



THE BOLLER REVIEW

ASSETS, LIABILITIES, AND GENDER EQUITY: HOW GENDER AND ECONOMIC PERFORMANCE AFFECT CEO COMMUNICATION

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ABSTRACT:

Men and women communicate differently. However, existing research has yet to examine if the stereotypical gender communication differences are evident in all groups and settings, in particular the case of Chief Executive Officers (CEOs) when presenting financial results. The growing number of female CEOs in the business world creates the possibility of gender-related variation in the communication of financial results, and thus different interpretations of that information by users of financial reports.

This study synthesizes existing research on gender, CEO, oral, and financial communication to fill the gap in research and answer the question: do CEO gender and company economic performance affect how CEOs communicate financial results? Through text analysis of year-end earnings release press conferences and regression analysis of factors that influence measures of the attributes of communication, this study reveals male and female CEO communication patterns do not necessarily align with existing stereotypes. Results show clear differences as expected, unexpected differences, and several non-differences, illustrating that, as a whole, male and female CEO communication are surprisingly similar.

The similarities may be due to the individual personalities of CEOs, a function of a long-standing male dominated executive environment, or other factors not controlled for in the models used in this study. Either way, analysts and other financial statement users should refrain from over-interpreting CEO language on the basis of gender as gender and economic performance appear to have an overall trivial effect on the substance and style of CEO communication.

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Introduction

At its core, accounting is the business world's most basic form of communication. Through numbers and narratives, balance sheets explain a company's financial position at a point in time, income statements outline a company's performance during a period, and earnings reports describe how end results stack up against analysts' projections. However, accounting is much more than the simple presentation of numbers.

Executives are able to manipulate negative numbers to look more positive, hide vital company information in the footnotes, and use language to spin a negative situation into something positive, all within the constraints of Generally Accepted Accounting Principles (GAAP). Therefore, accounting is not limited to what the numbers alone communicate. Management has significant discretion within GAAP to consciously and subconsciously choose how to communicate those numbers.

With the growing presence of female CEOs in the business world, gender related differences in the communication of financial results are becoming more and more of a potential reality, yet we know very little about this possibility. According to stereotypes, females talk more than men and focus on creating and maintaining relationships, while men focus on achievement and status; but, there is little conclusive evidence that these communicative differences apply to all situations. Furthermore, there is even less evidence that such communication patterns remain consistent when applied to CEO verbal communication of financial results. Does CEO communication about financial results change with the gender of the executive? And does the year-end economic performance of the company also impact how each gender communicates financial results to analysts? For example, are female CEOs more likely to accept fault for a decline in net income, while male CEOs are more likely to blame the economy?

While, in practice, differences in gender communication may seem minor, word choice in communicating earnings could significantly affect analysts' perceptions of companies' financial health. Therefore, managements' intentional and subconscious language choices are a vital element of the firm's strategic communication with external constituents. As such, identifying the existence of gender and performance related differences is a first step in determining which types of communication characteristics are likely to be most effective in influencing financial analysts and other users of financial reports.

Research Question

This paper seeks to answer the question: does the gender of the CEO and the performance of the company affect how the CEO will communicate the financial results in the earnings release press conference?¹ I answer this question by gathering press conference transcripts from companies led by male and female CEOs in similar industries that experienced both positive and negative economic performance in the preceding year. I use text analysis tools to note the differences in existence of the communication characteristics in question, and use statistical analysis to determine if said differences are significant. I summarize all differences, or lack thereof, in CEO gender communication based on my findings and describe several possible causes. Finally, I discuss the implications and relevance of all findings.

As noted in the literature review, little research exists regarding this area in particular. This is not to say the subject is not important, just that the lack of female CEOs in prior years has simply made research in this area impossible. Many academic articles exist regarding gender communication, CEO communication and financial disclosures, effects of gender on oral communication, and attribution theory, yet the collective evidence creates many contradictions and leaves several questions unanswered.

The main gap in existing research, and one I attempt to fill, relates to gender communication differences between CEOs during oral financial disclosures. There have been studies about the individual components of the proposed research question, yet nothing about the connection between them and their effects on each other. By examining the actual words spoken by CEOs in their fourth quarter earnings reports, this study quantifies real differences rather than simply making theoretical predictions. Using statistical analysis to determine the significance of any differences noted ensures that findings are attributable to established hypotheses and not just random chance.

