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Is the Optimism in shareholder letters associated with future financial performance?
- A study of sincerity in shareholder letters of U.S. banks issued prior to and in the outbreak of the financial crisis

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Abstract

In this study we examine whether or not optimistic tone in shareholder letters is sincere. By replicating the methodology of Patelli and Pedrini (J Bus Ethics 124:19–34, 2014) we contrast impression management theory with communicative action theory, and conduct text analysis of shareholder letters through the linguistic software program DICTION. Furthermore, we extend Patelli and Pedrini's (J Bus Ethics 124:19–34, 2014) study by capturing and comparing two different macroeconomic contexts in a large sample of publicly listed U.S. banks. In contrast to Patelli and Pedrini (J Bus Ethics 124:19–34, 2014), who found support for sincere communication by Fortune 500 firms in the outbreak of the global financial crisis, we find that optimistic tone was not positively associated with future financial performance neither prior to nor in the outbreak of the financial crisis. Thus with our results, we contribute to the academic field of impression management. Moreover, our study is of value to academics and other users of shareholder letters, which should question the sincerity of information communicated. However, as our study is limited to banks that survived the financial crisis, consideration of the survival bias should be taken. If accessibility of bankrupt banks' annual reports is improved, a suggestion for further research could be to include these to test whether our results are supported.

Introduction
The aim of this study is to test the sincerity of optimistic tone in shareholder letters; by examining its association with future financial performance in a large sample of U.S. publicly listed banks. Awareness of tone at the top of firms has been raised along with major company crises. In the U.S., tone at the top particularly came to the fore after the Enron crisis in 2001 and the passage of the Sarbanes-Oxley act in 2002 (Clatworthy & Jones, 2006; Amernic, Craig & Tourish, 2010). In prior research, various definitions and measurements of tone have been acknowledged (Patelli & Pedrini, 2015). As noted by Amernic et al. (2010), tone at the top can portray the ethical values, culture, and atmosphere of an organization. Moreover, Securities and Exchange Commission's (SEC) Director, Stephen Cutler, explained in a speech in 2004 that tone at the top is characterized by top management's words and actions. At Enron, it is argued that the tone at the top was characterized

by an insincere attitude coupled with a strong aspiration of keeping up the stock price (Amernic et al., 2010).

In September 2008 when Lehman Brothers Holdings, Inc. filed for bankruptcy protection, the financial crisis was globally acknowledged. The U.S. real estate bubble and the U.S. banks' changed business models were addressed as main causes (Alali & Romero, 2013; Patelli & Pedrini, 2015). In the aftermath of the crisis, which led to severe consequences for the banking industry in terms of trust issues and financial difficulties, ethics of top management at U.S. banks were questioned. Since tone and ethics of top management may be revealed in the discourse of corporate narratives through language and symbols (Yuthas, Rogers & Dillard, 2002; Amernic et al., 2010; Patelli & Pedrini, 2014), it is of interest to investigate the sincerity of optimistic tone in corporate narratives and its congruence with future financial performance. Prior research has examined the content of shareholder letters in the event of industrial crisis (D'Aveni & MacMillan, 1990), whether tone in shareholder letters is associated with financial aggressiveness (Patelli & Pedrini, 2015), and whether or not optimistic tone in shareholder letters was sincere in the wake of the financial crisis (Patelli & Pedrini, 2014). However, these studies do not focus solely on the banking industry and do not examine the predictive value of optimistic tone in different macroeconomic contexts. Consequently, we investigate sincerity of optimistic tone in shareholder letters by testing its association with future financial performance in U.S. banks both prior to and in the outbreak of the financial crisis.

The shareholder letter is generally included in annual reports of U.S. publicly listed firms. Although not mandatory (Yuthas et al., 2002; Patelli & Pedrini, 2015), the shareholder letter is perceived as one of the most important corporate communication tools among investors (Hyland, 1998) as it is said to have predictive value of future financial performance and can be used to discriminate between financially healthy and distressed firms (Clatworthy & Jones, 2006; Patelli & Pedrini, 2014). This non-regulated letter typically gives the reader an overview of the firm's past performance, but also what is expected in the future (McConnell, Haslem & Gibson, 1986; Yuthas et al., 2002). Executives are rather free to express themselves in the prospective segments of the letter, as future financial performance is not directly attributable to quantitative data in the same way as past performance is (McConnell et al., 1986). As noted by Amernic et al. (2010), shareholder letters can reflect top managers' language, leadership styles, personalities, priorities, mindsets, and charisma, but also how the particular firm aims to shape relationships and stakeholders' perceptions. In prior research, it is argued that rhetorical tone in shareholder letters can be used to either improve understanding of the true conditions or to obscure quantitative information of past and future financial performance (Yuthas et al., 2002; Sydserff & Weetman, 2002; Merkl-Davies & Brennan, 2007; Patelli & Pedrini, 2014). Accordingly, the lens of impression management views tone in shareholder letters as a strategic tool

used to manipulate the perceptions and expectations about a firm's performance. In contrast, the theory of communicative action assumes shareholder letters as sincere communication tools that favor mutual understanding (Yuthas et al., 2002; Patelli & Pedrini, 2014). Replicating the methodology of Patelli and Pedrini (2014), our investigation of sincerity of optimistic tone is performed by contrasting communicative action theory and impression management theory. Furthermore we examine the sincerity of shareholder letters both prior to and in the outbreak of the financial crisis to test its dependence on macroeconomic contexts.

In line with D'Aveni and MacMillan (1990), we expect optimistic tone to be insincere and hence lack predictive value of financial performance prior to the crisis, due to incentives for low-performing banks to present themselves in a more favorable light (Sydserff & Weetman, 2002; Clatworthy & Jones, 2006; Merkl-Davies & Brennan, 2007). On the other hand, as the social costs of engaging in impression management increase when macroeconomic conditions are tough (Patelli & Pedrini, 2014); we expect that optimistic tone is congruent with both past and future financial performance in the outbreak of the financial crisis. Our results indicate that low-performing banks are more optimistic than high-performing banks prior to the crisis. Moreover, minimal differences in optimistic tone between low and high-performing banks in the outbreak of the crisis are observed. Although not significant, we find a negative association between optimistic tone and future financial performance both prior to and in the outbreak of the

financial crisis. In conclusion, our results suggest incongruence between optimistic tone and future financial performance, which supports our expectation prior to the crisis but rejects our expectation in the outbreak of the crisis. Accordingly, we find support for the presence of impression management and insincerity of optimistic tone in shareholder letters in both periods. Thus we argue that optimistic tone may not be an appropriate indicator of future financial performance for U.S. publicly listed banks independently of macroeconomic conditions.

