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Accounting for Failure

A study of trends over time in the use of verbal Accounts to explain Failure events in CEO-letters

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Executive summary

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Five key words: "Account theory", "trends over time", "financial communication", "CEO-letter", "content analysis"

Purpose: The purpose of this study is to identify possible trends over time in the use of verbal Accounts in CEO-letters for firms with negative profit growth. Further, if such trends are found, potential explanations will be explored.

Theoretical perspectives: Account theory with an Account typology based on Sandell & Svensson (2016; 2017)

Methodology: The sample included firms listed on the Stockholm stock exchange with negative profit growth compared to the previous year, for years: 2002, 2007, 2012, and 2017. A content analysis methodology was employed in order to quantify the relevant aspects of the CEO-letters in the sample. Descriptive statistics, one way ANOVA tests and multiple linear regressions were used in order to identify relevant trends over time and explore potential explanations.

Empirical foundation: Upwards trends over time were identified for the number of Accounts per Failure event and the use of the individual Account types: Justification, Refocusing, and Mystification. Further, an upwards trend over time was identified for the use of visually highlighted Accounts in CEO-letters. No trend was identified, either up or down, for the number of Failure events mentioned in CEO-letters. Additionally, no trends were identified for the use of the individual Account types: Excuse, Concession, Wordification, and Refusal. The firm and CEO variables collected were deemed to not be explanations behind the trends identified. Other potential explanations not rooted in the study's dataset, but rather in economic reasoning, are discussed by the authors.

Conclusions: The combined picture given by the Account variables with upwards trends over time is that compared to before, firms increasingly downplay the negative consequences of Failure events and increasingly try to redirect focus towards other more positive aspects.

Preface

Firstly we would like to thank our supervisor Liesel Klemcke for her valuable contributions to this thesis, further we would like to thank the examiner Wenjun Wen. Niklas Sandell and Peter Svensson also deserve thanks, partly because they introduced us to the topic of verbal Accounts as teachers and partly because of their valuable contributions to the literature on the topic of verbal Accounts which provided a basis for this study through their Account typology.

Fellow student Jakob Skåring deserves recognition for being an integral part in the formulation of the central idea behind this study, to look at trends over time. Furthermore Daniel Johnsson and Hannes Rundgren deserve recognition as the co-authors of the bachelor thesis, written together with one of the authors of this study, which inspired parts of the methodology used in this thesis.

Jasper van Rijn *Kevin Titikic*

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1. Introduction

First, the background presents how both annual reports and CEO-letters have changed over time as well as a first presentation of verbal Accounts and how they are used in financial reports. Thereafter, the problematization dives into the practical and theoretical relevance of studying the use of verbal Account over time as well as providing some initial details about the studies methodology. The introduction ends with the presentation of the study's purpose.

1.1 Background

The purpose of annual reports has changed over time and the use of annual reports before is not entirely the same as today. Annual reports have changed from being a financial communication device between management and the board, to a financial report that stakeholders tend to rely on while making investment decisions (Epstein & Freedman, 1994; Hutchins, 1994; Jönsson, 1991; O'Brien & Tooley, 2013; Wilmot, Puxty, Robson, Cooper & Lowe, 1992). Firms use annual reports as an opportunity to meditate on their progress and future plans as well as their beliefs and attitudes (David, 2001). Further, according to Beattie, Dhanani and Jones (2008) the use of language in annual reports has shifted in a direction where the information that is communicated is more voluntary and has more focus on non-financial information.

Tengblad and Ohlsson (2006) investigated annual reports of 15 firms between the period of 1981-2001. They found that over time the CEO-letters had become more lavish, colorful and that they contained a greater amount of narrative text. CEO-letters are one of the non-financial parts of the annual report that have, over time, taken more space and focus (Tengblad and Ohlsson, 2006). According to Amernic, Craig and Tourish (2010) there has been a growth in the power of the CEO in recent decades and CEO-letters are used by corporate leaders to communicate their attitudes and values to their shareholders and potential investors. A potential reason behind the increased importance of CEO-letters is because stakeholders are more prone to read the narrative parts of the annual reports (Bartlett & Chandler, 1997). The CEO-letter is an opportunity for the firm to manage expectations, summarize the year as well as future plans, and how the firm works with sustainability issues (Jonäll, 2009). Because CEO-letters have the opportunity to create an image for the readers, Anderson and Epstein (1995) found that the majority of shareholders view CEO-letters as the most important part of the annual report.

The contents which are obligatory to be included in an annual report according to IFRS can be found in IAS 1 (Marton, Lundqvist & Pettersson, 2020). It mentions that an annual report must consist of a balance sheet, an income statement, statement of changes in equity, a cash flow statement, and relevant notes (Marton, Lundqvist & Pettersson, 2020). While there is regulation of those parts, there is no regulation for including a CEO-letter. At most it could be argued that the IASB framework gives certain guidance of what can and cannot be written in a CEO-letter through the qualitative characteristics, which amongst others includes that things should be represented in a neutral unbiased fashion (Marton, Lindqvist and Pettersson, 2020). But as the IASB framework is not enforced in any way, the CEO-letter and its contents are in practice both voluntary and unregulated.

Unlike certain other parts of the annual report, the CEO-letter mainly consists of text rather than numbers. Language can be seen as a linguistic device which needs to be interpreted and therefore acts as a complicated communication device (Alvesson & Kärreman, 2000a). Language is a device which cannot be seen as exclusively describing reality in an objective way, it also acts as a social action and helps create reality as it is experienced, which is referred to as the performativity of language. The way in which language is used to describe something can change the way it is perceived. In terms of the CEO-letter, language choices can amongst other things influence the stakeholders perception of the firm, the progress over the year, and of potential Failure events that have occurred. Despite language being a complicated device which needs to be interpreted, it is still used as the main way to transport meaning between humans (Alvesson & Kärreman, 2000a: Cooper, 1989; Deetz, 1992).

In line with the above notion of language impacting perceptions, Scott and Lyman (1968) were first to introduce the concept of verbal Accounts (henceforth named: Accounts). It is important to note that Accounts and Account theory should not be mixed up with the general term "account" that is used in accounting practice (Sandell and Svensson, 2016). An Account could be described as a linguistic device that has the purpose of "verbally bridging the gap between action and expectation" (Scott & Lyman, 1968, p. 46). Accounts are used whenever there is a need of explaining unanticipated or untoward behavior. Sandell and Svensson (2016) apply Account theory in a financial communication setting, where they point out that Accounts are used to explain and close the expectation gap left behind by a Failure event. The term Failure event means that an event or act has occurred, which has negative connotations, and of which the firm experiences an expectation (explicit or implicit) to explain themselves. Due to the characteristics of the typical CEO-letter, this is a good place for firms to attempt to explain themselves and close any potential expectation gaps the reader may have experienced due to Failure events.

Scott and Lyman (1968) introduced two types of Accounts, Excuse and Justification. Excuse is described as "in which one admits that the act in question is bad, wrong or inappropriate but denies responsibility" (Scott & Lyman, 1968, p. 47). While Justification is described as "in which one accepts responsibility for the act in question but denies the pejorative quality associated with it" (Scott & Lyman, 1968, p. 47). According to Sandell and Svensson (2017) Accounts have different rhetorical effects and the choice of Accounts is context and situation dependent. For example, Excuse could be interpreted as more aggressive while Justification is seen as more defensive (Fritsche, 2002). Over time as the literature on Account theory has grown more types of Accounts have been added, this study uses seven different Accounts which are introduced in the theory section.

1.2 Problematization

A CEO-letter is an opportunity for the firm in question to create an image for the readers of how/if the firm has matched expectations, how they have achieved progress, etc. (Anderson & Epstein, 1995; Jonäll, 2009). The amount of narrative space/text in annual reports has increased over time and the CEO-letter is one of the more read parts of the annual report (Beattie, Dhanani and Jones, 2008). Due to the fact that investors tend to rely, in part, on the annual report to make their investment decisions (Epstein & Freedman, 1994; Hutchins, 1994), firms have a clear incentive to try to impact the reader's perception of the firm and its management. Such a tendency can for example be seen in the fact that firms tend to link

bad performance to external events that they cannot control, while positive performance is connected with internal factors (Bettman & Weitz, 1983, Sandell & Svensson, 2016).

Since there is no regulation of CEO-letters, it gives the firm freedom to formulate and structure the CEO-letter as it sees fit. This includes the choice of what is brought up, and in this context perhaps more importantly how it is brought up. The combination of an unregulated, often read, text which influences the reader together with the firm's incentives to influence the reader leads to a potentially problematic situation. Accounts, as a linguistic device, are a tool the firm can employ in order to create/influence the reader's perceptions of the firm.

The use of language and Accounts in financial communication could be seen as a game of strategy from firms as the language is used as a linguistic device in an attempt to create the perfect perception of the firm. It should be noted however that not all use of Accounts is necessarily a conscious attempt at influencing the reader. Even though the subject of Accounts is well studied in general linguistic literature, there is a lack of studies done on Accounts linked to financial communication (Sandell & Svensson, 2016). And as far as the authors are aware, there are no previous studies on potential developments over time in the use of Accounts in financial communication. Therefore this study will focus on potential trends over time in the use of Accounts in financial communication in order to fill this gap in the literature. The expectation that the use of Accounts might change over time is due to the fact that language (use) in general is changes over time (Alvesson and Kärreman, 2000a; Alvesson; Kärreman, 2000b; Aitchison, 2001) and communication in financial reports, more specific CEO-letters, also changes over time (Epstein & Freedman, 1994; Hutchins, 1994; O'Brien & Tooley, 2013; Jönsson, 1991; Wilmot et al. 1992; Beattie, Dhanani & Jones;, 2008; Amernic, Craig & Tourish, 2010).

In order to investigate potential changes over time in the use of Accounts this study uses a sample of firms from the Stockholm stock exchange in order to study CEO-letters for 2002, 2007, 2012, and 2017. The sample is limited to firms with "negative profit growth year over year" (henceforth named: negative profit growth), that is to say firms which have a lower profit for the current year than the previous year. While firms with positive profit growth can also include verbal Accounts explaining Failure events in their CEO-letters, firms with negative profit growth essentially always have a need to explain themselves. Therefore, limiting the study to these firms is more likely to produce relevant and interesting results. The CEO-letters are studied using content analysis and the variables obtained are analyzed using descriptive statistics and difference of means tests in order to identify possible trends over time. Potential reasons for any trends identified will also be discussed both through the use of control variables, multiple linear regression, and through a broader discussion/reasoning. The research questions are therefore: Are there any trends over time in the use of Accounts in CEO-letters for firms with negative profit growth? And if so, what are potential reasons for the trends identified?

1.3 Purpose

The purpose of this study is to identify possible trends over time in the use of verbal Accounts in CEO-letters for firms with negative profit growth. Further, if such trends are found, potential explanations will be explored.

2. Theory

The theory section starts with introducing the use of language in general as well as the performativity of language. This is followed by describing language in financial communication in order to narrow it down to what is relevant for this study. Thereafter follows a section on Account Theory, after which an Account typology is described. This should help the reader understand the relevance of verbal Accounts and which Accounts will be used in this study. After this a literature review is presented in order to create an understanding of what has been studied before in the literature on Accounts in financial communication.. Lastly, we introduce the study's hypotheses.

2.1 The linguistic turn and performativity of language

Language use can be said to have become a more interesting subject over the years as it has been increasingly discussed within the social sciences, in this context it is impossible to neglect the term “Linguistic turn”. Two popular philosophers that developed and midiated Linguistic turn was Gustav Bergman and thereafter Richard Rorty (Rorty, 1992). It was in the 20th century that a linguistic turn started to develop and received a meaning in the world. The term could be seen as an impacted relationship between language and philosophy (Rorty, 1992).

2.1.1 Language

The importance of language has increased and is interpreted as a highly important phenomena disposable for empirical investigation, in social as well as organizational research (Alvesson & Kärreman, 2000a; Alvesson & Kärreman, 2000b). Language has become a focus point of the real world and is in constant change (Aitchison, 2001; Alvesson & Kärreman, 2000a; Alvesson; Kärreman, 2000b) The interest and focus is established around the nature of languages and how it works as a symbolic system (Alvesson & Kärreman, 2000a). Although the interest in language has increased, it is pointed out that language as a communication tool is hard to tame. This however, does not hold back writers to work and write with the intended purpose of mediating the idea or ideal that language is a tool of communication to transport meaning (Alvesson & Kärreman, 2000a).

Cooper (1989) and Deetz (1992) emphasize that language works as a system of distinction, building on the repression of hidden meanings; efforts to say something definite, to establish how things are, and should be deconstructed to find its meaning. This includes showing the false robustness of, and contradictions in, the hidden meanings. While for other people language is seen as a principal method of human communication, a tool for informative and expressive conversations. Language could be viewed as a tool for rhetorical purposes in order to create credible text, an important tool that researchers and firms struggle with, but it could also be used as a tool in order to potentially clarify social issues and wrongdoings (Alvesson & kärreman, 2000a). The use of language could also be seen as arbitrary to some extent and creates a particular version of the image or meaning intended. Alvesson and Kärreman (2000a) point out that language is context dependent, the same phrase or statement could have different meanings. Further they argue that language may not be capable of representing reality in full, however it's a possible tool to provide instructive variations of reality.

Alvesson and Kärreman (2000b) argue that the importance of language has increased and that the use of language is to be understood as an essential phenomenon available for empirical investigation, in social and organizational research. Language is controlled by the writer(s) who have the power to present information from their point of view, creating a perception for the readers (Alvesson & Kärreman, 2000a). Language is not a tool that describes the world objectively, it acts as a social action and builds meaning which can be referred to as performativity of language. The power of performativity of language has the effect of not only describing things but also changing the meaning and making a change in the world (Vollmer, Mennicken, & Preda, 2009). A way of showing that language is performative is when Benoit (1995) emphasizes that communication is a goal-directed activity which comes with a purpose, depending on the communicator and the situation. The performativity of language has the ability and power to accomplish outstandings effects, bringing a new social state, doing the necessary in order to convince the reader or audience (Kulick, 2003).

2.1.2 Financial communication

Sandell and Svensson (2016) explain that the language (text), which is blended in with the accounting language (numbers) in financial reports, could be used as a tool to argue, respond to expectations that have not been achieved, defend the firm against accusations, etc. They further argue that financial reporting could be seen as a legally and culturally regulated genre of communication that is in constant discussion between a firm and its public. It can be said that the purpose of communication strategies is to manage meaning, build trust and credibility between the firm and its public, and handle uncertainty, which concludes to represent the firm in the best possible way (Stephens, Malone & Bailey, 2005).

While the use of language as a communication tool can improve and strengthen a firm's image, it can also have the opposite effect. A firm's reputation or image could be damaged or ruined due to wrongful use of language, whether it is intentionally or unintentionally (Erickson, Weber & Segovia, 2011). Wrongful use of words will occur sooner or later which often could happen while trying to restore what has been damaged as the communicator will probably be faced with the problems of negative consequences both internal and external (Benoit, 1995). For firms it's important to maintain a positive image to the public and minimize the chances of wrongful language or deeds. Therefore, it is common for firms to reinforce the existence of public relations departments or turn to an external public relation firm with the sole purpose of completing the firm's image in the best possible way (Erickson, Weber & Segovia, 2011).

Within financial communication a major topic is financial reports in general and annual reports in specific. As it is found that language in general has changed over time, it is acknowledged that the use of language in financial reports, such as annual reports, has changed over time (Jönsson, 1991; Wilmot et al, 1992). Annual reports have shifted from being a financial communication device between management and the board to a financial report that stakeholders tend to rely on while making investment decisions (Epstein & Freedman, 1994; Hutchins, 1994; Jönsson, 1991; Wilmot et al, 1992). Therefore, a financial report is of great importance as a means of communication between a firm and its stakeholders (Bartlett & Chandler, 1997; O'Brien & Tooley, 2013). In annual reports the firm in question tends to use the report as an opportunity to enlighten their stakeholders about their progress over the year as well as their future plans. However, the annual report is also a great opportunity to use the beauty of language to express the firm's beliefs, culture, values, etc (David, 2001). As annual reports and the language in them have

changed over time, more voluntary information has been included, which typically has an increased focus on non-financial information (Beattie, Dhanani & Jones, 2008).

Language in financial reports tends to include narratives, which is especially common in annual reports. While it varies by firm, Beattie, Dhanani and Jones (2008) find that the space devoted to narratives in annual reports has increased over time. A reason behind this could be due to the fact that it's easier to communicate and restore a firm's image than changing the way a firm operates and past events or results (Dowling & Pfeffer, 1975). Another potential reason is given by Crowther, Carter and Cooper (2006) who argue that more space for language use could be necessary to control the public/stakeholders interpretation of the firm's story/image. Firms have the possibility to use language in order to manage meaning and manage impressions (Alvesson & kärreman, 2000a, Erickson, Weber & Segovia, 2011; Sandell & Svensson, 2017). When language is used in this way, or similar, it is argued that language in financial reporting plays an active role in reflective events and that it shows an image of reality from the firm’s perspective (Arnold & Oakes, 1998; Hines, 1988). However, Merkl-Davies and Brennan (2007) and Bowen, Davis and Matsumoto (2005) argue that the use of language in financial communication is a tool to manage impressions but to also provide stakeholders with valuable information. In other words, while language can be used to influence it is also an essential part of financial communications for the stakeholders of the firm. Financial reports, for example annual reports, are viewed as performative instead of representative text (Sandell & Svensson, 2016).

Chief Executive Officers (CEOs) tend to have a strong effect on “tone at the top” of firms that will express a feeling of power to stakeholders (Amernic, Craig & Tourish, 2010). Amernic, Craig and Tourish (2010) argue that the CEO-letter in annual reports is a medium used by corporate leaders to communicate their attitudes and values to their shareholders and potential investors. With the help of CEO-letters its possible for CEO:s to, with the use of language, show great leadership, show how the firm visualizes solutions to problems that have occured, manage the impression of external as well as internal challenges, and show how the firm handles sustainability issues (Amernic, Craig & Tourish, 2010; Jonäll, 2009). Amernic, Craig and Tourish (2010) argue that there has been a growth in the power of the CEO in recent decades, which further emphasizes the importance of CEO-letters. Tengblad and Ohlsson (2006) find that CEO-letters have changed over time. In their study of 15 firms between the period of 1981-2001 they found that CEO-letters are one of the non-financial parts that have taken more space in annual reports over time. As the importance of CEO-letters has increased over time, Anderson and Epstein (1995) acknowledge that the majority of shareholders view CEO-letters as the most important textual part of the annual report.

Acknowledged by different studies above, there is evidence that both annual reports and CEO-letters have changed over time. IAS 1 regulates what needs to be included in an annual report for firms applying IFRS (Marton, Lundqvist & Pettersson, 2020). However, the content of the CEO-letters is not regulated and annual reports do not necessarily need to include a CEO-letter. This opens up for the possibility of structuring the CEO-letter as the firm best sees fit for their own wining. Therefore it will be interesting to see if and how the use of Accounts in CEO-letters have also changed over time.

2.2 Account Theory

Scott and Lyman (1968) laid the foundations for the study of verbal Accounts and introduced Account theory to the world. Not to be confused with the general term account that is used in accounting practice. In their own words they describe Accounts to be “a linguistic device employed whenever an action is subjected to valuative inquiry” (Scott & Lyman, 1968, p. 46). Further, they explain that Accounts are crucial elements in the social order and as a device works with the purpose of minimizing or completely preventing conflicts from appearing by “verbally bridging the gap between action and expectation” (Scott & Lyman, 1968, p. 46). In the game of communication “we mean a statement made by a social actor to explain unanticipated or untoward behavior - whether that behavior is his *own* or that of others, and whether the proximate cause for the statement arises from the actor himself or from someone else” (Scott & Lyman, 1968, p. 46). They explain that it could be interpreted that Accounts are not only used when external events have occurred that a social actor can't control but also in situations where the social actor questions himself and feels the need that an explanation is required to rebuild the relationship with the public. The use of Accounts can be due to explicit questioning such as demands and expectations from outsiders, but also because the firm experiences an implicit need to explain itself (Sandell & Svensson, 2016).

Others have followed Scott and Lyman, and started to study and develop the meaning of Accounts. An overview of Accounts in the corporate life context is seen as a linguistic device used when a situation occurs where the outcome does not meet the expectation (Sandell & Svensson, 2016; Sandell & Svensson, 2017; Scott & Lyman, 1968). Sandell and Svensson (2016) use the term *Failure event* when outcomes have not met expectations, and describe the term as an event or act that has occurred, which has negative connotations, and of which the firm experiences an expectation (explicit or implicit) to explain themselves.

With time social actors have learned how to use Accounts to their benefit in financial reports, this is done through concealment or blurring information, by highlighting and emphasizing good events, and obfuscating bad in a lucrative and strategic way (Sandell & Svensson, 2016). A further strategic use of Account in financial reports is that firms tend to connect positive outcomes with internal factors and opposite they link negative outcomes to external factors that they do not control (Bettman & Weitz, 1983; Sandell & Svensson, 2016). A common scapegoat when blaming a negative outcome on external factors beyond a firm's reach is “the market”, according to Sandell and Svensson (2016) attributing the blame to the market is usually done with ease.

Accounts can be used in a reactive way, after a Failure event has occurred firms use suitable Accounts in order to obfuscate or blur firm's negative performance in a variety of ways (Sandell & Svensson, 2016; Scott & Lyman, 1968). However, Waring (2007) and Firth (1995) argue that Accounts can be used in an proactive way meaning that an Account is used before an untoward behavior has occurred, due to the firm wanting to influence the expectations of the public before the expected negative event. Using Accounts in a proactive way could be a strategic move in order to downplay expectations. That Accounts can be used in reactive and proactive ways is acknowledged by Brühl and Kury (2019). They mention that Accounts are a rhetorical device used by managers to interact with the firm's stakeholders and are used in order to explain both past as well as future events.

It is acknowledged by Sandell and Svensson (2016) that the number of studies on verbal Accounts in the financial accounting literature is lacking. Aerts (2005) recognizes Accounts in financial reporting and finds that listed firms are prone to take a more defensive stand in their explanations, compared to non-listed firms. While the number of studies on verbal Accounts is lacking, it's clear that financial reports are constructed with the help of Accounts in situations where reality/actions have failed to meet or satisfy expectations (Aerts, 2005; Brühl & Kury, 2019; Firth, 1995; Sandell & Svensson, 2016; Sandell & Svensson, 2017; Scott & Lyman, 1968; Waring, 2007). The occurrence of a valuative situation is presented and the firm has a chance at salvation through the explanation presented in their financial reports. Sandell and Svensson (2016) argue that the financial report along with the used Accounts is performative as a restoration of the firm's image, and an ongoing construction of legitimacy and social acceptance (Sandell & Svensson, 2016).

The use of Accounts, as explained earlier, can be used in various ways depending on the situation as well as which images the communicator wants to create. It is also important to acknowledge that one particular Failure event can be followed by one but also by multiple Accounts (Sandell & Svensson, 2016).