This study is most relevant to financial analysts. By knowing which communication patterns CEOs are most likely to use in a given situation due to their gender and company performance, analysts will be able to more accurately assess company health and performance in forming opinions for investors.

This paper begins with in-depth analysis of existing literature, with articles divided among the topics of gender communication, CEO communication, self-serving attribution theory, oral communication, and communicating financial results. Next, I describe the methods for forming the sample, collecting transcripts of earnings press conferences, and analyzing the associated text, along with the processes I used to determine statistical significance of differences. I then discuss ultimate results and conclusions, noting limitations in research and next steps for future studies. Finally, I discuss implications of my conclusions, with reference to relevance for financial analysts, and conclude with suggestions for further research.

Literature Review

In this section, I provide a review of existing literature regarding gender communication, CEO communication, attribution theory, oral communication, and the communication of financial results. While an abundance of research exists concerning these topics individually, little research has been done that considers the connections among them. Therefore, this section will endeavor to describe the existing literature, gaps in findings, and individual impacts on the overall research question.

Gender Communication

Stereotypes regarding differences in gender communication, also known as “folk linguistics” (Smeltzer & Werbel, 1986), have existed for hundreds of years. In fact, the most common stereotype, that women talk more than men, even prevails in “numerous languages and cultures” (Kriwy, Gross, & Gottburgsen, 2013). Ranging from plausible to completely outrageous, gender communication stereotypes usually seem to favor the male communication style. In fact, research by Smeltzer and Werbel suggests that women stereotypically display ineffective communication characteristics, such as “verbosity, constrained vocabulary, and indirect requests” (1986). It is also widely accepted that women speak more, speak faster, leave more sentences unfinished, and speak at a lower reading level than men (Brotherton & Penman 1977. Additionally, Griffin, Ledbetter, and Sparks discovered that women generally communicate to build relationships, known as “rapport talk,” while men communicate to gain status and power, known as “report talk” (2015).

While gender differences do exist, those mentioned above may not be as real as society leads us to believe. Decades of research have enabled experts to separate fact from fiction, and identify several attributes in particular that, in general, differ between males and females. For example, even when male and female speakers are equal in fairness, prestige, and self-presentation, “female public speakers are superior to men in vocabulary, sentence structure, and grammar” (Kenton, 1989). As a result, women should speak at a higher reading level than men.

In terms of CEOs, as mentioned in the research question, I measure this variable by counting the number of six letter words used, thus creating the first hypothesis (written in the alternative form):

H₁: Female CEOs communicate at a higher reading level than male CEOs.

However, detracting from the complexity of female speech is the use of simple intensifiers. Further research states that women use more adjectives and intensifiers, such as "so" and "very," when speaking (Samar & Alibakhshi, 2007). These words add little meaning to a sentence, thus reducing the overall effectiveness of female communication, yet add description to a phrase, making it seem more conversational. I measure the female tendency towards verbosity in the case of CEOs by number of adjectives used. This represents a further stereotype that women use a powerless speech style, and leads to the second hypothesis:

H₂: When speaking, female CEOs use more descriptive words than male CEOs.

Research regarding each gender's volubility, defined as "total amount of time spent talking" (Brescoll, 2011), results in the most contradictions of all. Consistent with the stereotype that women talk more than men, research by Samar and Alibakhshi finds that, even with the same level of education, females' speech amount is significantly greater than that of males (2007). In contrast, research by Kriwy, Gross, and Gottburgsen looks at the effects of expertise on gender communication, and states that men talk for longer periods than women, even when both are experts in the fields (2013). To further complicate the matter, research by Brescoll found that, when possessing the same amount of power, gender had no effect on volubility, and men spoke no longer than their female counterparts (2011). While male and female CEOs may have differing levels of education and expertise, their position at the head of their company means that all CEOs have a relatively similar amount of power. Therefore, existing research does not definitively predict whether one gender is likely to speak more/longer than the other. Thus, counting the total number of words spoken by both male and female CEOs in earnings release press conferences will either support or not support the third hypothesis:

H₃: While performing the same task, female CEOs speak more than male CEOs.