In regards of prior literature related to rhetorical tone in corporate narratives, text analysis has been the most prominent methodology to systematically address the association with financial performance (e.g. Yuthas et al., 2002; Sydserff & Weetman, 2002; Feldman, Govindaraj, Livnat & Segal, 2010; Davis, Piger & Sedor, 2012; Huang, Teoh & Zhang, 2014; Patelli & Pedrini, 2014; Patelli & Pedrini, 2015). We perform text analysis of shareholder letters through the linguistic software program DICTION, as it has been acknowledged in prior research (e.g. Yuthas et al., 2002; Sydserff & Weetman, 2002; Davis et al., 2012; Patelli & Pedrini, 2014). By extending the bivariate analysis performed by Patelli and Pedrini (2014), we compare average scores of optimistic tone in shareholder letters across performance quartiles, i.e. lowest and highest performing banks, and between periods. Furthermore, we investigate the association between optimistic tone and financial performance in a multiple regression model. The analysis is based on 973 shareholder letters of 250 U.S. publicly traded banks at NASDAQ and

NYSE, as of 2017, during the fiscal years 2005-2008. By controlling for variables as *Return on Assets, Price to Book, Total Revenue, Number of Employees, Equity to Assets, Loss, Text Length, Age* and *Period*, we conclude that optimistic tone is not associated with future financial performance. Accordingly, our results have implications for the usefulness of the shareholder letter as a predictive tool.

A limitation of our study concerns the survival bias of the sample. As annual reports for banks that went bankrupt during the financial crisis are not available at the database for company data, SNL, our sample is limited to banks that are publicly listed at NYSE and NASDAQ as of 2017. However, by dividing the sample into financial performance quartiles it is still possible to detect differences in rhetorical tone between the two extremes. Furthermore, attention should be paid to that firms might not solely engage in rhetorical manipulation strategies but also in accounting manipulation, through earnings management. Although we do not control for earnings management, as our focus lies upon the sincerity of corporate narratives, we are aware that it may have influenced the results obtained. However since we do not find evidence of communicative action, we argue that the possible impact of the validity of our results is limited.

By concluding that optimistic tone in shareholder letters is incongruent with future financial performance, we contribute to the literature of impression management. Moreover by capturing an additional empirical setting, we contribute to an extended methodology framework of examining sincerity of

shareholder letters initially suggested by Yuthas et al. (2002) and Patelli and Pedrini (2014). This extended framework enables comparisons and tests of optimistic tone and its dependence on different macroeconomic contexts. Furthermore as our study focuses on shareholder letters, our research contributes to the accounting and finance literature of voluntary narrative disclosures. Finally, our results should be of interest to academics and other users of shareholder letters, which should question the sincerity of information communicated in the letters.

The paper is structured as follows. In the next section, we present prior literature of the research area and our hypotheses. Thereafter, we present our research methodology, as well as the results of our bivariate analyses and multiple regression model. In the final sections we discuss our results, limitations and implications for further research.

Prior Literature

The shareholder letter is a communication tool that plays an important role in the accountability process (Patelli & Pedrini, 2014). Although, being widely read by investors (Hyland, 1998; Patelli & Pedrini, 2014), researchers have debated its usefulness in investment decisions (McConnell et al., 1986; Abrahamson & Amir, 1996; Yuthas et al., 2002; Jonäll & Rimmel, 2010; Patelli & Pedrini, 2014). Two views, regarding the sincerity and predictive value of shareholder letters have been identified in prior research, namely impression management and the theory of communicative action. Depending on different empirical settings, prior re-

search has found evidence for both views.

Impression management

Impression management has been the historically adopted lens of corporate narratives (Courtis, 1998; Patelli & Pedrini, 2014) and was initially defined as: *"the conscious or unconscious attempt to control images that are projected in real or imaginary social interactions"* (Schlenker, 1980, p. 51). Engaging in impression management and presenting biased information may violate the fundamental accounting principle that accounts should be fairly presented and may therefore have severe economic consequences for stakeholders (Clatworthy & Jones, 2006) and result in capital misallocations (Merkl-Davies & Brennan, 2007).

Impression management theory is consistent with the obfuscation hypothesis, which assumes that managers obfuscate failures and highlight successes (Staw, Mackechnie & Puffer, 1983; Salancik & Meindl 1984; Courtis, 1998; Clatworthy & Jones, 2003; Patelli & Pedrini, 2014). Prior research provides evidence of the presence of impression management in annual reports (Courtis, 1998; Sydserff & Weetman, 2002; Clatworthy & Jones, 2006; Merkl-Davies & Brennan, 2007). In corporate narratives, managing rhetorical tone and text readability through usage of complex lexicon, thematic content, visual and structural effects, and choice of performance metrics are examples of obfuscation strategies used to obscure poor performance (Merkl-Davies & Brennan, 2007; Patelli & Pedrini, 2014). Moreover, Yuthas et al. (2002) argue that the strategic action of manipulating rhetorical tone can be employed in corporate narratives through usage of jargon, complex logic, distorted and insincere information, and unnecessarily difficult language. For instance, Li (2008) suggests that annual reports of firms reporting low earnings are more difficult to read whereas annual reports of firms with persistent earnings are easier to read. As the narrative parts of annual reports have become longer and refined in the past years, the opportunities of engaging in impression management has increased (Merkl-Davies & Brennan, 2007).

In line with the obfuscation hypothesis, top managers are more likely to express their desired position than the actual underlying financial performance in corporate narratives. Particularly, low-performing firms tend to ignore past performance and focus on prospective opportunities to a greater extent than high-performing firms. By engaging in such strategic communication, top managers distract the reader from negative information and opportunistically influence the perceptions of the firm. Although, incentives to present the firm in a favorable light exist for all firms, it can be more tempting for unprofitable firms to obfuscate failure and highlight success (Clatworthy & Jones, 2006; Merkl-Davies & Brennan, 2007). Accordingly, low-performing firms are more likely to engage in impression management in corporate narratives than high-performing firms (Clatworthy & Jones, 2006). Furthermore, as acknowledged by Jonäll and Rimmel (2010), managers use shareholder letters as legitimacy builders with the intention of influencing the reader's perception of the firm's excellence and future surviv-

al. In accordance with the obfuscation hypothesis, managers reinforce the firm's success by only commenting on the positive numbers and omitting negative information in the letters. This reinforcement is supposed to strengthen firm legitimacy and trust among shareholders to ensure future survival (Clatworthy & Jones, 2003; Jonäll & Rimmel, 2010).

