Code of conduct characteristics: do they matter for corporate reporting quality?

A mixed methods study into the associations between content characteristics of codes of conduct and corporate reporting quality

MASTER'S THESIS

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Abstract

The reduction of conduct risk became more important after the occurrence of several conduct-related scandals. In order to reduce conduct risk, companies developed and implemented codes of conduct: documents that should guide corporate behavior and make companies behave more ethically. However, previous research provided mixed results on whether these codes of conduct are positively associated with corporate ethical behavior. This study explores the content characteristics of codes of conduct that are positively associated with corporate reporting quality. Using a mixed methods approach, this study focused on the associations between corporate reporting quality and five content characteristics of codes of conduct: (1) length; (2) punishments; (3) reporting procedures; (4) examples and (5) tone. The results indicated that the length of a code of conduct was negatively associated with financial reporting quality, while the other content characteristics were not significantly associated with financial reporting quality. None of the content characteristics turned out to be significantly associated with non-financial reporting quality.

Preface

In front of you lies my master's thesis: *Code of conduct characteristics: do they matter for corporate reporting quality?* I wrote this thesis to complete my master's program in Economics with the specialization Accounting and Control at the Radboud University.

I still remember the day I arrived at the Radboud University for the introduction week like it was yesterday. After the introduction week, I started my bachelor in Business Administration with a specialization in Business Economics. Then, I decided to become the treasurer at the board of Study Association Synergy for one year. This was an unforgettable year in which I learnt a lot about finance, but also about cooperation and social skills. I finalized my time as a student with the master specialization Accounting and Control. Now, almost five years after the introduction week, I am handing in my master's thesis and I will leave the Radboud University to start my career as a Finance Trainee at the Nederlandse Spoorwegen.

I combined my master's thesis with an internship at the Risk Advisory department at EY Amsterdam. Here, I had the opportunity to see what it is like to work at EY, I got support with writing my thesis, I got to know many people, and I even got the chance to participate in EY's research on conduct risk, which was presented at the conference of the Institute of Internal Auditors on 8 June 2018.

Of course, there are some people I would like to thank. First of all, I would like to thank Geert Braam for being my supervisor and always making time for a discussion or a feedback moment. Second, I would like to thank Ralph Vermeiren, my supervisor at EY, for constantly discussing the progress of my thesis and for giving me the opportunity to participate in the EY in Control project and EY's research on conduct risk. Third, I would like to thank Denise and Donna, who were also writing their master's theses, for sharing ideas and supporting each other. Finally, I would like to thank my boyfriend Stijn and my mother and sister for their support during the master's thesis process.

For now, I hope you enjoy reading my master's thesis.

Lisa Sijakovic

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1   Introduction

In the beginning of the 21st century, corporate unethical behavior seemed to be the rule rather than the exception. Accounting scandals came to the light in large companies like Enron, WorldCom, and Royal Ahold. These companies engaged in illegitimate financial transactions and took advantage of accounting limitations by managing earnings, thereby hiding their bad performance from stakeholders (Ball, 2009; Healy & Palepu, 2003; McKendall, DeMarr, & Jones-Rikkers, 2002). Furthermore, the main reason behind the global financial crisis can be found in the risky behavior of commercial banks. Commercial banks were excessively lending credits and mortgages, while ignoring the fact that this could have negative results for their stakeholders (Pospisil & Margulescu, 2015). These cases show that there is a risk that companies harm their stakeholders with their unethical behavior. This risk is formally called conduct risk (Chartered Institute of Internal Auditors, 2016; EY, 2018). In an attempt to reduce conduct risk after the occurrence of these cases, regulators started to place more importance on corporate ethical behavior (COSO, 2017; EY, 2018; Monitoring Commissie Corporate Governance Code, 2016). One of the steps companies took in order to adhere to the new regulations and to improve corporate ethical behavior was the development and implementation of codes of conduct (Erwin, 2011; García-Sánchez, Rodríguez-Domínguez, & Frías-Aceituno, 2014; Robertson, 2008; Stevens, Steensma, Harrison, & Cochran, 2005).

Codes of conduct are formal documents which contain a set of prescriptions to which all employees must adhere. These codes of conduct, which are also called 'codes of ethics' or 'codes of business standards' (Erwin, 2011), aim to improve corporate ethical behavior in an attempt to make companies more open, integer, and accountable (Cadbury, 1992; Doig & Wilson, 1998; Kaptein & Schwartz, 2008). However, research on the effectiveness of codes of conduct in achieving these goals has provided mixed results. Some researchers argue that companies use codes of conduct as a way to signal their corporate ethical behavior to their stakeholders (Maitland, 1985; Singh, 2011; Wotruba, Chonko, & Loe, 2001). However, other researchers argue that companies might also use codes of conduct as a way to cover up corporate misconduct, thereby misleading their stakeholders (Doig & Wilson, 1998; Hummel & Schlick, 2016; Overall, 2016). Together, these previous studies show that codes of conduct can be associated with either corporate ethical behavior and corporate unethical behavior. However, these previous studies focused mainly on the presence of codes of conduct, while codes of conduct differ widely in their content as they are developed by individual companies

or professional groups (Dean, 2013; Erwin, 2011). That is why other researchers suggested that the content characteristics of codes of conduct can be an important factor in determining whether they are positively associated with corporate ethical behavior (Erwin, 2011; García-Sánchez et al., 2014; Nitsch, Baetz, & Hughes, 2005; Raiborn & Payne, 1990). This study explores the content characteristics of codes of conduct that are positively associated with corporate ethical behavior. More specifically, this study examines which content characteristics of codes of conduct are positively associated with corporate reporting quality. The focus is specifically on corporate reporting quality, because corporate reports provide information that is crucial for managers' monitoring and advisory role in the organization (Armstrong, Guay, & Weber, 2010). Therefore, high quality corporate reports are needed to manage organizations well and make them behave ethically. Furthermore, the way in which companies behave regarding their corporate reports is a key indicator of their corporate ethical behavior (Lamond, 1995; Stanton & Stanton, 2002). This leads to the following research question:

RQ: Which content characteristics of codes of conduct are positively associated with corporate reporting quality?

The research question will be answered using a mixed methods approach. First, qualitative research will be used to conduct content analyses on the codes of conduct of Dutch listed companies. Using this research method, the content characteristics on which codes of conduct differ are identified. After that, quantitative regression analyses will be used to test whether these content characteristics of codes of conduct are positively associated with corporate reporting quality.

This study contributes to the existing literature in several ways. First, multiple researchers called for more research into the effectiveness of codes of conduct in improving corporate ethical behavior. Somers & Somers (2001) and Cowton & Thompson (2000) for example state that previous research was not able to confirm the effectiveness of codes of conduct in promoting corporate ethical behavior. This study responds to this call. However, this study differs from the preceding studies in at least two ways. While previous studies focused on the associations between codes of conduct and organizational culture or employee behavior (Cowton & Thompson, 2000; Erwin, 2011; Farrell, Cobbin, & Farrell, 2002a; Mcnutt, Batho, & Mcnutt, 2005; Somers & Somers, 2001), this study focuses on the associations between

codes of conduct and corporate reporting behavior. Furthermore, most previous studies that examined the effectiveness of codes of conduct in improving corporate ethical behavior focused on the presence of codes of conduct (Farrell et al., 2002a; Mckinney, Emerson, & Neubert, 2010; Okpara, 2003; Somers & Somers, 2001; Valentine & Fleischman, 2002). As this provided mixed results, this study looks deeper into codes of conduct by focusing on their content characteristics. Second, this study also contributes to the literature that already explored the content characteristics of codes of conduct. These studies examined a number of content characteristics which were retrieved from theories to see whether these characteristics were positively associated with corporate ethical behavior. For example, Raiborn & Payne (1990) focused on the qualitative accounting characteristics developed by the Financial Accounting Standards Board (FASB): clarity, comprehensiveness, and enforceability and Weaver (1995) focused on the presence of code rationales and descriptions of sanctions in codes of conduct. These content characteristics were retrieved from theories of organizational justice and persuasive communication. This study takes a different approach. The content characteristics that are used in this study are not based on theories, but on content analyses of the codes of conduct of Dutch listed companies. Third, this study contributes to the literature that aims to find explanatory factors for the quality of corporate reports. Previous studies aimed to find explanatory factors for the quality of financial- or non-financial reports. They found for example that the board of directors and their committees (Botti, Boubaker, Hamrouni, & Solonandrasana, 2014), and a company's general counsel (Hopkins, Maydew, & Venkatachalam, 2015) are able to affect financial reporting quality. Regarding non-financial reporting quality, Chan, Watson, & Woodliff (2014) for example found that companies with higher corporate governance ratings disclose higher quality CSR information, and Michelon, Pilonato, & Ricceri (2015) found that companies with good CSR reporting practices do not necessarily disclose higher quality CSR information. This study contributes to these studies by using the content characteristics of codes of conduct as a potential explanatory factor for the quality of corporate reports. Furthermore, this study examines both financial- and non-financial reporting quality, while previous studies focused on one of those (Botti et al., 2014; Chan et al., 2014; Hopkins et al., 2015; Michelon et al., 2015).

The remainder of this study is structured as follows. In chapter two, the literature on conduct risk and codes of conduct is reviewed, and several remaining questions are formulated. Chapter three discusses the methodology. Chapter four contains results of the empirical analyses, and chapter five contains the conclusions and the discussion.

2   Literature overview

2.1   Theoretical background

As conduct risk results from the conflicting interests of companies and their stakeholders, the theory underlying this study is agency theory. In agency theory, a company is viewed as a nexus of contracting relationships between individuals: the principal and the agent. This contracting relationship emerges when one or more persons (the principal(s)) engage another person (the agent) to perform a service on their behalf, in which the agent gets some decision making authority (Jensen & Meckling, 1976). In general, agency theory is concerned with the relationship between shareholders as the principal and a company as the agent, but it can also be argued that an agency relationship exists between other stakeholders and a company. The fact that agency relationships also exist between stakeholders and the company, leads to the term stakeholder agency theory (Hill & Jones, 1992). In (stakeholder) agency theory, it is assumed that there is information asymmetry between the principal and the agent, and is also assumed that both the principal and the agent are utility maximizers and that the principal and the agent have conflicting interests. Therefore, it is likely that the agent does not always act in the best interests of the principal. This is what is called an agency problem (Jensen & Meckling, 1976).