2.3 Account Typology

Benoit and Drew (1997) mention that a generally accepted typology of Account forms does not exist. After further research it's evident that different studies create or use different Account typologies (Benoit & Drew, 1997; Brühl & Kury, 2019; Sandell & Svensson, 2016; Sandell & Svensson, 2017; Scott & Lyman, 1968). However, it was Scott and Lyman (1968) who first introduced a typology of Accounts, which included two different Accounts, Excuse and Justification. Thereafter, there has been an extension of the typologies through new Accounts being added. The new Accounts that have occured after Scott and Lyman's (1968) introduction of Excuse and Justification is: Concession and Refusal (Schönbach 1980), Silence (McLaughlin, O'Hair and Cody, 1983), Attention Switching (Sitkin & Bies, 1993), Corrective Actions (Benoit & Drew, 1997), Mystification and Refocusing (Sandell & Svensson, 2016), Wordification (Sandell & Svensson, 2017), and Relativisation (Brühl & Kury, 2019). It is not possible to say whether this is because new rhetorical tactics/Accounts are being implemented in practice or if it is simply the scientific literature catching up to reality.

Even though there are several new Accounts types that have been introduced in the literature, some of them have the same or very similar meanings. It is common when doing research on image repair strategies (Accounts) to select strategies based on what appears appropriate for the purpose of the study (Benoit & Drew, 1997). Benoit and Drew (1997) argue that the majority of studies have valuable contribution even though they differ in opinions and strategies. However, they also mention that due to the fact that different Accounts, typologies and strategies are used, the integration of the various results is made more difficult.

As a result of the various Accounts types that have been added in the literature and their overlapping, there is an existence of and use of different typologies in different studies. Due to the apparent overlap between several concepts, these typologies can be seen as mutually exclusive and a choice has to be made on which one to use. With careful consideration and valuation the choice of typology for this study is

based on and inspired by Sandell and Svensson (2016; 2017). Sandell and Svensson (2016) mention in their articles that the Accounts they use in their typology are largely based on Account types gathered from previous studies in the Account literature. The following Account types are used in this study:

- *Excuse* is an Account that is used when admitting that an event is bad, wrong or inappropriate, however it denies responsibility (Scott & Lyman, 1968). The degree of denial of responsibility can vary.
- *Justification* as an Account means to accept responsibility for an event, however it downplays the negative qualities associated with the event (Scott & Lyman, 1968).
- *Refocusing* is used as a way to redirect focus from something negative to a different issue (often positive) (Sandell & Svensson, 2016).
- *Concession* is an Account that forwards an explicit admission of responsibility, the degree of admission of responsibility can vary (Schönbach 1980).
- *Mystification* as an Account is an admittance of not meeting or achieving the expected but the firm does not satisfactorily disclose the reasons for the occurrence of the event (Sandell & Svensson, 2016).
- *Refusal* is a way for the actor to communicate that the Failure event has not taken place, a complete denial (Schönbach 1980; McLaughlin, O'Hair and Cody, 1983).
- *Wordification* is an Account that tries to translate and repeat accounting language (the numbers) in every-day language (the text) without further explanation as to the reason for the numbers being as they are (Sandell & Svensson, 2017).

More detailed definitions, rule lists for when something is identified as a certain Account and various examples can be found in the coding manual in Appendix 1.

2.4 Literature review

2.4.1 Different methodologies in previous literature

Benoit and Drew (1997) explain that results can differ depending on the method of the study, such as the distinction between qualitative and quantitative. Both Benoit and Drew (1997) as well as Brühl and Kury (2019) did a quantitative study that at least partly focused on the effectiveness of different Account types. Brühl and Kury (2019) examine how banks communicate and defend their financial performance after the financial market crisis 2007/2008 using content analysis. They specifically looked at banks from the U.S. and Europe that were heavily affected by the crisis. While Benoit and Drew (1997) instead explore which Accounts were most effective in firms' financial reports using 202 students as their participants. When it comes to how they use Account typologies, Benoit and Drew (1997) used a similar strategy as Brühl and Kury (2019). Although they both used a quantitative study and similar techniques in conducting a typology, the results differed. This example and also several other studies indicate that the use of Accounts is context dependent and that Accounts' effectiveness depends on the situation.

Sandell and Svensson (2016) conducted a qualitative study, where they analyze large Swedish firms that have failed to reach analyst expectations during 2010's Q3 reports and further analyze their language use for verbal Accounts. The total number of firms analyzed was 9 out of 41 firms due to the limitation of firms that did not meet the analysts expectations. Choosing firms that did not meet the analysts expectations was due to the fact that Sandell and Svensson (2016) believed that firms who performed worse would include more verbal Accounts.

Further, there is also the matter of what type of texts and year(s) are investigated when investigating financial communication. As above, Sandell and Svensson (2016) specifically looked at Q3 reports for one year (2010). A year later they published another study on the use of Accounts. Sandell and Svensson (2017) is a quantitative study examining texts surrounding goodwill impairment from the annual reports of firms listed on the Stockholm stock exchange. Instead of a one year period they reviewed firms from 2005-2010 in order to increase the number of observations. Another way to differentiate by which country/countries is/are examined. Sandell and Svensson (2016; 2017) investigate Swedish firms, while Brühl and Kury (2019) look at banks from both U.S and Europe and specifically analyze CEO-letters.

Different types of typologies tend to be used in different studies. This could be due to the reason, as Benoit and Drew (1997) pointed out, that there is no existing generally accepted typology for verbal Accounts. Therefore it is inevitable that different typologies will be chosen or created their own for their specific study, which will result in different definitions and names for similar concepts (Benoit & Drew, 1997; Brühl & Kury, 2019; Sandell & Svensson, 2016; Sandell & Svensson, 2017).

There is no study in the Accounts literature that has the exact same methodology as is used for this specific study. The methodology used in Brühl and Kury's (2019) study can be said to be the closest in published literature. The similarity is that Brühl and Kury (2019) also perform a content analysis on verbal Account in CEO-letters and that it is a quantitative analysis. A key difference is that they do not investigate the time dimension as is done in this study.

2.4.2 Findings in previous literature

There are a few articles and studies executed on the subject of verbal Accounts in financial communication. While some studies are in line with each other, it is also evident that studies have shown differing results. As described above different studies use different strategies, methods and data, which could be an influencing factor to the difference in results. Further, the use of Accounts appears to be context dependent.

In the study done by Sandell and Svensson (2016) they argue that the use of Accounts in financial reports serves a purpose for firms to communicate with their public, taking a stand to challenges, critique, bridging the gap between outcome and expectations, etc. Out of the seven verbal Accounts types in their typology, the presence of five Accounts types was found in the financial reports. These five Accounts were: Excuse, Justification, Refocusing, Concession, and Mystification. Their results showed that Excuse and Justification was the most common (Sandell & Svensson, 2016). This result is in line with previous research results (Aerts, 1994; Cho, Roberts & Patten, 2010; Clatworthy & Jones, 2003; Merkl-Davies & Brennan, 2007). Further, both Refusal and Silence are considered to be two verbal Accounts that are difficult to examine by Sandell and Svensson (2016). However, in their typology they choose to include both Refusal and Silence due to the fact that they believe that the Accounts could be of importance when firms respond to challenges, crises and/or negative events. Usually the use of verbal Accounts in financial reports is a result of strategic communication decisions in order to respond and clarify certain events or acts, “the process by which individuals attempt to control the impressions others form of them” (Leary & Kowalski, 1990, p. 34).

In a later study, Sandell and Svensson (2017) examine texts surrounding goodwill impairment from the annual reports of firms on the Stockholm stock exchange. In this article they found seven different Account types over the years 2005-2010 that were discussed and analyzed. Based on the findings in this study they add one more Account type to their typology compared to their 2026 study. This is the Account labeled Wordification, which can be said to be a textual repetition of the accounting numbers which does not add any significant new information (Sandell & Svensson, 2017). This can lead to an illusion of an explanation being given, meanwhile it does not clarify anything about why it happened or who is responsible. Sandell and Svensson (2017) further point out that Wordification is closely related to Mystification in the sense that both Accounts surround a lack of satisfactory explanation of the Failure event, the main difference is that in the case of Wordification is that the illusion of an explanation is given through the textual repetition of the accounting numbers.

Different Account types achieve different effects and their use/effects is also context dependent. Sandell and Svensson (2017) point out that the seven Account types in their study have different rhetorical effects as well as serving a purpose depending on the situation and context. For example Fritsche (2002) mentions that an Excuse can be interpreted as a more “aggressive” Account while Concession could be interpreted as a more “soft” Account. In comparison, the Accounts Justification and Refusal are seen as more defensive Accounts. That verbal Accounts have different effects on written text is nothing new. Riordan, Marlin, and Kellogg (1983) argue that the verbal Account Excuse diminishes attribution of responsibility to the offending party. They also argue that Justification is an Account that minimizes the perceived error of an act or event.

There are a lot of ways to obfuscate meanings in financial communications, it could be a vague explanation of an event or act or even using a positive tone where in fact there should be a more problematice one (Sandell & Svensson, 2017). Sandell and Svensson (2017) argue that Mystification is well-documented in earlier research. They also describe that an annual reports readability depends on the performance of the firm, firms with inferior performance tend to on average create less readable annual reports compared to those with better performance. The relevance of firm performance on the creation of financial reports and use of language/Accounts is something that Aerts (2005) also finds. Listed firms are to a degree more defensive in their communication and explanations compared to non-listed firms (Aerts, 2005).

Brühl and Kury (2019) examine how banks communicate and explain/defend their financial performance after the financial market crisis 2007/2008 which is done by content analysis. In the study a typology was conducted with a relatively exhaustive list of Account types that also had subforms for some Account types (Brühl & Kury, 2019). They found that bank managers rely on Accounts as a linguistic device to look less responsible for the bad performance. The results showed that profitable banks tended to use Refusal more often as well as using relativize (similar to Refocusing) to switch attention to banks with worse performance (Brühl & Kury, 2019). Brühl and Kury (2019) concluded that bank managers with bad performance tended to be more defensive and more willing to use Excuses than Concessions which was in line with previous results by Sandell and Svensson (2016). A self-serving bias is a factor in the use of Accounts that has been exposed in more than one study, where firms tend to tie negative outcomes to external events out of the firm's control, while positive outcomes are tied to the firm's own actions and control (Bettman & Weitz, 1983; Brühl & Kury, 2019; Conrad, 1992; Sandell & Svensson, 2016; Shepperd, Malone, & Sweeny, 2008, Staw, McKechnie, & Puffer, 1983).

Benoit and Drew (1997) used a similar strategy as Brühl and Kury (2019) in the use of Account typology. However, a major difference was that they performed an experiment with 202 students as their participants. The Account Mortification (similar to Concession) and corrective action were seen as the most effective strategies by the students (Benoit & Drew, 1997). On the other hand the result showed that one of the least effective and appropriate Accounts was Denial (similar to Refusal).

Concession and Excuse seem to be two Account types that re-occur as effective and appropriate in several studies (Benoit & Drew, 1997; Sandell & Svensson, 2016; Brühl & Kury, 2019). Further, Fritsche (2002) argues that while less effective, Justification and Refusal are still used with the hopes of retaining legitimacy for the firm. This goes to show that even though some studies have found same or similar results it is not with certainty that all texts/studies will achieve the same results, whether it is in general text or financial reports. Methodology and context are likely two major factors behind differing results (Benoit & Drew, 1997).

2.5 Hypotheses

Language as a linguistic device is interpreted as a complicated and many faceted device to use (Alvesson & Kärreman, 2000a). Language is not a device that only describes objectively but also acts as a social action, and helps create reality as it is experienced, which is referred to as the performativity of language. The power of the performativity of language is to potentially be able to change the way something is perceived, in CEO-letters it could be to change stakeholders' perception of a "Failure event", its origins and its consequences. As many other things, language use changes over the years, both in how it is used and in its underlying meanings (Aitchison, 2001). The fact that language changes over time leads to the conclusion that it is likely that the use of Accounts could also have changed over time.

In the literature review above (2.4) the current standing of published literature on the use of Accounts in financial communication is presented. While parts of the existing literature find similar results, there are also conflicting results which likely result from methodological and/or contextual differences (Benoit & Drew, 1997). What, to the authors knowledge, is absent in the current literature however is an investigation of how the use of Accounts in financial communication potentially has changed over time. As expressed above, one would expect to find changes over time due to the fact that both language use as well as contextual factors change over time. Given this expectation, the following hypotheses are presented in order to investigate the potential changes over time in the use of Accounts in CEO-letters. Due to the lack of existing research there is no clear expectation of *how* the use of Accounts has changed over time, just that it likely has changed to at least some degree. Due to this, the hypotheses are purposely kept open and two-sided in order to not unnecessarily frame the authors' expectations, and allow for a thorough investigation of possible trends over time.

Hypothesis 1: *The number of Failure events mentioned per CEO-letter has changed over time.*

Failure events are a key feature for the use of Accounts since a Failure event has to be mentioned in order for Accounts to be relevant in the first place. The number of Failure events that actually occur for firms can be expected to be somewhat stable over time. However, this does not necessarily mean that the number of mentions of them in CEO-letters is also stable over time as firms might not mention all Failure events. Due to the aforementioned, this appears to be an important dimension to investigate when investigating potential changes over time in the use of Accounts.

Hypothesis 2: *The number of Accounts per Failure event has changed over time.*

As mentioned earlier, it is possible for there to be multiple Accounts per Failure event. If the use of Accounts has changed over time, this seems a likely dimension that could be affected. Firms could be using more or fewer Accounts per Failure event compared to the past. Therefore, this is an important aspect to investigate when trying to identify trends over time in the use of Accounts.

Hypothesis 3: *The frequency of use of individual Account types has changed over time.*

Perhaps the most obvious dimension to investigate when trying to identify changes in the use of Accounts over time is the use of the individual Account types. These include: Excuses, Justifications, Refocusing, Concession, Mystification, Refusal and Wordification (more detail in 2.3 and Appendix 1). It is not unthinkable that certain Account types have become more common, while others have become less common as the use of language shifts over time. Each of these Account types will be investigated individually in the course of this thesis in order to answer this hypothesis.

Hypothesis 4: *The percentage of CEO-letters including a visually highlighted Account has changed over time.*

As far as the authors of this study are aware, there are no studies that investigate if and how firms use visually highlighted Accounts in financial communication. With a visually highlighted Account the authors of this study mean Accounts which in one way or another are made to stand out visually when looking at the CEO-letter. For example Accounts used in: the main title, an enlarged/bolded introduction, enlarged quotes, pictures, graphs, etc. The idea of visually highlighted Accounts is new in the literature on Accounts in financial communication and introduced by the authors of this study. Inspiration for this dimension/variable comes from a previous thesis of one of the authors which amongst other things looked at visually highlighted occurrences of Covid-19 in CEO-letters (Johnsson, van Rijn & Rundgren, 2021). This in turn was inspired by a small number of studies which looked at visual aspects of CEO-letters and whether things such as color or font size were used in order to downplay, angle or emphasize certain information (Beattie & Jones, 2002; Courtis, 2004).

Firms have been known to use visual emphasis of certain messages in CEO-letters, potentially changing the reader's perception of the CEO-letter. Further, there is an expectation that the use of Accounts might change over time due to changes over time in the use of language. Therefore, it is not unlikely that there would be a difference in the use of visually highlighted Accounts over time. This contributes to not only the time dimension lacking in current literature, but also introduces a new concept: visually highlighted Accounts in CEO-letters.

3. Method

The method section starts with a general method description (3.1), followed by a description of the sample and data used (3.2). Section 3.3 describes the data collection process and variables in more detail while section 3.4 describes the statistical analysis methods used. Finally, the method section is concluded with reflections surrounding the method choices (3.5) made in the study which amongst other things includes a discussion regarding validity and reliability.

3.1 General method

3.1.1 Choice of theory

Given the topic and purpose of this study it is a given to include Account theory and a corresponding Account typology. The Account typology chosen for this study originates from Sandell and Svensson (2016; 2017) and has several advantages. Firstly, it is a comprehensive Account typology that takes in perspectives from several previous researchers within the field of verbal Accounts. Further, it has been applied on samples of Swedish annual reports multiple times in the, somewhat limited, existing literature. Finally, the authors of this study have had the privilege of being taught on the subject of Accounts by Sandell and Svensson during the authors' university studies. This leads to an enhanced understanding of Sandell and Svensson's views on and categorization of Accounts which the authors would not be able to obtain for another Account typology.

The reason behind the inclusion of the linguistic turn and the performativity of language in the text of this study is to convince the reader that it is relevant and interesting to study the use of Accounts in financial communication. In order for the study of Accounts to be interesting it is a prerequisite that people can be affected or persuaded by the image that the firm tries to present of itself. The idea of the performativity of language, that language creates and shapes the (perceived) reality of the object being described, is highly relevant in this setting.

This study can be said to mainly be deductive in the sense that it is based on an existing theory, hypotheses are formulated and tested. It does however also have a certain inductive element to it, by investigating trends over time the authors are filling a gap in the existing knowledge and literature. This therefore leads to the potential of developing the theory further based on the observations in this study.

3.1.2 Content analysis - A description

Content analysis is a technique intended for a systematic and objective analysis of written text (Neuendorf, 2017). It is a well known data collection method both within business research in general and within the literature on the use of Accounts in financial communication (Boudt & Thewissen, 2019; Brühl & Kury, 2019; Hooghiemstra, 2010; Patelli & Pedrini, 2014). In fact, Bryman and Bell (2017) specifically highlight content analysis as an appropriate tool for the analysis of annual reports in their book on research methodology.

The analysis is based on a coding manual, which can be described as a predetermined rule list and is constructed by the authors of the study. Sometimes trial studies are performed in the process of outlining

the coding manual in order to improve validity and reliability (Neuendorf, 2017). After the final coding manual has been decided upon, the coders proceed to analyze the relevant texts using the predetermined rule list in the coding manual. The results of the analysis are then marked down in the coding sheet (data file).

3.1.3 Advantages and disadvantages of content analysis

There are several advantages to the use of content analysis for the analysis of texts. Neuendorf (2017) points out that content analysis is a broad and flexible approach that allows context and underlying meanings to be taken into Account. A further advantage is that if the procedure and coding manual are described well and have clear rules the study can be replicated by others. Additionally, due to analyzing text rather than people, it is possible to do trial studies without impacting the results of the final study since the studied object does not react to the trial studies. If done properly this increases the possibility of a systematic and objective analysis.

A potential disadvantage is that there will still be a certain subjectivity involved in certain judgements in the coding process. At the same time this is also why the technique allows context and underlying meanings to be taken into Account. Hence the goal should be to strike a balance between clearly defined (but therefore more rigid) rules and the amount of room left for judgement.

3.1.4 Methodology - Similarities and differences compared to previous literature

As established in 2.4.1, it is clear that different methodologies have been used in studies on Accounts in financial communication. The method of this study shares characteristics with some of the different studies, but none of them fully have the same methodology. In short, this study has a quantitative methodology based on content analysis of CEO-letters and studies trends over time in the use of Accounts. The sample consists of firms listed on the Stockholm stock exchange which have negative profit growth compared to the previous year, CEO-letters for 2002, 2007, 2012, and 2017 are investigated.

Unlike this study, qualitative studies are most common in the literature (Benoit and Drew, 1997; Firth, 1995; Fritsche, 2002; Sandell & Svensson, 2016; Scott & Lyman, 1968; Sitkin & Bies, 1993). But, like this study, there are also some quantitative studies on the use of Accounts in financial communication (Brühl & Kury; 2019; Sandell & Svensson, 2017). Further there is also similarity in the data usage, in a similar vein as this study, by Sandell and Svensson (2016; 2017) who use Swedish firms as their sample. Also, Sandell and Svensson's (2016; 2017) Account typology is used in this study. Meanwhile Brühl and Kury (2019) shows a similarity to this study by also using content analysis on CEO-letters.

None of the studies mentioned above limits the sample to firms with negative profit growth like this study does, but Sandell and Svensson (2016) has a similar limitation in that it only looks at firms which have missed analyst expectations. They argue that this limitation leads to a more interesting sample of which the texts will contain more Accounts. The most important difference with this study compared to other studies is the time dimension, most studies look at individual years/periods. Sandell and Svensson (2017) study texts surrounding goodwill impairment from 2005-2010, but this was only in order to achieve a large enough sample. The time dimension is not part of their analysis.

3.2 Sample and data

3.2.1 Pooled cross-section design

A general consideration while performing scientific studies is depth versus width, which impacts the degree of generalizability of the results (Bryman & Bell, 2017). A study that deep dives into a few observations can capture details that might be lost when performing a broader study of more observations. However, this generally leads to results which are not generalizable outside of these few observations. A broader study of more observations risks losing a certain level of detail. However, when well designed, can lead to generalizable results outside of the objects observed. Given the purpose of this study, to identify trends over time, a broader approach with a large number of observations is required.

With other words, the purpose of the study implies a quantitative approach. Given the time dimension included in the study, two main data types are possible choices. A pooled cross-section design involves taking a random sample for each year studied and then pooling these random samples together into one large dataset (Wooldridge, 2016). Alternatively, a panel data design takes one random sample and collects data for all years for this random sample (Wooldridge, 2016). While a panel data design can be preferable, it is not possible to use in all settings. In the case of this study, the fact that the population is limited to firms that have negative profit growth means that different firms are included in the population for different years. Given that there are likely to be very few firms which have negative profit growth for all of the years included in the study, a panel data design would notably limit the number of observations which could be acquired. Therefore, given the purpose of this study, a pooled cross-section design is not only preferable but essentially required in order to get enough observations.

The main variables of importance collected for this study are those regarding the use of Accounts in the CEO-letters (more detail in 3.3.2). However, variables surrounding the firms (3.3.3) and the CEOs (3.3.4) were also collected. Partly, this can be helpful for the reader to gain a better understanding of the sample. However, they were mainly collected as control variables. That is, in order to investigate whether there might be firm or CEO variables that are behind potential trends over time observed in the study.

3.2.2 Population and sample

The population examined in this study are firms listed on the Stockholm stock exchange with negative profit growth. That is to say, lower profit in the current year than the previous year. While firms with positive profit growth can also include Accounts explaining Failure events in their CEO-letters, firms with negative profit growth essentially always have a need to explain themselves. Therefore, limiting the study to these firms is more likely to produce relevant and interesting results.

When it comes to the time dimension of the sampling, the aim was to study a recent period that was at the same time long enough to potentially see meaningful trends over time. In order to collect a sufficient number of observations per year and at the same time study a long enough period, it was necessary to sample specific years within this period. A further goal was to avoid so-called crisis years such as 2000 (IT-crash), 2008 (financial crisis), and 2020 (Covid-19) since the aim of this study is to identify trends over time and the specific events of these years would likely interfere with identifying these trends.

Finally another objective was to have even jumps between the years in the sample. After debating several options and reading numerous CEO-letters from different years in order to get a feel for how the time period affected them, the choice was made to study: 2002, 2007, 2012 and 2017.