Armenic et al. (2010) acknowledged the presence of impression management in shareholder letters of a mortgage finance company that filed for bankruptcy in 2007. The letters consisted of a rhetorical appeal and insincere tone prior to the financial crisis. Particularly the managers reported about changes in operations when little that was new appeared to be done. This study suggests that strategic manipulation of shareholder letters existed among financial companies prior to the crisis. An economy that had thrived for many years coupled with low external pressure characterized the macroeconomic context at this time. These conditions created incentives to engage in impression management to a greater extent than in the outbreak of the crisis when negative results were expected (Patelli & Pedrini, 2014).

Communicative Action
Yuthas et al. (2002) challenged the traditional view of corporate narratives in research, which claims shareholder letters as tools of impression management. As a result, Yuthas et al. (2002) were among the first to operationalize Habermas' norms of communicative action in corporate narratives (Habermas, 1984), specifically in shareholder letters and Management Discussion and Analy-

sis (MD&A) sections in annual reports. In contrast to impression management, communicative action relies on the assumption that actors in society seek to reach a mutual understanding. When we communicate, according to this view, we rely upon accepted norms shaped by the society. These norms, or validity claims, have been labeled into terms as; *Sincerity, Comprehensibility, Truth,* and *Legitimacy*. According to Habermas' theory, as the validity claims are often violated in corporate discourse, they can serve as ideals in the judgment of a particular discourse (Yuthas et al., 2002). In our study, focus lies upon the *Sincerity* principle, which refers to the honesty in the narrator's motives. Yuthas et al. (2002) argue that optimistic tone is sincere when it is supported by financial performance. Furthermore, Jonäll and Rimmel (2010) argue that shareholder letters can shape and enhance firm legitimacy and personal credibility by the use of a trustworthy language. Having said that, shareholder letters that consist of insincere information, might threaten firm legitimacy (Patelli & Pedrini, 2014).

Moreover, Fisher and Hu (1988) argue that even though the direction of a firm is not always explicitly expressed in the shareholder letter, the underlying message can be revealed by the overall tone. Similarly, Abrahamson and Amir (1996) discover that information expressed in the shareholder letter is consistent with the reported financial numbers. Thus, the shareholder letter may serve as an indicator of future financial performance (Fisher & Hu, 1988; Abrahamson & Amir, 1996). As noted by Yuthas et al. (2002), corporate narratives in annual reports are used to

communicate trustworthy information, as communicative action is used both by firms that are expecting good or bad earnings surprises. Hence, firms might not engage in impression management due to legitimacy reasons (Yuthas et al., 2002). Feldman et al. (2010) argue that sincere information is communicated in MD&A sections, as they found that pessimistic tone was associated with poor anticipated performance. Furthermore, Patelli and Pedrini (2014) conclude that shareholder letters of firms with better past and future financial performance generally tend to be more optimistic and that sincere information is communicated when macroeconomic conditions are tough. Remarkably, Patelli and Pedrini (2014) contradicted prior studies that had identified evidence of impression management in corporate narratives (Merkl-Davies & Brennan, 2007).

Hypothesis Development
As outlined above, macroeconomic and firm specific conditions, management and firm reputation, past financial performance and legitimacy have been recognized as the fundamental factors that affect the congruence between rhetorical tone and future financial performance. We examine the association between optimistic tone and firm performance of U.S. publicly listed banks in a large sample of shareholder letters. As our study aims to capture the sincerity of optimistic tone prior to and in the outbreak of the financial crisis, we test two hypotheses as we expect different patterns in these periods.

Clatworthy and Jones (2006) debate that corporate scandals, such as the Enron collapse in 2001, were partly caused by insincere communication concealing the true economic conditions. Similarly, Armenic et al. (2010) argue that distressed banks had incentives of engaging in impression management prior to the financial crisis. Moreover, D'Aveni and MacMillan (1990) find minimal differences in content of shareholder letters between bankrupts and matching survivors prior to an industrial crisis, which indicates lack of predictive value in letters and the presence of impression management. Furthermore, Sydserff and Weetman (2002) argue that minimal differences of optimistic tone in shareholder letters appear because low-performing firms try to imitate the content of high-performing firms. According to Yuthas et al. (2002) and Patelli and Pedrini (2014), sincerity in shareholder letters is present when optimistic tone is positively associated with future financial performance. Thus, no association or a negative association would implicate absence of sincerity and presence of impression management. We expect that optimistic tone lacks predictive value of financial performance prior to the crisis. This could either take the form of minimal differences in optimistic tone between low and high-performing banks (D'Aveni & MacMillan, 1990; Sydserff & Weetman, 2002), no association between optimistic tone and financial performance, or a negative association between optimistic tone and future financial performance (Yuthas et al., 2002; Patelli & Pedrini, 2014). Thus, our first hypothesis regarding the period prior to the financial crisis (2005-2006) is:

H1: Optimism in shareholder letters is negatively associated with future financial performance prior to the financial crisis.

In the outbreak of the financial crisis, new relationships between the banking industry and regulators emerged, which along with increased enforcement and external pressure led to a greater demand for transparent and sincere communication (Amernic et al., 2010; Patelli & Pedrini, 2014; Patelli & Pedrini, 2015). As acknowledged by Patelli and Pedrini (2014) and DiMaggio and Powell (1991), the incentives for engaging in impression management are reduced under tough macroeconomic conditions due to expected negative results and increased social costs if the manipulation is revealed. Moreover, since top management's reputation and legitimacy can be damaged by a persistent incongruence between tone and future financial performance (Patelli & Pedrini, 2014), we believe that banks engaging in such strategies prior to the crisis ceased to do so in the shareholder letters of 2007 (published in 2008). Thus in accordance with Patelli and Pedrini (2014) and DiMaggio and Powell (1991), we expect the optimistic tone in U.S. banks' shareholder letters to be sincere, and hence positively associated with future financial performance, when the crisis was acknowledged. Consequently, optimistic tone would have predictive value of financial performance and function as a discriminator between lowest and highest performing banks. Explicitly, our second hypothesis regarding the period when the crisis was acknowledged (2007-2008), is:

H2: Optimism in shareholder letters is positively associated with future financial performance in the outbreak of the financial crisis.