Finally, an attribute of language not mentioned in the above stereotypes is narcissism. Defined as a pervasive pattern of grandiosity, need for admiration, and lack of empathy, narcissistic individuals tend to be more competitive, assertive, and dominant. Men are typically more narcissistic than women (Grijalva, Tay, Harms, Newman, Donnellan, Robins & Taiyi, 2015), which is consistent with the idea that men communicate to gain power and status. Further, general CEO communication is typically high in narcissism as well (Olsen, Dworkis, & Young, 2014), meaning that, even when an increase in profits may be due to the work of lower-level employees, CEOs are more likely to take the credit. While this may be true, is one gender of CEO more narcissistic than the other? This leads to the fourth hypothesis:

H₄: When speaking, male CEOs display more narcissism than female CEOs.

As this section examined only existing literature about gender communication, the above hypotheses are merely speculations of how the findings apply to CEO communication. However, when taking specific research about CEO communication into consideration, the application of the above theories does not become any clearer.

CEO Communication

While general standards and expectations exist for effective communication including clarity, brevity, and directness (Bromage, 1970), expectations for effective CEO communication are based on a long history of how male CEOs have behaved and communicated in the past. With more female CEOs in the world than ever before, future standards of

CEO communication depend on the extent to which female CEOs choose (consciously or unconsciously) to communicate like men or like women. This choice may be based on personal preference, trial and error, or even the potential future dominance of female CEOs in the business world. As such, when examining gender communication differences between male and female CEOs, the degree to which female CEOs have adapted their communication style to that of male CEOs, or vice versa, will impact the significance of any differences found among them.

Kalbfleisch and Herold's research regarding sex, power, and communication concluded that both men and women in positions of power use influence strategies to achieve desired goals and help or hinder others from achieving their preferred outcomes (2005). Additionally, while there are still far fewer female than male CEOs, cultural changes in gender roles mean that more women are entering the business world and, according to Grijalva, Tay, Harms, Newman, Donnellan, Robins, and Taiyi, are communicating with assertiveness (2015). These findings mean that, while gender communication differences between CEOs likely exist, they may not be as apparent as the differences between an average male or female engaged in everyday conversation. CEOs typically have extensive business experience and likely learned over time which styles of communication are most effective. Therefore, gender communication differences may diminish as both male and female CEOs adapt to the communication style that fits the job.

Interestingly, this speculation remains consistent within a group completely separate from the business realm—athletes. Groups of male and female athletes, selected to maximize the probability of sex differences in communication, actually exhibited no differences with respect to frequency of communication (Sullivan, 2004). As both male and female athletes seek to accomplish the same goal, winning, it is understandable that they may use similar communication styles. Therefore, it may be possible that there is, in fact, one "best" way of communicating, and athletes of both genders abandon their natural communication tendencies in order to accomplish their ultimate goal.

Thus, context seemingly plays a key role in either mitigating or intensifying the differences related to gender communication. As the goals and values of two people become more similar, the above research shows that their communication styles do as well. In the context of male and female CEOs, the shared desire to perform well financially and make themselves "look good" may drive their common use of one communication style containing characteristics and behaviors that society generally agrees are superior. On the other hand, the power held by male and female CEOs may serve to emphasize the differences in their communication styles as neither gender feels as though they must conform to the other. Therefore, CEO communication may be similar between genders in some respects, as noted above, but drastically different in others. The gap in research regarding gender and CEO communication leaves ample room for speculation, and this paper seeks to identify a definitive connection between them. However, aside from gender, what other traits could impact CEO communication? Age, industry, experience, economic performance? While the effects of gender and company economic performance on CEO communication are the only variables mentioned in the research question, it is important to note that gender communication differences among CEOs may exist for a number of reasons beyond the scope of this paper.

Self-Serving Attribution Theory

Self-serving attribution theory, another specific aspect of communication, describes how individuals often incorrectly explain reality in order to make themselves appear more successful. Self-serving attributions occur in two ways: enhancing attributions attribute favorable performance to internal causes, while defensive attributions attribute poor performance to external causes. Therefore, in the earnings press release, CEOs may use enhancing or defensive attributions in order to sway investors' perceptions of the positive or negative earnings news. By doing this, the resulting market reward or penalty may be either heightened or dampened, when, in actuality, the correct information would not produce the same effect (Kimbrough & Wang, 2014).