The original aim was to collect 40 observations for each year. For 2017 a population of 61 firms was identified and a random sample of 40 firms was selected. For 2012 a population of 86 firms was identified and again a random sample of 40 firms was selected. The random sampling was achieved by use of a random sequence generator based on atmospheric noise (Random, 2022). For 2007 a population of 39 firms was identified which meant no sample was taken and the entire population was included in the study. For 2002, a population of 38 firms was identified. However, for 6 firms the necessary annual reports could not be located. Therefore, a sample based on availability of data of 32 firms was included in the study. The 6 firms for which the 2002 annual report could not be located are spread out over 5 different industries according to the ICB-industry classification. Therefore there does not appear to be a pattern or correlation between these firms that negatively impacts the reliability of the results of this study. The above leads to a sample of 151 observations out of a population of 224.

3.2.3 Identification and retrieval of relevant annual reports

The Orbis database was used to identify which firms had negative profit growth for years 2012 and 2017. A useful feature of the Orbis database in this context is the ability to filter for firms listed on the Stockholm stock exchange. Unfortunately the required data in order to calculate profit growth was not available in the Orbis database for years 2002 and 2007. For these years the Factset database was used. The downside with the Factset database is that, at least with a student license, it is not possible to filter for firms listed on the Stockholm stock exchange and create a list suitable for calculating negative profit growth. Instead the authors used the list of firms on the Stockholm stock exchange generated by Orbis to manually check one firm at a time in the Factset database to determine whether they had negative profit growth for 2002 and 2007.

For the firms included in the sample the relevant annual reports had to be located. This was first hand done by downloading them from the respective firms' websites. If the relevant report was not available on the firm's website, not uncommon with some of the older reports, the authors searched for it elsewhere. The other sources for the annual reports were: Cision (https://news.cision.com/se), Annual Report Promotion (https://arp2018.euroland.com), and in rare cases Google (https://www.google.com).

3.3 Applied method - Data collection

3.3.1 Trial studies - An iterative process

The ability to perform trial studies is one of the advantages of content analysis as a method (Neuendorf, 2017). In the process of this study, several trial studies were performed leading to an iterative process with the aim of improving the validity and reliability of the results obtained. This process started with a discussion between the authors surrounding the variables and coding manual. This was followed by a trial study, which was then analyzed and led to renewed discussions and revisions of the variables and coding manual.

This process was repeated several times and is intended to refine the definitions and rule sets in the coding manual. Additionally, it also leads the coders to converge and agree on a shared way of thinking surrounding the topic and variables at hand. This continued until the authors became satisfied with the data collection process and confident in a similar treatment of the CEO-letter between the coders. Amongst other improvements, this led to the inclusion of a process into the data collection for discussion of unclear items in order to reach shared agreement and reduce potential disparities. It was first after all of these trial studies and improvements to the data collection process were concluded that the final data collection of the data included in this study started.

3.3.2 Account variables

A short explanation of each Account variable and an explanation of how these were collected during the data collection process will be presented below.

A Failure event: Something which has happened, which has negative connotations, and of which the firm experiences an expectation (explicit or implicit) to explain themselves.

The Failure event is what leads to the need to bridge the gap between the expected and the actual outcome through the use of Accounts. In a practical sense this means that during the data collection process the coders are reading the CEO-letters searching for Failure events. The total number of Failure events was recorded for every CEO-letter. Once a Failure event is located, the surrounding text is carefully examined for Accounts. It is possible, and not uncommon, for there to be multiple Accounts for one Failure event. A definition, rule set for identifying Failure events, and an example of Failure event are available in the coding manual in Appendix 1.

For the individual types of Accounts: **Excuse, Justification, Refocusing, Concession, Mystification, Refusal and Wordification**, short explanations can be found in section 2.3 and detailed definitions, explanations and examples can be found in the coding manual in Appendix 1. After a Failure event was located in the text of a CEO-letter, the surrounding area was carefully examined for Accounts. The total number of each individual Account-type in the CEO-letter was recorded. The Accounts were identified and classified according to the ruleset in the guideline column of the coding manual in Appendix 1. In the case of a potential Account being difficult to classify, it was discussed by both coders until a consensus was reached on how to classify it.

Average number of Accounts per Failure event: a measure indicating how many Accounts are used per Failure event, on average, in a CEO-letter. A higher number indicates a larger drive for the firm to explain itself, since it means multiple Accounts are given for a single Failure event. This variable is not collected as such, rather it is calculated by using the variables above. The calculation of the variable is as follows:

$$Average\ number\ of\ Accounts\ per\ Failure\ event\ = \frac{Total\ number\ of\ Accounts\ in\ a\ CEO-letter}{Total\ number\ of\ Failure\ events\ in\ a\ CEO-letter}$$

Visually highlighted Account: An Account which is visually highlighted in the CEO-letter. This means it is included in either: the title, an enlarged/bolded introduction, a header, an enlarged quote, a table/graph or an image.

A visually highlighted Account is essentially any Account which stands out visually when looking at the CEO-letter as per the inclusion criteria in the explanation above. This information was recorded in a binary variable, either a CEO-letter included a visually highlighted Account or not. Examining visually highlighted elements in CEO-letters, while not very common, has a precedence in the financial communication literature (Beattie & Jones, 2002; Courtis, 2004). The idea behind including it as a variable in this study is twofold. First of it is simply a possible dimension of change in which there might be a trend over time in the use of Accounts and therefore thought relevant. Further, it implies that the firm wants to put extra focus on the explanation given by the Account if they choose to highlight it visually. In other words, it says something about the "strength" of the Account given.

While not an Account variable, there was one additional aspect of the CEO-letter for which data was collected. The **number of words** per CEO-letter was collected as a potential control variable. The number of words was counted such that any potential words in the margins of the pages were not counted. Enlarged quotes were also not counted if they were duplicates of the words in the main text, in order to avoid double counting. Other than that, all words on the pages of the CEO-letter were counted.

3.3.3 Firm variables

Firm variables have been collected for a number of reasons. Partly to give a greater understanding for the sample used in the study. And partly in order to check whether any firm variables might be a driving factor behind trends over time observed in the use of Accounts.

Industry: It is not unlikely that the use of Accounts in CEO-letters could differ between different industries and therefore this would appear to be a relevant variable to collect. The ICB industry classification is used by NASDAQ itself for the Stockholm stock exchange (Nasdaq, 2022), therefore the same industry classification is used in this study. Names of the different industries are taken directly from the organization that originated the ICB industry classifications (FTSE Russell, 2022). There is no historical data available for the ICB-codes for all firms and years included in the study. Consequently, the industry classifications used are based on the firm's current industry classification. Considering that it is rather rare for stock exchange listed firms to switch industry this is not deemed as problematic for the results.

Size: It is not unlikely that a firm's size could impact how a firm uses Accounts in the CEO-letter. As there are large differences in the size of firms listed on the Stockholm stock exchange it is likely the context these firms operate in is quite different. The proxy used for firm size in this study is the firm's total assets as listed on the balance sheet, which is the most common proxy for firm size (Wooldridge, 2016). In order to collect this data the firm's total assets are located on the balance sheet in the annual report and recorded in millions of SEK (henceforth named: mSEK). In cases where the scale or currency used in the annual report are different, the authors have recalculated the number to be correct in mSEK. In the cases where the numbers in the annual report were in a different currency, the exchange rate on the date the books were closed for the financial year was used.

Profit growth: that is to say the current year's profit in relation to the previous year's profit. This is a relevant variable partly because it is an important limitation in the purpose of this study. Further, it is an indication of the firm's financial performance during the previous year. It should be rather evident that this could have an impact on the use of Accounts in the CEO-letter. Amongst the many possible profit measures that could be used, operating profit was selected. Partly because this is the profit measure that could be said to be most directly impacted by management, and therefore the CEO. Partly because during the trial studies conducted it appeared to be the profit measure most commonly used in CEO-letters when a profit measure was mentioned. And finally because it is a common profit measure used in previous literature within financial communication and Accounts (Clatworthy & Jones, 2003; Brühl & Kury, 2019).

The two operating profit values needed were located in the annual reports income statement and recorded in mSEK, the same transformation to achieve the mSEK format as mentioned under the size variable apply. The formula for calculating profit growth is the following:

$$Profit\ growth\ = \frac{Operating\ profit\ year\ (t) - Operating\ profit\ year\ (t-1)}{[Operating\ profit\ year\ (t-1)]}$$

That is to say, profit growth is equal to the current year's operating profit minus the previous year's operating profit and then divided by the absolute value of the previous year's operating profit. The reason the division is done with the absolute value is in order for the sign of the variable to be correct regardless of whether the operating profit was positive or negative. There is a potential issue with the above calculation which is not due to the formula being wrong. But rather due to the nature of operating profit which has a range from minus infinity to plus infinity with a, in essence rather arbitrary, point where the sign switches (0). This means that for cases where the past year's operating profit is very close to zero we get very large values relative to cases where it is not close to zero. At the same time, the calculation using percentages is required in order to make firms comparable despite their different size. In order to combat the extreme values this technicality gives rise to, profit growth has been winsorized at the 10 and 90 percent levels. This is a technique that allows for the adjustment of a variable so that the extreme values have less importance for the results obtained, but at the same time are not removed outright from the sample (Wooldridge, 2016).

3.3.4 CEO variables

The CEO variables were collected due to the fact that it is not unthinkable that certain CEO characteristics influence the CEOs use of Accounts in the CEO letter. Therefore it is interesting both from a control variable point of view and in order to give the reader an idea of the CEOs in the sample. The data for the CEO variables was mostly collected from the executive management section in the respective annual reports. In case not all data needed was available in the annual report, it was complemented with sources such as: the firm's website, the CEOs LinkedIn or news articles.

CEO gender: A binary variable indicating either man or woman.

CEO age: Numerical variable equal to the CEOs age

CEO tenure: Numerical variable equal to the amount of years that the CEO has been CEO at this specific firm

CEO nationality: A variable that during the data collection process included the specific nationality of the CEO. After completion of the data collection process it was decided to turn this into a binary variable of either Swedish or non-Swedish nationality. The vast majority of the CEOs in the sample is Swedish and the vast majority of those who are not have a EU nationality, so the added granularity of having the specific nationality was not deemed relevant for the analysis in this study.

3.3.5 Data collection - A practical example

The majority of the following explanation is repetition of details mentioned in different parts of the method section. However, in order to give a more concrete grasp of our data collection process and data sheet, an example will be provided below.

First, as explained in more detail in 3.2.3, all relevant firms in the population were identified and a list was made of: year, firm name, firm ID and industry. Where firm ID is an ID attached to the firm in this study in order to be able to differentiate between unique firms in the statistical analysis. Once this list was complete, random sampling (details in 3.2.2) was performed in order to identify which firms would be included in the sample. Below follows one line of our data sheet with a specific example, H&M's 2017 CEO letter.

Year	Firm name	Firm ID	Industry	Assets (mSEK)	Profit growth
2017	Hennes & Mauritz AB (H&M)	53	4040	106.562	-13,66%

Table 1: H&M 2017's firm variables

When starting the data collection for a specific firm, the firm variables were collected first. The necessary data for the asset and profit growth variables were collected from the balance sheet and income statement of the annual report (more detail 3.3.3).

CEO gender	CEO age	CEO tenure	CEO nationality	Number of words
0 (male)	42	9	0 (Swedish)	1447

Table 2: H&M 2017's CEO variables and number of words

Then the CEO variables would be collected first hand from the executive management section in the annual report (more detail 3.3.4). After this the focus would turn to the CEO-letter and the number of words was determined by copying the relevant text (more detail in 3.3.2) into a Word file and then the number of words indicated by Word would be entered into the datasheet.

Failure events	Highlighted Account	Excuse	Justification	Refocusing
5	0 (no highlighted Account)	2	2	1

Table 3: H&M 2017's Account variables part 1

Concession	Mystification	Refusal	Wordification	Average number of Accounts per Failure event
2	0	0	0	1,40

Table 4: H&M 2017's Account variables part 2

Once the number of words was determined the actual reading/analysis of the CEO letter would start. This meant searching for Failure events while reading the text, as there cannot be Accounts without a Failure event. Once a Failure event was located, the surrounding text would be carefully examined for Accounts and all Accounts found would be classified and entered into the datasheet. If one of the Accounts was found to be a visually highlighted Account this would also be entered into the datasheet. The average number of Accounts per Failure event was automatically calculated as the other values were entered. More detail on the Account variables can be found in section 3.3.2.

3.4 Applied method - Statistical analysis

3.4.1 Descriptive statistics

After completion of the data collection process the first step was to get a grasp of the data collected through calculating and analyzing descriptive statistics. Totals and average values both for the whole sample and divided by years were used to investigate the time dimension and give a first look at potential trends. Average, median, minimum values, maximum values and standard deviations were investigated in order to look at the spread of the different variables. Different graphs/tables were produced and inspected such as a correlation table (presented in Appendix 2), line graphs, and boxplots. A table was produced to visually display the spread of firms' industries over the different years.

In the empirical data section which follows after the method the following descriptive statistics are presented for most variables. A line graph with average values divided by year in order to visualize changes over time is presented. Further the average, median, minimum value, maximum value and the standard deviation for the entire sample are given in order to give an idea of the spread of the variable. As mentioned above, the authors dove deeper into the descriptive statistics than this. The decision of what to include and what not to include in the empirical section was based on a balance between giving the reader an idea and overview of our data, while at the same time trying to avoid an information overload in order to focus on the most relevant aspects.

3.4.2 ANOVA test

A one way ANOVA test is used to compare the sample means of two or more groups in order to see if there is a statistically significant difference in the population means (Glantz, Slinker & Neilands, 2016). Or in other words, it leads to the following test-hypotheses in the case of this study:

$H(0):\ \mu_{2002} = \mu_{2007} = \ \mu_{2012} = \mu_{2017}$

$H(a):\ \textit{There is a statistically significant difference between the means of the years tested}$

This makes it an appropriate test for determining if the trends over time spotted in the sample used in this study are statistically significant. The test is not very informative on what any trends might look like, it only provides information on whether there is a statistically significant difference in the means. When combined with a line chart which plots the averages of the different years over time however, it will provide good insight into the potential trends over time. Essentially, the ANOVA test is used in order to determine whether any trends spotted in the graph are statistically significant.

The test itself is somewhat complex and best run using statistics software, but an intuitive explanation of the test is that it compares variation within groups and variation between groups. The test statistic of a one way ANOVA is the F-statistic, the intuitive explanation is as per the following:

$$F = \frac{Between\ group\ variation}{Within\ group\ variation}$$

The F-statistic needs to go over a certain threshold in order for the ANOVA test to reach statistical significance and the null hypothesis to be rejected. A relatively high between group variation and a relatively low within group variation leads to a higher F-statistic.

One important assumption for a one way ANOVA test is random selection (Glantz, Slinker & Neilands, 2016), the random selection assumption is fulfilled in this study. Other assumptions are equal variances and normality, but the test is still robust even if these are violated (Glantz, Slinker & Neilands, 2016). If the data severely violates the equal variances and normality assumptions it can be preferable to instead use the non-parametric equivalent: the Kruskal-Wallis test. When the one way ANOVA test is run in SPSS, as will be done for this study, the output contains a Welch test as well as a Brown-Foresythe test. These can help determine whether it could be preferable to use the Kruskal-Wallis test instead of a one way ANOVA test. All relevant results are brought up in the analysis section (4.3 and 4.5). However, for transparency purposes, screenshots of the test results from SPSS can be found in Appendix 3.

3.4.3 Regression analysis

Multiple linear regressions using OLS as the estimator, more commonly known as pooled-OLS in the case of pooled cross-sectional data, were employed to determine whether the firm and CEO variables could be explanations behind the trends over time identified in the use of Accounts. This technique is appropriate in this context, due to the ability to check how a larger number of variables might be affecting the dependent variable while keeping the other variables included in the model equal (Wooldridge, 2016).

It is worth to note straight away that due to some complications with the model any potential statistically significant variables can not be seen as proof of a cause and effect relationship. The most notable complication being endogeneity issues due to there almost certainly being omitted variable bias. It is not feasible to include all possible factors that could be influencing the trends over time in the model, especially since it is not even known what they are. The variables that are not statistically significant can however confidently be discarded as potential explanations behind the trends over time in the use of Accounts. Therefore, the authors argue that there is still value in this test. Given the fact that the regressions have a relatively minor role in this study, that model issues are already admitted above and that the purpose is mainly to see which variables are *not* statistically significant, the authors will not go into detail regarding the assumptions behind this test.

Clustered robust (by firm ID) standard errors were used to increase the accuracy of the model, this is important due to the fact that the pooled cross-sectional data includes several firms multiple times due to them being included for multiple years. Further it is customary to control for industry effects and year effects when using pooled-OLS (Wooldridge, 2016), at least in corporate finance. The regressions used in this study do indeed control for industry effects. The possible effects of industry on the trends over time in Accounts will be explored separately (in section 4.5.2). However, year effects are not controlled for considering it is specifically relevant to know whether these firm and CEO variables could be influencing the trends seen over time in the use of Accounts. Controlling for year effects would therefore defeat the purpose of these regressions. All relevant results are presented in section 4.6.1. However, for transparency purposes, screenshots of the regression results from STATA can be found in Appendix 4.

3.5 Reflections surrounding method choice

3.5.1 Alternative method choices considered

The fact that one of the authors has previously produced a thesis with a similar methodology, minus the time dimension, made the methodology design more straightforward (Johnsson, van Rijn & Rundgren, 2021). Further, given that the authors from the start decided on studying the use of Accounts in financial communication with a time dimension, some of the method choices were fairly straightforward. This for example heavily implied the use of content analysis and a quantitative study as explained earlier in the method section.

Other texts in financial communication than CEO-letters were shortly considered. For example: press releases, financial notes, sustainability reports and more. However, CEO-letters were chosen at an early stage. Partly because of data availability potentially being a problem for the earlier years with certain text types and partly because the CEO-letter is one of the more read/influential textual parts of the firm's financial communication.

Further, a choice was made to try to focus on "normal" or "non-crisis" years in order to try to find an underlying trend over time in the use of Accounts in CEO-letters. During crisis years such as 2008 (financial crisis) and 2020 (Covid-19) the crisis would likely have a big influence on the use of Accounts for that specific year, which does not have to do with the underlying trend and therefore affect comparability. A choice that was considered however was to do the exact opposite and specifically study only crisis years. This would also have been an interesting study and one that could be worth pursuing. It would however say something specifically about how different crises affect the use of Accounts, not trends over time in the use of Accounts.

Several different periods were considered for this study (more detail in 3.2.2). One option which was considered until the final decision was 2001-2007-2013-2019. While this would likely also have been an acceptable period to study, reading a sample of CEO-letters from 2001, 2002 and 2019 lead the authors to conclude that 2002 was the better option. It appeared that CEO-letters from 2001 and 2019 had a larger risk of being affected in their Account usage by happenings of the time (IT-crash and Covid-19).

3.5.2 Validity and reliability

When it comes to the validity of the study, several aspects can be reflected upon. One is whether the variables used in this study actually measure what they are intended to measure. For example, whether total assets is a good proxy for firm size. As has been argued for in different parts of the method section, it is deemed by the authors that the variables used are valid for what is intended to be measured. The process of trial studies in order to refine the definition and rule set governing the variables has been very valuable in this aspect.

Another aspect that can be considered when discussing validity is whether the authors feel any variables should have been modified or if any variables should have been added/removed now that the study is concluded. One aspect the authors would change in hindsight is how the variable visually highlighted

Accounts was recorded. It should not only have been recorded whether there were any visually highlighted Accounts in the different parts of the text, but also how often they appeared in the different parts of the text. While the authors did not experience that it was common for one CEO-letter to have multiple visually highlighted Accounts, this change might still potentially have been able to give more insights.

Reliability is also deemed to have been significantly positively impacted by the trial study process. One aspect of reliability is whether there were any Failure events and/or Accounts in the CEO-letters that were missed by the coders. This is of course impossible to quantify, but the CEO-letters were carefully examined. Given the trial studies done and discussions between the coders leading to a clear idea and ruleset on how to classify things, this is not deemed to be a major problem for the results of this study even if it is likely at least something will have been missed.

Another, and perhaps more important, aspect of reliability is the reliability of what has been classified. Cohen's Kappa is a suitable and commonly used method for measuring reliability in literature employing content analysis (Neuendorf, 2017). Part of the sample, in this case 10%, is independently coded by both of the coders. This allows for the comparison of these results and an analysis of how similar the coders have classified observations. One part of the formula, PA(o), is the proportion of observations that is classified the same. The formula also takes into account the fact that some observations might be classified the same due to random chance, PA(e). In order for something to be classified the same, the coders first need to identify the same part of the text, and then classify it in the same way. Therefore, the random chance to classify something the same is not deemed very high, 5% is used in the calculation below. Note however that the exact percentage chosen for PA(e) has a relatively small impact on the outcome, which is largely determined by PA(o).

$$Cohen's\ Kappa = \frac{PA(o) - PA(e)}{1 - PA(e)} = \frac{244/274 - 0{,}05}{1 - 0{,}05} \approx 88\%$$

As can be seen above, the Cohen's Kappa in this study is 88% which can be deemed to imply a high reliability. In order to give some context to this number, a comparison to Brühl and Kury (2019) is appropriate. Their study is the methodologically closest study in the published literature to the one performed in this paper. They also perform a content analysis on Accounts in CEO-letters and continue to perform a quantitative analysis, though it does not have a time dimension. Therefore, the Cohen's Kappa of these studies should be able to be compared without any major comparability issues. Brühl and Kury (2019) achieve a Cohen's Kappa of 87%, which further strengthens the impression that the 88% achieved in this study stands up well to scrutiny.

4. Empirical data & Analysis

This section contains both descriptive statistics of and analysis of the data. First descriptive statistics surrounding the firms (4.1) and their CEO characteristics (4.2) are presented. After, descriptive statistics and trend analysis using ANOVA for the use of Accounts are presented (4.3). This is followed by section 4.4 which both combines the different variables for a full picture and answers the hypotheses. A section with robustness tests of the results obtained in this study is also included (4.5). Finally potential explanations for the trends identified are explored in 4.6, both through the use of multiple linear regressions using firm and CEO variables as well as more broad reasoning and economic intuition on the part of the authors.

4.1 Descriptive statistics - The firm

4.1.1 Size

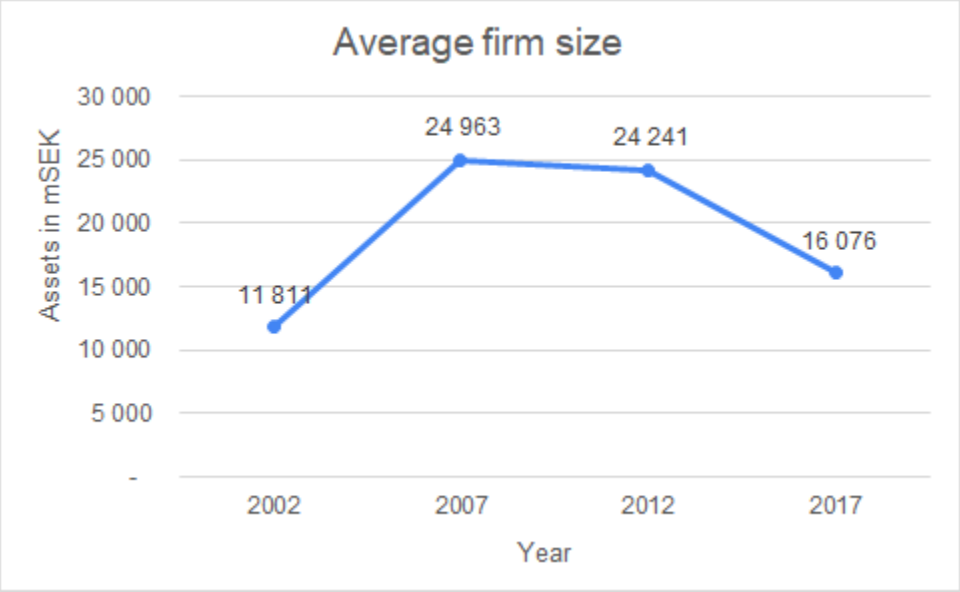

Figure 1: The average size of firms included in the sample divided by year, size measured by assets in mSEK.