Methodology
Sample
Our sample is composed of shareholder letters, for the time period 2005-2008, of publicly listed U.S. banks at NASDAQ and NYSE. These letters were manually retrieved from annual reports available at SNL. Choosing publicly listed banks, which to a great extent publish shareholder letters even if it is not mandatory, facilitated data collection and enabled a large sample.

The shareholder letter is unaudited and less restricted by the SEC than for example MD&A sections (Abrahamsson & Amir, 1996), which opens up for management to complement the information in the 10-K filing (Merkl-Davies & Brennan, 2007). Coupled with this, this non-regulated format is shaped by management's language, which allows us to capture differences in tone across firms and time. Although the enforcement of banks' corporate narratives increased in the aftermath of the crisis, it is still of interest to include shareholder letters issued prior to the crisis (2005-2006) in order to examine sincerity of optimistic tone in different macroeconomic contexts. This comparison allows us to examine whether optimistic tone in shareholder letters has predictive value under neutral circumstances and under exogenous shock when real risks and weaknesses generally are exposed. As Patelli and Pedrini (2014) only recognize the latter state, we focus on the banking industry and capture both empirical settings.

Our initial list of U.S. publicly listed banks at NASDAQ and NYSE comprised of 377 banks, as of 2017. The issuing date of the bank list is not considered as a problem since annual

reports of bankrupt banks are not available at SNL. Data collection issues and research design choices resulted in that our final sample was reduced to 250 banks. For example, we only included shareholder letters that were retrievable from SNL. Furthermore, only letters signed by CEOs and Presidents, or one of the former together with members of the board, were included. Chairman's letters were excluded since our study aims to capture tone used by top management. Moreover, missing financial data in SNL led to further reduction of the sample. Thus, in total, 127 banks were excluded from the initial list.

Textual Analysis Program

In this study we use DICTION text analysis software to gauge rhetorical tone in shareholder letters. This software, which measures different words based on linguistic theory, enables thematic text analysis of content and meaning of words in corporate discourse (Patelli & Pedrini, 2015). The software is acknowledged in recent studies on tone in corporate narratives (Ober, Zhao, Davis & Alexander, 1999; Yuthas et al., 2002; Davis et al., 2012; Patelli & Pedrini, 2014; Patelli & Pedrini, 2015), due to its high degree of objectivity and measurement validity (Patelli & Pedrini, 2014). Furthermore, it is argued that the use of dictionaries in research can prevent subjective coding (Davis et al., 2012) and contribute to bridging the gap between business and linguistic literature (Patelli & Pedrini, 2015). The program relies on a series of U.S. dictionaries and overcomes the limitation of syntactic analysis that fails to control for similarity of terms. Coupled with the benefits listed above, DICTION is

deemed as an appropriate tool for our study since it is based on U.S. dictionaries and our sample comprises of shareholder letters of U.S. banks.

DICTION captures five semantic master variables, namely *Optimism, Activity, Certainty, Realism*, and *Commonality* (DICTION Software, 2017). These are built upon a variable structure issued by Hart (2000) and on prior seminal semantic studies. Yuthas et al. (2002) did interpret DICTION's five master variables to the four principles of Habermas' communicative action, namely *Comprehensibility, Truthfulness, Sincerity*, and *Legitimacy.* Yuthas et al. (2002) argue that *Sincerity* is achieved when optimistic tone is positively associated with financial performance. Thus the DICTION master variable *Optimism* may be the best in assessing whether the discourse is communicative or strategic. Accordingly, we focus on *Optimism* and the other four master variables are only included as control variables.

Data Analysis

Our methodology of analyzing optimistic tone consists of three parts. First, descriptive statistics of *Optimism* prior to and in the outbreak of the financial crisis is provided. Here the sample is divided into two groups, based on shareholder letters reported in 2005-2006 and 2007-2008. This method represents a viable way to compare optimistic tone before and when the financial crisis was acknowledged, as we argue that tensions of the crisis should be viable in shareholder letters of 2007 that were issued in 2008. Furthermore, as high standard deviations and lower medians of *Optimism* than the sample average of the two peri-

ods were observed in this test, we excluded extreme values of *Optimism* in the 5th and 95th percentile in our subsequent bivariate analysis and multiple regression model.

Second, by replicating Yuthas et al. (2002) and Patelli and Pedrini's (2014) bivariate analyses we explore differences in optimistic tone across performance quartiles. In order to measure financial performance of the banks, we retrieved financial data from SNL for the time period 2004-2009. Thereafter, we divided the sample into two performance quartiles (LOWEST and HIGHEST) based on past and future revenue growth in order to distinguish between lowest and highest performance. Revenue growth was chosen due to its importance to investors and analysts. Similarly to Patelli and Pedrini (2014), we calculated the 1-year percentage change in revenue in order to

group the sample and detect differences in tone of shareholder letters between the groups.

Third, future financial performance (as measured by Future Return on Assets, *FROA*) is regressed on *Optimism* in a multivariate analysis. Table 1 displays a summary of all variables included in the OLS regression model.

Through the use of *FROA*, we are able to measure overall future operating profitability and examine its association with *Optimism*. Alali and Romero (2013) suggest that *ROA* is positively associated with survival of banks. Thus, we use *ROA* and *FROA* as financial measures for banks' past and future performance. Similarly to Patelli and Pedrini (2014), *FROA* of the current year is *ROA* in the subsequent year. Accordingly, *ROA* was retrieved for 2005-2009.

Table 1 Summary of variables

Variable	Abbrevation	Type	Description	Proxy for
Future Return on Assets	FROA	Dependent variable	Future Return on Assets in the subsequent year	Overall future operating profitability
Optimism	OPT	Independent variable	*"Language endorsing some person, group, concept or event, or highlighting their positive entailments"**	Optimistic tone
Activity	ACT	Control variable	*"Language featuring movement, change, the implementation of ideas and the avoidance of inertia"**	Rhetorical feature other than Optimism
Certainty	CER	Control variable	*"Language indicating resoluteness, inflexibility, and completeness and a tendency to speak ex cathedra"**	Rhetorical feature other than Optimism
Realism	REA	Control variable	*"Language describing tangible, immediate, recognizable matters that affect people's everyday lives"**	Rhetorical feature other than Optimism
Commonality	COM	Control variable	*"Language highlighting the agreed-upon values of a group and rejecting idiosyncratic modes of engagement"**	Rhetorical feature other than Optimism
Text length	TL	Control variable	Total Characters Analyzed	Readability
Age	AGE	Control variable	Age of bank	Survival likelihood
Return on Assets	ROA	Control variable	Return on Assets of the current year	Overall operating profitability, Survival likelihood
Total Revenue	REV	Control variable	Reported total revenue	Firm size, Survival likelihood
Loss	LOSS	Control variable (Dummy)	Reported negative net profit (0=Profit, 1=Loss)	Separator between profit and loss-making banks
Number of Employees	EMP	Control variable	Average number of full-time employees	Firm size, Survival likelihood
Price to Book	PB	Control variable	Price to Book ratio	Opportunity to grow
Equity to Assets	EA	Control variable	Total Equity to Total Assets	Survival likelihood
Period	PER	Control variable (Dummy)	Prior to (0=2005-2006), In the outbreak of the crisis (1=2007-2008)	Separator between the studied periods
Period X Optimism	PXO	Interaction variable	Period interacted with Optimism	Difference in Optimism prior to and in the outbreak of the crisis

