of segments the firm operates in) are more likely to disclose a material weakness. The rationalization behind these results is that, ceteris paribus, it is easier to be in control of a firm that has less complex operations than to be in control of a firm that has more complex operations. Therefore, this thesis expects the sign of coefficient $\beta_5$ to be positive.

The above discusses the methodology employed to test the first hypothesis. To test the second hypothesis, this thesis follows Kwak et al. (2012). The proxy for power (i.e. whether or not a GC has more power relative to other top managers) is whether or not the GC is amongst the top three highest paid executives. The assumption here is that when the GC is amongst the top 3 highest paid executives, he is relatively powerful and consequently he has a lot of influence in the top management’s decision making process.

The methodological process taken to test the second hypothesis is as follows. First, this thesis divides the GC sample into two groups based on whether or not the GC is in the top three highest paid executives. Of the 4,978 firm-year observations, 2,169 (44%) firm-year observations have a GC which is in the top three highest-paid executives. Second, this thesis creates two binary variables: $GC1$ and $GC2$. $GC1$ equals one when a GC firm has a GC that is amongst the top three highest paid executives and zero when a GC firm has a GC that is not amongst the top three highest paid executives and zero when it is a non-GC firm. $GC2$ equals one when a GC firm does not have a GC that is amongst the top three highest paid executives and zero when it is a non-GC firm. Third, this thesis replicates models one and two after replacing the binary variable $GC$ by $GC1$ and $GC2$. By doing this, this thesis examines whether more powerful GCs have a different effect on internal control weaknesses than less powerful GCs. The third, fourth, fifth and sixth model look as follows:

3) $\text{Pr}(MW)_{i,t} = \beta_0 + \beta_1GC1_{i,t} + \epsilon_{i,t}$
4) $\text{Pr}(MW)_{i,t} = \beta_0 + \beta_1GC1_{i,t} + \beta_2BIG4_{i,t} + \beta_3FEERATIO_{i,t} + \beta_4LNSIZE_{i,t} + \beta_5RESTRUCTURE_{i,t} + \epsilon_{i,t}$
5) $\text{Pr}(MW)_{i,t} = \beta_0 + \beta_1GC2_{i,t} + \epsilon_{i,t}$
6) $\text{Pr}(MW)_{i,t} = \beta_0 + \beta_1GC2_{i,t} + \beta_2BIG4_{i,t} + \beta_3FEERATIO_{i,t} + \beta_4LNSIZE_{i,t} + \beta_5RESTRUCTURE_{i,t} + \epsilon_{i,t}$
If GCs are effective guardians of governance, risk and compliance, then one would expect that more powerful GCs (i.e. GCs that have a lot of influence on the firm’s decision making process) are even more effective guardians of governance, risk and compliance. Therefore, this thesis expects that both coefficients $GC1$ and $GC2$ have a negative sign and that the effect of $GC1$ on $MW$ (i.e. the dummy variable material weakness) is stronger than the effect of $GC2$ on $MW$. The expectations regarding the control variables in model four and six are the same as discussed above.

4.2. Data

In this section, this thesis discusses data collection and data processing. Data collection and data processing are necessary in order to enable this thesis to run the above regressions using the statistical software programme STATA. The sample is based on annual data from 01.01.2010 – 31.12.2014 and it contains 4,978 firm-year observations from 1,040 firms. This thesis has chosen this sample period because it contains recent and enough data. Table 1 shows a summary of the sample selection process. Table 2 shows a list of all variables used in this thesis.

**Table 1 Sample selection process**

<table>
<thead>
<tr>
<th>Sample criteria</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations containing MW data</td>
<td>20,923</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Firms paying zero total fees</td>
<td>9,013</td>
</tr>
<tr>
<td></td>
<td>11,910</td>
</tr>
<tr>
<td>Firms having firm size zero</td>
<td>1,860</td>
</tr>
<tr>
<td></td>
<td>10,050</td>
</tr>
<tr>
<td>Missing GC data</td>
<td>5,046</td>
</tr>
<tr>
<td></td>
<td>5,004</td>
</tr>
<tr>
<td>Missing RESTRUCTURE data</td>
<td>26</td>
</tr>
<tr>
<td>Sample observations</td>
<td>4,978</td>
</tr>
</tbody>
</table>

Table 1 provides information on the sample selection process, and describes how the final sample has been obtained after deleting certain observations for reasons such as missing data or zero values.
Table 2 Variable definitions