The average size for firms in the sample, measured as the amount of total assets on the balance sheet, is 19.630 mSEK. However the median is only 1.403 mSEK, indicating a large and skewed spread of values. The minimum value is 30 mSEK while the maximum value is 338.742 mSEK. The large spread of values is also reflected in a standard deviation of 55.289 mSEK. As can be seen from the median, most firms are relatively small whereas the largest firms are very large and significantly increase average values. Therefore, it is perhaps not surprising that no clear trend arises in figure 1 above when average firm size is broken down by year. The largest firms have such an outsized influence on average values that whether a few more or less are included in a certain year will move the needle significantly. This should not be of major importance for the following analysis as the variable was collected as a control variable. When used as a control variable it will be on an individual observation level, not on an aggregate basis. The

information regarding firm size presented here is mostly for the reader to get an understanding of the sample.

4.1.2 Profit growth

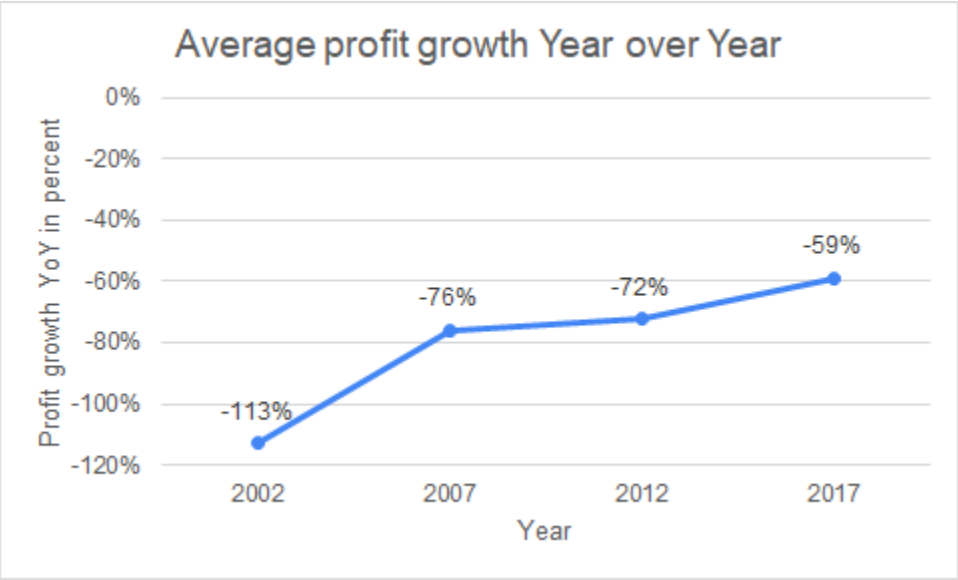

Figure 2: Average profit growth in percentage (the current year's profit relative to last year's profit) for firms in the sample divided by year.

The average profit growth for the sample is -78,29%. For details on the definition and calculation of profit growth see section 3.3.3. Median profit growth is -31,65%, the minimum value is -300,76%, the maximum value is -4,82% and the standard deviation is 95,69%. As can be seen in figure 2 above, there appears to be a trend towards a less negative profit growth as the years progress. Potential reasons for this are many and not the focus of this study. However, this does indicate that this could potentially be an important control variable.

4.1.3 Industry

In table 5 below a detailed breakdown by year of the different industries in the sample is presented. Mostly the industries are well spread and relatively equal over the years. The large concentration of industrial firms is to be expected since the population of the study is the Stockholm stock exchange. Furthermore, the amount of industrial firms is relatively stable over the years. That being said, there are some values that could potentially be interesting to further investigate when discussing the robustness of the results. For example technology (1010), healthcare (2010) and financial services (3020).

ICB-code and industry name	**Year**			
	2002	**2007**	**2012**	**2017**
1010 - Technology	3	6	3	2
1510 - Telecommunications	1	3	4	2
2010 - Healthcare	2	6	2	10
3020 - Financial services	6	4	2	3
3510 - Real estate	1	1	-	1
4010 - Automobiles and parts	-	-	1	-
4020 - Consumer products and services	1	1	4	2
4030 - Media	2	-	-	1
4040 - Retailers	1	1	2	3
4050 - Travel and leisure	-	1	1	1
4510 - Food, beverage and tobacco	-	1	1	-
4520 - Personal care, drug and grocery stores	1	2	1	2
5010 - Construction and materials	4	2	1	3
5020 - Industrial goods and services	9	9	14	9
5510 - Basic resources	1	2	3	1
6010 - Energy	-	-	1	-
Total	32	39	40	40

Table 5: A detailed breakdown of the ICB industry classifications of the firms in the sample divided by year.

4.2 Descriptive statistics - The CEO

4.2.1 Gender

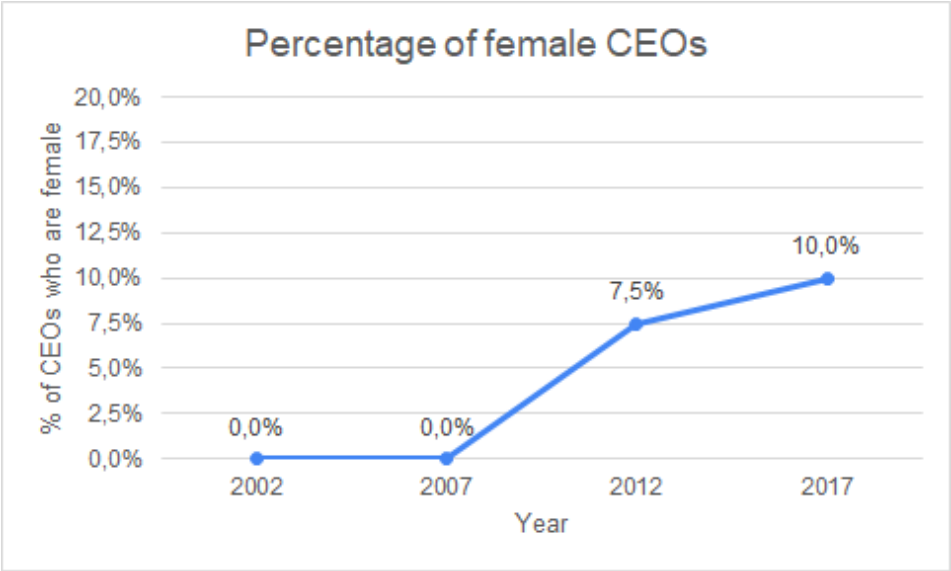

Figure 3: Percentage of female CEOs for the firms in the sample divided by year.

As can be seen in figure 3 above the vast majority of CEOs in the sample are male. In fact, no female CEOs are encountered in the sample during 2002 and 2007. As perhaps expected considering improvements in gender equality in society at large, there is an upwards trend over time in the proportion of female CEOs in the sample. Unfortunately, the absolute number of female CEOs in the sample is low enough that the value of gender as a control variable is diminished.

4.2.2 Age

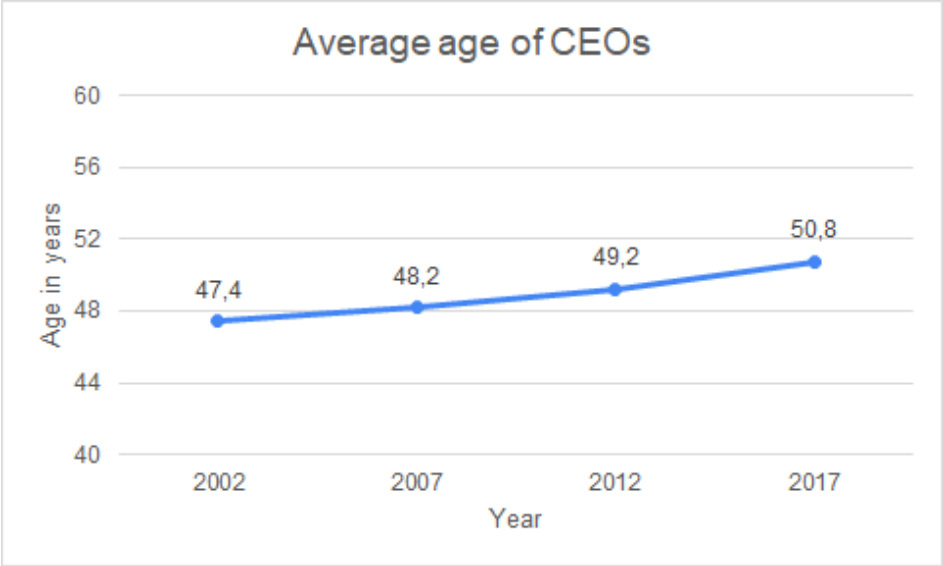

Figure 4: Average age of CEOs for the firms in the sample divided by year.

The average age of CEOs in the sample is 49,0 years, and the median is also 49 years. The minimum value is 33, the maximum value 64 and the standard deviation is 6,9 years. The spread of age for CEOs in the sample is, in other words, not very large. The vast majority of CEOs are in their 40s and 50s and it is in this sense a rather homogenous group. Figure 4 above shows the average age of CEOs divided by year. The average age of CEOs in the sample is very similar for all years included indicating no problems for comparability between years. However, CEO age could still be a relevant explanatory variable on the individual observation level even if the aggregated values are similar for the different years.

4.2.3 Tenure

Figure 5: Average CEO tenure for firms in the sample divided by year.

The average tenure of CEOs in the sample is 6,03 years, and the median is 3 years. The minimum value is 0, the maximum value is 32 years and the standard deviation is 6,74 years. The reason there are CEOs with a tenure of 0 years in the sample is that they were employed as CEO after the closing of the books but before the release of the annual report and wrote the CEO-letter despite not being CEO during the year described. The median in relation to the average combined with the maximum value and standard deviation paint a picture where the majority of the CEOs have been employed for only a few years, however a minority has been employed for a long time. As can be seen in figure 5 above, the development of the average value over time has been mostly flat. This would indicate that tenure likely does not influence any trends over time in the use of Accounts. However, it could potentially still be a factor for how individual CEOs use Accounts especially considering the relatively large spread in this variable.

4.2.4 Nationality

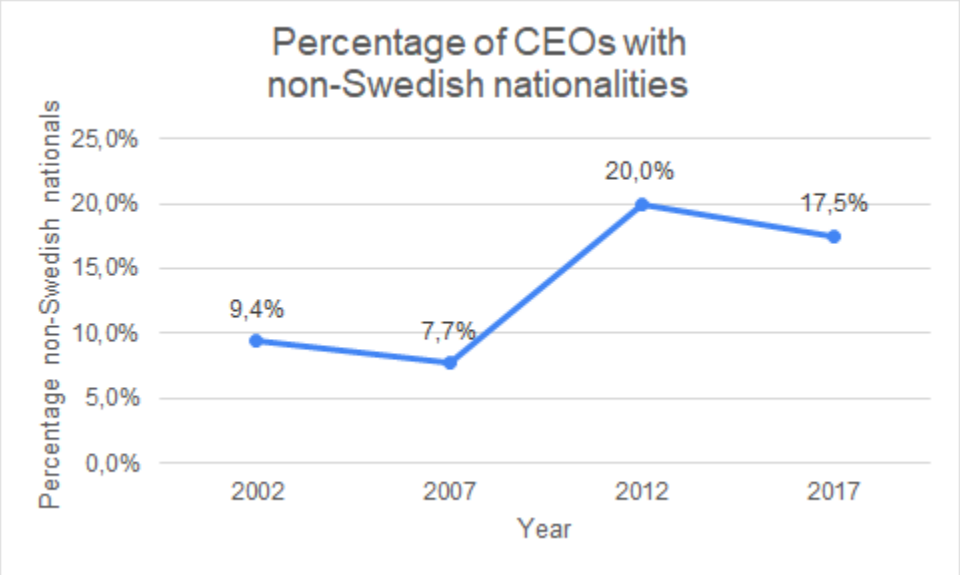

Figure 6: Percentage of CEOs with non-Swedish nationalities for firms in the sample divided by year.

For the entire sample, 21 out of 151 or 14% of CEOs do not have the Swedish nationality. The majority of those who do not have the Swedish nationality have another European nationality, and of those many are from other nordic countries. Only two of the CEOs did not have a European nationality, one being from the USA and one from Canada. Studying figure 6 above there does appear to potentially be a rising trend over time in the percentage of CEOs that do not have the Swedish nationality. One interesting observation is that quite similar trends over time appear in this sample for both CEO gender and CEO nationality, where 2012 and 2017 are at a higher level than 2002 and 2007. While this does not have to mean anything, one can speculate if this is perhaps indicative of firms becoming more comfortable with more diverse CEOs than the standard Swedish male in his 40's and 50's. Alternatively it could simply be a sign that more women and foreign nationals attempted to make careers for themselves in the Swedish corporate world 20-30 years ago compared to before and that this is now starting to show up in the CEO ranks. Since the majority of CEOs are in their 50s and late 40s it takes time for changes in the labor market makeup for junior positions to show up in CEO statistics.

4.3 Descriptive statistics and trend identification - CEO-letter & use of Accounts

4.3.1 Number of words

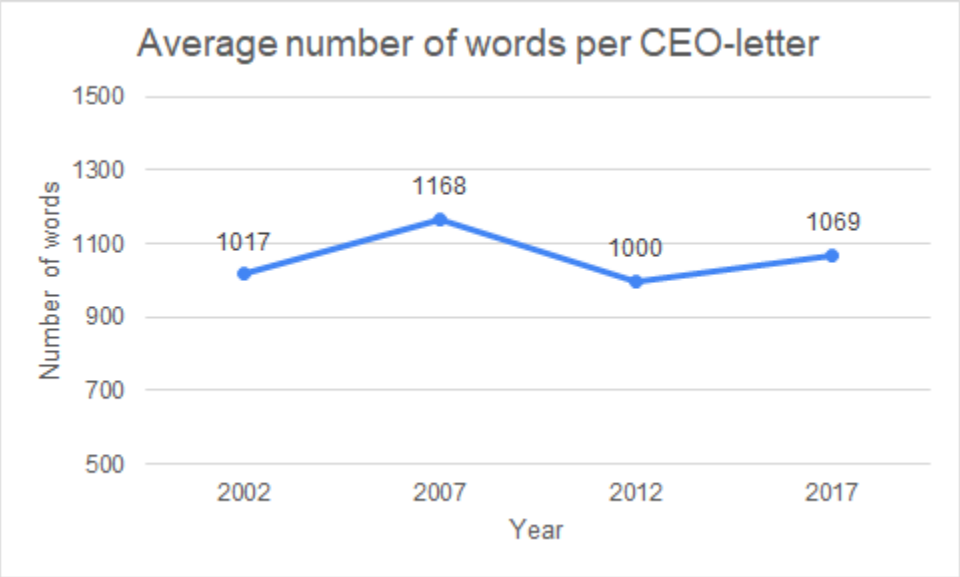

Figure 7: Average number of words per CEO-letter for firms in the sample divided by year.

The average number of words for the CEO-letters in the sample is 1065 words and the median is 1040 words. The minimum value is 209 words, the maximum value is 2267 words and the standard deviation is 399 words. While there clearly are outliers as can be seen from the minimum and maximum values. The average, median and standard deviation indicate that a large portion of the CEO-letters have a relatively similar number of words. Further, as can be seen in figure 7 above, the average number of words is rather flat over time. This indicates that the number of words in the CEO-letters likely has a limited impact on any potential trends over time in the use of Accounts.

4.3.2 Failure events

In total 488 Failure events were recorded for an average of 3,23 Failure events per CEO-letter, the median is 3 Failure events. The minimum value is 0 Failure events, the maximum value is 14 Failure events and the standard deviation is 2,5.

In fact 17 CEO-letters did not contain a single Failure event, which can be seen as surprising given that all firms in the sample had a lower operating profit than the year before. While these firms of course are varied and not all of them fit the following description, two common features were found by the authors for firms that did not mention any Failure events. The majority were either pharmaceutical/biotech firms and/or firms early in their lifecycle developing a technology or platform. The style of writing in their CEO-letters was often quite different from the “typical” CEO-letter in the sample. Their CEO-letters were mostly, or even exclusively, focused on new product developments / medicine candidates and new deals signed. Often with very limited mention of anything financial and missing several of the sections common

in the more “typical” CEO-letter. In other words, these CEOs choose to focus on the firm’s future potential in their CEO-letters and spend less time describing the current, especially skirting over the finer details with regards to current profit and the like. While not expressed explicitly, it is implicitly indicated that the current financials are of limited importance since there is such potential for great financial performance in the future.

As can be seen in figure 8 below, the average number of Failure events per CEO-letter was relatively stable over time varying roughly between 3 and 3,5. This does not indicate a clear trend over time in the number of Failure events mentioned. This interpretation is confirmed by the P-value of 0,759 given by the ANOVA test reported in table 6 below. In other words, the null hypothesis that the means do not differ between the years cannot be rejected. No trend over time can be identified in the average number of Failure events per CEO-letter. It is not unlikely that the number of Failure events that actually occur for firms is relatively stable over time, and this data implies that the number of mentions of these Failure events in CEO-letters is also relatively stable over time.

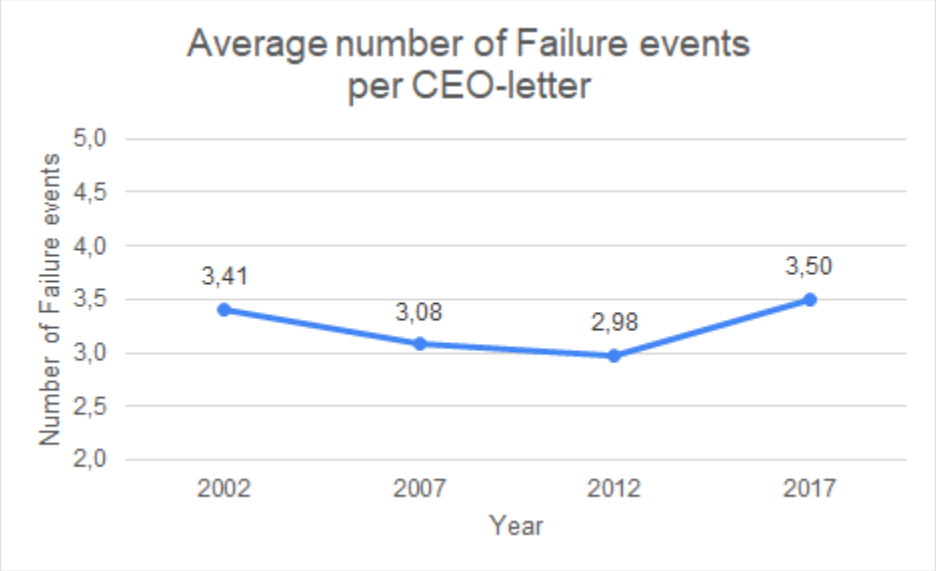

Figure 8: Average number of Failure events per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	7,424	3	2,475	0,391	0,759
Within groups	929,463	147	6,323		

Table 6: One way ANOVA test for Failure events, Significance: (*)=5%, (**)=1%, (***)=0,1%

4.3.3 Average number of Accounts per Failure event

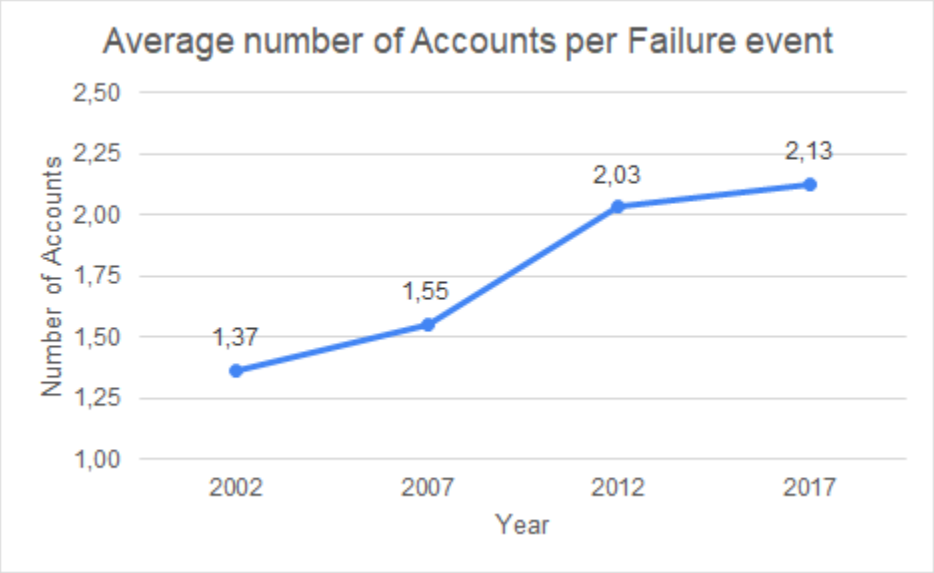

Figure 9: Average number of Accounts per Failure event for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	13,418	3	4,473	13,732	<0,001***
Within groups	42,342	130	0,326		

Table 7: One way ANOVA test for Average number of Accounts per Failure event, Significance: (*)=5%, (**)=1%, (***)=0,1%

The average number of Accounts per Failure event is 1,79 with a median of 1,67. The minimum value is 1, the maximum value is 4,5 and the standard deviation is 0,65. The majority of CEO-letters have between 1 and 2 Accounts per Failure event, and only three CEO-letters are above 3 Accounts per Failure event.

As can be seen in figure 9 above, there appears to be an upwards trend over time in the number of Accounts per Failure event. This is confirmed by the highly statistically significant P-value of <0,001 as reported in table 7 above. It can be concluded with high certainty that the means for the different years are not equal. Combined with the development shown in the graph, it can be concluded that there is indeed an upwards trend in the average number of Accounts per Failure event over time. Given the relatively stable level of Failure events per CEO-letter described above, this leads to the conclusion that the total number of Accounts per CEO-letter increases for later years in the sample.