Two types of behavioral or conduct risk can arise because of agency problems: adverse selection and moral hazard. With adverse selection, companies have an information advantage over their stakeholders. This is because they have access to more sources of information than their stakeholders. The companies can use this information advantage in an unethical way and this can result in negative outcomes for the stakeholders. With moral hazard, the stakeholders do not have the ability to monitor the company's behavior. Here, companies can behave unethically without the stakeholders knowing it, and the stakeholders can be harmed (Deloitte, 2017; Jamal & Bowie, 1995; Scott, 2015). In both situations, agency problems can cause the fact that companies' behavior results in negative outcomes for their stakeholders. It can thus be concluded that conduct risk arises because of agency problems.

Conduct risk has become an important topic for either regulators, stakeholders, and companies. This can be attributed to a number of factors. First, there has been a change in the competitive environment, with a greater tendency toward turbulence and complexity. Second, several stakeholder groups have emerged that placed greater emphasis on corporate ethical

behavior (Arena, Arnaboldi, & Azzone, 2010). Third, regulators started to place greater importance on companies' ethical behavior (Power, 2004). As a result of this, direct requirements regarding conduct risk arose in the financial industry, which were coming from the Financial Stability Board, the Basel Committee, the European Insurance and Occupational Pensions Authority (EIOPA), and the Autoriteit Financiële Markten (AFM) (EY, 2018). Because less conduct related scandals occurred outside the financial industry, there are no direct requirements regarding conduct risk in other industries yet. However, there have been changes in several frameworks that are also used outside the financial industry. For example, the Dutch Corporate Governance Code now requires the board members of the company to stimulate a culture that promotes ethical behavior, and the COSO ERM framework now includes culture as one of its components. Here, companies are expected to define the behaviors that characterize the company's desired ethical culture (COSO, 2017; EY, 2018; Monitoring Commissie Corporate Governance Code, 2016). These changes emphasize the importance of conduct risk.

As conduct risk is increasing in importance for regulators and other stakeholders, companies also started to place greater importance on reducing conduct risk and improving corporate ethical behavior. Figure 1 presents a framework that explains the ways in which this can be done. According to the framework, there are several key mechanisms that can be used to improve corporate ethical behavior: (1) tone from the top; (2) risk behavior standards; (3) roles and responsibilities; (4) risk governance; (5) risk appetite; (6) risk transparency; (7) rewards and (8) employee life cycle (EY, 2015). This study focuses on one of these mechanisms: risk behavior standards. Risk behavior standards require that the companies' desired ethical behaviors are established and constantly displayed (EY, 2015). One way for companies to establish and display the desired ethical behaviors is by implementing a code of conduct. Codes of conduct can thus be seen as a mechanism that can be used to improve corporate ethical behavior.

2.2   Codes of conduct

Codes of conduct can be defined as written, formal documents which consist of moral standards used to guide employee and corporate behavior (Schwartz, 2004). More specifically, codes of conduct attempt to improve corporate ethical behavior by making companies more open, integer, and accountable (Cadbury, 1992; Doig & Wilson, 1998).

Companies in the United States started to develop and implement codes of conduct in the 1970s, after the revelation of corporate bribes, kickbacks, and other improper behaviors (Farrell, Cobbin, & Farrell, 2002). Around that time, about 2% of the Fortune Global 200 companies had a code of conduct, but after 40 years, 86% of the Fortune Global 200 companies had adopted a code of conduct (KPMG Advisory N.V., 2008). The growing adoption of codes of conduct can be attributed to a number of factors. First, in the United States, penalties can be reduced if a company demonstrates that an effective ethics and compliance program was in place prior to an offence. Here, a code of conduct is part of an effective ethics and compliance program (McKendall et al., 2002; Schwartz, 2004; Singh, 2011). Second, the corporate accounting scandals that took place in the beginning of the 21st century led to the implementation of the Sarbanes-Oxley Act. This act requires companies to disclose whether or not they implemented a code of conduct, and if not, the reasons why not have to be disclosed (Schwartz, 2004). Third, there is a general belief that codes of conduct enhance corporate reputations (Singh, 2011) and fourth, companies believe that codes of conduct are mechanisms which can improve corporate ethical behavior (Schwartz, 2004).

But even though companies have widely adopted codes of conduct to improve corporate ethical behavior, studies using different theories provide partly competing explanations on why codes of conduct are either effective or ineffective in improving corporate ethical behavior and corporate reporting behavior (Garriga & Melé, 2004; Jensen & Meckling, 1976).

On the one hand, ethical theories, political theories, and integrative theories (Garriga & Melé, 2004) explain how codes of conduct can be effective in improving corporate reporting behavior. Ethical theories suggest that companies have ethical responsibilities toward society, political theories suggest that companies should use the power they have in a responsible way in society, and integrative theories suggest that companies should be focusing on satisfying the demands of society (Garriga & Melé, 2004; Kim, Park, & Wier, 2012). Together, studies that used these theories found that codes of conduct are used by companies that want to signal their corporate ethical behavior to their stakeholders. For example, prior research shows that employees working at companies with codes of conduct are less likely to accept ethically questionable behavior (Mckinney et al., 2010) and more likely to choose ethical alternatives when making decisions (Sims & Keon, 1999; Somers & Somers, 2001). Furthermore, Jones (1995) found that codes of conduct can reduce opportunistic behavior by making employees more honest and integer. When this is the case, codes of conduct are likely to lead to higher quality corporate reports, because companies that want to behave ethically are likely to be more transparent about their behavior.

On the other hand, agency theory (Jensen & Meckling, 1976) assumes opportunistic behavior by agents, and instrumental theories (Garriga & Melé, 2004) assume that companies only exist to create wealth for themselves. Studies using these theories found that codes of conduct are used by opportunistic companies to manipulate stakeholders. To give some examples, prior research indicates that codes of conduct do not change honesty, avoidance of harm, accuracy, and fair treatment (Snell & Herndon Jr, 2000), they do not increase the propensity to report unethical behavior (Okpara, 2003), and they are often used as a marketing tool to enhance corporate reputation (Prasad & Holzinger, 2013; Singh, 2006) or to cover up the impact of corporate misconduct (Hemingway & Maclagan, 2004; Long & Driscoll, 2008), instead of furthering social good. When this is the case, codes of conduct do not improve corporate ethical behavior and they are not likely to lead to higher quality corporate reports, because these opportunistic companies are not likely to be transparent about their corporate misconduct.

These previous studies indicate that the presence of a code of conduct is not enough to improve corporate reporting behavior in all companies. Other researchers therefore argue that codes of conduct do not only need to be present, but they also need to have some underlying qualitative characteristics in order to be viable and useful documents which can help in improving corporate reporting quality (Erwin, 2011; Kaptein & Schwartz, 2008; Raiborn & Payne, 1990; Singh, 2011; Weaver, 1995).

The previous discussion raises some questions that need to be answered in order to properly answer the research question:

➢ On which content characteristics do codes of conduct differ?
➢ Which content characteristics of codes of conduct are significantly associated with corporate reporting quality?

3   Research methods

3.1   Methodology

To examine which content characteristics of codes of conduct are positively associated with corporate reporting quality, a mixed methods approach was used. A mixed methods approach is characterized by methodological eclecticism, which means that the most appropriate research techniques are selected and synergistically integrated. The result is a mix of qualitative and quantitative research (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2003). Its logic of inquiry includes both the use of induction to discover patterns, and deduction to test theories (Johnson & Onwuegbuzie, 2004). A mixed method approach has the strengths of both qualitative and quantitative research, and it can neutralize or cancel out some of the limitations that both methods have (Creswell, Clark, Gutmann, & Hanson, 2007). However, the most important advantage of a mixed methods approach is that it is possible to "simultaneously generate and verify theory in the same study" (Molina-Azorin, 2012, p. 35; Williams & Shepherd, 2017, p. 275). Creswell et al. (2007) distinguish six design types of mixed methods approaches: (1) sequential explanatory; (2) sequential exploratory; (3) sequential transformative; (4) concurrent triangulation; (5) concurrent nested and (6) concurrent transformative. This study used a sequential exploratory design type, which means that qualitative data were collected first, followed by the collection and analysis of quantitative data. The purpose of this design type is to identify variables in a qualitative way, in order to test them using quantitative analyses. In this study, qualitative research methods were used first in order to identify the content characteristics on which codes of conduct differ. After that, quantitative research methods were used to quantify the dependent variable, which is corporate reporting quality, the independent variables, which are the content characteristics of the codes of conduct, and control variables. After quantifying all the variables, regression analyses were used to test whether the content characteristics of codes of conduct are positively associated with corporate reporting quality.

3.2   Sample

The sample consisted of 104 Dutch listed companies in 2017 and was retrieved from the Eikon database. 2017 was chosen because this is the most recent year for which both the financial- and non-financial reports are available. 5 companies for which no code of conduct could be found were directly removed from the sample. 25 other companies needed to be removed, because other essential data for the analyses was missing. This resulted in a final sample of 74 Dutch listed companies which could be used in the analyses. The descriptives of

the sample can be found in table 1. A data limitation lies in the fact that every company only has its most recent code of conduct published on its website and codes of conduct that were used in previous years cannot be found anymore. Therefore, it was not possible to include multiple years in the sample and there was no other option than doing cross-sectional analyses.

Table 1: Sample descriptives

Industry	N	%
Mining, Quarrying, and Oil and Gas Extraction	2	2,7
Construction	6	8,1
Manufacturing	22	29,7
Wholesale Trade	2	2,7
Retail Trade	4	5,4
Transport and Warehousing	2	2,7
Information	6	8,1
Finance and Insurance	12	16,2
Real Estate and Rental and Leasing	7	9,4
Professional, Scientific, and Technical Services	6	8,1
Administrative and Support and Waste Management and Remediation Services	3	4,1
Health Care and Social Assistance	1	1,4
Arts, Entertainment, and Social Assistance	1	1,4
Total	74	100

3.3   Qualitative research

To identify the content characteristics on which codes of conduct differ, qualitative content analyses were used. Content analysis is a research method which is used for identifying characteristics of a message in a systematical and objective way (Cole, 1988). In this study, an inductive approach was used. This means that documents were analyzed loosely in order to identify variables or characteristics with which new theory can be generated (Molina-Azorin, 2012; Williams & Shepherd, 2017). First, the codes of conduct of the 74 Dutch listed companies in the sample were collected from the internet. Second, the contents of these documents were examined following the well-known grounded theory techniques developed

by Corbin & Strauss (1990). This means that during the analysis of the documents, the concepts that could be seen as potential indicators corporate reporting quality were marked and labeled. Concepts that were similar to each other got the same label. In the end, the labels were compared, and when multiple concepts had the same label, those concepts were grouped into categories. This means that only when a concept was repeatedly present, or significantly absent, the concepts were included in the categories. The categories that were identified at the end of the process were the basic units for the theory that will be generated (Corbin & Strauss, 1990).