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable definition</th>
<th>Study</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MW</td>
<td>A dummy variable which equals one when a firm has disclosed one or more material weakness in its system of internal control and zero otherwise.</td>
<td>Ge &amp; McVay (2005); Doyle et al. (2007); Zhang et al. (2007); Balsam et al. (2014)</td>
<td>AuditAnalytics</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC</td>
<td>A dummy variable which equals one when a firm has a GC in top management in a specific year and zero otherwise.</td>
<td>Hopkins et al. (2015); Kwak et al. (2012)</td>
<td>Execucomp</td>
</tr>
<tr>
<td>GC1</td>
<td>A dummy variable which equals one when a GC firm has a GC that is amongst the top three highest paid executives and zero when a GC firm has a GC that is not amongst the top three highest paid executives or when it is a non-GC firm.</td>
<td>Kwak et al. (2015)</td>
<td>Execucomp</td>
</tr>
<tr>
<td>GC2</td>
<td>A dummy variable which equals one when a GC firm does not have a GC that is amongst the top three highest paid executives and zero when it is a non-GC firm.</td>
<td>Kwak et al. (2015)</td>
<td>Execucomp</td>
</tr>
<tr>
<td>BIG4</td>
<td>A dummy variable which equals one when the firm is audited by a big four auditor (i.e. PwC, EY, Deloitte or KPMG) and zero otherwise.</td>
<td>Ge &amp; McVay (2005); Francis &amp; Yu (2009); Balsam et al. (2014)</td>
<td>AuditAnalytics</td>
</tr>
<tr>
<td>FEERATIO</td>
<td>A continuous variable that is calculated as the ratio of non-audit fees to total fees.</td>
<td>Zhang et al. (2007); Balsam et al. (2014)</td>
<td>AuditAnalytics</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>Calculated by taking the natural logarithm of total assets.</td>
<td>Ge &amp; McVay (2005); Balsam et al. (2014)</td>
<td>AuditAnalytics</td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>A dummy variable which equals one when a firm reported restructuring charges in any of the two previous years.</td>
<td>Balsam et al. (2014)</td>
<td>Compustat</td>
</tr>
</tbody>
</table>

Table 2 provides information about the variables used in this thesis. It describes the variables used and refers to studies which also used these variables. The table also shows from which database the data are downloaded to construct the variables. All databases are accessible via Wharton Research Data Services (WRDS). For more specific information, this thesis refers to the online manuals of the databases.

The first step in data collection and data processing is to download the GC data. GC data are downloaded from the Compustat’s Execucomp database. The Execucomp database contains data on individual top managers in US firms. This thesis downloads the following variables in order to construct the dummy variable GC: ‘ticker’, ‘company ID/GVKEY’, ‘company name’, ‘fiscal year’ and ‘annual title’.
After having downloaded the necessary data, this thesis continues to identify which firms have a general counsel in the years 2010-2014. This is done following Hopkins et al. (2015). The approach of Hopkins et al. (2015) is similar to the approach of Kwak et al. (2012), but this thesis favors the approach of Hopkins et al. (2015) because that approach is easier to implement. This thesis considers an officer of a firm to be a general counsel when the officer has ‘counsel’, ‘law’ or ‘legal’ in his annual title. Thus, when a firm in year X has an officer which has ‘counsel’, ‘law’ or ‘legal’ in his annual title, that firm is considered to be a GC firm in year X. After having done this, this thesis can construct the dummy variable $GC$ which equals one when a firm has a GC in top management in a specific year and zero otherwise.

The second step in data collection and data processing is to download data to construct the variables $GC1$ and $GC2$. The following data are downloaded from Execucomp: ‘executive rank by salary and bonus’. Using this data in combination with the in step one downloaded data, this thesis constructs the variables $GC1$ and $GC2$. $GC1$ is a dummy variable which equals one when a GC firm has a GC that is amongst the top three highest paid executives and zero when a GC firm has a GC that is not amongst the top three highest paid executives or when it is a non-GC firm (Kwak et al., 2012). $GC2$ is a dummy variable which equals one when a GC firm does not have a GC that is amongst the top three highest paid executives and zero when it is a non-GC firm (Kwak et al., 2012).

The third step in data collection and data processing is to download the MW data. MW data are downloaded from AuditAnalytics. AuditAnalytics contains data on, among other things, SOX 404 internal controls. This thesis downloads the following variables in order to construct the dummy variable $MW$: ‘ticker’, ‘company fkey/ CIK’, ‘company name’, ‘fiscal year IC opinion’ and ‘count weaknesses’.