4.3.4 Visually highlighted Accounts

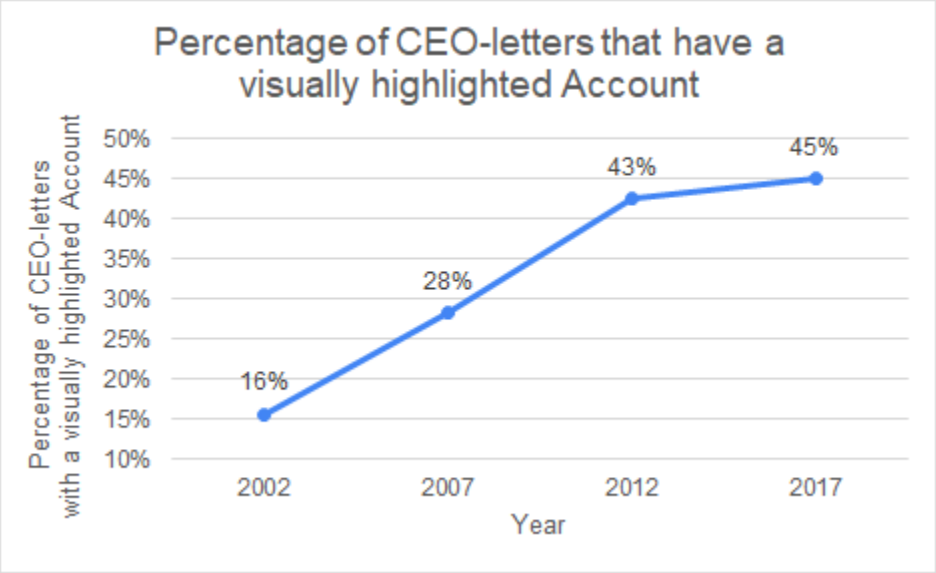

Figure 10: Percentage of CEO-letters that include a visually highlighted Account divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	1,984	3	0,661	3,057	0,030*
Within groups	31,791	147	0,216		

Table 8: One way ANOVA test for Visually highlighted Accounts, Significance: (*)=5%, (**)=1%, (***)=0,1%

In total 51 out of 151, or 34%, of CEO-letters contained a visually highlighted Account. As can be seen in figure 10 above, there appears to be a upwards trend in the occurrence of visually highlighted Accounts in CEO-letters. That there is a difference in means is confirmed by the statistically significant P-value of 0,030 reported in table 8 above. Combined with the trend visible in the graph, the conclusion is that an upwards trend in the percentage of CEO-letters that have a visually highlighted Account has been identified.

One potential explanation is the increased number of Accounts over time as described in the section above. Another likely factor in the increased occurrence of visually highlighted Accounts is the way that the layout of the average CEO-letter has changed over time. As observed by the authors during the data collection process, the average CEO-letter year 2002 was of a simpler design with some only having a title and regular text. Meanwhile, many CEO-letters for 2017 contain lots of visual elements such as enlarged quotes, pictures, graphs and more. With other words, as there is much more visually highlighted content in general in later CEO-letters it is perhaps to be expected that there would also be a larger number of visually highlighted Accounts.

The two explanations above seem likely to be driving at least part of the trend, but of course do not exclude that there could be other factors also contributing to the observed trend. For example it is possible that firms are deliberately trying to emphasize certain Accounts in a way that they were not before.

4.3.5 Excuse

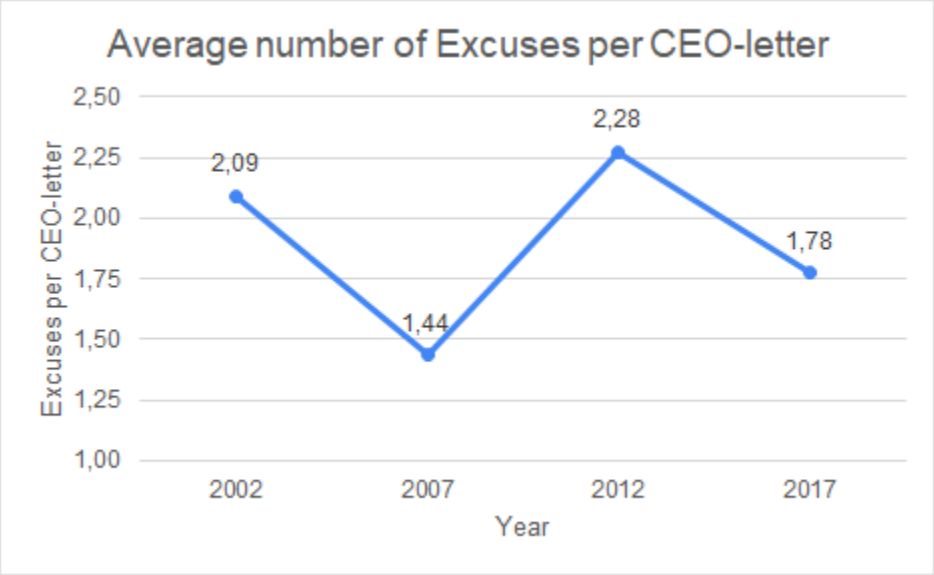

Figure 11: Average number of Excuses per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	15,828	3	5,276	1,505	0,216
Within groups	515,258	147	3,505		

Table 9: One way ANOVA test for Excuses, Significance: (*)=5%, (**)=1%, (***)=0,1%

A total of 285 Excuses were identified in the sample, 108 CEO-letters had at least one Excuse and 43 CEO-letters had none. The average was 1,89 Excuses per CEO-letter. The minimum value was 0 Excuses, the maximum value was 8 Excuses and the standard deviation was 1,88.

The Account Excuse was recurrent in a majority of the CEO-letters which is in line with the findings by Sandell and Svennson (2016). It is also acknowledged in previous literature that firms tend to link negative performance to external events that are out of their control and positive outcomes to internal processes, which is referred to as self serving bias (Bettman & Weitz, 1983; Conrad, 1992; Brühl & Kury, 2019; Sandell & Svensson, 2016; Shepperd, Malone, & Sweeny, 2008; Staw, McKechnie, & Puffer, 1983).

As can be seen in figure 11 above, there are noticeable swings in the number of Excuses from year to year but no clear trend over time. One very common type of Excuse both in the authors' experience during data collection and in previous literature (Sandell and Svensson, 2016) is to blame a Failure event on "the market" or economic conditions. The authors' perception from the data collection is that these types of Excuses were more common in 2002 and 2012, which would at least partly explain the swings from year to year. Therefore it seems likely that the pattern over time observed in the use of Excuses is at least partly driven by the economic conditions of the given years rather than a persistent change in how firms use Excuses in their CEO-letter.

Further, the P-value of 0,216 given by the ANOVA test reported in table 9 means that the null hypothesis of the means being equal for the different years cannot be rejected. Therefore, no trend over time has been identified in the use of Excuses in CEO-letters.

4.3.6 Justification

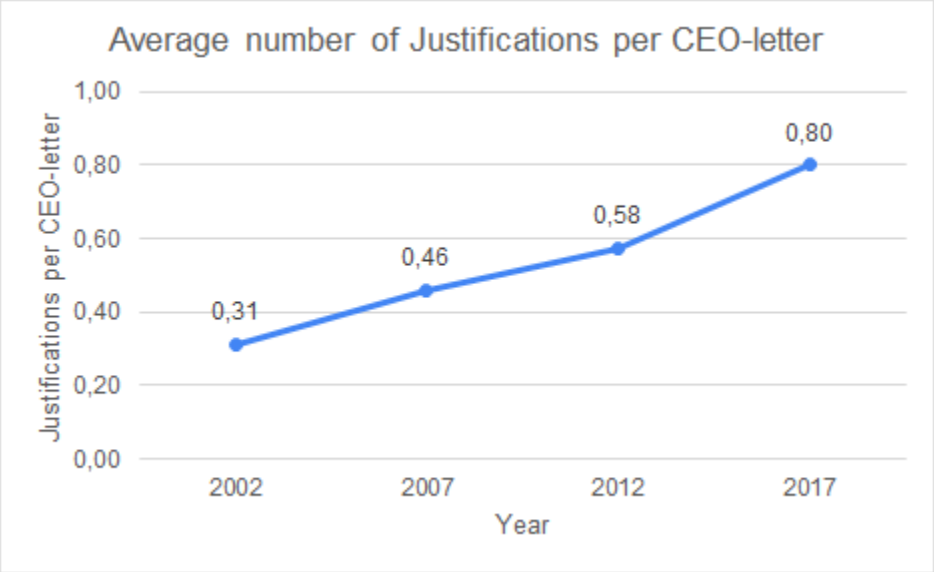

Figure 12: Average number of Justifications per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	4,635	3	1,545	2,960	0,034*
Within groups	76,742	147	,522		

Table 10: One way ANOVA test for Justifications, Significance: (*)=5%, (**)=1%, (***)=0,1%

A total of 83 Justifications were identified in the sample, 63 CEO-letters contained at least one Justification and 88 CEO-letters contained none. The average was 0,55 Justifications per CEO-letter. The minimum value was 0 Justifications, the maximum value was 3 Justifications and the standard deviation was 0,74.

As can be seen in figure 12 above, there appears to be an upwards trend in the number of Justifications per CEO-letter over time. The P-value of 0,034 reported in table 10 confirms that there is a statistically significant difference in means between the years. This combined with the development over time in the graph leads to the conclusion that an upwards trend over time has been identified for the use of Justifications in CEO-letters. Justification is an Account where responsibility for the Failure event is admitted but the negative consequences associated with it are downplayed. Given that the actual severity of the consequences of Failure events would be expected to be relatively stable over time, there appears to be an increased drive to try to downplay these effects. Justification is seen as an more defensive Account

and an Account that minimizes the perceived error of an act or event (Fritsche, 2002; Riordan, Marlin, & Kellogg, 1983)

4.3.7 Refocusing

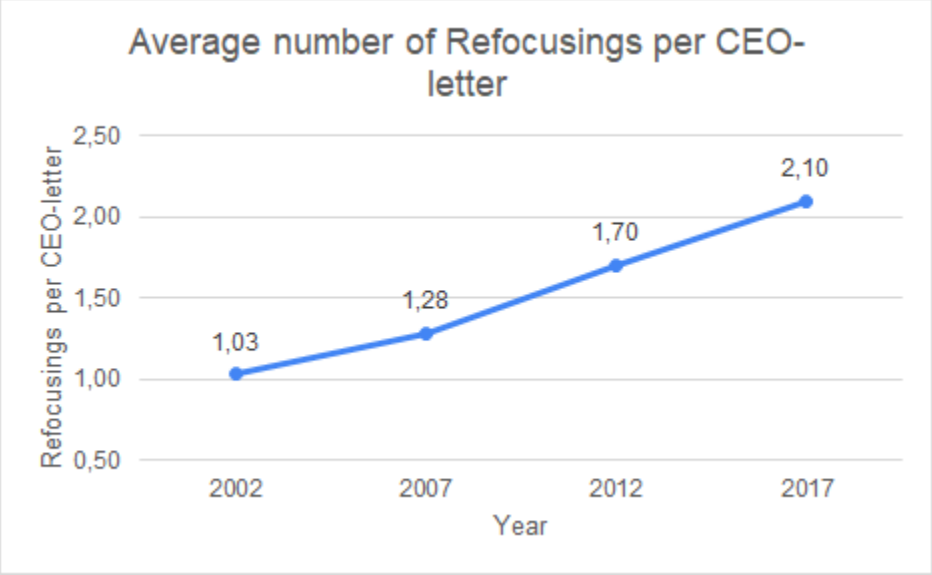

Figure 13: Average number of Refocusings per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	23,654	3	7,885	2,958	0,034*
Within groups	389,833	147	2,666		

Table 11: One way ANOVA test for Refocusing, Significance: (*)=5%, (**)=1%, (***)=0,1%

A total of 235 Refocusings were identified in the sample, 103 CEO-letters contained at least one Refocusing and 48 CEO-letters contained none. This means that Refocusing was the next most common Account after Excuse in this study. The average was 1,56 Refocusings per CEO-letter. The minimum value was 0 Refocusings, the maximum value was 9 Refocusings and the standard deviation was 1,66.

As can be seen in figure 13 above, there appears to be an upwards trend in the number of Refocusings per CEO-letter over time. The P-value of 0,034 reported in table 11 confirms that there is a statistically significant difference in means between the years. This combined with the development over time in the graph leads to the conclusion that an upwards trend over time has been identified for the use of Refocusing in CEO-letters. Refocusing is an Account which attempts to direct attention towards something positive/different after the mention of a Failure event, if successful this can indirectly lead to reduced negative connotations for the Failure event. An increased use of Refocusing over time indicates that firms try to put more emphasis on the positive now compared to previously.

4.3.8 Concession

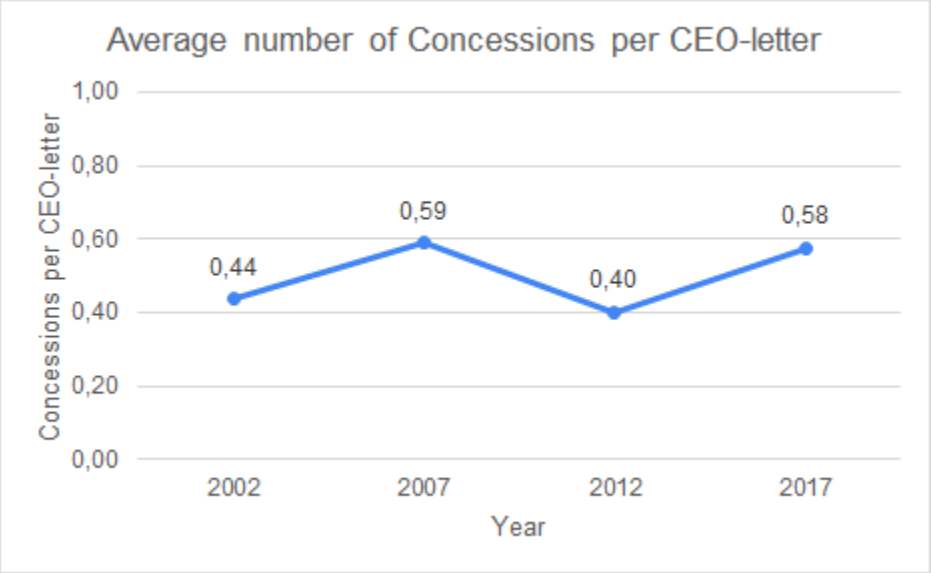

Figure 14: Average number of Concessions per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	1,245	3	0,451	0,367	0,777
Within groups	163,990	147	1,131		

Table 12: One way ANOVA test for Concession, Significance: (*)=5%, (**)=1%, (***)=0,1%

A total of 76 Concessions were identified in the sample, 44 CEO-letters contained at least one Concession and 108 CEO-letters contained none. The average was 0,5 Concessions per CEO-letter. The minimum value was 0 Concessions, the maximum value was 6 Concessions and the standard deviation was 1,05.

As can be seen in figure 14 above there is no clear trend over time and the changes between the years are not very large. This is reaffirmed by the P-value of 0,777 reported in table 12. The null hypothesis that the means of the different years are equal cannot be rejected. Therefore, no trend over time has been identified for the use of Concessions in CEO-letters.

One potential factor in the use of Concessions is that it is the Account type which, in a sense, reflects the worst on the executive management. The executive management of course includes the CEO who writes the CEO-letter. When a Concession is used the firm admits that its own actions/choices are at least partly to blame for the Failure event, while also not trying to downplay the negative consequences associated with the Failure event (the difference between a Justification and a Concession). Therefore, one would expect that Concessions are only used when it cannot really be avoided. If this is correct then one would expect a flat trend over time given that the conditions leading to the need for a Concession don't change.

Concession has been found to be an effective Account (Benoit and Drew, 1997), yet the total number of Concessions is quite low compared to other Account types. This could partly be due to the fact that the

sample of this study only includes firms with negative profit growth, and firms with worse performance tend to be more prone to use Excuses versus Concessions compared to firms with better performance (Brühl & Kury, 2019). The fact that Concessions are rather rare despite being seen as an effective Account does then seem likely to be linked to the fact that it reflects badly on the executive management which has a large degree of control over the contents of the CEO-letter.

4.3.9 Mystification

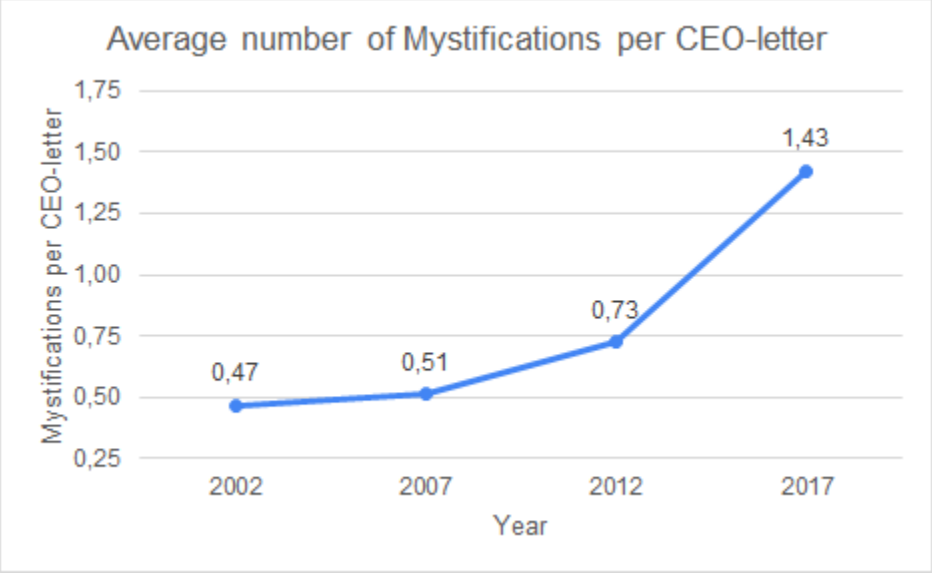

Figure 15: Average number of Mystifications per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	22,201	3	7,400	5,424	0,001**
Within groups	199,192	147	1,364		

Table 13: One way ANOVA test for Mystification, Significance: (*)=5%, (**)=1%, (***)=0,1%

The total number of Mystifications in the sample is 121, 72 CEO-letters contain at least one Mystification and 79 CEO-letters contain none. The average number of Mystifications per CEO-letter is 0,8. The minimum number of Mystifications is 0, the maximum number of Mystifications is 7 and the standard deviation is 1,22.

As can be seen in figure 15 above, there appears to be an upwards trend over time in the use of Mystifications with an accelerated increase upwards 2017. The P-value of 0,001 reported in table 13, indicates that there is a statistically significant difference in means between the years. Note however that this is likely largely driven by the fact that 2017 is so far above the other years. The trend between 2002 and 2012, while going up, is not so pronounced. Therefore, an upwards trend over time in the use of Mystification in CEO-letters is identified. However, while this trend appears to be relatively robust it is possible that this could partly be driven by 2017 being an extreme value. A study including more years could increase certainty of this upwards trend, alternatively disprove it.

One thing the authors noted about 2017 during the data collection process is that it was common for one Failure event to have a combination of both Refocusing and Mystification. In other words, the reason for the Failure event was not satisfactorily explained (Mystification) and then an attempt was made to distract/redirect the reader to something more positive (Refocusing). This combination was not as common in other years and therefore likely a factor behind the large increase in Mystifications for 2017.

Sandell and Svensson (2017) argue that annual reports readability, which includes CEO-letters, are dependent on the firm's performance. Firms with inferior performance tend to compile less readable annual reports compared to firms that perform better. One factor when it comes to readability could be uses of Mystification, this would indicate that lower firm performance could perhaps make a firm more willing to use Mystifications in their CEO-letter. However in this study, the number of Mystifications has increased over time while profit growth has become less negative. So firm performance does not seem to be an explanatory factor for the trend over time seen in the use of Mystification.

4.3.10 Wordification

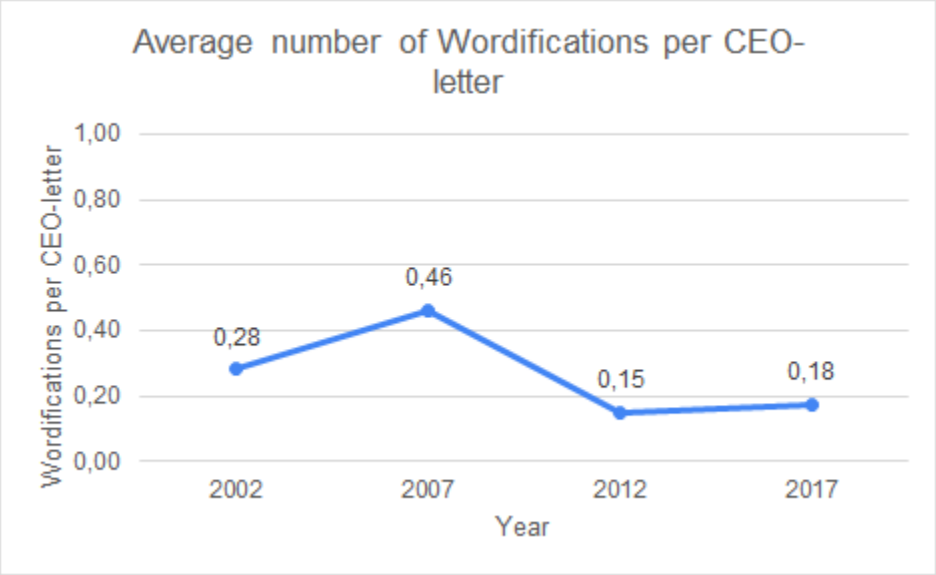

Figure 16: Average number of Wordifications per CEO-letter for firms in the sample divided by year.

ANOVA	Sum of squares	Degrees of freedom	Mean square	F	P-value
Between groups	2,516	3	0,839	3,000	0,033*
Within groups	40,817	147	0,280		

Table 14: One way ANOVA test for Wordification, Significance: (*)=5%, (**)=1%, (***)=0,1%

The total number of incidences of Wordification recorded in the sample is 40, 34 CEO-letters included at least one Wordification and 117 CEO-letters contained none. The average number of Wordifications per CEO-letter is 0,26. The minimum number of Wordifications is 0, the maximum number is 3 and the standard deviation is 0,54.

As can be seen in figure 16 above, there might be a downwards trend over time in the use of Wordification. The P-value of 0,033 reported in table 14 indicates that there is a statistically significant difference in means between the years. However, the fact that there is a significant P-value is likely driven by the value of 0,46 in 2007. The results are somewhat ambiguous given the lack of clear direction in the graph. It is possible for example that there really is a downward trend which is just not fully visible due to the gaps between years and that would be shown more clearly in a study using more years. Alternatively it is also possible that there is no trend and that 2007 was an extreme value. The appropriate conclusion therefore appears to be that there might be a downward trend over time in the use of Wordification, however it cannot be proven with this dataset and therefore no trend has been identified. A study including more years could prove or disprove the existence of such a trend.

While there is no good way to test for it statistically with this dataset, one speculation from the authors' side is that there might potentially be an inverse relationship between Wordification and Mystification. They are after all very similar Accounts as was pointed out by Sandell and Svensson (2017) who first introduced the concept of Wordification. Such an inverse relationship would entail that firms have gotten better at not just repeating the numerical Accounting information in words (fewer Wordifications). But still do not satisfactorily explain the Failure event while removing the numerical Accounting information from the text (increased number of Mystifications).