From this process, five categories were identified, representing the content characteristics on which code of conduct differ from each other:

- Length: because codes of conduct turned out to differ widely in their length. While the shortest code of conduct discussed only 4 topics (Esperite N.V., 2014), the longest codes of conduct in the sample discussed 29 topics (e.g. Wolters Kluwer, 2016).
- Punishments: because some codes turned out to be enforced by stating that punishments will follow when employees do not adhere to the code, while other codes did not state this.
- Reporting procedures: because some codes specified special procedures through which unethical behavior or code violations can be reported without retribution of the reporter, while other codes did not specify such procedures.
- Examples: because some codes provided examples of situations in which the code of conduct would be violated, while other codes did not provide examples.
- Tone: because codes of conduct differed in their tone. Some codes were mainly written in a positive or directive way, while other were mainly written in a negative of proscriptive way.

These content characteristics match with the content characteristics that were used in the prior studies of for example Raiborn & Payne (1990) and Weaver (1995). To determine whether these content characteristics are associated with corporate reporting quality, quantitative multiple regression analyses were used.

3.4 Quantitative research

3.4.1 Measurement of variable

3.4.1.1 Dependent variable

In the quantitative multiple regression analyses, corporate reporting quality was included as the dependent variable. To measure corporate reporting quality, two variables were used. This is because a distinction is usually made between financial and non-financial reporting (Farvaque, Refait-alexandre, & Saïdane, 2012). Therefore, both financial reporting quality (*FRQ*) and non-financial reporting quality (*NFRQ*) were considered in this study.

Financial reporting quality

Consistent with previous studies (e.g. Cohen et al., 2008; Roychowdhury, 2006), financial reporting quality (*FRQ*) was measured by earnings management. This is because the financial reporting quality decreases when a company engages in earnings management (Shuli, 2011).

Two types of earnings management were distinguished: accrual based earnings management and real earnings management. The data for these variables were retrieved from the Eikon database.

To measure accrual based earnings management (*ABEM*), I used discretionary accruals. Consistent with previous research (Cohen et al., 2008; Dechow, Sloan, & Sweeney, 1995; Hill & Jones, 1992), discretionary accruals were calculated using multiple steps.

The first step in determining discretionary accruals was solving the following equation:

$$\frac{TA_{i,t}}{Assets_{i,t-1}} = \beta_0 + \beta_{1t}\ \frac{1}{Assets_{i,t-1}} + \beta_2\ \frac{\Delta\,REV_{it}}{Assets_{i,t-1}} + \beta_3\ \frac{PPE_{it}}{Assets_{i,t-1}} + \varepsilon_{it} \qquad (1)$$

Where:

TA $_{it}$	Total accruals calculated by subtracting cash flow from operations from earnings before extraordinary items and discontinued operations
Assets $_{t-1}$	Total assets in the preceding year
Δ REV	Change in revenues from the preceding year
PPE $_{it}$	Gross value of property, plant, and equipment

The coefficients from equation (1) were used in step two to determine the non-discretionary accruals:

$$NDA_{i,t} = \widehat{\beta_0} + \widehat{\beta_1}\left[\frac{1}{Assets_{i,t-1}}\right] + \widehat{\beta_2}\left[\frac{(\Delta REV_{i,t}-\Delta AR_{i,t})}{Assets_{i,t-1}}\right] + \widehat{\beta_3}\left[\frac{PPE_{i,t}}{Assets_{i,t-1}}\right] + \varepsilon_{it} \qquad (2)$$

Where:

NDA it   Non-discretionary accruals

Δ AR it   Change in accounts receivable from the preceding year

In step three, the discretionary accruals were determined by calculating the difference between total accruals and non-discretionary accruals:

$$DA_{it} = \left(\frac{TA_{it}}{Assets_{i,t-1}}\right) - NDA_{it} \qquad (3)$$

Where:

DA it   Discretionary accruals

Because the discretionary accruals can have either positive or a negative value, the possibility exists that they cancel out each other. Therefore, consistent with Cohen et al. (2008), I used the absolute value of the discretionary accruals in the analyses.

To measure real earnings management (*REM*), I relied on previous studies (e.g. Cohen et al., 2008; Roychowdhury, 2006) that distinguished three proxies for real earnings management: (1) abnormal levels of cash flow from operations; (2) abnormal discretionary expenses, and (3) abnormal production costs. These proxies relate to three ways in which managers can manipulate operating activities (Cohen et al., 2008; Roychowdhury, 2006). However, because of many missings in the data regarding abnormal discretionary expenses, I decided to use only the proxies for abnormal levels of cash flow from operations and abnormal production costs.

First, the abnormal level of cash flow from operations was used as a proxy for real earnings management, because cash flow from operations can be lower when managers for example accelerate the timing of sales by giving price discounts or more lenient credit terms (Cohen et al., 2008). The abnormal level of cash flows from operations was calculated by subtracting the

normal level of cash flow from operations from the actual level of cash flow from operations. This normal level of cash flow from operations was calculated as follows:

$$\frac{CFO_{it}}{Assets_{it-1}} = \beta_1 \left(\frac{1}{Assets_{it-1}}\right) + \beta_2 \left(\frac{REV_{it}}{Assets_{it-1}}\right) + \beta_3 \left(\frac{\Delta REV_{it}}{Assets_{it-1}}\right) + \varepsilon_{it} \qquad (4)$$

Where:

CFO$_{it}$ Cash flow from operations

Second, production costs was used as a proxy for real earnings management. Production can be increased by managers in order to spread the fixed costs over a larger number of units. This can increase earnings (Cohen et al., 2008). Production costs were calculated as the sum of costs of goods sold and change in inventory during the year. These variables were calculated as follows:

$$\frac{COGS_{it}}{Assets_{it-1}} = \beta_1 \left(\frac{1}{Assets_{it-1}}\right) + \beta_2 \left(\frac{REV_{it}}{Assets_{it}}\right) + \varepsilon_{it} \qquad (6)$$

Where:

COGS$_{it}$ Costs of goods sold

$$\frac{\Delta INV_{it}}{Assets_{it-1}} = \beta_1 \left(\frac{1}{Assets_{it-1}}\right) + \beta_2 \left(\frac{REV_{it}}{Assets_{it-1}}\right) + \beta_3 \left(\frac{\Delta REV_{it}}{Assets_{it-1}}\right) + \varepsilon_{it} \qquad (7)$$

Where:

ΔINV$_{it}$ Change in inventory from the preceding year

The variables costs of goods sold and change in inventory during the year were combined to calculate the normal level of production cost:

$$\frac{PROD_{it}}{Assets_{it-1}} = \beta_1 \left(\frac{1}{Assets_{it-1}}\right) + \beta_2 \left(\frac{REV_{it}}{Assets_{it-1}}\right) + \beta_3 \left(\frac{\Delta REV_{it}}{Assets_{it-1}}\right) + \beta_4 \left(\frac{\Delta REV_{it-1}}{Assets_{it-1}}\right) + \varepsilon_{it} \qquad (8)$$

Where:

PROD$_{it}$ Normal level of production costs

The abnormal level of production costs was then calculated by subtracting the normal level of production costs from the actual production costs.

Finally, real earnings management (*REM*) is calculated by taking the sum of the two proxies. Because *REM* can also have either positive or negative values, the possibility again exists that they cancel out each other. Therefore, the absolute value of *REM* was used in the analyses.

Eventually, financial reporting quality (*FRQ*) was measured by adding up the values for accrual based earnings management and real earnings management. Because a higher score on earnings management now represents a lower financial reporting quality, the values for earnings management were multiplied by -1. In this way, a higher score on earnings management represents a higher score on financial reporting quality.

Non-financial reporting quality

To measure non-financial reporting quality (*NFRQ*), I used the company's most recent score on the Transparency Benchmark. The Transparency Benchmark was developed by the Dutch Ministry of Economic Affairs and Climate Policy in 2004. It is a research on the qualitative and quantitative characteristics of non-financial reports for listed companies in the Netherlands and it was used in previous theses to measure non-financial reporting quality (e.g. Kengen, 2017; Reintjes, 2017). The Transparency Benchmark was developed to provide insight into the way in which the largest companies in the Netherlands report about their CSR performance. The assessment criteria of the Transparency Benchmark comply with the guidelines of the Global Reporting Initiative (GRI), but they are especially designed for Dutch companies. The assessment process of the Transparency Benchmark is as follows: First, companies have to fill in a self-assessment in which they assess themselves on their CSR performance. This leads to an initial score. Second, companies have the possibility to comment on the initial score by using an e-tool. External auditor EY will handle these comments and finally, the final scores are determined by the Ministry of Economic Affairs and Climate Policy. This final score consists of two parts: a Content-Oriented Framework of Standards and a Quality-Oriented Framework of Standards. The Content-Oriented Framework of Standards consists of three parts: Company and Business model, Policy and Results, and Management approach. The Quality-Oriented Framework of Standards consists of five parts: Relevance, Clearness, Reliability, Responsiveness, and Coherence. For both the Content-Oriented- and the Quality-Oriented part, a company can receive a maximum of 100 points.

So, the maximum score on the Transparency Benchmark is 200. The maximum score per part is further outlined in figure 2. The minimum score on the Transparency Benchmark is 0. However, a company does not only receive a score of 0 when the content and the quality of its non-financial report are extremely bad. When the corporate reports of the company are not publicly available or only available against a payment, when the report is not available before a certain deadline, or when a company is part of a group that reports on group level, but did not mention this in the Dutch report, a company will also receive a score of 0. As it is not possible to check the reason behind a score of 0, only companies that have a minimum score of 1 on the Transparency Benchmark were included in the analyses (B&A B.V., 2013; Ministry of Economic Affairs and Climate Policy, 2018).