After having downloaded the necessary variables, this thesis continues to identify which firms disclosed material weaknesses in which years. A firm has disclosed a material weakness when the variable ‘count weaknesses’ shows that a firm has disclosed one or more material weaknesses in the system of internal control. Using this information, this thesis constructs the dummy variable $MW$. $MW$ equals one when a firm has disclosed one or more material weaknesses in its system of internal control and zero otherwise (Ge & McVay, 2005; Doyle et al., 2007; Zhang et al., 2007; Balsam et al., 2014). The assumption here is that when a firm discloses one or more material weaknesses in the system of internal control, this firm has a low
quality of internal control and vice versa. Thus, the quality of internal control is proxied by whether or not a firm has disclosed one or more material weaknesses.

The fourth step in data collection and data processing is to download the data to construct the control variables. Let’s first discuss the construction of the control variables BIG4, FEERATIO and LNSIZE. The data used to construct these variables is downloaded from AuditAnalytics. The following variables are downloaded in order to construct these control variables: ‘ticker’, ‘company fkey/ CIK’, ‘company name’, ‘fiscal year IC opinion’, ‘auditor fkey’, ‘opinion auditor name’, ‘non audit fees’, ‘total fees’, ‘match fiscal year and balance sheet total assets’.

BIG4 is a dummy variable which equals one when the firm is audited by a big four audit firm (i.e. PwC, EY, Deloitte or KPMG) and zero otherwise (Ge & McVay, 2005; Francis & Yu, 2009; Balsam et al., 2014). FEERATIO is a continuous variable that is calculated as the ratio of non-audit fees to audit fees (Zhang et al., 2007; Balsam et al., 2014). LNSIZE is calculated by taking the natural logarithm of total assets (Ge & McVay, 2005; Balsam et al., 2014).

The control variable RESTRUCTURE is constructed using data downloaded from Compustat. The following variables are downloaded from Compustat: ‘ticker’, ‘company ID/ GVKEY’, ‘company fkey/ CIK’, ‘company name’, ‘fiscal year’ and ‘restructuring costs pretax’. Having downloaded the data from Compustat, the control variable RESTRUCTURE can be constructed. RESTRUCTURE is a dummy variable which equals one when a firm reported restructuring charges in any of the two previous years (Balsam et al., 2014). So, if at $t-1$ or at $t-2$ a firm reported restructuring charges, then the dummy variable RESTRUCTURE equals one for that firm at $t$.

After having constructed all the variables, the fifth step in data collection and data processing is to merge the variables using the firm’s ticker, company ID/ GVKEY, company fkey/ CIK and the fiscal year.

The sixth step in data collection and data processing is to correct the data for outliers. Basically, there are two approaches to this. First, one can drop outliers and second, one can choose to winsorize the data. Dropping outliers comes down to identifying extreme values and dropping these values from the dataset, while winsorizing comes down to identifying extreme values and making these extreme values less extreme. The advantage of winsorizing over dropping outliers is that it does not delete observations. Therefore, this thesis chooses to winsorize the data at the 1st percentile rank and the 100th percentile rank. The variables FEERATIO and LNSIZE are
The other variables are not winsorized since these are dummy variables. This process is conducted using STATA.

Finally, the last step in data collection and data processing is to discuss and test the assumptions of logistic regression. The assumptions that need to be evaluated are: linearity, independence of errors and multicollinearity of the data (Field, 2013). First, logistic regression assumes that there is a linear relation between any continuous independent variable and the logit of the dependent variable. In order to test for this assumption, this thesis follows the approach mentioned in Field (2013, p. 794). This method states that when the interaction between a continuous predictor variables and its natural logarithm is significant, then the model suffers from non-linearity between the continuous independent variables and the logit of the dependent variable.

Models two, four and six contain continuous independent variables. However, since in these model the variable FEERATIO contains zeros, this thesis cannot test for linearity in these models. This is because dummy variables are binary variables containing either a zero or a one. Since one cannot take the natural logarithm of zero, this thesis cannot test for linearity in in the models. Therefore, one must be cautious when interpreting the results of models two, four and six.