4.3.11 Refusal

No Refusals were recorded in the sample. That Refusals are uncommon in financial communication is in line with previous literature (Sandell & Svensson, 2016; Sandell & Svensson, 2017). There are other genres of communication where Refusals appear to be more common, such as politics. While Refusals are used in different genres of communication, the effectiveness is still questioned (Benoit & Drew, 1997).

It makes sense however that its use is limited in financial communication. If a firm wants to downplay a Failure event it is better off not mentioning it at all or admitting to the Failure event but downplaying its consequences. The use of a Refusal, acknowledging it is being accused of a Failure event and then denying that the Failure event happened, is a risky strategy. Especially with the speed that information and discussions can spread these days due to the internet and social media. It would therefore be unwise to refuse a Failure event unless it actually did not happen. While uncommon, the use of Refusal as an Account has previously been found in financial communication. Brühl and Kury (2019) found results that acknowledged that profitable banks tended to use Refusal more often than non-profitable banks.

4.4 The bigger picture - Combining results from the individual variables

4.4.1 Trends over time in the use of Accounts

No trend over time was identified, either up or down, for the number of Failure events mentioned in CEO-letters. Further, no trends over time were identified in the use of the individual Account types: Excuse, Concession, Wordification, and Refusal.

An upwards trend was identified for the number of CEO-letters which include a visually highlighted Account. This could be due to an increased drive by firms to emphasize Accounts and manage readers' perceptions of Failure events and the firm in general. However, it seems likely that at least a notable part of the explanation behind this trend is the change in the visual identity of CEO-letters over time. Compared to 2002, CEO-letters contain many more visually highlighted elements in general for later years. It would therefore be expected that this would also lead to more visually highlighted Accounts even if the firm's attitude towards the use of Accounts had not changed.

Further, upwards trends over time were identified for the use of the individual Account types: Justification, Refocusing, and Mystification. Also, an upwards trend in the average number of Accounts per Failure event was identified. Given the stable level of mentioned Failure events and other Account types, this increase in the average number of Accounts per Failure event (and therefore the total number of Accounts per CEO-letter) is driven fully by the increases in the use of Justification, Refocusing, and Mystification. There appears to be a certain overarching theme to these Accounts.

With Justification a firm accepts responsibility for the Failure event but tries to downplay the negative consequences associated with it, “it’s not so bad because …”. With Refocusing, an attempt is made to divert attention to something different which has positive aspects or qualities. Which if successful then indirectly reduces the negative impression left by the Failure event and its consequences. Lastly, Mystification entails a lacking or non-existent explanation of the reasons for, and therefore responsibility for, the Failure event. The fact that all three of these have seen notable increases in use at the same time seems to indicate that firms increasingly attempt to downplay negative associations tied to the Failure event and increase focus on positive aspects in their CEO-letters. Or to put it in wording more in-line with previous literature on Account theory in financial communication: firms appear to put more effort than before into closing the gap between the expected and the actual outcome created by the Failure Event.

One specific finding that ties in to this apparent trend is that a combination of a Refocusing and a Mystification for a single Failure event was noticeably more common for later years and especially for 2017. So in other words, what happens is that a firm admits that something bad has happened. Then fails to satisfactorily explain why it happened, which makes it difficult to determine whether the firm is responsible. Further, the firm also tries to redirect attention to another more positive topic. So while firms appear to feel a need to mention a Failure event in their CEO-letter if it has occurred, judging by the stable trend in Failure events mentioned, how it is then framed has changed. This change appears to be towards trying to impact the reader's perception of the Failure event to be less negative. This was of course already happening to some degree in the past, but is done so increasingly in the present compared to before. Note that this does not necessarily mean that there is a conscious decision from the firm to try

to “manipulate” or influence the reader. Further discussion of possible explanations behind these trends are explored in section 4.6.

4.4.2 Answering the hypotheses

Hypothesis 1: *The number of Failure events mentioned per CEO-letter has changed over time.*

Hypothesis 1 is rejected, as has been shown above the number of Failure events mentioned per CEO-letter has not changed over time for firms with negative profit growth. Note that there is of course a distinction between actual occurrences of Failure events for the firm and number of mentions of Failure events in CEO-letters. These do not necessarily need to be the same. However, since we cannot measure the actual occurrences of Failure events we can only look at the number of mentions in CEO-letters. If the number of actual occurrences of Failure events has not changed over time, which seems likely, then this would lead to the conclusion that firms’ attitudes on whether to mention a Failure event have not changed.

Hypothesis 2: *The number of Accounts per Failure event has changed over time.*

Hypothesis 2 is accepted, the number of Accounts per Failure event has increased over time for firms with negative profit growth. Given that there is no increase in the number of Failure events mentioned in CEO-letters this leads to the conclusion that the total number of Accounts in CEO-letters has increased.

Hypothesis 3: *The frequency of use of individual Account types has changed over time.*

Hypothesis 3 is accepted, the frequency of use of the individual Account types has changed over time for firms with negative profit growth. Justification, Refocusing, and Mystification have all seen increased use over time. However, no trends were identified for the use of: Excuse, Concession, Wordification, and Refusal.

Hypothesis 4: *The percentage of CEO-letters including a visually highlighted Account has changed over time.*

Hypothesis 4 is accepted, the percentage of CEO-letters including a visually highlighted Account has increased over time for firms with negative profit growth.

4.5 Robustness tests

In this section certain aspects that could influence the reliability of the results obtained are discussed. First the appropriateness of the use of the ANOVA test is discussed and its results are compared to the other test alternatives available. In the section after it is explored whether the industry distribution over the years (as detailed in 4.1.3) could have influenced the trends over time identified in the use of Accounts.

4.5.1 Comparing the ANOVA test to other potential statistical tests

There are several different statistical tests for equality of means that can be employed on the type of data used in this study. The most commonly used and typically preferred option is the one way ANOVA, which has normality and equal variances assumptions but is robust even if these are violated (more detail 3.4.2). The Welch and Brown-Forsythe tests for equality of means do not have an equal variance assumption. Typically the Welch test is preferred out of the two but the Brown-Forsythe test can be preferable if the normality assumption is violated (Glantz, Slinker & Neilands, 2016), as is the case for several of the variables in this study. As was shortly discussed in 3.4.2, the Kurskal-Wallis test is a nonparametric test which can be preferable if the equal variances and normality assumptions are severely violated. However, the three other options can be said to be worse than the one way ANOVA test unless their respective conditions for making them preferable are fulfilled (Glantz, Slinker & Neilands, 2016).

There are no clear rules or tests in order to securely determine which of these tests is best in a specific situation. However, a rule of thumb is to compare the P-value given by the ANOVA test with the p-values of the Welch and Brown-Forsythe tests (Glantz, Slinker & Neilands, 2016). If the P-values given by the Welch and Brown-Forsythe tests differ notably from the P-value given by the ANOVA test, this would indicate that the Kurskal-Wallis test might be better for the given data.

The P-values for all four test types are displayed in table 15 below. As can be seen, in general all four test types produce similar P-values for most variables. And except for a few instances they agree on whether there is statistical significance or not. The Kurskal-Wallis test produces a notably lower P-value for Excuses but as none of the tests produce a significant P-value it is not of importance to discuss which test might be better.

Refocusing receives a significant P-value from the Welch, Brown-Forsythe and ANOVA tests but has a P-value of 0,133 in the Kruskal-Wallis test. Given that the Welch and Brown-Forsythe P-values are similar to the ANOVA P-value and that there is a rather clear movement in the graph of figure 13, the authors deem the ANOVA P-value to be more dependable. Though the P-value given by the Kurskal-Wallis test of course does have a certain negative impact on the certainty about the results found for this variable.

For Wordification the results are somewhat ambiguous with the Brown-Forsythe and ANOVA tests producing significant results while the Welch and Kruskal-Wallis tests do not. While an argument can be made for prioritizing Brown-Forsythe over Welch given that the variable is not normally distributed, the authors do not feel that there is a clear result for this variable. Especially when combined with the appearance of the potential trend in figure 16. Therefore the conclusion drawn in the analysis of Wordification in 4.3 seems to hold. There might potentially be a downward trend over time in the use of

Wordification, but it cannot be confirmed with the data available in this study.

Overall, the results provided by the one way ANOVA tests which were used in the analysis of this study appear to be robust and hold up well even when scrutinized by comparison with other available test methods.

Variable	P-value Welch	P-value Brown-Forsythe	P-value ANOVA	P-value Kurskal-Wallis
Failure events	0,764	0,757	0,759	0,814
Average number of Accounts per Failure event	<0,001***	<0,001***	<0,001***	<0,001***
Visually highlighted Accounts	0,017*	0,027*	0,030*	0,032*
Excuses	0,201	0,214	0,216	0,097
Justification	0,028*	0,030*	0,034*	0,042*
Refocusing	0,024*	0,029*	0,034*	0,133
Concession	0,761	0,771	0,777	0,691
Mystification	0,015*	0,001**	0,001**	0,020*
Wordification	0,071	0,039*	0,033*	0,065

Table 15: P-values of the Welch, Brown-Forsythe, ANOVA and Kruskal-Wallis tests for all variables which are examined for trends over time in the use of Accounts, Significance: (*)=5%, (**)=1%, (***)=0,1%

4.5.2 Examining the potential impact of industry distribution on trends found

The number of firms in respective industries changes over the different years in the sample, see 4.1.3 for more detail, due to random sampling and the limitation of negative profit growth. Since the use of Accounts is rather context dependent (Sandell & Svensson, 2016; Sandell & Svensson, 2017), it is possible that certain industries use Accounts differently than others. Then if an industry is severely overrepresented in a certain year of the sample, it could impact the overall results for that year. Which in turn could potentially impact our overall results.

In order for it to actually impact the overall results it would need to deviate rather significantly, be representative of the industry rather than just an outlier, and differ in a way that impacts the trend so much that it might make a difference to the statistical significance of the trend. Industry/year combinations will be evaluated below by comparing the means of the Account variables of the whole sample for the year with the mean of the relevant industry for that year. The combinations evaluated are: Financial services (3020) for 2002, Technology (1010) for 2007, and Healthcare (2010) for 2017. The reason it is just these combinations is because the authors judge that these are the only ones that might potentially negatively impact the reliability of the results.

As can be seen in table 16 below, the values for Failure events and Excuse for Financial service firms in 2002 differ notably from the mean for the whole year. For the other variables, the differences are rather small. The difference in those two variables combined with the relative overrepresentation during that year make it likely that the average value of Failure events and Excuses for 2002 was impacted by the overrepresentation of Financial service firms. However, if the value for these two variables would have been a bit lower for 2002, it would not have impacted any of the results regarding trends (not) identified.

Sub-Sample	Failure events	Visually highlighted Accounts	Average number of Accounts per Failure event	Excuse	Justification	Refocusing	Concession	Mystification	Wordification
ICB 3020 - Financial services 2002	5,50	17%	1,24	3,83	0,50	1,00	0,50	0,67	0,50
All firms 2002	3,41	16%	1,55	2,09	0,31	1,03	0,44	0,47	0,28

Table 16: Comparison of the means of the Account variables between the whole sample for a certain year and that of a certain industry the same year.

As can be seen in table 17 below, all variables except for Concession are very similar for Technology firms (1010) and the overall sample for 2007. Partly the difference in Concession becomes less relevant / more expected when you take into account that it is a rather uncommon variable and that we are looking at a sub-sample of 6 out of 39 firms. And partly it is rather irrelevant either way since Concession is not even close to displaying any kind of trend. Therefore it is deemed that this does not impact the overall results.

Sub-Sample	Failure events	Visually highlighted Accounts	Average number of Accounts per Failure event	Excuse	Justification	Refocusing	Concession	Mystification	Wordification
ICB 1010 - Technology 2007	2,83	33%	1,69	1,67	0,67	1,17	0	0,50	0,50
All firms 2007	3,08	28%	1,55	1,44	0,46	1,28	0,59	0,51	0,46

Table 17: Comparison of the means of the Account variables between the whole sample for a certain year and that of a certain industry the same year.

As can be seen in table 18 below, there are several variables which differ notably between Healthcare firms (2010) and the overall sample for 2017. Failure events, Excuse, Justification, Refocusing and Concession are all notably lower than the average for the entire year. With other words, the averages of these variables for 2017 might have been higher if it was not for the overrepresentation of Healthcare firms. For Failure events, Excuse, and Concession this would likely not have made any difference for trends (not) identified. For Justification and Refocusing this would actually have strengthened the upwards trends identified in the study.

Sub-Sample	Failure events	Visually highlighted Accounts	Average number of Accounts per Failure event	Excuse	Justification	Refocusing	Concession	Mystification	Wordification
ICB 2010 - Healthcare 2017	1,80	50%	2,13	0,90	0,30	1,10	0	1,00	0,10
All firms 2017	3,50	45%	2,13	1,78	0,80	2,10	0,58	1,43	0,18

Table 18: Comparison of the means of the Account variables between the whole sample for a certain year and that of a certain industry the same year.

Overall, the results of the analysis of potential influence of industry distribution on the trends identified in this study reveal that the results appear to be robust and not influenced by industry distribution.

4.6 Exploring potential explanations for the trends identified

4.6.1 Firm and CEO variables - Pooled-OLS regression

Several multiple linear regression models were fitted (detail on model choices/specifications can be found in 3.4.3) in order to investigate the potential influence of the firm and CEO variables in the trends over time identified for the Account variables. Models were fitted with an Account variable as the dependent variable and the firm and CEO variables as explanatory variables.

Note that the meaning with these regressions is to exclude the different firm and CEO variables as potential reasons behind the trends over time. Not to prove that they influence the use of individual Account variables. Since the models reasonably have endogeneity issues due to omitted variable bias, statistically significant results cannot be taken as proof of the relevant variable influencing the use of the Account variable. However, lack of statistical significance shows that they do not influence the use of the Account variable.

As can be seen in table 19 on the next page, the majority of results are not statistically significant. Of those which are, the majority are either for Account variables for which a trend has not been identified or for firm and CEO variables for which there is no clear trend over time. Therefore, these variables are not an explanation behind trends over time identified in the use of Accounts.

The major exception to this is a possible relationship between profit growth and the use of Justification. Profit growth goes up over time (becomes less negative) while the number of uses of Justification increases over time. And according to the regression results below for each increase of 1 (=100%) in profit growth, on average 0,15 more Justifications will be used in a CEO-letter keeping all other explanatory variables equal. Therefore, it is possible that the upwards trend in profit growth is driving the upwards trend in the use of Justification. The size of the coefficient suggests however that it would only explain a smaller part of the upwards trend. Further, due to problems with the model such as omitted variable bias it is not certain that there actually is a cause and effect relationship between profit growth and the use of Justification. Nonetheless, it cannot be ruled out that profit growth is indeed one of the multiple explanations behind the trend identified in the use of Justification in CEO-letters.

Taken together the above leads to the conclusion that: firm size, CEO gender, CEO age, CEO tenure, CEO nationality and number of words in CEO-letters are not explanations behind the trends over time identified in the use of Accounts. However, it is possible that profit growth could be one of the explanations behind the upwards trend identified in the use of Justification. Further potential explanations behind the trends identified are discussed in the next section (4.6.2).

Explanatory variables	Failure events	Accounts per Failure event	Highlighted Account	Excuse	Justification	Refocusing	Concession	Mystification	Wordification
logAssets	0,055 (0,096)	0,033 (0,041)	0,037 (0,026)	0,029 (0,085)	0,049 (0,040)	0,083 (0,075)	-0,0330 (0,046)	0,025 (0,062)	-0,060 (0,032)
Profit growth	-0,055 (0,196)	0,021 (0,057)	-0,044 (0,047)	-0,140 (0,180)	0,150** (0,058)	-0,188 (0,134)	0,033 (0,105)	0,011 (0,122)	0,028 (0,051)
CEO gender	0,127 (1,149)	-0,016 (0,212)	0,097 (0,233)	-0,258 (0,632)	-0,093 (0,271)	0,736 (0,538)	-0,428 (0,289)	0,363 (0,825)	-0,375* (0,151)
CEO age	0,027 (0,026)	-0,005 (0,011)	0,003 (0,007)	-0,001 (0,025)	0,005 (0,008)	0,021 (0,022)	-0,009 (0,013)	0,030* (0,014)	0,005 (0,008)
CEO tenure	-0,042 (0,034)	-0,006 (0,009)	-0,007 (0,005)	0,005 (0,027)	-0,016* (0,008)	-0,011 (0,022)	-0,003 (0,017)	-0,034* (0,015)	-0,012 (0,008)
CEO nationality	-0,913* (0,455)	0,007 (0,217)	-0,079 (0,127)	-0,444 (0,428)	-0,254 (0,148)	-0,425 (0,346)	0,176 (0,336)	-0,548 (0,288)	-0,152 (0,134)
Words	0,002*** (0,000)	-0,000 (0,000)	0,000 (0,000)	0,001 (0,001)	0,000* (0,000)	0,002*** (0,000)	0,000 (0,000)	0,001 (0,000)	0,000** (0,000)
Observations	151	134	151	151	151	151	151	151	151
Industry effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0,330	0,077	0,151	0,227	0,267	0,279	0,090	0,185	0,137

The table reports the coefficients associated with the variables
Statistical significance: (*)=5%, (**)=1%, (***)=0,1%
Clustered robust (by FirmID) standard errors in parentheses

Table 19: Multiple linear regressions with the different Account variables as dependent variables and the firm and CEO variables as explanatory variables. Regressions are controlled for industry effects and use clustered robust (by FirmID) standard errors.

4.6.2 Possible alternative explanations for the trends identified

Having ruled out a number of firm and CEO variables as potential explanations behind the trends over time found in the use of Accounts, the focus turns to potential alternative explanations for these trends. This leaves behind the area where things can be analyzed using the dataset of this study and is therefore more speculative in nature, no definitive conclusions can be drawn. Rather this is based on the authors' economic intuition/education, pulling on ideas from other (fields of) literature which seem relevant. It should also be noted that this is not an exhaustive list, but rather the things which seem most likely and/or relevant to the authors of this study.

One important concept to begin with is that of isomorphism, which entails that firms will often imitate other firms and in doing so the way firms act tends to converge (De Villiers & Alexander, 2014). This happens not only because they might want to copy a practice which is more effective or efficient, but can also happen because the firm wants to be seen as legitimate. In striving to be perceived as legitimate a firm might imitate other firms, to do as the others. In this setting a closely related concept is that of genre within linguistics, where the CEO-letter in annual reports can be seen as its own genre (Alvesson & Kärreman, 2000a; Alvesson & Kärreman, 2000b). While there are of course sub-genres, such as shown in this study through the very different CEO-letters presented by many pharmaceutical / early stage technology firms, most try to stay within "the box" of what makes a CEO-letter fit within the larger overall genre. Again this can be seen as something surrounding legitimacy, in order to be perceived as legitimate the CEO-letter needs to have certain characteristics and fit into what we expect of a CEO-letter. With that said, the concepts of isomorphism and genre indicate that it is enough for some firms to start behaving differently when it comes to the use of Accounts and then others might simply follow. Either because the new use of Accounts is seen as better, or simply because they want legitimacy. This can therefore be a driving force behind trends over time.

One further thing that is likely contributing to a convergence in the use of Accounts is the fact that many annual reports and therefore CEO-letters are (partly) prepared by external consultancy firms (Erickson, Weber & Segovia, 2011). According to discussions the authors of this study have had with a practitioner within this field, use of external consultants has become more common over time and presently the majority of firms listed on the Stockholm stock exchange have some level of outside involvement in the preparation of their annual report. This is also in line with what studies have found to be true in the UK (Stanton & Stanton, 2002). Considering that one external consultancy firm typically helps multiple or even many other firms with their CEO-letter, changes in the way the external consultants tend to write will quickly spread to many firms' annual reports. Another interesting point from the discussion with the practitioner was that the majority of people within this field used to be formally trained as journalists, however these days the majority of people getting into this line of work have strategic communication degrees. It is not unthinkable that people with strategic communication degrees would be more likely to try to deflect negatives and try to focus on other more positive aspects, which would help explain the trends over time in the use of Accounts identified in this study.

Another potential factor behind the trends observed is a potential increase over time in outside pressure on firms, which could then lead to firms feeling an increased need to close the expectation gap left by a Failure event and to explain themselves. That outside pressure likely has an influence on the use of Accounts can be surmised for example from the work of Aerts (2005) who finds that listed firms (who

receive more outside pressure) tend to take a more defensive stand in their explanations than non-listed firms (who receive less outside pressure). Outside pressure comes from shareholders, media, analysts, financial markets, etc. Increasingly even regular people, who might not even be that interested in the corporate world, can exert pressure through the increased importance of social media in society. Both positive and negative stories can spread with lightning speed. One indication that firms take outside pressure and image very seriously is the speed with which many western firms recently hurried to divest/close any business related to Russia (Tosun & Eshraghi, 2022). This was in many cases likely done at a significant cost to these firms, and while the more charitable conclusion would be that it is for ethical reasons, the authors deem it more likely that firms chose to do so in order to avoid a potential media/public backlash. Just as technological advancements have possibly led to increased outside pressure on firms, it has also led to firms being able to spread their version of events more broadly. These days annual reports are easily accessible online just one Google search away for anyone with an internet connection, comparatively in 2002 the most common form of distribution of annual reports was a physically printed version. The increased reach of the annual report and the CEO-letter (Amernic, Craig & Tourish, 2010; Jonäll, 2009; Anderson & Epstein, 1995) make it a more valuable tool for firms to respond to potential increased outside pressure. One way of doing so is through increased use of Accounts in the CEO-letter in order to deflect the negatives associated with Failure events and increase focus on other more positive aspects, which would support the trends identified in this study.

Lastly, firms could simply have an increased desire to present a good image of the firm and its management, and/or an increased desire to attempt to influence the reader. This could be because of the aforementioned isomorphism, external consultants, and potential increased outside pressure. However, it could also be entirely separate from them and stand on its own. The attribution theory and impression management theories describe how firms want to give good impressions of themselves and for example tend to emphasize the positive and downplay the negative (Aerts, 2005; Clatworthy & Jones, 2003; Tedeschi, 1981). Another potential dimension in this is the increased importance of the CEO-letter over time (Bartlett & Chandler, 1997; Jonäll, 2009; Tengblad & Ohlsson, 2006; Amernic, Craig & Tourish, 2010), which would provide increased incentives to try to manage the image of the firm given in the CEO-letter. An increased desire to present a good image of the firm and management, and/or an increased desire to influence the reader could then lead to the increased use of Accounts and the increased emphasis (visually highlighted) on Accounts seen in this study. The impression of the firm left on the reader by the CEO-letter can afterall affect several important things such as decisions on media coverage, potential policy decisions, and investment decisions just to name a few.

5. Conclusion and discussion

First, a conclusion of this study will be presented. Afterwards the discussion section contains discussions on the contribution of this study, limitations and a discussion surrounding interesting further studies that could be conducted.