*Definition cited from DICTION Software (2017)

Optimism denotes language that positively highlights an event, a word or a person. The optimistic increasing words are related to *Praise, Satisfaction* and *Inspiration,* whereas the pessimistic words are related to *Blame, Hardship* and *Denial* expressed in shareholder letters (Feldman et al., 2010; Yuthas et al., 2002; Davis et al., 2012; Patelli & Pedrini, 2014).

In order to enhance the robustness of our model, we control for the other four rhetorical DICTION master variables, as Patelli and Pedrini (2014) find significant associations between *Commonality* and firm performance, *Certainty, Realism*, and *Commonality* and financial reporting aggressiveness (Patelli & Pedrini, 2015). *Activity* refers to the self-consciousness of delivering a positive performance and change. *Certainty* is associated with an authoritative language, which emphasizes precision and avoids doubtfulness, whereas *Realism* captures the tangibility for the reader of the matters expressed. Finally, *Commonality* captures the language that is used to engage and build up a sense of affinity and commitment of reaching common goals with shareholders (Patelli & Pedrini, 2014).

Furthermore as DICTION captures readability indicators, such as *Text Length*, which in its relationship to firm performance has been widely examined in prior literature (Subramanian, Insley & Blackwell, 1993; Li, 2008), it is included as a control variable.

Moreover, we control for *Age, ROA, Total Revenue, Loss, Number of Employees, Price to Book, Equity to Assets,* and *Period.* As Alali and Romero (2013) found that older banks are more likely to become bankrupt, we control for *Age.*

ROA, which is an efficiency measure of how firms use assets to generate revenue, is used to control for the association between past and future financial performance. Since firm size is positively associated with future financial performance for banks (Alali & Romero, 2013), we include *Total Revenue* and *Number of Employees* as proxies for size. The dummy variable *Loss* is included to discriminate between profit and loss making banks. Furthermore, the *Price to Book* ratio is included to control for the opportunity to grow, as it tends to be positively associated with future financial performance (Alali & Romero, 2013; Patelli & Pedrini, 2014). The *Equity to Assets* ratio controls for survival likelihood, as Alali and Romero (2013) found that as *Equity to Assets* increases, the likelihood of bank failure becomes smaller.

Finally, we include a dummy variable for *Period*, measured as prior to (0 = 2005-2006) and in the outbreak of the financial crisis (1 = 2007-2008), as we expect the directions of the associations between *Optimism* and *FROA* to differ between the two periods. Furthermore, we interacted *Period* with *Optimism* (*Period X Optimism*), which allows us to examine whether a significant difference in *Optimism* can be found between the two periods.

Results

Bivariate Analysis

First, to test whether there is a difference in *Optimism* prior to and in the outbreak of the crisis, a bivariate analysis of all shareholder letters of the initial sample was conducted. Table 2 displays descriptive statistics of *Optimism* and a comparison between the two periods

Table 2 Descriptive statistics of Optimism prior to and in the outbreak of the financial crisis

Variables	Prior	SD Prior	Outbreak	SD Outbreak	Median (all years)	Comparison Prior/Outbreak	T stat.
Optimism	53,81	2,16	54,21	2,90	53,70	0,74%	-2,45*
Praise	6,85	3,48	6,88	4,68	6,23	0,47%	-0,12
Satisfaction	4,59	3,00	5,25	4,23	4,19	12,48%	-2,78**
Inspiration	8,20	4,37	9,46	7,83	7,86	13,32%	-3,1**
Blame	0,62	0,86	0,69	1,24	0,38	9,49%	-0,95
Hardship	2,36	1,94	2,41	2,27	2,00	2,20%	-0,39
Denial	1,52	1,71	1,76	1,88	1,14	13,56%	-2,07*
N	484		489				

* p < 0,05; ** p < 0,01

Table 3 Comparison of Optimism between lowest and highest performance, and sample average

	Prior to the crisis													
Variables	Lowest	Highest	Lowest/ highest	Sample Average	Lowest/Sample Average	Highest/Sample Average	T stat.	Lowest	Highest	Lowest/ highest	Sample Average	Lowest/Sample Average	Highest/Sample Average	T stat.
	Past revenue growth							Future revenue growth						
Optimism	53,83	53,63	0,37%	53,81	0,03%	-0,33%	0,87	53,93	53,32	1,13%	53,81	0,22%	-0,90%	2,85**
Praise	6,70	6,91	-3,02%	6,85	-2,20%	0,85%	-0,44	6,60	6,58	0,30%	6,85	-3,59%	-3,89%	0,05
Satisfaction	4,48	4,06	10,38%	4,59	-2,37%	-11,55%	1,29	4,64	4,05	14,77%	4,59	1,16%	-11,86%	1,72
Inspiration	8,34	8,06	3,48%	8,20	1,76%	-1,66%	0,54	8,75	7,30	19,90%	8,20	6,74%	-10,97%	2,98**
Blame	0,59	0,57	2,24%	0,62	-5,44%	-7,51%	0,10	0,64	0,60	7,17%	0,62	3,84%	-3,11%	0,33
Hardship	2,13	2,22	-4,37%	2,36	-9,76%	-5,64%	-0,41	2,12	2,38	-10,96%	2,36	-10,08%	0,99%	-1,05
Denial	1,51	1,64	-8,19%	1,52	-0,84%	8,01%	-0,55	1,46	1,64	-11,07%	1,52	-4,34%	7,57%	-0,85
N	111	104						110	107					
	In the outbreak of the crisis													
	Past revenue growth							Future revenue growth						
Optimism	54,14	53,91	0,43%	54,21	-0,13%	-0,56%	0,97	54,14	53,92	0,40%	54,21	-0,13%	-0,53%	0,91
Praise	6,75	6,58	2,59%	6,88	-1,93%	-4,41%	0,40	6,75	6,62	1,99%	6,88	-1,93%	-3,84%	0,31
Satisfaction	4,71	5,03	-6,39%	5,25	-10,25%	-4,12%	-0,70	4,71	4,99	-5,62%	5,25	-10,25%	-4,91%	-0,61
Inspiration	9,38	8,60	9,04%	9,46	-0,79%	-9,01%	1,29	9,38	8,64	8,59%	9,46	-0,79%	-8,63%	1,23
Blame	0,50	0,63	-20,01%	0,69	-27,05%	-8,81%	-1,26	0,50	0,61	-18,46%	0,69	-27,05%	-10,54%	-1,14
Hardship	2,26	2,38	-5,38%	2,41	-6,35%	-1,03%	-0,48	2,26	2,37	-5,00%	2,41	-6,35%	-1,43%	-0,45
Denial	1,56	1,74	-10,18%	1,76	-11,30%	-1,25%	-0,84	1,56	1,73	-9,59%	1,76	-11,30%	-1,89%	-0,78
N	108	112						108	112					