The second assumption is that of independence of errors. Also here, this thesis follows the approach of Field (2013, p. 772). In order to assess whether this assumption holds, this thesis computes a dispersion parameter. The dispersion parameter is the ratio of the LR Chi-square to its degrees of freedom (Field, 2013). A dispersion parameter of higher than 2 indicates that the model suffers from non-independence of errors. The dispersion parameters presented in tables 5, 6 and 7 suggest that models two, four and six suffer from non-independence of errors. Since also this assumption is violated for models two, four and six, one must to be cautious when interpreting the results.

The third assumption that needs to be evaluated is multicollinearity. Table 3 shows a variance-covariance matrix of all independent variables used in this thesis. Multicollinearity means that the independent variables should not be perfectly (or near perfectly) correlated with each other. If the independent variables would be perfectly (or near perfectly) correlated with each other, then it would be very challenging to disentangle the effect of perfectly (or near perfectly) correlated independent variables on the dependent variable.
Table 3 Variance-covariance matrix

<table>
<thead>
<tr>
<th></th>
<th>GC</th>
<th>GC1</th>
<th>GC2</th>
<th>BIG4</th>
<th>FEERATIO</th>
<th>LNSIZE</th>
<th>RESTRUCTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC1</td>
<td>0.4546</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GC2</td>
<td>0.7417</td>
<td>0.2603</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIG4</td>
<td>0.0592</td>
<td>0.0146</td>
<td>0.0532</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEERATIO</td>
<td>0.0429</td>
<td>0.0652</td>
<td>0.0025</td>
<td>0.1161</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LNSIZE</td>
<td>0.0088</td>
<td>0.0483</td>
<td>0.0269</td>
<td>0.278</td>
<td>0.1847</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>0.0643</td>
<td>0.0143</td>
<td>0.0589</td>
<td>0.1284</td>
<td>0.0857</td>
<td>0.077</td>
<td>1</td>
</tr>
</tbody>
</table>

The variance-covariance matrix shows that there is no multicollinearity in the data. This means that the data is not perfectly (or near perfectly) correlated with each other. As a result, the standard errors of the coefficients will be biased which makes hypothesis testing unreliable. Therefore, it is very important to have no multicollinearity in the data. The correlation matrix (table 3) shows that the data are not suffering from multicollinearity.

4.3. **Summary**

The above discusses the research methodology and data used in this thesis. Important to note is that this thesis uses six panel logistic regressions to test the hypotheses. The results of these regressions enable this thesis to answer the hypotheses and consequently the research question. In the next section, this thesis discusses the descriptive statistics and presents the results of the six regression models discussed above.
5. Results

After having collected and prepared the data, this thesis continues to first discuss the descriptive statistics and second to analyze the results of the models presented above in order to determine whether to accept or not to accept the above postulated hypotheses.

5.1. Descriptive statistics

Table 4 shows the descriptive statistics of the variables that are used by this thesis’ models. The first interesting thing to note is that 3% of the firm-year observations contain a material weakness. This corresponds to 144 out of 1,040 (13.8%) firms exhibiting a material weakness in any of the five years investigated.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observations</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>MW</td>
<td>4,978</td>
<td>0.03</td>
<td>0.00</td>
<td>0.17</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>GC</td>
<td>4,978</td>
<td>0.44</td>
<td>0.00</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>GC1</td>
<td>4,978</td>
<td>0.14</td>
<td>0.00</td>
<td>0.34</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>GC2</td>
<td>4,978</td>
<td>0.30</td>
<td>0.00</td>
<td>0.46</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>BIG4</td>
<td>4,978</td>
<td>0.90</td>
<td>1.00</td>
<td>0.29</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>FEERATIO</td>
<td>4,978</td>
<td>0.17</td>
<td>0.14</td>
<td>0.14</td>
<td>0.00</td>
<td>0.56</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>4,978</td>
<td>21.82</td>
<td>21.69</td>
<td>1.73</td>
<td>18.53</td>
<td>26.57</td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>4,978</td>
<td>0.44</td>
<td>0.00</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 4 shows the descriptive statistics of the variables used in this thesis. As stated before, only FEERATIO and LNSIZE are continuous variables. The other variables are binary variables.

Second, 44% (2,169 firm-year observations) of the firm-year observations report the presence of a general counsel in top management. One finds similar statistics when comparing this statistic with Kwak et al. (2012) and Goh et al. (2014). Kwak et al. (2012) find in their research that 43% of the firm-year observations report the presence of a general counsel in top management, while Goh et al. (2014) find in their research that 41% of the firm-year observations report the presence of a general counsel in top management.