Research by Salancik and Meindl indicates that, when comparing firms with stable and unstable economic performance over an 18-year period, unstable firms are more likely than their stable counterparts to claim responsibility for both positive and negative outcomes (1984). These findings contradict existing psychological theories,

which state that firms are equally likely to attribute poor performance to the environment, rather than an internal, controllable variable. Additional research examines the plausibility of seemingly self-serving attributions in unstructured real-world settings (Kimbrough & Wang, 2014), but little to no research exists that studies the effects of CEO gender and economic performance on the use of self-serving attributions.

Before delving any further into this topic, it is important to illustrate how individuals act differently based on positive and negative economic performance. Prospect theory, also known as loss aversion theory, states that individuals would prefer to avoid losses rather than make gains of similar magnitudes. For example, when presented with two equal options framed in terms of either a gain or loss, an individual is more likely to choose the option presented as a gain in order to avoid the potential loss (Investopedia, 2005). Therefore, as each year's net income is uncertain, and missing projected earnings by even \$1 can result in a massive decrease in stock price, CEOs do all that they can to avoid a negative economic performance. However, when performance is poor, CEOs may ascribe the loss to something other than the actual cause in order to soften the blow, thus tying in the concept of self-serving attributions.

As mentioned above, men communicate to boost their status and reputations. Therefore, to avoid losing face, a male CEO should be less likely than a female CEO to publicly admit his mistakes (Toomey, 2004). Thus, in times of poor economic performance, male CEOs should be more likely than females to use defensive attributions to recover from the loss and shift the blame to the economy. Similarly, male CEOs should also be more likely than females to use enhancing attributions in times of positive economic performance in order to boost their status. On the other hand, it is also possible that female CEOs are more likely than males to use enhancing attributions in times of positive economic performance in order to credit their employees with the success. Therefore, when taking company economic performance and CEO gender into account, the use of self-serving attributions becomes unclear, thus leading to the fifth and sixth hypotheses:

H₅: Following a period of negative performance, male CEOs use more defensive attributions than females.

H₆: Following a period of positive performance, female CEOs use more enhancing attributions than males.

Oral Communication

In business, there are many different ways to communicate. Having already examined gender, CEO, and performance related attributes of communication in general, the question becomes, do additional gender communication differences present themselves when studied in the context of specific types of communication, such as written versus oral?

When asking male and female college students to write three different letters (one persuasive, one requesting payment, and one selling a product), researchers found differences between the three types of letters, but no significant interaction between letter type and gender of the author (Sterkel, 1988). While men and women may have different motivations for communication, and thus engage in verbal conversation differently, no significant differences exist when both genders put pen to paper. In fact, when communicating orally, men and women consistently exhibit differences in terms of nonverbal communication, management styles, small group communication, and dyadic communication (Sterkel, 1988). Therefore, this paper examines differences in oral communication between male and female CEOs, specifically in the earnings press conference, as existing research indicates greater variation exists in oral, rather than written, communication.

Looking specifically at oral communication patterns, research indicates that power does have an overarching effect over task, relational, and organizational communication. As CEOs hold the most power in the organization, it is reasonable to assume that their communication style will differ from that of their employees. For example, CEOs communicate more frequently as a whole and tend to be more formal and task oriented, communicating most often in large groups and about planning as opposed to personal topics (MacLeod, Scriven, & Wayne, 1992). When

adding gender to the mix, also contradicting the stereotype that women talk more than men, male CEOs were found to communicate more frequently than females. Additionally, females are more likely to communicate in small groups than men, and are more likely to communicate in informal, unscheduled meetings. In contrast, male communication is more task oriented as males communicate to send information, while females communicate to socialize (MacLeod, Scriven, & Wayne, 1992).