Figure 2:Transparency Benchmark criteria

Content-oriented Framework of Standards							100
1. Company and Business model	33	2. Policy and Results			34	3. Management approach	33
1A. Profile and value chain	10	2A. Policy and (self-imposed) obligations			5	3A. Governance en remuneration	10
1B. Proces of value creation	10	2B. Objectives			5	3B. Steering and Control	8
1C. Analysis of the operating context (including risks and opportunities)	8	2C. Economic aspects of business practice ·8	2D. Environmental aspects business practice ·8	2E. Social aspects of business practice ·8		3C. Future expectations	5
1D. Strategic context	5					3D. Reporting criteria	10

Quality-oriented Framework of Standards									
4. Relevance	20	5. Clearness	20	6. Reliability	20	7. Responsiveness	20	8. Coherence	20
Materiality	8	Clearness	6	Accuracy, Completeness and true view	17	Focus on stakeholders	13	Strategic focus	5
Scope and demarcation	6	Conciseness	4	Prudence	3	Contribution to social debate	2	Contextual coherence	6
Timeliness	6	Insightfull	7			Audacity	5	Integration	8
		Accesibility	3					Comparability	3

3.4.1.2 Independent variables

After conducting qualitative content analyses on the codes of conduct of the Dutch listed companies in the sample, it turned out that codes of conduct differed widely on five content characteristics. These characteristics were used in the analyses as independent variables. However, in order to use these content characteristics in the quantitative analyses, they first had to be quantified. This was done by using measurements that were used in related prior

literature. The first independent variable was length (*Length*) and as in Gaumnitz & Lere (2004), it was measured by the number of topics that is discussed in a company's code of conduct. The second independent variable was punishments (*Punishments*). As in Murphy (1995), this variable was measured as a dummy variable which has a value of 1 when the code of conduct explains possible punishments that employees get when they violate the code, and a value of 0 otherwise. The third independent variable was reporting procedures (*Reporting*). The measurement of this variable was an adaptation from Erwin (2011) and it consisted of a dummy variable which has a value of 1 when the code explains procedures by which code violations can be reported without retribution of the reporter, and a value of 0 otherwise. The fourth independent variable was examples (*Examples*). Adapted from Gibbs (2003) and Murphy (1995), this variable was measured as a dummy variable. The dummy variable has a value of 1 when the code of conduct provides examples of possible ethical violations, and a value of 0 otherwise. The last independent variable was positive tone (*Tone*). As suggested by Gaumnitz & Lere (2004), this variable was measured as the percentage of topics that are discussed in the code of conduct that is written in a directive or positive way, instead of a proscriptive or negative way.

3.4.1.3 Control Variables

Several variables were included as control variables in the analyses. This is because prior research showed that these variables also have an effect on corporate reporting quality. By including these variables in the analyses, the problem of correlated omitted variables will be avoided. The first control variable was firm size (*Size*). This control variable is also widely used in prior literature (e.g. Brown & Hillegeist, 2003; Chan et al., 2014; Gamerschlag, Möller, & Verbeeten, 2011; Lang & Lundholm, 2000; McKendall et al., 2002; Mckinney et al., 2010; Qian, Gao, & Tsang, 2015; Stevens et al., 2005; Van der Bauwhede & Willekens, 2008), and it was measured by taking the natural logarithm of year-end total assets. Prior research indicated that firm size is positively related to corporate reporting quality. This has several reasons: First, large companies are more visible to society than small ones, and therefore, they are subject to greater political and regulatory pressures. In order to reduce the potential cost stemming from these pressures, large companies try to show that they behave ethically by disclosing more information (Brammer & Pavelin, 2006; Meek, Roberts, & Gray, 1995; Roberts, 1992). Furthermore, large companies are more likely than small ones to use formal communication channels, such as financial- and non-financial annual reports (Brammer & Pavelin, 2006), and large companies have more stable and predictable operations

than small companies, which makes them less likely to have errors in their corporate reports (Dechow & Dichev, 2002). The second control variable was financial leverage (*Leverage*), which was also used by for example Qian et al. (2015) and Braam, Nandy, Weitzel & Lodh (2015). It was measured as the ratio between year-end total liabilities and total assets. Financial leverage was included as a control variable, because Van der Bauwhede & Willekens (2008) and Defond et al. (1994) indicated that the presence of debt causes managers to change their reporting behavior. This is because managers want to show good financial performance in order to avoid debt covenant violations. Third, return on assets (*ROA*) controlled for firm performance and it was computed as the company's net income divided by its total assets. This variable was also used by for example Zang (2012) and McKendall et al. (2002). It was added because prior research indicated that companies are more likely to disclose information when they perform well (Miller, 2002), and they are more likely to engage in earnings management when they perform poor (Abdul Rahman & Haneem Mohamed Ali, 2006). The fourth control variable was auditor quality (*BIG4*). This was a dummy variable which has a value of 1 when the company is audited by one of the big 4 companies (EY, Deloitte, KPMG or PwC), and a value of 0 when the company is audited by another audit company. Auditor was added as a control variable, because prior research indicated that companies with a big 4 auditor are more likely to have higher quality corporate reports. This is because higher quality auditors, such as big 4 auditors, are more likely to detect earnings management than lower quality auditors (Abdul Rahman & Haneem Mohamed Ali, 2006; Ghosh, Marra, & Moon, 2010). *BIG4* was also used as a control variable in previous studies by for example Kim et al. (2012) and Qian et al. (2015). As a fifth control variable, equity offerings (*EO*) was added. This dummy variable has a value of 1 if the company is planning an equity offering next year, and a value of 0 otherwise. This control variable was also used in prior research of Kim et al. (2012) and Qian et al. (2015) and it was added because prior research indicated that companies which are planning equity offerings have an incentive to manage their earnings in order to make their equity offerings successful. Sixth, industry sector (*Industry*), also used by for example Chan et al. (2014), McKendall et al. (2002), and Mckinney et al. (2010) was included as a control variable and it was measured by using the 2-digit North American Industry Classification System (NAICS) code. By using these codes, 20 industry groups were distinguished, which can be found in table 2. Industry was added as a control variable, because the quality of corporate reports is dependent on the industry. Certain industries, such as health care, technology, and finance, are more likely to engage in fraudulent financial reporting (Beasly, Carcello, Hermanson, & Lapides, 2000), and

certain other industries, especially those that have high environmental impact, tend to disclose more CSR information (Gamerschlag, Möller, & Verbeeten, 2011).

NAICS Industry Classification Code	Industry Classification
11	Agriculture, Forestry, Fishing, and Hunting
21	Mining, Quarrying, and Oil and Gas Extraction
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Social Assistance
72	Accommodation and Food Services
81	Other Services (except Public Administration)
92	Public Administration

An overview of the dependent-, independent-, and control variables that were used in the analyses can be found in table 3.

Variable	Proxy	Measurement
Dependent variables		
FRQ	Financial reporting quality	The sum of real earnings management and accrual-based earnings management, as described in section 3.4.1.1
NFRQ	Non-financial reporting quality	The company's most recent score on the Transparancy Benchmark
Independent variables		
LENGTH	Length of the code of conduct	The number of topics that is discussed in the code of conduct
PUNISHMENTS	Enforcement of the code of conduct	Dummy variable that equals 1 when the code of conduct describes the punishments that employees get when they violate the code of conduct, and 0 otherwise
REPORTING	Rerporting procedures that protect the reporter in the code of conduct	Dummy variable that equals 1 when the code of conduct describes procedures by which code violations can be reported without retribution of the reporter, and 0 otherwise
EXAMPLES	Examples of possible code violations in the code of conduct	Dummy variable that equals 1 when the code of conduct provides examples of possible code violations, and 0 otherwise
TONE	Tone of the code of conduct	The percentage of topics in the code of conduct that is written in a positive or directive way
Control variables		
SIZE	Company size	Natural logarithm of year-end total assets
LEVERAGE	Financial leverage	The ratio between year-end total liabilities and total assets
ROA	Firm performance	Net income divided by total assets
BIG4	Auditor quality	Dummy variable that equals 1 when the company is audited by a big 4 auditor, and 0 otherwise
EO	Equity offerings	Dummy variable that equals 1 when the company is planning an equity offering next year (2018), and 0 otherwise
INDUSTRY	Industry classification	North American Industry Classification code

3.4.2 Econometric models

Multiple regression analyses were used to test whether the identified content characteristics are positively associated with corporate reporting quality. This is an appropriate method, because regression analysis is used to analyze relationships (Kahane, 2008), and the multiple regression specifically allows the usage of multiple independent variables. The following models will be estimated:

- $FRQ = \beta_0 + \beta_1 \text{ LENGTH} + \beta_2 \text{ PUNISHMENTS} + \beta_3 \text{ REPORTING} + \beta_4 \text{ EXAMPLES} + \beta_5 \text{ TONE} + \beta_6 \text{ SIZE}_{\text{CONTROL}} + \beta_7 \text{ LEVERAGE}_{\text{CONTROL}} + \beta_8 \text{ ROA}_{\text{CONTROL}} + \beta_9 \text{ BIG4}_{\text{CONTROL}} + \beta_{10} \text{ EO}_{\text{CONTROL}} + \beta_{11} \text{ INDUSTRY}_{\text{CONTROL}} + \varepsilon_i$

- $NFRQ = \beta_0 + \beta_1 \text{ LENGTH} + \beta_2 \text{ PUNISHMENTS} + \beta_3 \text{ REPORTING} + \beta_4 \text{ EXAMPLES} + \beta_5 \text{ TONE} + \beta_6 \text{ SIZE}_{\text{CONTROL}} + \beta_7 \text{ LEVERAGE}_{\text{CONTROL}} + \beta_8 \text{ ROA}_{\text{CONTROL}} + \beta_9 \text{ BIG4}_{\text{CONTROL}} + \beta_{10} \text{ EO}_{\text{CONTROL}} + \beta_{11} \text{ INDUSTRY}_{\text{CONTROL}} + \varepsilon_i$

4   Empirical results

4.1   Descriptive statistics

Table 4 gives an overview of the descriptive statistics of the dependent-, independent-, and control variables. These statistics indicate that the mean value of the financial reporting quality of the Dutch listed companies is -0,57. The mean value of the non-financial reporting quality is 121,3. Furthermore, an average code of conduct discusses 16,9 topics of which 77,5% is written in a positive way. 63,5% of the codes of conduct discusses possible punishments that employees get when the code is violated, 79,7% of the companies in the sample has procedures by which violations of codes of conduct can be reported without retribution of the reporter, and 10,8% of the codes of conduct contains examples of possible code violations. Regarding the control variables, the companies in the sample have an average size of 21,5, the average ratio between total liabilities and total assets is 8,3, the average return on assets is 17,8%, 98,6% of the companies in the sample is audited by a big 4 auditor, and 12,2% of the companies in the sample is planning an equity offering for 2018.