Third, regarding GC1 (GC2), 14% (30%) of the total firm-year observations report the presence of a general counsel in top management that is (not) amongst the five highest paid executives. Out of the 2,169 firm-year observations that report the presence of a general counsel in top management, 32% (68%) of the firm-year observations report the presence of a general counsel in top management that is (not) amongst the five highest paid executives. Kwak et al. (2012) find rather opposite statistics, namely out of the firm-year observations that report the presence
of a general counsel in top management, 65% (35%) firm-year observations report the presence of a general counsel in top management that is (not) amongst the five highest paid executives.

Fourth, the statistics regarding BIG4, FEERATIO and RESTRUCTURE do not show any peculiarities. Regarding BIG4, 90% of the firm-year observations report that the audit was conducted by a big four accounting firm. This is not a surprising result, since Balsam et al. (2014) find similar statistics (i.e. around 83%).

Finally, the statistics regarding RESTRUCTURE report that in 44% of the firm-year observations there were restructuring charges. This corresponds to the statistics of Balsam et al. (2014). They find that in 40% of the firm-year observations in their sample there were restructuring charges.

5.2. Regression results – H1 – models one and two

In this section, this thesis presents and discusses the results of models one and two which are used to test the first hypothesis. Recall that the first hypothesis states: “GC firms are more likely to have a higher quality of internal control than non-GC firms”. Table 5 shows the results of models one and two.

Bear in mind that model one is a univariate model that regresses the quality of internal control within firms on whether or not firms have a general counsel. Model two is the same as model one except that it contains four control variables (i.e. BIG4, FEERATIO, LNSIZE and RESTRUCTURE).

The most important coefficient in models one and two is the one regarding GC. This thesis has previously hypothesized that since it is the duty of the general counsel to effectively guard governance, risk and compliance, one would expect that having a general counsel in top management would translate into a better quality of internal control. If this would be the case, then the coefficients of GC would be negative and statistically significant. But as one can see from table 5, both models show that the coefficients of GC have the wrong sign (i.e. positive) and they are not statistically significant. Therefore, this thesis does not accept the first hypothesis. I.e., GC firms are not more likely to have a higher quality of internal control than non-GC firms.
Table 5 Regression results models one and two

\[
\text{Pr}(MW)_{lt} = \beta_0 + \beta_1 GC_{lt} + \varepsilon_{lt}
\]

\[
\text{Pr}(MW)_{lt} = \beta_0 + \beta_1 GC_{lt} + \beta_2 BIG4_{lt} + \beta_3 FEERATIO_{lt} + \beta_4 LNSIZE_{lt} + \beta_5 RESTRUCTURE_{lt} + \varepsilon_{lt}
\]

<table>
<thead>
<tr>
<th></th>
<th>Model one</th>
<th>Model two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Predicted sign</td>
<td>Coefficient</td>
</tr>
<tr>
<td>C</td>
<td>-5,127</td>
<td>0,000</td>
</tr>
<tr>
<td>GC</td>
<td>-</td>
<td>0,202</td>
</tr>
<tr>
<td>BIG4</td>
<td>+</td>
<td>0,042</td>
</tr>
<tr>
<td>FEERATIO</td>
<td>-</td>
<td>-0,844</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>-</td>
<td>-0,313</td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>+</td>
<td>0,022</td>
</tr>
</tbody>
</table>

Observations     | 4978            | 4978          |
LR chi-square     | 0,82            | 19,59         |
Degrees of freedom| 1              | 5             |
Dispersion parameter| 0,82         | 3,92          |

Table 5 shows the results of models one and two. Panel logistic regressions are performed with MW as dependent variable. *, ** and *** indicate the significance of the coefficients at the 10%, 5% and 1% level, respectively.

A possible explanation for not accepting the first hypothesis relates to the evolving role of the general counsel. Nelson & Nielsen (2000), but also other scholars like Ham & Koharki (2016), identify a shift from times that the general counsel was primarily focused on his duty of being an effective guardian of governance, risk and compliance (i.e., being a cop) to contemporaneous times where the general counsel is becoming more and more involved with non-legal issues (i.e., becoming a counsel and entrepreneur). The fact that contemporaneous GCs are not fully focused on effectively guarding governance, risk and compliance might explain why GC firms are not more likely to have a higher quality of internal control than non-GC firms.