* p < 0,05; ** p < 0,01

with t statistics. As annual reports are published one quarter after year-end for publicly listed firms, we argue that a decrease in optimistic tone should be viable already in 2007's shareholder letters due to the already present turmoil in the financial market.

Results in Table 2, report a significant difference in *Optimism, Satisfaction, Inspiration* and *Denial* between the two periods. In contrast to our expectations, *Optimism* is significantly higher in the latter period. Given that this bivariate analysis does not take financial performance into consideration, conclusions regarding impression management in the outbreak of the crisis cannot be drawn. However, these results offer significant evidence for a more encouraging language with terms expressing positive states (as measured by *Satisfaction*) and nouns conveying desirable moral qualities (as measured by *Inspiration*) in the latter period (Patelli & Pedrini, 2014). Although, the *Optimism* score is significantly higher in total in the latter period, the results do also offer significant evidence for a greater use of negative words and contradictions (as measured by *Denial*) (Yuthas et al., 2002). However, as the test shows high standard deviations of *Optimism* and lower medians than sample averages of both periods, it indicates that our initial sample contains extreme values, which could impact the significant difference in *Optimism.* Thus outliers in the 5th and 95th percentile were excluded in the subsequent tests.

Second, by replicating the bivariate analysis of (Yuthas et al., 2002; Patelli & Pedrini, 2014), we examine the difference in *Optimism* between two performance quartiles (LOWEST and HIGHEST) based on past and future revenue growth. This allows us to discriminate the average of DICTION scores between the LOWEST and HIGHEST quartiles for the years of 2005-2008. Table 3 displays the average scores of *Optimism* among the performance quartiles, which enables a comparison of scores between lowest and highest performance and to the sample average of all quartiles. Furthermore, Table 2 also displays the significance of differences in the means, measured through t-tests.

The results in Table 3 show a significant difference in *Optimism* in shareholder letters between lowest and highest performance of future revenue growth prior to the crisis. *Optimism* is significantly higher for the LOWEST quartile of future revenue growth than the HIGHEST quartile. Particularly, these banks used a more positive language (as measured by *Optimism*) and more nouns conveying desirable moral qualities (as measured by *Inspiration*). Meanwhile when considering past revenue growth, the difference in *Optimism* and *Inspiration* is not significant. Thus, this result supports the incongruence between *Optimism* and performance, which indicates that optimistic tone lacks predictive value in terms of future financial performance. In other words, these results are in line with the obfuscation hypothesis of impression management.

Moreover, the insignificant difference in *Optimism* in the outbreak of the crisis, displayed in Table 3, indicates minimal differences in shareholder letters between LOWEST and HIGHEST. With this in mind, optimistic tone cannot be used to discriminate between lowest

and highest future financial performance in this period. These results suggest that banks reporting in the LOWEST quartile imitate the optimistic tone expressed by banks reporting in the HIGHEST quartile, which give support for impression management. Thus, no evidence of the sincerity principle of communicative action in the outbreak of the crisis is found in this test.

Regression Results

An OLS regression model, where *FROA* is a function of past performance and *Optimism,* was used to test the congruence between future financial performance and optimistic tone in shareholder letters. To enhance robustness of the model, we controlled for the four other DICTION master variables, a readability indicator, and other proxies for performance. As our multiple regression model tests all years included in the study (2005-2008) we created a dummy variable for *Period* to discriminate between the periods prior to (2005-2006 = 0) and in the outbreak (2007-2008 = 1) of the financial crisis. The function used to test our hypotheses is:

$$FROA = \alpha + \beta_1 OPT + \beta_2 ACT + \beta_3 CER + \beta_4 REA + \beta_5 COM + \beta_6 TL + \beta_7 AGE + \beta_8 ROA + \beta_9 REV + \beta_{10} LOSS + \beta_{11} EMP + \beta_{12} PB + \beta_{13} EA + \beta_{14} PER + \beta_{15} PXO$$
Note: Abbreviations can be found in Table 1.

Table 4 displays descriptive statistics and correlation coefficients between all variables included in the model, whereas Table 5 displays the results of our OLS regression model. As reported in Table 5, the regression coefficient *Optimism* is statistically insignificant (p > 0,05) when controlling for other variables. This suggests that *Optimism* is not a significant predictor of *FROA*.

Furthermore, the regression coefficient of the interaction variable *Period X Optimism* is also statistically insignificant (p > 0,05), which suggests that there is no significant difference in *Optimism* between the periods prior to and in the outbreak of the crisis. This result partly supports our first expectation. First we reject **H1** since no significant negative association between *Optimism* and *FROA* prior to the crisis is found. However, the sincerity of shareholder letters can still be questioned as no positive association is found. Consequently, this result is consistent with the null hypothesis and do offer support for *Optimism's* inability to predict future financial performance in the period prior to the crisis.

Second, in accordance with the sincerity principle of discourse ethics, we expected that banks would communicate sincere information when the crisis was acknowledged. In contrast to our expectation we do not find support for **H2**; that *Optimism* in shareholder letters is positively associated with future financial performance in the outbreak of the crisis. Accordingly, **H2** is rejected by the statistical insignificance of the regression coefficients of *Optimism* and *Period X Optimism*. Thus, *Optimism* in shareholder letters is insincere and lacks predictive value in the outbreak of the crisis as well. Concluding, the incongruence between *Optimism* and *FROA* both prior to and in the outbreak of the financial crisis offers support for impression management.