Table 4: Descriptive statistics of the variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent Variables					
FRQ	74	-.5676502	.2464342	-1.135019	-.1112452
NFRQ	74	121.2838	58.09876	19	199
Independent Variables					
Length	74	16.85135	8.871507	4	54
Punishments	74	.6351351	.4846782	0	1
Reporting	74	.7972973	.404757	0	1
Examples	74	.1081081	.3126365	0	1
Tone	74	77.5	13.91092	50	100
Control Variables					
Size	74	21.48496	2.322842	16.56047	27.46404
Leverage	74	8.339873	63.68014	.0015606	548.2662
ROA	74	.1779654	.9460915	-.3812742	7.923134
BIG4	74	.9864865	.1162476	0	1
EO	74	.1216216	.3290794	0	1
Industry	74			21	71

4.2   Expectations based on prior literature

Several previous researchers also examined the content characteristics of codes of conduct that I found during the content analyses. Based on their research, some expectations about the

associations between the content characteristics of codes of conduct and corporate reporting quality can be created.

First, it was found that codes of conduct differ widely in their length. Of course, the longer a code of conduct is, the more specific the company can be in discussing relevant topics. Previous research states that codes of conduct increase in their utility when they are more specific in discussing topics (Mckinney et al., 2010; Murphy, 1995). Furthermore, when a code discusses all the risk topics that are relevant to the company, the quality of the code will be higher and the code is more likely to lead to higher quality corporate reports (Erwin, 2011). Therefore, it is expected that:

> ➢ Companies with codes of conduct that discuss more topics are more likely to have high quality corporate reports than companies with codes of conduct that discuss less topics.

Second, it was found that some codes of conduct are enforced by explaining which punishments will follow when employees do not adhere to the code, while other codes do not explain this. Previous literature on this topic states that a code of conduct should explain the punishments that follow when the code is violated in order to be effective in improving corporate reporting behavior. Raiborn & Payne (1990) and Singh (2011) for example, argue that when there are no punishments for violation of the code specified, employees that behave opportunistically are not likely to change their behavior. Furthermore, Leventhal (1970), found that messages which cause fear, such as possible punishments, are more effective than messages that do not cause fear, but only when it is also showed how the punishments can be avoided. Since codes of conduct also provide behavioral guidelines that help employees to avoid punishments, including punishments in codes of conduct will only make them more effective. Weaver (1995) also emphasizes the importance of punishments in codes of conduct. According to him, employees will be more likely to recall the code of conduct when it includes possible punishments. This will make employees more likely to act upon the code, and thereby to improve the quality of corporate reports. Therefore, it is expected that:

> ➢ Companies with codes of conduct that contain possible punishments are more likely to have high quality corporate reports than companies with codes of conduct that do not contain possible punishments.

Third, it was found that some codes specify special procedures through which employees can report unethical behavior or code violations without retribution, while other codes no not specify such procedures. However, for companies to be effective in dealing with violations of codes of conduct, it is necessary that code violations are brought to the attention of the management (Nitsch et al., 2005). Therefore, it is desirable that employees report code violations to the management when they observe them. According to previous research, employees are more likely to report code violations when they know that retribution against them is prohibited (Nitsch et al., 2005; Raiborn & Payne, 1990; Singh, 2011). This leads to the following expectation:

➢ Companies with codes of conduct that specify procedures through which code violations can be reported without retribution of the reporter are more likely to have high quality corporate reports than companies with codes of conduct that do not specify these procedures.

Fourth, it was found that some codes provide examples of situations in which the code of conduct is violated, while other codes do not provide these examples. Previous research indicates that providing examples of possible ethical violations has several advantages. Examples facilitate employees' understanding of the code, and therefore, employees will understand better how they should apply the code. This will make the codes more effective in improving corporate reporting behavior (Gibbs, 2003; Murphy, 1995; Schwartz, 2004). This leads to the next expectation:

➢ Companies with codes of conduct that provide examples of possible code violations are more likely to have high quality corporate reports than companies with codes of conduct that do not provide these examples.

Fifth, it was found that codes of conduct differ in their tone. Some codes are mainly written in a positive or directive way, while other are mainly written in a negative of proscriptive way (Gaumnitz & Lere, 2004; KPMG Advisory N.V., 2014). An example of a positively written statement in a code of conduct is: "We comply with all applicable competition laws and regulations" (KPN, n.d.), while an example of a negatively written statement is: "Do not in any way (try to) bribe another person" (Aalberts Industries, 1985). According to Raiborn & Payne (1990), a code of conduct written with a negative tone can create an attitude problem among employees, because employees can feel threatened or accused by a code of conduct with a negative tone. This can lead to the fact that employees do not act upon the code.

Therefore, they state that codes are more effective in improving corporate reporting behavior when they have a positive tone. In addition to this, Snell & Herndon Jr (2000) and Gaumnitz & Lere (2004) also advise companies to write their codes of conduct with a positive tone, in order to make them more effective in improving corporate reporting behavior. Therefore, the final expectation is the following:

➢ Companies with codes of conduct written with a positive tone are more likely to have high quality corporate reports than companies with codes of conduct written with a negative tone.

4.3 Regression assumption checks

To formally test these expectations, multiple regression analyses were conducted. However, multiple regression analysis rests on several assumptions. Therefore, before I could run the regression analyses, I had to check whether the following assumptions were satisfied: (1) linear relationships; (2) homoscedasticity; (3) normal distribution of the residuals, and (4) no multicollinearity in the predicting variables (Berry, 1993).

First, it is assumed that the relationship between the dependent variable and the independent variables is linear. This was checked by using residual plots, which are plots of the standardized residuals as a function of standardized predicted values. These plots, which can be found in figure 3, show that both *FRQ* and *NFRQ* are linearly related to the independent variables. Therefore, the assumption of linear relationships was satisfied.

Figure 3: Residual plots to test the assumption of linear relations

Second, in the assumption of homoscedasticity, it is assumed that the variance of the error terms is constant. In the residual plots which were used for the assumption of linear relations, it can already be seen that the residuals are quite randomly scattered around 0, which indicates that there is an even distribution and the assumption of homoscedasticity is thus satisfied. However, to test this formally, two White's tests were used, which can be found in table 5 and 6. The tests show that in both the regressions with *FRQ* and *NFRQ,* the p value is larger than 0.05. This confirms the homoscedasticity hypotheses.

Table 5: White's test for the FRQ regression to test the assumption of homoscedasticity

Source	Chi2	df	p
Heteroskedasticity	58.33	59	0.5004
Skewness	10.29	11	0.5043
Kurtosis	0.57	1	0.4521
Total	69.18	71	0.5389

Table 6: White's test for the NFRQ regression to test the assumption of homoscedasticity

Source	Chi2	df	p
Heteroskedasticity	61.93	59	0.3718
Skewness	11.57	11	0.3965
Kurtosis	1.08	1	0.2997
Total	74.58	71	0.3626

Third, using histograms, I checked whether the residuals of the regression analyses were normally distributed. The histograms can be found in figure 4 and they show that the residuals for both the *FRQ* and the *NFRQ* regressions are distributed normally. Therefore, this assumption is also satisfied.

Figure 4:Histograms to check the assumption of normal distribution of the residuals
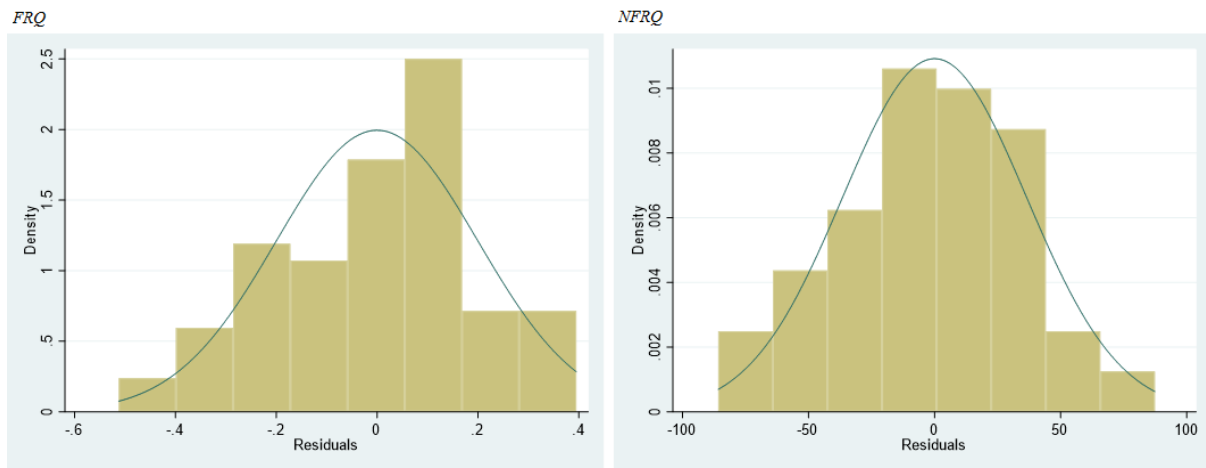
Fourth, I checked whether there was multicollinearity in the predicting variables by using a Pearson Correlation matrix. This matrix can be found in table 7.

Table 7:Pearson Correlation Matrix to test the assumption of multicollinearity

	1	2	3	4	5	6	7	8	9	10	11
1. Length	1.0000										
2. Punishments	0.2357*	1.0000									
3. Reporting	0.1975	0.1765	1.0000								
4. Examples	0.3072*	0.1735	0.1755	1.0000							
5. Tone	-0.1885	-0.1209	-0.1886	-0.0315	1.0000						
6. Size	0.3554*	0.2089	0.1163	0.1027	0.0037	1.0000					
7. Leverage	0.2271	0.0932	0.0616	0.3344*	0.0604	-0.2530*	1.0000				
8. ROA	0.2203	0.1055	0.0598	0.3208*	0.0297	-0.2641*	0.9742*	1.0000			
9. BIG4	-0.2278	-0.0887	-0.0590	-0.3362*	-0.0635	0.2498*	-0.9991*	-0.9647*	1.0000		
10. EO	0.0110	0.1474	0.0848	0.1296	0.1511	-0.0785	-0.0439	-0.0545	0.0436	1.0000	
11. Industry	-0.0718	-0.0464	-0.1091	-0.1296	0.1306	0.0383	0.0967	0.0615	-0.0998	0.1427	1.0000

When variables have a correlation higher than 0,6, this might indicate problems (Smits, 2017). In this case, *ROA, Leverage,* and *BIG4* are too strongly correlated. This can also be checked using an additional VIF and TOL test, which can be found in table 8.