This explanation is supported by, e.g., Nelson & Nielsen (2000), Goh et al. (2014) and Ham & Koharki (2016). Nelson & Nielsen (2000) surveyed general counsels and found that out of the three groups discussed above (cop, counsel and entrepreneur), only a few general counsels stated that they acted as a cop. Furthermore, Goh et al. (2014) show that the general counsel uses his legal expertise to facilitate top management in avoiding taxes. This is the opposite of what is expected from a general counsel who is focused on effectively guarding governance, risk and compliance. A general counsel who is focused on effectively guarding governance,
risk and compliance would rather act as a gatekeeper who exerts a conservative influence on the firm’s tax policies (Goh et al., 2014).

As stated above, model two contains four control variables. The coefficients for all control variables have the predicted sign. However, only the coefficient for \( \text{LNSIZE} \) is statistically significant at the 1% level. This thesis expected all control variables to be statistically significant, since previous research has shown that the control variables can be used to predict material weaknesses in firms. The fact that not all control variables are statistically significant suggests that the model as a whole does not really fit the data.

5.3. Regression results – \( H2 \) – models three, four, five and six

This thesis continues with presenting and discussing the results of models three, four, five and six, which are used to test the second hypothesis. Table 6 shows the results of models three and four while table 7 shows the results of models five and six.

### Table 6 Regressions results models three and four

\[
\begin{align*}
\text{Pr}(\text{MW}_{it}) &= \beta_0 + \beta_1 \text{GC1}_{it} + \epsilon_{it} \\
\text{Pr}(\text{MW}_{it}) &= \beta_0 + \beta_1 \text{GC1}_{it} + \beta_2 \text{BIG4}_{it} + \beta_3 \text{FEERATIO}_{it} + \beta_4 \text{LNSIZE}_{it} + \beta_5 \text{RESTRUCTURE}_{it} + \epsilon_{it}
\end{align*}
\]

<table>
<thead>
<tr>
<th>Predicted sign</th>
<th>Coefficient</th>
<th>( p )-value</th>
<th>Coefficient</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-5.083</td>
<td>0.000</td>
<td>1.814</td>
<td>0.286</td>
</tr>
<tr>
<td>GC1</td>
<td>-</td>
<td>0.184</td>
<td>0.125</td>
<td>0.679</td>
</tr>
<tr>
<td>BIG4</td>
<td>+</td>
<td>0.053</td>
<td>0.892</td>
<td></td>
</tr>
<tr>
<td>FEERATIO</td>
<td>-</td>
<td>-0.861</td>
<td>0.305</td>
<td></td>
</tr>
<tr>
<td>LNSIZE</td>
<td>-</td>
<td>-0.313</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>+</td>
<td>0.035</td>
<td>0.881</td>
<td></td>
</tr>
</tbody>
</table>

| Observations   | 4978        | 4978          |
| LR chi-square  | 0.36        | 19            |
| Degrees of freedom | 1         | 5             |
| Dispersion parameter | 0.36      | 3.80          |

Table 6 shows the results of models three and four. Panel logistic regressions are performed with MW as dependent variable. *, ** and *** indicate the significance of the coefficients at the 10%, 5% and 1% level, respectively.
Table 7 Regression results models five and six

\[
Pr(MW)_{it} = \beta_0 + \beta_1GC2_{it} + \varepsilon_{it}
\]

\[
Pr(MW)_{it} = \beta_0 + \beta_1GC2_{it} + \beta_2BIG4_{it} + \beta_3FEERATIO_{it} + \beta_4LNSIZE_{it} + \beta_5RESTRUCTURE_{it} + \varepsilon_{it}
\]

<table>
<thead>
<tr>
<th></th>
<th>Model five</th>
<th></th>
<th>Model six</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Predicted sign</td>
<td>Coefficient</td>
<td>p-value</td>
<td>Coefficient</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>-5.072</td>
<td>0.000</td>
<td>1.842</td>
</tr>
<tr>
<td>GC2</td>
<td>-</td>
<td>0.109</td>
<td>0.635</td>
<td>0.134</td>
</tr>
<tr>
<td>BIG4</td>
<td>+</td>
<td></td>
<td></td>
<td>0.051</td>
</tr>
<tr>
<td>FEERATIO</td>
<td>-</td>
<td></td>
<td></td>
<td>-0.852</td>
</tr>
<tr>
<td>LNSIZE</td>
<td>-</td>
<td></td>
<td></td>
<td>-0.314</td>
</tr>
<tr>
<td>RESTRUCTURE</td>
<td>+</td>
<td></td>
<td></td>
<td>0.027</td>
</tr>
<tr>
<td>Observations</td>
<td>4978</td>
<td></td>
<td>4978</td>
<td></td>
</tr>
<tr>
<td>LR chi-square</td>
<td>0.24</td>
<td></td>
<td>19.18</td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>1</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Dispersion parameter</td>
<td>0.24</td>
<td></td>
<td>3.84</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 shows the results of models five and six. Panel logistic regressions are performed with MW as dependent variable. *, ** and *** indicate the significance of the coefficients at the 10%, 5% and 1% level, respectively.