The statistical significance of the regression coefficients of *Commonality* and *Certainty* support their predictive value in terms of future financial performance (p < 0,05). *Commonality* alone

Table 4 Descriptive statistics and correlations

Variables	M	SD	02.	03.	04.	05.	06.	07.	08.	09.	10.	11.	12.	13.	14.	15.	16.
01. FROA	0,61	1,11	0,01	0,05	0,00	-0,03	0,11**	0,03	0,06	0,53**	0,01	-0,39**	0,00	0,48**	-0,06	-0,4**	-0,4**
02. Optimism	53,82	1,72		-0,2**	0,00	-0,07*	0,01	0,04	-0,04	-0,01	0,01	-0,01	0,00	-0,01	0,01	0,06	0,08*
03. Activity	48,16	3,68			0,06	0,07*	-0,01	0,07*	0,07*	0,04	0,02	-0,07*	0,03	0,05	-0,06*	0,03	0,02
04. Certainty	46,43	3,33				0,32**	-0,03	0,13**	0,04	-0,15**	-0,03	0,12**	-0,01	-0,06	-0,08*	0,05	0,05
05. Realism	47,67	2,41					-0,12**	-0,01	0,00	-0,07*	0,08*	0,05	0,09**	-0,06	0,02	0,03	0,03
06. Commonality	51,23	2,26						0,03	-0,01	0,02	-0,02	0,04	-0,03	0,06*	0,00	-0,08*	-0,08*
07. Text Length	7668,44	6322,44							0,00	0,05	-0,03	-0,01	-0,02	0,06*	0,00	0,06*	0,06*
08. Age	32,72	18,53								0,07*	0,35**	0,01	0,39**	0,05	-0,09**	-0,02	-0,03
09. ROA	0,93	0,73									-0,01	-0,72**	-0,04	0,56**	0,07**	-0,35**	-0,35**
10. Total Revenue	1654290,91	8666190,45										0,02	0,95**	-0,03	-0,07*	0,00	0,00
11. Loss	0,05	0,22											0,04	-0,29**	0,05	0,20**	0,20**
12. Number of Employees	6717,55	33578,99												-0,03	-0,08*	0,01	0,01
13. Price to Book	169,62	67,64													-0,21**	-0,52**	-0,52**
14. Equity to Assets	9,38	2,08														0,05	0,05
15. Period	0,52	0,50															0,99**
16. Period X Optimism	27,95	26,99															

N.obs.: 677 ; * p < 0,05; ** p < 0,01

Table 5 OLS Regression on FROA

Variables		β	SE	T
Intercept		-3,523	2,055	-1,71
02. Optimism		-0,005	0,030	-0,18
03. Activity		0,006	0,010	0,57
04. Certainty		0,027	0,011	2,35*
05. Realism		-0,001	0,015	-0,09
06. Commonality		0,046	0,015	3,00**
07. Text length		0,000	0,000	0,07
	Predicted sign			
08. Age	-	0,001	0,002	0,46
09. ROA	+	0,490	0,087	5,64**
10. Total Revenue	+	0,000	0,000	-0,13
11. Loss	-	-0,433	0,242	-1,79
12. Number of Employees	+	0,000	0,000	0,27
13. Price to Book	+	0,003	0,001	3,78**
14. Equity to Assets	+	-0,012	0,018	-0,68
15. Period	-	-2,625	2,183	-1,20
16. Period X Optimism	+	0,041	0,041	1,02
R Square		0,375		

N. obs.: 677 ; * p < 0,05; ** p < 0,01

Note: For variables 02-07, we expect different directions of associations prior to and in the outbreak of the crisis.

is positively correlated with *FROA*, which is displayed in Table 4. Moreover, the significant positive regression coefficient of *Commonality* indicates that shareholder letters that comprise of a more engaging language, with the aim of building up a sense of affinity with shareholders, have higher future financial performance. By controlling for other variables, *Certainty* is a statistically significant predictor of future financial performance. This result indicates that banks, which use more authoritative and precise language and avoid doubtfulness, perform better financially. However, as neither Patelli and Pedrini (2014) nor Yuthas et al. (2002) interpret *Commonality* and *Certainty* as contributors to the sincerity principle of discourse ethics, their significance rather emphasizes the importance of considering other rhetorical features that possibly can explain the association with financial performance.

The other DICTION master variables (*Activity* and *Realism*) are statistically insignificant as predictors of future financial performance (p > 0,05). Nor is *Text Length* (as measured by the *Total Number of Characters*) a statistically significant predictor of *FROA* when controlling for other variables, which do not support findings of prior research (e.g. Subramanian et al., 1993; Li, 2008).

Conclusions

In this study, we investigated the sincerity of optimistic tone in shareholder letters of publicly listed U.S. banks prior to and in the outbreak of the financial crisis in 2008. Historically, the shareholder letter has been accused for being a strategic communication tool and for

its incongruence with financial performance (Merkl-Davies & Brennan, 2007). Recent attempts have been made to challenge this view (e.g. Yuthas et al., 2002; Patelli & Pedrini, 2014), which have proposed that the letters instead contain sincere information and are used to favor mutual understanding with stakeholders. As Yuthas et al. (2002) argue that optimistic tone is the most appropriate rhetorical feature in assessing sincerity; we examined *Optimism*'s association with future financial performance by contrasting impression management theory and communicative action theory.

We investigated the sincerity of shareholder letters in a large sample of U.S. banks, prior to and in the outbreak of the financial crisis, through thematic content analysis of optimistic tone in the software program DICTION. By replicating the methodology of Patelli and Pedrini (2014) we conducted bivariate analyses to explore differences in *Optimism* in different macroeconomic contexts and between lowest and highest performing banks. Furthermore we tested the association of *Optimism* and future financial performance in an OLS regression model, by controlling for other rhetorical features and proxies for performance.