Table 8: VIF and TOL test

Variable	VIF	1/VIF (TOL)
Leverage	6202.04	0.000161
BIG4	4530.91	0.000221
ROA	156.42	0.006393
Length	1.47	0.681587
Size	1.45	0.690776
Examples	1.29	0.772724
Tone	1.19	0.843542
Punishments	1.18	0.845539
Reporting	1.17	0.855499
Industry	1.15	0.869290
EO	1.13	0.882421
Mean VIF/TOL	990.85	0,586196

These tests also show that the VIF values for *ROA, Leverage*, and *BIG4* are way higher than the critical value of 10, and the TOL values for these variables were way lower than the critical value of 0,2[1]. To overcome this problem, I decided to create three different models in the regression analyses. In each model, only one of the correlating variables will be included. This ensures that the correlations between *ROA, Leverage, and BIG4* cannot influence the regression analyses.

Furthermore, because the sample contains less than 500 companies, I had to determine whether individual cases were too influential in the analyses (Smits, 2017). This was determined with a Cook's Distance test. In this test, a value greater than $4/n$, in which n is the number of cases in the sample, is problematic. As can be seen in appendix 1, ASML Holding NV, Basic Fit NV, Beter Bed Holding NV and Sif Holding NV can be seen as outliers, because the Cook's Distance for these companies was greater than $4/n$. Because of this, I had to check whether those companies were significantly influencing the regression outcomes. Therefore, the initial multiple regression analyses were conducted first. After that, ASML

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[1] *Leverage* is logically related to *ROA*, because firms that perform well and have a high *ROA* have usually no need to borrow money. Therefore, is it logical that their leverage is lower (Paredes Gómez, Ángeles Castro, & Flores Ortega, 2016; Prime & Qi, 2013). It is also logical that *ROA* is related to *BIG4*. This is because the audit fee for big 4 auditors is usually higher than the audit fee for other auditors (Van Caneghem, 2010). Because the companies that perform well and have a high *ROA* are able to afford this higher audit fee, it is logical that these companies will be more likely to hire a big 4 auditor than companies with a low *ROA*. Finally, *Leverage* is also logically related to *BIG4*, because companies that are in need of external financing are more likely to get external finance when their financial statements are credible. Therefore, they are more likely to hire a big 4 auditor (Knechel, Niemi, & Sundgren, 2008).

Holding NV, Basic Fit NV, Beter Bed Holding NV and Sif Holding NV were excluded from the sample one by one and the multiple regressions were conducted again. The multiple regression analyses with and without the outliers were compared, and when the results of the regression analyses changed significantly after the removal, the companies were excluded from the sample.

4.4   Regression analyses

Because all assumptions had been satisfied or dealt with, the multiple regression analyses could be conducted. First, I compared the initial multiple regression analyses to the multiple regression analyses in which either ASML Holding NV, Basic Fit NV, Beter Bed Holding NV or Sif Holding NV were excluded. The results of these multiple regressions can be found in appendix 2. From the comparison, it could be concluded that ASML Holding NV, Basic Fit NV and Beter Bed Holding NV were significantly influencing the multiple regression outcomes. This is because of the following reasons: (1) After removing ASML Holding NV from the sample, it turned out that *Length* was significant in the *FRQ* regression, while this was not the case when ASML Holding NV was in the sample; (2) After removing Basic Fit NV from the sample, *EO* turned out to be significant in the *FRQ* regression, while *EO* was not significant in this regression when Basic Fit NV was in the sample, and (3) After removing Beter Bed Holding NV from the sample, *Length* was also significant in the *FRQ* regression. Therefore, ASML Holding NV, Basic Fit NV and Beter Bed Holding NV were excluded from the sample for the final multiple regression analyses and the multiple regression analyses were eventually based on a sample of 71 Dutch listed companies.

In table 9, the results of the multiple regression analyses for *FRQ* can be found. These multiple regression analyses formally test whether the content characteristics of codes of conduct and the control variables are associated with financial reporting quality. Model 1 is the model that includes *Leverage* as a control variable, model 2 includes *ROA* as a control variable, and model 3 includes *BIG4* as a control variable. These models needed to be separated from each other, because *Leverage, ROA,* and *BIG4* were too highly correlated to include them in one regression model.

Table 9: Multiple regression analyses for FRQ

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0077843 (-2.27)**	-.0076595 (-2.25)**	-.0078591 (-2.29)**
Punishments	.0067793 (0.13)	.0080617 (0.16)	.0063058 (0.12)
Reporting	-.0356505 (-0.57)	-.0358059 (-0.58)	-.0358636 (-0.58)
Examples	-.0498766 (-0.56)	-.0475084 (-0.54)	-.0516348 (-0.58)
Tone	-.0000729 (-0.04)	-.0001059 (-0.06)	-.0000799 (-0.04)
Size	.0503582 (4.11)***	.049573 (4.05)***	.0507293 (4.15)***
Leverage	-.0003523 (-0.78)		
ROA		-.0277082 (-0.93)	
BIG4			.1774067 (0.72)
EO	-.1365008 (-1.81)*	-.1379907 (-1.83)*	-.1361454 (-1.80)*
Industry	.0025661 (1.18)	.0025547 (1.18)	.0025413 (1.16)
_cons	-1.565264 (-5.71)***	-1.546125 (-5.60)***	-1.747765 (-5.34)***
Number of obs	71	71	71
F(9,61)	4.05***	4.10***	4.03***
Prob > F	0.0004	0.0004	0.0004
R-squared	0.3741	0.3766	0.3731
Adj R-squared	0.2818	0.2847	0.2807
Root MSE	.19898	.19858	.19913

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

See table 3 for the description of the variables

The first thing that stands out is the F test, which is significant at a 99% level (F(9,61)=4.05/4.10/4.03, p<0,01). The null-hypothesis for the F test is that $R^2 = 0$, which means that the multiple regression model does not have any explanatory power. The alternative hypothesis is that $R^2 \neq 0$, which means that the multiple regression model has explanatory power. Because the F test is significant at a 99% level, we can be 99% confident that we can reject the null-hypothesis. The model for *FRQ* is thus a good multiple regression model which has explanatory power.

Next, the adjusted R^2 is checked. The adjusted R^2 represents the percentage of variation in the dependent variable (*FRQ*) that is explained by the independent-, and control variables. In comparison to R^2, the adjusted R^2 controls for the number of predictors and is thus more reliable. In this case, the adjusted R^2 is 0.28, which means that 28% of the variance in financial reporting quality can be explained by the content characteristics of codes of conduct and the control variables.

The numbers in table 9 show the coefficients and the T tests. The null-hypothesis for a T test is that the coefficient for an independent- or control variable = 0 and the alternative hypothesis is that the coefficient $\neq 0$. When the T test is significant, the null hypothesis can be rejected and it can be concluded that the independent- or the control variable is associated with the dependent variable. In this case, it can be concluded that *Length* is the only content characteristic of codes of conduct that is significantly associated with financial reporting quality (t(71)=2.27/2.25/2.29, p<0.05). Because the p value is lower than 0.05, we can be 95% confident that *Length* is associated with financial reporting quality. As the coefficient for *Length* is negative, it can be concluded that companies that discuss more topics in their code of conduct are less likely to have high quality financial reports. This is because they are more likely to engage in earnings management. This is opposite to the expectations I had based on prior literature. However, it can be justified. Despite the fact that codes of conduct increase in quality and utility when they discuss more topics (Erwin, 2011; Mckinney et al., 2010; Murphy, 1995), the opinion of employees can be that codes that discuss more topics are too lengthy and take too much time to read. In this case, it becomes more likely that employees do not read the code and therefore, they do not act upon the code and the corporate reporting quality decreases (Schwartz, 2004). The other content characteristics of codes of conduct, *Punishments, Reporting, Examples,* and *Tone,* are not significantly associated with financial reporting quality. When looking at the control variables, we can see that both *Size* (t(71)=-4.11/-4.05/-4.15, p<0.01) and *EO* (t(71)=1.81/1.83/8.80, p<0.1) are significantly associated with financial reporting quality. The coefficient for *Size* is positive, which means that large companies are more likely to have high quality financial reports than small companies. For *EO,* the coefficient is negative. This means that companies that are planning an equity offering for next year are less likely to have high quality financial reports than companies that are not planning an equity offering. These findings are in line with the expectations that were made based on prior research.

In table 10, the results of the multiple regression analyses for *NFRQ* can be found. These regression analyses formally test whether the content characteristics of codes of conduct and the control variables are associated with non-financial reporting quality. Again, model 1 is the model that includes *Leverage* as a control variable, model 2 includes *ROA* as a control variable, and model 3 includes *BIG4* as a control variable.

Table 10: Multiple regression analyses for NFRQ

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.2019905	.2459004	.1800181
	(0.27)	(0.34)	(0.24)
Punishments	-.3273008	-.1043708	-.4076273
	(-0.03)	(-0.01)	(-0.04)
Reporting	19.32576	19.35508	19.29296
	(1.45)	(1.45)	(1.44)
Examples	-9.733058	-8.679481	-10.29223
	(-0.51)	(-0.46)	(-0.54)
Tone	.5037247	.5052554	.5008275
	(1.29)	(1.29)	(1.28)
Size	16.32094	16.10554	16.41971
	(6.21)***	(6.13)***	(6.26)***
Leverage	-.0191215		
	(-0.20)		
ROA		-2.471856	
		(-0.39)	
BIG4			5.950382
			(0.11)
EO	-11.18079	-11.45261	-11.08638
	(-0.69)	(-0.71)	(-0.68)
Industry	-1.181371	-1.170015	-1.189548
	(-2.53)**	(-2.52)**	(-2.54)**
_cons	-234.0577	-230.7048	-241.156
	(-3.98)***	(-3.89)***	(-3.43)***
Number of obs	71	71	71
F(9,61)	7.85***	7.87***	7.84***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5365	0.5374	0.5363
Adj R-squared	0.4682	0.4691	0.4679
Root MSE	42.694	42.656	42.703

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent levels*

See table 3 for the description of the variables

In the regression table, we can see that the F test is again significant at a 99% level ($F_{(9,61)}$=7.85/7.87/7.84, $p<0.01$), which means that regression model can be used because it has explanatory power. The adjusted R^2 is 0.47, which means that the content characteristics

of codes of conduct, together with the control variables, explain 47% of the variance in non-financial reporting quality. Finally, the only significant coefficients are the control variables *Size* (t(71)=6.21/6.13/6.26, p<0.01) and *Industry* (t(71)=-2.53/-2.52/-2.54, p<0.05). This means that it can be concluded that only these variables are associated with non-financial reporting quality. The coefficient for size is positive, which means that larger companies are more likely to get a higher score on the Transparency Benchmark than small companies. Therefore, large companies are more likely to have high quality non-financial reports than small companies. None of the content characteristics of codes of conduct turned out to be significantly associated with non-financial reporting quality.