Recall that the second hypothesis states: “the likelihood that GC firms with a general counsel in top management have a higher quality internal control is higher when the general counsel has more power relative to other top managers”. Also recall that hypothesis two is tested by dividing the GC sample into two subsamples (i.e. GC1 and GC2). GC1 equals one when a GC firm has a GC that is amongst the top three highest paid executives and zero when a GC firm has a GC that is not amongst the top three highest paid executives or when it is a non-GC firm. GC2 equals one when a GC firm does not have a GC that is amongst the top three highest paid executives and zero when it is a non-GC firm. Model one and two are then replicated after replacing the binary variable GC by GC1 and GC2 (this results in models three, four, five and six). By doing this, this thesis examines whether more powerful GCs have a different effect on the quality of internal control compared to less powerful GCs.

Table 6 shows the univariate and multivariate results of regressing GC1 on MW and table 7 shows the univariate and multivariate results of regressing GC2 on MW. If the likelihood that GC firms with a general counsel in top management have a higher quality internal control is higher when the general counsel has more power relative to other top managers, then one should observe a statistically significant and a more negative coefficient for GC1 compared to GC2. Tables 6 and 7 show that, in model 5, the coefficient for GC1 is not lower than the coefficient
for GC2. For model 6, the coefficient for GC1 is lower than the coefficient for GC2. However, both coefficients are positive and not significant. Therefore, this thesis does not accept the second hypothesis. I.e., the likelihood that GC firms with a general counsel in top management have a higher quality internal control is not higher when the general counsel has more power relative to other top managers.

A possible explanation for this result again relates to the shift from times that the general counsel was primarily focused on his duty of being an effective guardian of governance, risk and compliance (i.e., being a cop) to contemporaneous times where the general counsel is becoming more and more involved with non-legal issues (i.e., becoming a counsel and entrepreneur). The results show that firms with more powerful general counsels are not more prone to having a higher quality of internal control.

Regarding the overall fit of models four and six, the coefficients for all control variables have the predicted sign. However, only the coefficient for LNSIZE is statistically significant at the 1% level. The fact that not all control variables are statistically significant suggests that the model as a whole does not really fit the data.

5.4. Summary

The above discusses the results which are obtained after running the six models. The results of the first and second model show that GC firms are not more likely to have a higher quality of internal control than non-GC firms. Therefore, this thesis does not accept the first hypothesis. The results of the third, fourth, fifth and sixth model show that the likelihood that GC firms with a general counsel in top management have a higher quality internal control is not higher when the general counsel has more power relative to other top managers. Therefore, this thesis also does not accept the second hypothesis.

A possible explanation for not accepting both hypotheses relates to the shift from times that the general counsel was primarily focused on his duty of being an effective guardian of governance, risk and compliance (i.e., being a cop) to contemporaneous times where the general counsel is becoming more and more involved with non-legal issues (i.e., becoming a counsel and entrepreneur). It seems that firms with a general counsel in top management do not have a better quality of internal control. This result is not significantly affected by the relative power of the general counsel.
6. Conclusion

Recently, the corporate general counsel has been subjected to extensive academic research. Many scholars have studied the role of the general counsel in corporate policies. This thesis focuses on analyzing the relation between the general counsel and firm’s quality of internal control. The research question that this thesis addresses is as follows:

Does having a general counsel in top management affect the quality of internal control?

It is important to address this research question, because previous literature shows that there are some inconsistencies regarding the role of the general counsel in corporate policies. Some scholars find evidence that supports the claim that the general counsel is an effective guardian of the firm’s governance, risk and compliance (Kwak et al., 2012), while others find evidence that supports the opposite (Goh et al., 2014; Ham & Koharki, 2016). Therefore, it seems that the previous literature is somewhat contradictory regarding the role of the general counsel. In other words: is the general counsel a friend or a foe?