5.1 Conclusion

The purpose of this study was to identify possible trends over time in the use of verbal Accounts in CEO-letters for firms with negative profit growth. Further, to explore potential explanations if such trends were found. Literature on verbal Accounts is somewhat limited in the financial communication literature, and there are no studies on trends over time at all as far as the authors are aware. Many of the studies that have been performed on Accounts in financial communication have been qualitative, although there have been some quantitative studies. In order to be able to answer the purpose of this study a quantitative approach was required, and an Account typology adapted from Sandell and Svensson (2016; 2017) was used. The study was performed using content analysis on the CEO-letters of a sample of Stockholm stock exchange listed firms with negative profit growth, for the years: 2002, 2007, 2012, and 2017.

Upwards trends over time were identified in the use of Justification, Refocusing, and Mystification. Further, an upwards trend over time was identified for the average number of Accounts per Failure event. Meanwhile, no trends either up or down were identified for the number of Failure events per CEO-letter or the use of: Excuse, Concession, Wordification, and Refusal. This leads to the conclusion that the total number of Accounts per CEO-letter has increased over time and that the increase in the average number of Accounts per Failure event is driven by the increases in the use of Justification, Refocusing, and Mystification. Overall this creates the impression that compared to before, firms increasingly try to deflect negative connotations caused by Failure events and instead try to redirect the readers focus to other more positive aspects.

One new concept/variable introduced by the authors of this study is that of the visually highlighted Account. Which can be said to be when a firm emphasizes an Account through visually highlighting it in the CEO-letter through such things as size, bolding, images, etc. (more details in 2.5 and 3.3.2). An upwards trend over time was identified for the use of visually highlighted Accounts in CEO-letters.

The firm and CEO variables collected in this study were mostly discarded as potential explanations for the trends found. Further, the authors speculate surrounding other potential explanations for the trends observed. These include isomorphism/genre, increased use of external consultants for the production of the CEO-letter, potentially increased outside pressure on the firm, and an increased desire to present a good image of the firm/management and influence the reader's perception of the firm. Afterall, if firms are successful in influencing the reader's perception of the firm there are potential benefits. The reader's perception of the firm can influence everything from decisions on media coverage, to policy decisions and investment decisions.

As was discussed in the introduction to this study, the content of the CEO-letter is in practice unregulated. The discussion on whether they should be regulated and if so to what extent is a complex one with many

angles and nuances. Therefore the authors will refrain from taking a stand in this discussion, however will point out that the findings of this study likely are a relevant piece of the puzzle in this discussion. If nothing else it reinforces that the ideals of neutral unbiased information from the IASB framework (Marton, Lundqvist & Pettersson, 2020) are not being upheld in CEO-letters.

5.2 Discussion

5.2.1 Contribution

While the contributions from this study are mainly theoretical, there is a practical contribution as well. That is mainly that it helps people become more aware of how language is used in CEO-letters to influence the reader's perception of the firm, and that some of the tools to achieve this have become more used over time. Whether this is through a conscious effort of the firm or not, the important fact is that there is a real possibility of being influenced by this. The CEO-letter (and other textual parts of the annual report) can both influence the readers directly, or indirectly through the framing of the numerical accounting data. By being aware that things are increasingly being angled and presented in a way more favorable to the firm, users of the annual report are enabled to more critically reflect upon the contents of the CEO-letter and other textual parts of the annual reports.

When it comes to the theoretical contributions of this study, an overall contribution is made to the literature due to the limited number of studies in the accounting literature on the use of verbal Accounts. Given that the study is performed on a different sample than existing literature and also thoroughly describes both methodology as well as the data collected, this can be seen to contribute in general to the literature on Accounts in financial communication. A further, more specific and more important, contribution is made since as far as the authors of this study are aware, there is no existing literature on the use of Accounts over time. Therefore, the insights provided by this study on the trends over time in the use of Accounts are valuable for filling a knowledge gap in the existing literature. Further, this study contributes to the literature on the use of Accounts in financial communication by introducing the concept of visually highlighted Accounts.

5.2.2 Limitations

While the overall results of this study are deemed as robust by the authors, there are some limitations to keep in mind when reflecting on the study and its generalizability.

Due to some of the sample choices, the generalizability of the study is impacted. The study is performed on firms listed on the Stockholm stock exchange, with negative profit growth compared to the previous year and for the period 2002-2017. While the results are likely to be generalizable to some degree for other western markets around the same time period, it is not a given. The further away from the sample, in dimensions such as time and culture, the level of generalizability likely decreases. Additionally, it is not certain that it is generalizable to firms with positive profit growth. The lack of other literature on the use of Accounts over time makes it more difficult to say anything definitive on this, as there is nothing to compare with, but limitations to generalizability should be kept in mind when applying the study's results outside of the sample used.

Due to practical limitations for the data collection process, jumps between the years for which data was collected was necessary. This was in order to have a long enough period of time where changes in use of Accounts could be expected while also having a large enough number of observations per year examined. Due to this method, there is a risk that extreme values in individual years could have had a larger impact on the results compared to if data was collected for all years. However, by excluding the years most affected by external crises which affect a large number of firms, the risk of extreme values impacting the results was partly reduced.

It is acknowledged by Erickson, Weber and Segovia (2011) that not all CEO-letters are fully written by the CEO himself/herself. It is common that the CEO and an external consultancy firm co-write the CEO-letter (Erickson, Weber & Segovia, 2011). While this of course does not change anything about the trends identified or how they potentially influence the readers of CEO-letters. It does potentially impact the usefulness of CEO characteristics as control/explanatory variables. However, while hiring an external party to help produce the CEO-letter likely affects the final product, the CEO still has the final say over what is and is not included. Furthermore, most CEOs are very involved in the writing process even if co-written with an external consultant. Therefore, it was still deemed relevant to examine CEO characteristics in the analysis of this study.

Conducting a quantitative analysis, as done in this study, was essential in order to be able to achieve the study's purpose. The method used in the study gives a large number of observations which is essential in order to be able to say anything about trends over time due to the need for statistical analysis. However, by doing a quantitative analysis on a large number of observations it is inevitable that a certain level of depth in the analysis of the underlying meanings in the text is lost.

5.2.3 Further studies

Given the relative lack of literature on the use of Accounts in financial communication a lot of interesting studies can still be done. One aspect that could have been examined given the dataset in this study but which was not in line with the study's purpose and therefore not examined is how the use of Accounts is affected by the firm's financial performance. This was also suggested by Sandell and Svensson (2016) who argued that worse performing firms might have an increased use of Accounts.

Another aspect which would be interesting is to specifically look at crisis years such as the IT bubble, the financial crisis, Covid-19, etc. as was considered by the authors as an alternative for this study. While this would not answer the question of general trends over time in the use of Accounts, it would be able to look at how different crises affect the use of Accounts in financial communication.

Due to the fact that the use of Accounts in financial communication appears to be notably influenced by context it would be interesting with more studies in different settings. For example to examine the use of Accounts in financial communication in "non-western countries". Different time periods are of course also of interest as they would likely yield different results. Further, as mentioned earlier in the limitations section it would be interesting to examine all years in a longer time period.

Finally, studies both on the use of Accounts in CEO-letters and on CEO-letters in general for pharmaceutical and early stage tech firms would be highly interesting. As was found in this study it could almost be said to be a sub-genre to the CEO-letter with quite a different way of writing, their CEO-letters were distinguished from the rest of the industries in the sample. There were quite a few CEO-letters for this type of firm who did not even mention a single Failure event despite having lower operating profit than the year before. In depth qualitative studies on the CEO-letters of these types of firms and how they relate to/contrast the more common CEO-letters would be highly interesting.

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Appendix 1 - Coding manual

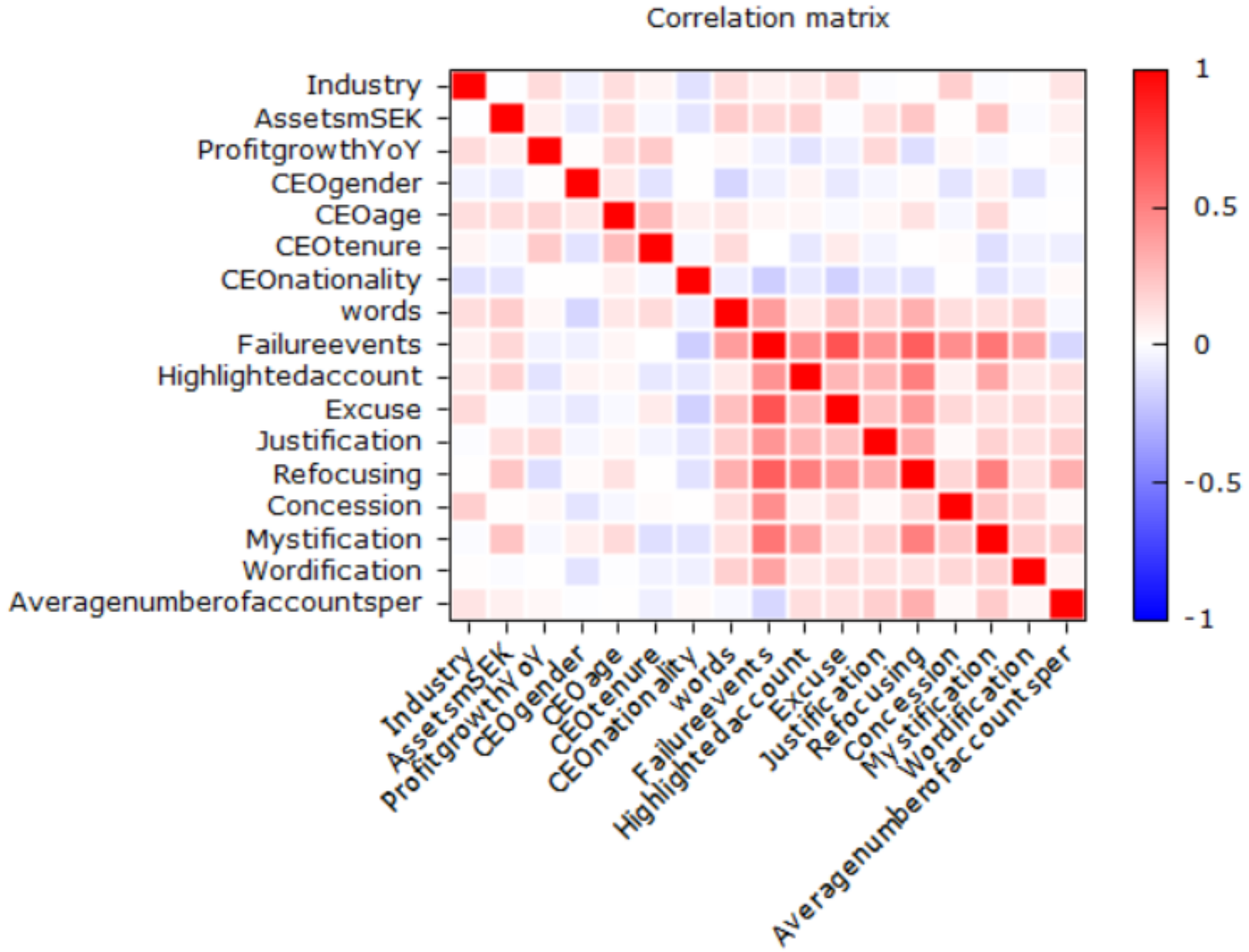
Coding Manual			
Variable	**Definition**	**Guidelines**	**Example**
Failure event	Failure event is an *impression* of an event or decision that did not meet the external performance expectations or standards. These external expectations can either be outspoken or implied, the key is that the firm experiences that there is an expectation for explanation (Sandell & Svensson, 2016).	All three of the following need to apply in order to identify a Failure event: 1. Something happened or is expected to happen (event, decision, etc.) 2. Negative connotations 3. Not meeting the (experienced/implied) external expectations	"We can now look back on a year in which our two largest business areas – NCC Building and NCC Infrastructure – underperformed in terms of earnings." (NCC, 2017, p. 4)
Visually highlighted Account	Certain things, including Accounts, can be visually highlighted in a CEO-letter through such means as including it in the title, enlarged quotes, etc. That is to say, it is an Account present in a way which can be said to visually stand out when looking at the CEO-letter as a whole.	An Account in the following was counted as a visually highlighted Account: ● Title ● Enlarged/bolded introduction ● Sub-header ● Picture / enlarged quote / graph / table	
Excuse	Excuse is an Account which admits that an event or act is "bad, wrong or inappropriate" but (at least partly) denies responsibility (Scott & Lyman, 1968, p. 47). Excuses tend to refer to factors beyond the control of the accused such as external circumstances or accidents (Waring, 2007).	Both of the following conditions have to be met for an Account to be qualified as an Excuse: 1. Admission of the negative qualities of the Failure event. 2. Denial, at least partially, of responsibility for the Failure event.	"We stand on very stable ground but in 2012 the weak economic climate had a clear impact on development in Ratos's holdings. Many of the markets in which our holdings operate were more affected by the weaker economic climate than we initially expected." (Ratos, 2012, p. 3)

Justification	Justification could be viewed as accepting responsibility for an act or event, however denying the negative consequences associated with it (Scott & Lyman, 1968). The firm in question tries to convince that the act or event was not untoward and further appeals to the positive value of the act or event (McLaughlin et al., 1983).	Both of the following conditions have to be met for an Account to be qualified as a Justification: 1. Denial, at least partially, of the negative qualities of the Failure event. 2. Admission of responsibility for the Failure event.	"Our personnel were reduced by about 80 persons during the year. We lowered our overhead and introduced a salary freeze for managers and many of the employees. These savings contributed to our ability to generate a positive result" (Lagercrantz, 2002, p. 2)
Refocusing	The intention of Refocusing as an Account is to redirect the audience's attention to a completely or partly different issue. For example by relativizing the Failure event by comparison to other firms (Sandell & Svensson, 2016).	Both of the following conditions have to be met for an Account to be qualified as Refocusing: 1. The Failure event is acknowledged. 2. There is an attempt to redirect/refocus attention to something else.	"Fellow shareholders, while I regret the poor return during 2007, I want to stress that Investor, with its proven business model, is in a strong position to continue our history of generating above-market returns to shareholders." (Investor, 2007, p. 3)
Concession	Concession is an Account that forwards an explicit admission of guilt (McLaughlin et al., 1983). The degree of confession can vary, either full confession or partial confession with reservations (Schönbach, 1980).	Both of the following conditions have to be met for an Account to be qualified as a Concession: 1. Admission of the negative qualities of the Failure event. 2. Admission, at least partially, of responsibility for the Failure event.	"The increase in SEB during the third quarter was based on our positive view of the long-term return potential of the firm, both stand-alone and in any potential consolidation scenario. Since our increase, the stock price in SEB has continued to decline, and we can see that we acted prematurely." (Investor, 2007, p. 2)
Mystification	Mystification as an Account is an admittance of not meeting or achieving the expected but the firm does not satisfactorily disclose the reason behind it (Sandell & Svensson, 2016).	Both of the following conditions have to be met for an Account to be qualified as a Mystification: 1. The Failure event is acknowledged. 2. No or very limited disclosure surrounding reasons for or responsibility surrounding the Failure event.	"Although 2007 was one of the most profitable years in the firm's history, our operating margin fell well below expectations at the end of the third quarter, which made us issue a profit warning in mid-October." (Ericsson, 2007, p. 4)

Refusal	Refusal is a way for the actor to communicate that the Failure event has not taken place (Schönbach 1980; McLaughlin, O'Hair and Cody, 1983).	1. The supposed Failure event is mentioned but denied	**No Examples found**
Wordification	The meaning behind Wordification is to translate and repeat Accounting language (the numbers) in every-day language (the text) without further explanation of the reasons behind the numbers (Sandell & Svensson, 2017).	Both of the following conditions have to be met for an Account to be qualified as Wordification: 1. The Failure event is acknowledged. 2. The Accounting language (numbers) is repeated in normal language (text) without giving further information/explanation.	"Our net asset value developed on a par with the return index (including reinvested dividends), which fell by 3%. Despite this, Industrivärden's stock performed below the market index in 2007. The reason for this is that the discount to net asset value doubled in 2007, from 10% to 20%. The total return was –14% for the Class A shares and –15% for the Class C shares, compared with –3% for the return index." (Industrivärden, 2007, p. 2)

Appendix 2 - Correlation table

The correlation table was examined by the authors during the data exploration process and the conclusion was drawn that there was little of significance to the results of this study or for the statistical tests employed. Therefore it was not deemed relevant to spend space and the reader's mental energy on including it in the main text. It is presented here however for the sake of transparency. First, a coloured correlation matrix which gives an easy overview is presented. After, a table is presented in order to give the actual values. The somewhat high positive correlations between the Account variables is to be expected and not problematic for the analysis or results of this study.



Variables in the correlation table below: 1 = Industry, 2 = Assets, 3 = Profit growth, 4 = CEO gender, 5 = CEO age, 6 = CEO tenure, 7 = CEO nationality, 8 = Words, 9 = Failure events, 10 = Highlighted Account, 11 = Excuse, 12 = Justification, 13 = Refocusing, 14 = Concession, 15 = Mystification, 16 = Wordification, 17 = Average number of Accounts per Failure event.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	1,00	-0,00	0,14	-0,05	0,13	0,04	-0,12	0,13	0,06	0,08	0,15	-0,01	0,01	0,19	-0,02	0,01	0,11
2		1,00	0,06	-0,08	0,14	-0,03	-0,10	0,20	0,15	0,18	-0,01	0,13	0,22	0,01	0,23	-0,02	0,06
3			1,00	0,01	0,17	0,21	0,00	0,03	-0,05	-0,11	-0,06	0,15	-0,13	0,03	-0,03	0,00	0,03
4				1,00	0,10	-0,11	0,00	-0,16	-0,06	0,04	-0,09	-0,04	0,02	-0,11	0,06	-0,11	-0,01
5					1,00	0,26	0,06	0,09	0,04	0,03	-0,03	0,03	0,11	-0,03	0,14	-0,01	0,00
6						1,00	-0,03	0,14	0,00	-0,09	0,08	-0,04	0,01	0,02	-0,13	-0,05	-0,06
7							1,00	-0,07	-0,19	-0,08	-0,18	-0,09	-0,11	0,01	-0,11	-0,06	0,02
8								1,00	0,38	0,09	0,25	0,19	0,31	0,13	0,12	0,18	-0,02
9									1,00	0,42	0,67	0,42	0,63	0,44	0,54	0,36	-0,16
10										1,00	0,28	0,29	0,50	0,06	0,35	0,09	0,13
11											1,00	0,24	0,40	0,15	0,12	0,14	0,12
12												1,00	0,33	0,02	0,18	0,12	0,19
13													1,00	0,16	0,50	0,12	0,31
14														1,00	0,22	0,16	0,02
15															1,00	0,18	0,20
16																1,00	0,04
17																	1,00

Appendix 3 - Difference of means screenshots from SPSS

Failure events:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Failure events	Based on Mean	1,565	3	147	,200
	Based on Median	1,281	3	147	,283
	Based on Median and with adjusted df	1,281	3	135,929	,283
	Based on trimmed mean	1,455	3	147	,229

ANOVA

Failure events

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7,424	3	2,475	,391	,759
Within Groups	929,463	147	6,323		
Total	936,887	150			

Robust Tests of Equality of Means

Failure events

	Statistic[a]	df1	df2	Sig.
Welch	,385	3	80,239	,764
Brown-Forsythe	,394	3	140,731	,757

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Failure events is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,814	Retain the null hypothesis.

Visually highlighted Accounts:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Highlighted account	Based on Mean	15,479	3	147	<,001
	Based on Median	3,057	3	147	,030
	Based on Median and with adjusted df	3,057	3	140,792	,030
	Based on trimmed mean	15,479	3	147	<,001

ANOVA

Highlighted account

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,984	3	,661	3,057	,030
Within Groups	31,791	147	,216		
Total	33,775	150			

Robust Tests of Equality of Means

Highlighted account

	Statistic[a]	df1	df2	Sig.
Welch	3,576	3	81,524	,017
Brown-Forsythe	3,137	3	144,852	,027

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Highlighted account is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,032	Reject the null hypothesis.

Excuses:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Excuse	Based on Mean	,421	3	147	,738
	Based on Median	,696	3	147	,556
	Based on Median and with adjusted df	,696	3	146,438	,556
	Based on trimmed mean	,536	3	147	,658

ANOVA

Excuse

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15,828	3	5,276	1,505	,216
Within Groups	515,258	147	3,505		
Total	531,086	150			

Robust Tests of Equality of Means

Excuse

	Statistic[a]	df1	df2	Sig.
Welch	1,577	3	80,481	,201
Brown-Forsythe	1,513	3	144,634	,214

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Excuse is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,097	Retain the null hypothesis.

Justification:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Justification	Based on Mean	2,693	3	147	,048
	Based on Median	1,828	3	147	,145
	Based on Median and with adjusted df	1,828	3	132,783	,145
	Based on trimmed mean	3,013	3	147	,032

ANOVA

Justification

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4,635	3	1,545	2,960	,034
Within Groups	76,742	147	,522		
Total	81,377	150			

Robust Tests of Equality of Means

Justification

	Statistic[a]	df1	df2	Sig.
Welch	3,192	3	81,591	,028
Brown-Forsythe	3,056	3	141,311	,030

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Justification is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,042	Reject the null hypothesis.

Refocusing:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Refocusing	Based on Mean	5,245	3	146	,002
	Based on Median	4,047	3	146	,008
	Based on Median and with adjusted df	4,047	3	122,370	,009
	Based on trimmed mean	4,724	3	146	,004

ANOVA

Refocusing

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23,654	3	7,885	2,958	,034
Within Groups	389,179	146	2,666		
Total	412,833	149			

Robust Tests of Equality of Means

Refocusing

	Statistic[a]	df1	df2	Sig.
Welch	3,303	3	80,672	,024
Brown-Forsythe	3,106	3	125,633	,029

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Refocusing is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,133	Retain the null hypothesis.

Concession:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Concession	Based on Mean	1,528	3	145	,210
	Based on Median	,367	3	145	,777
	Based on Median and with adjusted df	,367	3	125,946	,777
	Based on trimmed mean	,958	3	145	,414

ANOVA

Concession

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,245	3	,415	,367	,777
Within Groups	163,990	145	1,131		
Total	165,235	148			

Robust Tests of Equality of Means

Concession

	Statistic[a]	df1	df2	Sig.
Welch	,390	3	79,643	,761
Brown-Forsythe	,375	3	129,462	,771

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Concession is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,691	Retain the null hypothesis.

Mystification:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Mystification	Based on Mean	9,083	3	146	<,001
	Based on Median	4,295	3	146	,006
	Based on Median and with adjusted df	4,295	3	93,184	,007
	Based on trimmed mean	6,414	3	146	<,001

ANOVA

Mystification

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22,201	3	7,400	5,424	,001
Within Groups	199,192	146	1,364		
Total	221,393	149			

Robust Tests of Equality of Means

Mystification

	Statistic[a]	df1	df2	Sig.
Welch	3,710	3	79,659	,015
Brown-Forsythe	5,752	3	91,429	,001

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Mystification is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,020	Reject the null hypothesis.