As previous research has found evidence for both impression management and communicative action under different macroeconomic circumstances, we expected different patterns in optimistic tone prior to and in the outbreak of the crisis. First, as banks were exposed to less external pressure prior to the crisis than in the outbreak of the crisis, we hypothesized a negative association between *Optimism* and future financial

performance in the first period. This expectation is in line with the obfuscation hypothesis of impression management, which has been widely acknowledged in prior literature (Staw et al., 1983; Salancik & Meindl 1984; Courtis, 1998; Clatworthy & Jones, 2006). Second, as the social costs of engaging in impression management increase under tough macroeconomic conditions when real risks are exposed and negative results are expected (DiMaggio & Powell, 1991; Patelli & Pedrini, 2014), we instead hypothesized shareholder letters to be positively associated with future financial performance in the outbreak of the crisis. Accordingly in line with communicative action (D'Aveni & Macmillan, 1990; Patelli & Pedrini, 2014), the shareholder letter was expected to be a sincere communication tool with predictive value in this macroeconomic context.

The results of our first bivariate analysis showed a higher score of *Optimism* in shareholder letters in the outbreak than prior to the crisis. In contrast to our expectation, banks were more optimistic in the outbreak of the crisis, which logically would suggest impression management due to the worsened economic climate. However, as no connection to financial performance was made, coupled with the fact that optimistic tone deviated notably from the average sample scores of *Optimism,* this test rather served as a test of the validity of the measure since we decided to exclude outliers for subsequent tests.

Additionally, as shown by our second bivariate analysis, *Optimism* only differed significantly between lowest and highest performing banks prior to

the crisis considering future revenue growth. Particularly banks reporting in the lowest performance quartile used a more optimistic language than banks in the highest quartile. In line with Clatworthy and Jones (2006), which found that low-performing firms are more likely to engage in rhetorical manipulation, this reverse relationship suggests the presence of impression management. However, the difference in *Optimism* became insignificant when we controlled for past revenue growth. This also supports Clatworthy and Jones (2006), which argued that low-performing firms tend to ignore past performance and focus on prospective opportunities. Although our results do not confirm D'Aveni and MacMillan's (1990) finding, that the content of shareholder letters is similar between survivors and bankrupts prior to crisis, it still confirms the incongruence between *Optimism* and financial performance in such macroeconomic context. Moreover in our study, no significant difference in *Optimism* between low and high-performing banks was found in the outbreak of the financial crisis, for neither future nor past performance. Unlike other research carried out in this field (e.g. D'Aveni & MacMillan, 1990; Patelli & Pedrini, 2014), our result does not support communicative action when macroeconomic conditions are tough. Instead, in line with D'Aveni and MacMillan's (1990) and Sydserff and Weetman (2002), the minimal differences in optimistic tone of shareholder letters suggest that low-performing banks aim to resemble high-performing banks. Taken together, the results obtained from our bivariate analysis support the obfuscation hypothesis of

impression management. This suggests incongruence between *Optimism* and financial performance and that optimistic tone cannot be used to discriminate between low and high-performing banks.

Finally, our OLS regression was unsuccessful in delivering significant associations between *Optimism* and future financial performance. Thus we rejected both our hypotheses and conclude that there was no relationship between *Optimism* and future financial performance neither prior to nor in the outbreak of the financial crisis. Despite this, the multiple regression model further strengthened our previous results from the bivariate analysis that suggested insincerity of shareholder letters, as no positive association was found. The incongruence between *Optimism* and financial performance is consistent with the findings of Armenic et al. (2010), who found that shareholder letters were insincere and lacked predictive value of future financial performance prior to the crisis. In contrast to previous literature that have found evidence of sincere communication in shareholder letters issued under exogenous shock (e.g. D'Aveni & MacMillan, 1990; Patelli & Pedrini, 2014), we can conclude that the increased external pressure did not improve the predictive value of optimistic tone in our study, as no positive association was found in the OLS regression. Taken together, we do not find support for communicative action neither prior to nor in the outbreak of the crisis. In contrast to Patelli and Pedrini (2014), which argued that external contexts are one of the main factors that influence rhetorical tone and manipulation strategies, we conclude that macroeconomic

contexts do not influence the sincerity of U.S. publicly listed banks' shareholder letters. Concluding, our results indicate insincerity of shareholder letters, and thus offer support for impression management both under neutral circumstances and when macroeconomic conditions are tough.

We are aware of that our research may have some limitations. First, as annual reports at SNL were restricted to banks that survived the financial crisis, we were unable to include banks that went bankrupt to our sample. Thus, our research can be questioned for its survival bias. This limitation underlines the difficulty of collecting data of bankrupt banks. Through possible improvements in accessibility of documents published by bankrupt banks, further research can extend our study by including those to the sample. However, we overcame this limitation by identifying lowest and highest financial performance through dividing the sample into extreme performance quartiles.

Second, as accounting manipulation can impact the congruence between optimistic tone and financial performance, we are aware of the risk of earnings management and that it could have influenced the results obtained. However, we argue that the possible impact of the validity of our results is limited since we did not find evidence of communicative action.

Third, Patelli and Pedrini (2014) argued that impression management in narrative discourse is only ethically wrong when it is intentional. The issue of discriminating between intentional and unintentional impression management has been debated in prior research (e.g. D'Aveni & Macmillan, 1990; Pro-

vis, 2010; Patelli & Pedrini, 2014). For example, top management can unintentionally be too optimistic about the future without being insincere. To develop techniques to discriminate between intentional and unintentional impression management is crucial within the research field of discourse ethics. Yet in our study, we argue that unintentional impression management affects the predictive value of shareholder letters in the same way as intentional manipulation, as the reader cannot tell the difference and still bases its decisions on erroneous information.

Fourth, since our study relied on the thematic analysis program DICTION, which has been criticized for not analyzing the context of statements (Yuthas et al., 2002; Armenic et al., 2010; Patelli & Pedrini, 2014), considerable care to our findings should be taken. As argued by Armenic et al. (2010), further research could solve this issue by combining thematic analysis and close reading of shareholder letters. Worth to mention is that such research design would reduce the sample size and could decrease objectivity.

With our results, we contribute to the academic field of impression management and thus reinforce the historically adopted lens of corporate narratives. Our results showed that shareholder letters are strategic communication tools that lack connection to future financial performance. Moreover, our study contributes to an extended methodology framework of examining sincerity of shareholder letters in different macroeconomic contexts, which can be adopted and developed by further studies examining other industries. However, opposed to the argument that

macroeconomic contexts shape rhetorical features in narratives, we contribute by concluding that rhetorical manipulation was present in U.S. banks independently of macroeconomic contexts. Furthermore our study can be of value to users of shareholder letters, which should question the sincerity of information communicated in the letters. Finally, as our research raises concerns of the sincerity of shareholder letters, we also give contributions to the accounting and finance literature of voluntary narrative disclosures.

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