In order to be able to answer the research question, this thesis formulates two hypotheses. The first hypothesis reads as follows:

\[ H_1: \text{GC firms are more likely to have a higher quality of internal control than non-GC firms.} \]

It is in the interest of the general counsel that the firm has a good internal control system, because having a good internal control system enables him to better adhere to his duties. Therefore, one would expect that having a general counsel in top management would translate into a better quality of internal control. The mechanism through which this could work is the control environment. However, models one and two present evidence which does not support the first hypothesis (i.e. the results show that GC firms are not more likely to have a higher quality of internal control than non-GC firms). Therefore, this thesis does not accept the first hypothesis.

The second hypothesis reads as follows:

\[ H_2: \text{The likelihood that GC firms with a general counsel in top management have a higher quality internal control is higher when the general counsel has more power relative to other top managers.} \]
The theory behind the second hypothesis is that if the general counsel has relatively more power, he will be relatively more able to influence the internal control policy. Models three, four, five and six present evidence which does not support the second hypothesis (i.e. the results show that the likelihood that GC firms with a general counsel in top management have a higher quality internal control is not higher when the general counsel has more power relative to other top managers). Therefore, this thesis also does not accept the second hypothesis.

Based on the answers given to the hypotheses, this thesis concludes that having a general counsel in top management does not affect the quality of internal control. This result can be explained by the shift from times that the general counsel was primarily focused on his duty of being an effective guardian of governance, risk and compliance (i.e., being a cop) to contemporaneous times where the general counsel is becoming more and more involved with non-legal issues (i.e., becoming a counsel and entrepreneur). The reason is that when the general counsel takes on more non-legal responsibilities, he will be more likely to be less able to execute his legal responsibilities correctly. This includes his responsibility of making the firm more aware of the importance of being in control.

This thesis is relevant for academics because it adds to two streams of literature. First, this thesis adds to the stream of literature concerning causes and consequences of quality of internal control. The evidence shows that having a general counsel in top management does not significantly affect the quality of internal control. Second, this thesis adds to the stream of literature regarding the role of the general counsel in top management (and in corporate policies). The results show that, at least from the perspective of internal control, the role of the general counsel in top management can be described as that of being a counsel (i.e. the general counsel is primarily focused on the duty of effectively guarding governance, risk and compliance, but he is willing to think strategically with business people and business units within the firm about business issues) and that of being an entrepreneur (here the general counsel focuses less on his duty of effectively guarding governance, risk and compliance in comparison with the cop and the counsel and he is actively involved in business issues). It seems that in contemporaneous times, the general counsel is not fully focused on being an effective guardian of the firm’s governance, risk and compliance. This view is supported by Nelson & Nielsen (2000), Goh et al. (2014) and Ham & Koharki (2016).

This thesis is also relevant for regulators and practitioners. By introducing new regulations concerning internal control in the SOX Act, the U.S. regulator has shown its willingness to
contribute to good quality of internal control. Because this thesis shows that having a general counsel in top management does not significantly affect the quality of internal control, the regulator can focus on finding new ways to further regulate the requirements for internal control.

Practitioners such as the board of directors and the management board are responsible for their firm’s internal control. For these actors, the results of this thesis could contribute to more understanding of the factors that affect quality of internal control. Also here, bearing in mind the results of this thesis, the board of directors and the management board should focus on other ways of improving their internal control, since this thesis shows that appointing a general counsel in top management will not significantly affect the quality of internal control.

Last but not least, this thesis is also relevant for general counsels themselves. The results of this thesis might induce general counsels to think about how to use their position to try to enhance the control environment with the ultimate goal of enhancing the quality of internal control.

This thesis does not come without its limitations. The limitations are as follows. Firstly, the models used to test the hypotheses seem to not really fit the data. While all control variables in models two, four and six have the predicted sign, not all control variables in models two, four and six are statistically significant. This is unexpected because previous research has shown that the control variables can be used to predict material weaknesses in firms. Secondly, one must be cautious when interpreting the results. This is because models two, four and six suffer from non-independence of errors and because this thesis cannot test the linearity assumption of binary regression.

For further research, this thesis recommends to further analyze the role of the general counsel in top management in order to get a better understanding of why his presence in top management does not significantly affect the quality of internal control. This could for example be done by interviewing a sample of general counsels who are in the top management of a firm.
7. Bibliography