Wordification:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Wordification	Based on Mean	9,241	3	146	<,001
	Based on Median	3,000	3	146	,033
	Based on Median and with adjusted df	3,000	3	112,653	,034
	Based on trimmed mean	7,707	3	146	<,001

ANOVA

Wordification

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2,516	3	,839	3,000	,033
Within Groups	40,817	146	,280		
Total	43,333	149			

Robust Tests of Equality of Means

Wordification

	Statistic[a]	df1	df2	Sig.
Welch	2,434	3	75,605	,071
Brown-Forsythe	2,880	3	107,043	,039

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Wordification is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	,065	Retain the null hypothesis.

Average number of Accounts per Failure event:

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Average number of accounts per failure event	Based on Mean	5,114	3	130	,002
	Based on Median	3,763	3	130	,012
	Based on Median and with adjusted df	3,763	3	87,752	,014
	Based on trimmed mean	4,580	3	130	,004

ANOVA

Average number of accounts per failure event

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13,418	3	4,473	13,732	<,001
Within Groups	42,342	130	,326		
Total	55,759	133			

Robust Tests of Equality of Means

Average number of accounts per failure event

	Statistic[a]	df1	df2	Sig.
Welch	15,181	3	71,352	<,001
Brown-Forsythe	14,142	3	99,484	<,001

a. Asymptotically F distributed.

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Average number of accounts per failure event is the same across categories of Year.	Independent-Samples Kruskal-Wallis Test	<,001	Reject the null hypothesis.

Appendix 4 - Regression screenshots from STATA

Failure events:

```
. reg FailureEvents logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.
```

Linear regression	Number of obs	=	151
	F(20, 119)	=	.
	Prob > F	=	.
	R-squared	=	0.3298
	Root MSE	=	2.2148

(Std. err. adjusted for 120 clusters in FirmID)

FailureEvents	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
logAssets	.0551824	.0959418	0.58	0.566	-.1347919	.2451566
Profitgrowth	-.0554965	.1964017	-0.28	0.778	-.4443915	.3333986
CEOgender	.1268908	1.148844	0.11	0.912	-2.147934	2.401716
CEOage	.0266176	.0263584	1.01	0.315	-.0255747	.0788099
CEOtenure	-.0419867	.03395	-1.24	0.219	-.1092112	.0252377
CEOnationality	-.9129453	.4548939	-2.01	0.047	-1.813681	-.0122099
Words	.0024199	.0004842	5.00	0.000	.0014612	.0033787
Industry_1010	-2.242525	.6012784	-3.73	0.000	-3.433117	-1.051934
Industry_1510	-1.919924	.559589	-3.43	0.001	-3.027966	-.8118815
Industry_2010	-3.699131	.5422047	-6.82	0.000	-4.77275	-2.625512
Industry_3020	-1.29107	.7980824	-1.62	0.108	-2.871353	.2892123
Industry_3510	-3.649027	.3422389	-10.66	0.000	-4.326695	-2.97136
Industry_4010	0	(omitted)				
Industry_4020	-1.604052	1.048455	-1.53	0.129	-3.680098	.4719935
Industry_4030	-3.440768	.5147124	-6.68	0.000	-4.45995	-2.421586
Industry_4040	-2.770274	.5936436	-4.67	0.000	-3.945748	-1.594801
Industry_4050	-2.58339	1.007185	-2.56	0.012	-4.577718	-.5890628
Industry_4510	-7.327499	1.513663	-4.84	0.000	-10.3247	-4.330295
Industry_4520	-3.116202	.4607136	-6.76	0.000	-4.028461	-2.203943
Industry_5010	-3.014549	.7228562	-4.17	0.000	-4.445877	-1.583221
Industry_5020	-2.240026	.4085992	-5.48	0.000	-3.049093	-1.430959
Industry_5510	-3.197881	.6430342	-4.97	0.000	-4.471153	-1.924609
Industry_6010	-5.934432	.6216711	-9.55	0.000	-7.165403	-4.703462
_cons	1.836936	1.557874	1.18	0.241	-1.247811	4.921682

Accounts per Failure event:

```
. reg AccountsPerFailureEvent logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_6010 omitted because of collinearity.

Linear regression                               Number of obs     =        134
                                                F(19, 107)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.0773
                                                Root MSE          =      .6808

                                   (Std. err. adjusted for 108 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
AccountsPerF~t | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     logAssets |   .0328131   .0412713     0.80   0.428    -.0490024    .1146287
  Profitgrowth |   .0206751    .057298     0.36   0.719    -.0929115    .1342617
     CEOgender |  -.0162788   .2124313    -0.08   0.939     -.437399    .4048415
        CEOage |  -.0054837   .0108314    -0.51   0.614    -.0269558    .0159883
     CEOtenure |  -.0055853   .0088581    -0.63   0.530    -.0231455    .0119748
CEOnationality |   .0070136   .2174178     0.03   0.974    -.4239919    .4380191
         Words |  -.0000359   .0001604    -0.22   0.823    -.0003538     .000282
 Industry_1010 |  -.2924126   .3068583    -0.95   0.343    -.9007234    .3158982
 Industry_1510 |  -.0823682   .3088563    -0.27   0.790    -.6946399    .5299035
 Industry_2010 |   -.175904   .3061065    -0.57   0.567    -.7827244    .4309164
 Industry_3020 |   -.574106   .2417009    -2.38   0.019     -1.05325   -.0949621
 Industry_3510 |  -.0679331   .3780554    -0.18   0.858    -.8173838    .6815176
 Industry_4010 |  -.7294515    .289569    -2.52   0.013    -1.303488   -.1554147
 Industry_4020 |  -.1089875   .3250562    -0.34   0.738    -.7533734    .5353984
 Industry_4030 |  -.4782392   .1945166    -2.46   0.016    -.8638457   -.0926327
 Industry_4040 |  -.0422179   .5677036    -0.07   0.941    -1.167624    1.083188
 Industry_4050 |  -.2187347   .4721595    -0.46   0.644    -1.154736    .7172665
 Industry_4510 |  -.0452643    .253845    -0.18   0.859    -.5484823    .4579537
 Industry_4520 |  -.3472595   .3483084    -1.00   0.321     -1.03774    .3432213
 Industry_5010 |  -.0016902    .523037    -0.00   0.997     -1.03855     1.03517
 Industry_5020 |  -.0673516   .2774529    -0.24   0.809    -.6173696    .4826663
 Industry_5510 |  -.2105579   .3430852    -0.61   0.541    -.8906844    .4695686
 Industry_6010 |           0  (omitted)
         _cons |   2.079703   .5639225     3.69   0.000     .9617922    3.197614
------------------------------------------------------------------------------
```

Highlighted Accounts:

```
. reg HighlightedAccount logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.1510
                                                Root MSE          =     .4733

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
HighlightedA~t |      Coef.   Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
     logAssets |   .0370136   .0263947     1.40   0.163    -.0152506    .0892778
   Profitgrowth |    -.04422   .0465817    -0.95   0.344    -.1364563    .0480164
     CEOgender |   .0973087   .2331555     0.42   0.677    -.3643626    .5589799
        CEOage |    .002817   .0072686     0.39   0.699    -.0115755    .0172095
     CEOtenure |   -.007146   .0051033    -1.40   0.164     -.017251    .0029591
CEOnationality |  -.0790397   .1268662    -0.62   0.534    -.3302474     .172168
         Words |   .0001317   .0001188     1.11   0.270    -.0001035    .0003669
 Industry_1010 |  -.7627752   .1346865    -5.66   0.000    -1.029468   -.4960825
 Industry_1510 |  -.6745077   .1784298    -3.78   0.000    -1.027817   -.3211987
 Industry_2010 |   -.734098   .1147474    -6.40   0.000    -.9613092   -.5068867
 Industry_3020 |  -.8132376   .1515182    -5.37   0.000    -1.113259   -.5132163
 Industry_3510 |  -1.109585   .0677726   -16.37   0.000    -1.243781   -.9753884
 Industry_4010 |           0  (omitted)
 Industry_4020 |  -.4124408   .2035304    -2.03   0.045    -.8154514   -.0094302
 Industry_4030 |   -1.09362   .1148567    -9.52   0.000    -1.321048   -.8661923
 Industry_4040 |  -.7628451   .2076809    -3.67   0.000    -1.174074   -.3516161
 Industry_4050 |  -.4010805   .3270655    -1.23   0.223    -1.048703    .246542
 Industry_4510 |  -1.233328   .1026632   -12.01   0.000    -1.436612   -1.030045
 Industry_4520 |  -.7645395    .188709    -4.05   0.000    -1.138202   -.3908768
 Industry_5010 |  -.7018249   .1772628    -3.96   0.000    -1.052823   -.3508268
 Industry_5020 |  -.6425437   .0799999    -8.03   0.000    -.8009515   -.4841358
 Industry_5510 |  -.8637695   .1912256    -4.52   0.000    -1.242415   -.4851237
 Industry_6010 |  -1.117635   .1839011    -6.08   0.000    -1.481778   -.7534928
         _cons |   .5104559   .3677197     1.39   0.168    -.2176659    1.238578
------------------------------------------------------------------------------
```

Excuse:

```
. reg Excuse logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.2268
                                                Root MSE          =     1.7911

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
      Excuse | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
   logAssets |   .0293475   .0854839     0.34   0.732    -.1399191    .1986141
 Profitgrowth|  -.1401679   .1803939    -0.78   0.439    -.4973657      .21703
   CEOgender |  -.2580091   .6324965    -0.41   0.684    -1.510415    .9943972
      CEOage |  -.0011563   .0245665    -0.05   0.963    -.0498003    .0474878
   CEOtenure |     .00482   .0269869     0.18   0.859    -.0486168    .0582568
CEOnationality|  -.4439607   .4284659    -1.04   0.302    -1.292366    .4044445
       Words |   .0008493    .000525     1.62   0.108    -.0001903    .0018889
Industry_1010|  -1.192542   .5919589    -2.01   0.046     -2.36468   -.0204048
Industry_1510|  -1.534425   .5942016    -2.58   0.011    -2.711004   -.3578468
Industry_2010|  -1.985411   .3907945    -5.08   0.000    -2.759223   -1.211598
Industry_3020|   .1609109   .6112462     0.26   0.793    -1.049418    1.371239
Industry_3510|  -.9737208   .5648038    -1.72   0.087    -2.092089    .1446472
Industry_4010|          0  (omitted)
Industry_4020|  -.2387067   .9423923    -0.25   0.800    -2.104738    1.627324
Industry_4030|  -1.211684   .4693957    -2.58   0.011    -2.141135   -.2822341
Industry_4040|  -1.146031   .6831439    -1.68   0.096    -2.498725    .2066616
Industry_4050|  -1.270603   .9752224    -1.30   0.195    -3.201641    .6604344
Industry_4510|   -2.49608   1.175192    -2.12   0.036    -4.823077   -.1690826
Industry_4520|  -1.185669   1.019509    -1.16   0.247    -3.204399    .8330612
Industry_5010|  -1.758742    .489685    -3.59   0.000    -2.728368   -.7891172
Industry_5020|  -.6856174   .4730146    -1.45   0.150    -1.622234    .2509988
Industry_5510|  -.3979473   .6050255    -0.66   0.512    -1.595958    .8000637
Industry_6010|  -3.270068   .5384213    -6.07   0.000    -4.336196   -2.20394
       _cons |   1.767689   1.488331     1.19   0.237    -1.179356    4.714734
------------------------------------------------------------------------------
```

Justification:

```
. reg Justification logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.2670
                                                Root MSE          =     .68264

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
Justification |      Coef.   Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
    logAssets |   .0486964   .0401212     1.21   0.227    -.0307476    .1281405
  Profitgrowth |   .1499294   .0573695     2.61   0.010     .0363321    .2635267
    CEOgender |  -.0931285   .2706645    -0.34   0.731    -.6290713    .4428143
       CEOage |   .0050263   .0081362     0.62   0.538    -.0110841    .0211368
    CEOtenure |  -.0161242   .0081194    -1.99   0.049    -.0322014   -.0000469
CEOnationality |  -.2540565   .1480307    -1.72   0.089    -.5471721    .0390591
        Words |   .0003576   .0001711     2.09   0.039     .0000188    .0006963
 Industry_1010 |  -2.204832   .1787544   -12.33   0.000    -2.558783    -1.85088
 Industry_1510 |  -1.998354   .3746764    -5.33   0.000    -2.740251   -1.256458
 Industry_2010 |  -2.525903   .1616028   -15.63   0.000    -2.845892   -2.205913
 Industry_3020 |   -2.60566   .1792879   -14.53   0.000    -2.960667   -2.250652
 Industry_3510 |   -2.49412   .3015797    -8.27   0.000    -3.091278   -1.896962
 Industry_4010 |          0  (omitted)
 Industry_4020 |  -1.928619   .3017959    -6.39   0.000    -2.526205   -1.331033
 Industry_4030 |  -2.369929   .3290254    -7.20   0.000    -3.021432   -1.718426
 Industry_4040 |  -2.310509    .224597   -10.29   0.000    -2.755234   -1.865785
 Industry_4050 |  -2.331597   .3895629    -5.99   0.000     -3.10297   -1.560223
 Industry_4510 |  -3.451321   .2401804   -14.37   0.000    -3.926902    -2.97574
 Industry_4520 |  -2.295247    .335056    -6.85   0.000    -2.958692   -1.631803
 Industry_5010 |  -2.765533    .182803   -15.13   0.000    -3.127502   -2.403565
 Industry_5020 |  -2.392575   .1299042   -18.42   0.000    -2.649798   -2.135351
 Industry_5510 |  -2.932592   .2354466   -12.46   0.000    -3.398799   -2.466384
 Industry_6010 |   -2.14735   .2364202    -9.08   0.000    -2.615485   -1.679214
         _cons |   2.208857   .4334257     5.10   0.000     1.350631    3.067083
------------------------------------------------------------------------------
```

Refocusing:

```
. reg Refocusing logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.2791
                                                Root MSE          =     1.5293

                                    (Std. err. adjusted for 120 clusters in FirmID)
```

Refocusing	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
logAssets	.0833519	.0751892	1.11	0.270	-.0655301	.2322339
Profitgrowth	-.1875217	.134112	-1.40	0.165	-.4530768	.0780333
CEOgender	.7360816	.5376878	1.37	0.174	-.3285938	1.800757
CEOage	.020922	.0219089	0.95	0.342	-.0224598	.0643038
CEOtenure	-.011487	.0216038	-0.53	0.596	-.0542648	.0312907
CEOnationality	-.4252713	.3457374	-1.23	0.221	-1.109866	.2593233
Words	.001581	.0003901	4.05	0.000	.0008085	.0023535
Industry_1010	2.058547	.3771037	5.46	0.000	1.311844	2.805249
Industry_1510	2.688319	.7797034	3.45	0.001	1.144429	4.23221
Industry_2010	1.257978	.3958714	3.18	0.002	.4741132	2.041843
Industry_3020	1.353001	.4856335	2.79	0.006	.3913976	2.314604
Industry_3510	.7545542	.560265	1.35	0.181	-.3548264	1.863935
Industry_4010	0	(omitted)				
Industry_4020	2.218627	.8191728	2.71	0.008	.596583	3.840671
Industry_4030	.4292898	.4016967	1.07	0.287	-.3661098	1.224689
Industry_4040	1.214166	.4973693	2.44	0.016	.2293255	2.199007
Industry_4050	1.857069	1.558692	1.19	0.236	-1.229296	4.943435
Industry_4510	-1.171698	.7678685	-1.53	0.130	-2.692154	.3487583
Industry_4520	1.242689	.3539173	3.51	0.001	.5418978	1.943481
Industry_5010	1.559255	.4644301	3.36	0.001	.6396371	2.478873
Industry_5020	1.981616	.2728457	7.26	0.000	1.441354	2.521877
Industry_5510	1.306404	.4296851	3.04	0.003	.4555841	2.157223
Industry_6010	-.903581	.4658093	-1.94	0.055	-1.82593	.018768
_cons	-3.472747	1.374912	-2.53	0.013	-6.19521	-.7502826

Concession:

```
. reg Concession logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.0904
                                                Root MSE          =     1.0853

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
  Concession |      Coef.   Std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
   logAssets |  -.0302655   .0464599    -0.65   0.516    -.1222608    .0617298
 Profitgrowth|   .0330586   .1054991     0.31   0.755    -.1758402    .2419575
   CEOgender |  -.4283575   .2888841    -1.48   0.141    -1.000377    .1436618
      CEOage |   -.008854   .0133996    -0.66   0.510    -.0353865    .0176785
   CEOtenure |  -.0025982   .0170078    -0.15   0.879    -.0362753    .0310788
CEOnationality|  .1761486   .3355948     0.52   0.601    -.4883625    .8406598
       Words |   .0004119   .0002192     1.88   0.063    -.0000221     .000846
 Industry_1010|  .1530909    .169116     0.91   0.367    -.1817757    .4879574
 Industry_1510|  .3248584   .3475641     0.93   0.352    -.3633532     1.01307
 Industry_2010|  .1888139   .2363324     0.80   0.426    -.2791478    .6567757
 Industry_3020|  .5329261   .3270813     1.63   0.106    -.1147275     1.18058
 Industry_3510|   .636747   .5858548     1.09   0.279    -.5233041    1.796798
 Industry_4010|        0  (omitted)
 Industry_4020|  .7309437   .6018529     1.21   0.227    -.4607851    1.922673
 Industry_4030|  .2793585   .4888776     0.57   0.569    -.6886681    1.247385
 Industry_4040|   .668436   .3585007     1.86   0.065    -.0414312    1.378303
 Industry_4050|  .4185631   .3574164     1.17   0.244    -.2891571    1.126283
 Industry_4510| -.1719713   .2354852    -0.73   0.467    -.6382554    .2943129
 Industry_4520|  .4569357   .2787938     1.64   0.104    -.0951039    1.008975
 Industry_5010|  .7905952   .3926564     2.01   0.046     .0130963    1.568094
 Industry_5020|  .7616757   .2141801     3.56   0.001     .3375777    1.185774
 Industry_5510|  .7916256   .7816284     1.01   0.313    -.7560766    2.339328
 Industry_6010| -.4253442   .4769151    -0.89   0.374    -1.369684    .5189953
         _cons|  .2465039   .6858804     0.36   0.720    -1.111608    1.604616
------------------------------------------------------------------------------
```

Mystification:

```
. reg Mystification logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.1852
                                                Root MSE          =     1.1888

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
Mystification|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
    logAssets|   .0248924   .0618009     0.40   0.688    -.0974797    .1472644
  Profitgrowth|   .0111374   .1217081     0.09   0.927    -.2298567    .2521315
    CEOgender|   .3629881   .8248422     0.44   0.661    -1.270282    1.996258
       CEOage|    .029625   .0143228     2.07   0.041     .0012644    .0579856
    CEOtenure|  -.0338313   .0150814    -2.24   0.027    -.0636939   -.0039686
CEOnationality|  -.5482016   .2880312    -1.90   0.059    -1.118532    .0221289
         Words|   .0005826   .0003234     1.80   0.074    -.0000578    .0012231
 Industry_1010|    -.26043   .1934052    -1.35   0.181    -.6433915    .1225316
 Industry_1510|   .8893083   .5530092     1.61   0.110    -.2057052    1.984322
 Industry_2010|  -.1720035   .2816109    -0.61   0.543    -.7296212    .3856143
 Industry_3020|  -.2236397   .3445358    -0.65   0.518    -.9058551    .4585756
 Industry_3510|  -1.119381   .1805684    -6.20   0.000    -1.476925   -.7618378
 Industry_4010|          0  (omitted)
 Industry_4020|  -.0312119   .5073403    -0.06   0.951    -1.035796    .9733725
 Industry_4030|  -.5017665    .322044    -1.56   0.122    -1.139446    .1359128
 Industry_4040|  -.2495095   .3568246    -0.70   0.486    -.9560578    .4570388
 Industry_4050|   .1891453   1.145997     0.17   0.869    -2.080042    2.458333
 Industry_4510|  -1.680604    .395785    -4.25   0.000    -2.464298   -.8969102
 Industry_4520|  -.6511848   .1883684    -3.46   0.001    -1.024173   -.2781965
 Industry_5010|   .1660437   .4912126     0.34   0.736    -.8066063    1.138694
 Industry_5020|  -.0675498   .1973864    -0.34   0.733    -.4583945    .3232949
 Industry_5510|  -.6382435     .2681    -2.38   0.019    -1.169108   -.1073788
 Industry_6010|  -.8405614   .3857813    -2.18   0.031    -1.604447    -.076676
         _cons|    -1.0448   .9235188    -1.13   0.260    -2.873459    .7838594
------------------------------------------------------------------------------
```

Wordification:

```
. reg Wordification logAssets Profitgrowth CEOgender CEOage CEOtenure CEOnationality Words Industry_*, vce(cluster FirmID)
note: Industry_4010 omitted because of collinearity.

Linear regression                               Number of obs     =        151
                                                F(20, 119)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.1373
                                                Root MSE          =     .54085

                                   (Std. err. adjusted for 120 clusters in FirmID)
------------------------------------------------------------------------------
             |               Robust
Wordification|  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
    logAssets|   -.0598303   .0319845    -1.87   0.064    -.1231628    .0035021
 Profitgrowth|    .0278663   .0514755     0.54   0.589    -.0740603    .1297929
    CEOgender|   -.3748944   .1508525    -2.49   0.014    -.6735974   -.0761915
       CEOage|     .005356   .0079447     0.67   0.502    -.0103752    .0210872
    CEOtenure|   -.0121476    .008072    -1.50   0.135    -.0281309    .0038357
CEOnationality|  -.1524618   .1342673    -1.14   0.258    -.4183245    .1134008
         Words|   .0003353   .0001039     3.23   0.002     .0001295    .0005411
 Industry_1010|   .3144234   .1785917     1.76   0.081     -.039206    .6680528
 Industry_1510|   .4750608   .2442096     1.95   0.054    -.0084986    .9586203
 Industry_2010|   .2217875   .1279196     1.73   0.086     -.031506    .4750809
 Industry_3020|    .416076   .2234902     1.86   0.065    -.0264569    .8586088
 Industry_3510|   .7554447   .5733053     1.32   0.190    -.3797571    1.890646
 Industry_4010|          0  (omitted)
 Industry_4020|   .5025131   .2832818     1.77   0.079    -.0584131    1.063439
 Industry_4030|   .1664276   .1276226     1.30   0.195    -.0862779    .4191332
 Industry_4040|   .4684348   .2140921     2.19   0.031     .044511     .8923585
 Industry_4050|   .2126343   .1639913     1.30   0.197    -.1120848    .5373534
 Industry_4510|  -.1411174   .1640069    -0.86   0.391    -.4658674    .1836326
 Industry_4520|    .317506   .1713988     1.85   0.066    -.0218808    .6568927
 Industry_5010|   .3831376   .1689712     2.27   0.025     .0485577    .7177174
 Industry_5020|   .3297952   .0760704     4.34   0.000     .1791682    .4804222
 Industry_5510|   .2609164   .1828671     1.43   0.156    -.1011787    .6230115
 Industry_6010|   1.107385   .1886066     5.87   0.000     .7339249    1.480845
         _cons|   -.113156   .4345852    -0.26   0.795    -.9736781     .747366
------------------------------------------------------------------------------
```