In sum, only the length of codes of conduct was negatively associated with corporate financial reporting quality. All other content characteristics were not significantly associated with corporate financial- or non-financial reporting quality. Thus, most content characteristics of codes of conduct do not matter for corporate reporting quality. This finding is in line with previous research (e.g. Weaver, 1995).

5   Conclusion and discussion

5.1   Conclusion

Conduct risk, the risk that companies' behavior can result in negative outcomes for their stakeholders, moved up the agenda of companies, regulators, governments and other stakeholders after the occurrence of several conduct-related scandals. In an attempt to reduce conduct risk, companies implemented codes of conduct: documents that should guide corporate behavior and make companies behave more ethically. However, previous research indicated that the presence of these codes of conduct was not necessarily associated with corporate ethical behavior. Therefore, this study looked further into codes of conduct by testing whether five content characteristics are positively associated with corporate ethical behavior. As corporate reporting quality is a key indicator for corporate ethical behavior (Lamond, 1995; Stanton & Stanton, 2002), the research question of this study was: *"Which content characteristics of codes of conduct are positively associated with corporate reporting quality?"* Using a mixed methods approach, this study focused on the following content characteristics of codes of conduct: (1) length; (2) punishments; (3) reporting procedures; (4) examples and (5) tone. The results indicated that none of the content characteristics of codes of conduct is positively associated with corporate reporting quality. Only the length of codes of conduct is significantly associated with corporate financial reporting quality. However, this content characteristic is negatively associated with corporate financial reporting quality. Companies that discuss more topics in their code of conduct are less likely to have high quality financial reports than companies that discuss less topics. The other four content characteristics are not significantly associated with corporate financial reporting quality, and none of the content characteristics turned out to be associated with corporate non-financial quality.

These results are contrary to the expectations I made based on prior research. However, they can be explained. According to (Schwartz, 2004), employees may feel that codes of conduct that discuss more topics will take too long to read. Therefore, there is a risk that employees do not read these codes of conduct and because of this, they will not act upon them. This explains the negative association between the length of codes of conduct and corporate financial reporting quality. The other non-significant results can also be explained. As codes of conduct are developed by individual companies or professional groups, the organizational context can influence employees' interpretations of and responses to codes of conduct (Erwin, 2011;

Weaver, 1995). Therefore, the implementation of a code of conduct can have different effects in different companies. Furthermore, implementing a code of conduct and taking care of its design might not be enough to affect corporate reporting quality. The code of conduct might need support from for example ethics training, an ethics office or an ethics committee in order to affect corporate reporting quality (Kaptein & Schwartz, 2008; Long & Driscoll, 2008; Singh, 2006, 2011). Another explanation for the non-significant results was provided by Royall (2016). According to him, studies with small sample sizes are less likely to show significant results. As this study was based on a sample of only 71 companies, the small sample size might be the reason for the insignificant results. Another explanation can be the measurements of the independent variables, the content characteristics of codes of conduct. As these variables were identified by content analyses, standardized quantitative measurements were not available for all variables and some existing measurements were adapted. These measurements might be incorrect, which might have affected the results.

5.2   Discussion

The findings of this study can have multiple implications. First, the findings of this study can be useful to companies that want to improve corporate reporting behavior or companies that are developing a code of conduct. From this study, these companies can retrieve that they should not discuss too many topics in their code of conduct when they want to improve corporate financial reporting quality. This is because companies that discuss more topics in their code of conduct are more likely to engage in earnings management. Second, the findings of this study can also be useful for stakeholders. From this study, stakeholders can retrieve that the corporate financial reports of companies with a code of conduct that discusses more topics are more likely to be of low quality than the corporate financial reports of companies that discuss less topics in their code of conduct. This can especially be interesting for stakeholders that are making investment decisions (Al-Ajmi, 2009).

Despite the usefulness of this study for companies and stakeholders, the study also has some limitations. First, the study was conducted using an initial sample of 74 Dutch listed companies. Eventually, because of outliers in the sample, the final results were based on 71 companies. I acknowledge that this small sample size can have consequences for the validity of the results. It might for example be hard to generalize the results (Sergeant & Bock, 2002). In order to overcome this problem, I encourage future researchers to use a larger sample, including for example Dutch non-listed companies, or companies from other countries.

Another potential concern with this study is the possibility that both the content characteristics of codes of conduct and the corporate reporting quality are influenced by factors that were not included in the analyses, such as the characteristics of the board of directors. This is called an endogeneity problem. García-Sánchez et al. (2014) for example showed that companies with large-sized and diverse boards of directors develop codes of conduct with the highest quality. Furthermore, Epps & Ismail (2009) and Torchia & Calabrò (2016) investigated the associations between board characteristics and corporate reporting quality. They found that independent boards of directors were positively associated with the level of financial transparency and disclosure, while large boards of directors were negatively associated with the level of financial transparency and disclosure. These studies thus indicate a potential endogeneity problem. However, other studies, such as Donnelly & Mulcahy (2008), did not find a significant relationship between board characteristics and corporate reporting quality. Therefore, to test the extent to which this endogeneity problem exists, I recommend to include board characteristics as independent- or control variables in further research. When this study would be based on panel data instead of cross-sectional data, and multiple years would be included in the sample, the potential influence of board characteristics would be canceled out. This is because members of boards of directors change over the years. However, a panel data study was not possible here, because every company has only published its most recent code of conduct on its website. The potential endogeneity problem thus particularly exists because this study was based on cross-sectional data (Duncan, Magnuson, & Ludwig, 2004). Another problem that exists because of the usage of cross-sectional data is that it is not possible to infer the temporal associations between content characteristics of codes of conduct and corporate reporting quality. Therefore, only an association, and not a causation between content characteristics of codes of conduct and corporate reporting quality, can be inferred from this study (Sedgwick, 2014). A final limitation is that this study was conducted using a mixed methods approach. A mixed measured approach has multiple advantages. However, using a mixed methods approach can also have disadvantages. When qualitative data is collected first, the data is often multi-directional and available for review. But when qualitative data is quantified, like it was the case in this study, the meaning of the data becomes fixed and single-dimensional. Therefore, the depth will be lost (Bazeley, 2004). To overcome this limitation, further research should consider to conduct either qualitative or quantitative research into the relationship between content characteristics of codes of conduct and corporate reporting quality, instead of taking a mixed methods approach.

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Appendix

1   Test for outliers

Companies in the sample for which Cook's Distance was larger than 4/n:

	Companyname	cooksd
11.	ASML Holding NV	.0755398
13.	Basic Fit NV	.0704978
16.	Beter Bed Holding NV	.0658632
64.	Sif Holding NV	1.335455

2   Compare regressions with and without outliers

2.1   FRQ initial regressions

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0054203	-.0053335	-.0054736
	(-1.56)	(-1.54)	(-1.57)
Punishments	.0054896	.0067983	.0049933
	(0.10)	(0.12)	(0.09)
Reporting	-.0258161	-.0260414	-.0260742
	(-0.39)	(-0.39)	(-0.39)
Examples	-.0071792	-.0057497	-.0084593
	(-0.08)	(-0.06)	(-0.09)
Tone	-.0007558	-.0007917	-.0007657
	(-0.39)	(-0.41)	(-0.39)
Size	.0539655	.0532555	.0543004
	(4.10)***	(4.04)***	(4.12)***
Leverage	-.000411		
	(-0.86)		
ROA		-.0312499	
		(-0.98)	
BIG4			.2110472
			(0.80)
EO	-.1189654	-.1203639	-.118728
	(-1.45)	(-1.47)	(-1.45)
Industry	.0011328	.0011005	.0011149
	(0.50)	(0.49)	(0.49)
_cons	-1.590018	-1.570558	-1.805775
	(-5. 34)***	(-5.24)***	(-5.06)***
Number of obs	74	74	74
$F_{(9,61)}$	3.27***	3.30***	3.25***
Prob > F	0.0025	0.0023	0.0026
R-squared	0.3148	0.3172	0.3138
Adj R-squared	0.2184	0.2211	0.2173
Root MSE	.21787	.21749	.21802

*, **, *** *Denote significance at the 10 percent, 5 percent, and 1 percent level*

2.2   NFRQ initial regressions

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.2085261 (0.31)	.2413758 (0.36)	.192043 (0.29)
Punishments	-1.448992 (-0.13)	-1.234469 (-0.11)	-1.528296 (-0.14)
Reporting	17.03653 (1.33)	17.07955 (1.33)	16.99374 (1.32)
Examples	-8.624296 (-0.48)	-7.798214 (-0.44)	-9.0704 (-0.51)
Tone	.5541202 (1.47)	.5575988 (1.49)	.550226 (1.46)
Size	16.24703 (6.41)***	16.05214 (6.33) ***	16.33671 (6.45)***
Leverage	-.0201739 (-0.22)		
ROA		-2.45875 (-0.40)	
BIG4			6.816288 (0.13)
EO	-10.7967 (-0.68)	-11.00564 (-0.70)	-10.73293 (-0.68)
Industry	-1.244564 (-2.87)***	-1. 236106 (-2.87)***	-1.251382 (-2.88)***
_cons	-231.092 (-4.03)***	-228.0559 (-3.95)** *	-238.914 (-3.48)***
Number of obs	74	74	74
F(9,61)	8.46***	8.49***	8.45***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5433	0.5441	0.5431
Adj R-squared	0.4791	0.4800	0.4789
Root MSE	41.931	41.894	41.941

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent levels

2.3   Excluding ASML Holding NV for FRQ

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0076225	-.0074681	-.0076926
	(-2.06)**	(-2.03)**	(-2.07)**
Punishments	.0077283	0088274	.0073718
	(0.14)	(0.16)	(0.13)
Reporting	-.0190178	-.0191238	-.0191615
	(-0.29)	(-0.29)	(-0.29)
Examples	-.0532646	-.0498795	-.0549752
	(-0.56)	(-0.53)	(-0.57)
Tone	-.0004119	-.0004256	-.0004203
	(-0.21)	(-0.22)	(-0.22)
Size	.0564184	.055575	.0567475
	(4.30)***	(4.24)***	(4.33)***
Leverage	-.0002388		
	(-0.49)		
ROA		-.0206049	
		(-0.64)	
BIG4			.1163086
			(0.44)
EO	-.1127389	-.1139971	-.11247
	(-1.39)	(-1.41)	(-1.39)
Industry	.0010908	.0010969	.0010707
	(0.49)	(0.50)	(0.48)
_cons	-1.63999	-1.622736	-1.760644
	(-5.54)***	(-5.44)***	(-4.98)***
Number of obs	73	73	73
F(9,61)	3.47***	3.50***	3.47***
Prob > F	0.0015	0.0014	0.0016
R-squared	0.3317	0.3335	0.3312
Adj R-squared	0.2362	0.2383	0.2356
Root MSE	.21532	.21504	.21541

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

2.4   Excluding ASML Holding NV for NFRQ

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.1677542 (0.23)	.2110938 (0.29)	.1460964 (0.20)
Punishments	-1.407545 (-0.13)	-1.205685 (-0.11)	-1.479048 (-0.14)
Reporting	17.16239 (1.32)	17.17768 (1.32)	17.13687 (1.32)
Examples	-9.477519 (-0.50)	-8.424229 (-0.45)	-10.03356 (-0.53)
Tone	.5604875 (1.47)	.5627929 (1.48)	.5573771 (1.46)
Size	16.29244 (6.33)***	16.08504 (6.25)***	16.38737 (6.38)***
Leverage	-.0169862 (-0.18)		
ROA		-2.307742 (-0.36)	
BIG4			4.854638 (0.09)
EO	-10.68142 (-0.67)	-10.91532 (-0.69)	-10.60335 (-0.67)
Industry	-1.245341 (-2.84)***	-1.236157 (-2.85)***	-1.252296 (-2.86)***
_cons	-232.0172 (-4.00)***	-228.7961 (-3.91)***	-237.9795 (-3.43)***
Number of obs	73	73	73
F(9,61)	8.21***	8.24***	8.21***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5399	0.5406	0.5397
Adj R-squared	0.4741	0.4750	0.4740
Root MSE	42.255	42.221	42.263

*, **, *** *Denote significance at the 10 percent, 5 percent, and 1 percent levels*

2.5   Excluding Basic Fit NV for FRQ

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0052038	-.0051278	-.0052609
	(-1.54)	(-1.52)	(-1.55)
Punishments	.0165952	.0180788	.0159881
	(0.30)	(0.33)	(0.29)
Reporting	-.0130032	-.0132873	-.0133402
	(-0.20)	(-0.20)	(-0.20)
Examples	-.0087883	-.0078686	-.0101035
	(-0.10)	(-0.09)	(-0.11)
Tone	-.001143	-.0011942	-.0011516
	(-0.60)	(-0.63)	(-0.60)
Size	.0504286	.0497193	.0508026
	(3.91)***	(3.86)***	(3.94)***
Leverage	-.0005032		
	(-1.08)		
ROA		-.0372784	
		(-1.20)	
BIG4			.2605173
			(1.02)
EO	-.1395093	-.1411513	-.1391873
	(-1.74)*	(-1.76)*	(-1.73)*
Industry	.002772	.0027279	.0027487
	(1.20)	(1.19)	(1.18)
_cons	-1.565087	-1.543418	-1.830949
	(-5.41)***	(-5.29)***	(-5.27)***
Number of obs	73	73	73
F(9,61)	3.53***	3.58***	3.51***
Prob > F	0.0014	0.0012	0.0014
R-squared	0.3352	0.3381	0.3339
Adj R-squared	0.2402	0.2435	0.2387
Root MSE	.21172	.21125	.21193

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

2.6   Excluding Basic Fit NV for NFRQ

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.2158723 (0.32)	.2486163 (0.37)	.1991329 (0.30)
Punishments	-1.07205 (-0.10)	-.8372618 (-0.08)	-1.161833 (-0.11)
Reporting	17.47142 (1.34)	17.52865 (1.35)	17.41817 (1.34)
Examples	-8.678909 (-0.48)	-7.872826 (-0.44)	-9.125202 (-0.51)
Tone	.5409784 (1.42)	.5434246 (1.43)	.537361 (1.41)
Size	16.12698 (6.27)***	15.92762 (6.19)***	16.22012 (6.31)***
Leverage	-.0233035 (-0.25)		
ROA		-2.671025 (-0.43)	
BIG4			8.465168 (0.17)
EO	-11.49399 (-0.72)	-11.73761 (-0.73)	-11.41485 (-0.71)
Industry	-1.188927 (-2.57)**	-1.178799 (-2.57)**	-1.196926 (-2.59)**
_cons	-230.2458 (-3.99)***	-227.1003 (-3.90)***	-239.7531 (-3.47)***
Number of obs	73	73	73
F(9,61)	8.08***	8.11***	8.08***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5359	0.5369	0.5357
Adj R-squared	0.4697	0.4707	0.4694
Root MSE	42.216	42.175	42.228

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

2.7 Excluding Beter Bed Holding NV for FRQ

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0056631	-.0055893	-.0057161
	(-1.70)*	(-1.68)*	(-1.71)*
Punishments	-.0061103	-.0047956	-.0066219
	(-0.11)	(-0.09)	(-0.12)
Reporting	-.0546771	-.0549434	-.0549287
	(-0.84)	(-0.85)	(-0.84)
Examples	.0002147	.0012231	-.0010494
	(0.00)	(0.01)	(-0.01)
Tone	-.0000745	-.0001173	-.0000844
	(-0.04)	(-0.06)	(-0.04)
Size	.0512426	.0505894	.0515826
	(4.04)***	(3.99)***	(4.07)***
Leverage	-.0004442		
	(-0.97)		
ROA		-.0331243	
		(-1.08)	
BIG4			.2292519
			(0.91)
EO	-.1231161	-.1245266	-.1228738
	(-1.57)	(-1.59)	(-1.56)
Industry	.0010261	.0009842	.0010087
	(0.47)	(0.46)	(0.47)
_cons	-1.537616	-1.518077	-1.771739
	(-5.37)***	(-5.27)***	(-5.17)***
Number of obs	73	73	73
F(9,61)	3.45***	3.49***	3.43***
Prob > F	0.0016	0.0015	0.0017
R-squared	0.3301	0.3327	0.3290
Adj R-squared	0.2344	0.2373	0.2332
Root MSE	.20897	.20857	.20914

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

2.8 Excluding Beter Bed Holding NV for NFRQ

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.2232496 (0.33)	.2568243 (0.38)	.2068012 (0.31)
Punishments	-.7455925 (-0.07)	-.5343138 (-0.05)	-.8213923 (-0.08)
Reporting	18.78661 (1.44)	18.82494 (1.44)	18.74983 (1.43)
Examples	-9.072653 (-0.51)	-8.219306 (-0.46)	-9.52137 (-0.53)
Tone	.5128059 (1.34)	.5168739 (1.36)	.5087672 (1.33)
Size	16.41214 (6.43)***	16.21314 (6.35)***	16.50211 (6.47)***
Leverage	-.0181582 (-0.20)		
ROA		-2.345557 (-0.38)	
BIG4			5.708344 (0.11)
EO	-10.545 (-0.67)	-10.75426 (-0.68)	-10.48061 (-0.66)
Industry	-1.238095 (-2.84)***	-1.229081 (-2.84)***	-1.244921 (-2.85)***
_cons	-234.2696 (-4.07)***	-231.2253 (-3.98)***	-240.9854 (-3.50)***
Number of obs	73	73	73
F(9,61)	8.46***	8.49***	8.46***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5473	0.5480	0.5471
Adj R-squared	0.4826	0.4835	0.4824
Root MSE	42.064	42.029	42.073

*, **, *** *Denote significance at the 10 percent, 5 percent, and 1 percent levels*

2.9   Excluding Sif Holding NV for FRQ

Financial reporting quality	Model 1	Model 2	Model 3
Length	-.0054561	-.0055618	-.0054577
	(-1.57)	(-1.60)	(-1.57)
Punishments	.0110558	.0103121	.0109984
	(0.20)	(0.18)	(0.19)
Reporting	-.0222819	-.0235074	-.0222804
	(-0.33)	(-0.35)	(-0.33)
Examples	-.0136955	-.016347	-.0137698
	(-0.15)	(-0.18)	(-0.15)
Tone	-.0008893	-.000937	-.0008914
	(-0.45)	(-0.48)	(-0.45)
Size	.0524676	.0531416	.0524607
	(3.96)***	(4.02)***	(3.96)***
Leverage	-.0004028		
	(-0.84)		
ROA		-.0243477	
		(-0.74)	
BIG4			.2199422
			(0.84)
EO	-.123153	.-1228126	-.1232835
	(-1.50)	(-1.50)	(-1.50)
Industry	.0009567	.0008869	.0009544
	(0.42)	(0.39)	(0.42)
_cons	-1.541435	-1.545333	-1.76114
	(-5.12)***	(-5.11)***	(-4.91)***
Number of obs	73	73	73
F(9,61)	3.13***	3.10***	3.13***
Prob > F	0.0036	0.0038	0.0036
R-squared	0.3087	0.3070	0.3087
Adj R-squared	0.2100	0.2080	0.2099
Root MSE	.21779	.21807	.2178

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level

2.10 Excluding Sif Holding NV for NFRQ

Non-financial reporting quality	Model 1	Model 2	Model 3
Length	.1962227 (0.30)	.144792 (0.22)	.1973215 (0.30)
Punishments	.4621636 (0.04)	.2520864 (0.02)	.4645296 (0.04)
Reporting	18.24999 (1.45)	18.15158 (1.44)	18.25273 (1.45)
Examples	-10.86166 (-0.62)	-12.28153 (-0.70)	-10.83273 (-0.62)
Tone	.508296 (1.37)	.4961478 (1.34)	.5084854 (1.37)
Size	15.73272 (6.28)***	16.00398 (6.42)***	15.72619 (6.28)***
Leverage	-.0173397 (-0.19)		
ROA		.4613538 (0.07)	
BIG4			9.768169 (0.20)
EO	-12.23452 (-0.79)	-12.04158 (-0.78)	-12.24469 (-0.79)
Industry	-1.305042 (-3.05)***	--1.326449 (-3.11)***	-1.304644 (-3.05)***
_cons	-214.4108 (-3.77)***	-217.3839 (-3.81)***	-224.1016 (-3.30)***
Number of obs	73	73	73
F(9,61)	8.49***	8.48***	8.49***
Prob > F	0.0000	0.0000	0.0000
R-squared	0.5480	0.5478	0.5480
Adj R-squared	0.4834	0.4831	0.4834
Root MSE	41.151	41.161	41.15

*, **, *** Denote significance at the 10 percent, 5 percent, and 1 percent level