These findings relate to general oral communication; however, when directing oral communication toward a specific task, differences between males and females become less obvious. For example, a study by Smeltzer and Watson found that, when negotiating, the only significant difference between men and women is women's increased use of hedges (1986). Hedges are words such as "could," "maybe," or "perhaps," that make a sentence less direct and lessen the responsibility of the speaker. While claiming responsibility can be risky if the outcome is unknown, avoiding responsibility indicates uncertainty. Therefore, women's increased use of hedges supports the claim that female CEOs use less powerful language than males, and contributes to the seventh hypothesis:

H₇: When speaking, female CEOs are more tentative than male CEOs.

The lack of other differences between male and female communication while negotiating may be due to the fact that business women, and especially female CEOs, are accustomed to working in a male dominated environment (Smeltzer & Watson, 1986). Thus, it is possible that more educated women have overcome some of the stereotypical female behaviors, supporting the earlier proposition that female CEOs may have adapted their communication to match that of their male counterparts. While these findings may be true in negotiations, do other differences in gender communication characteristics appear when in the context of earnings press conferences?

Communicating Financial Results

This paper specifically examines the earnings press conference because it is typically a more candid and informal portrayal of the financial results, and offers a rare opportunity to analyze words straight from the CEO's mouth. These press conferences are particularly informative due to the question-and-answer portion, which allow analysts to probe further into topics that the CEO may have glossed over. In fact, analyst involvement in press conferences naturally increases the information provided by the CEO, particularly when firm performance is poor (Matsumoto, Pronk, & Roelofsen, 2011). As mentioned above, CEOs attempt to create and maintain a positive corporate image, even in years marked by poor performance and positive external characteristics. In fact, "companies with positive performance in a good external context blame negative effects on the environment in a proportion equivalent to that observed for companies with positive performance in a bad year" (Tessarolo & Pagliarussi, 2010). While these findings further support the idea that CEOs are more likely take advantage of self-serving attributions, further research found the exact opposite.

A study conducted by Ober, Zhao, and Davis discovered that CEOs do not avoid certainty to mask financial performance, as "corporate use of certainty in public business discourse is not affected by organizational profitability status or industry type" (1999). These findings support the idea that CEOs prefer to "tell it like it is," and present the public with the facts, rather than a justification. To clarify this contradiction in existing research and examine the associated effects of gender and performance, the eighth hypothesis proposes the following:

H₈: When speaking, male CEOs will use more certainty than female CEOs in times of negative economic performance.

In conclusion, many contradictions and gaps exist within the existing research on the above topics, with the lack of research about gender and CEO communication being the most prominent. As mentioned in the CEO communication section, the possibility that female CEOs have adapted their communication tendencies to equal that of males would alter all stated expectations, thus confounding all hypotheses and making any differences between

male and female CEO communication statistically insignificant. Despite this possibility, the expectations for communicative differences remain as stated. By analyzing a number of earnings press conference transcripts conducted by both male and female CEOs, this paper fills the described gaps in research and provides one definitive answer to the question: do CEO gender and financial performance affect how CEOs communicate the financial results in the earnings release press conference?

Methods

Sample Selection

I addressed my research question and associated hypotheses about the effects of gender and performance on CEO communication using a multistep process of gathering and analyzing readily available company data. I began by using a recent listing from the Catalyst Knowledge Center (Catalyst, 2017) to create a list of female CEOs currently leading Fortune 500 companies. I then verified each CEO's term and the accuracy of the original listing using Securities and Exchange Commission (SEC) form 10-Ks, annual reports, and other sources. These searches also aided in identifying several other women that had been CEOs in the past, but are not currently in the position. In order to yield a relatively large sample, I identified female CEOs as far as 10 years into the past. The need for data from so many prior periods is due to the sheer lack of female CEOs of public companies in American history. The result of these steps was a list of 35 female CEOs that served for any time during 2006 to 2016.

Next, I determined how many complete, consecutive years each female CEO served based on their start and end dates. Using only the years each CEO led completely and consecutively ensures that the final economic performance of those years was due primarily to that CEO's decision making, and mitigates economic effects related to a change in CEO. However, despite these efforts, it is impossible to perfectly match performance to a specific CEO as current performance is partially attributable to decisions made by prior CEOs.

As mentioned in the literature review, several of the hypotheses relate to changes in gender communication patterns based on economic performance. In this paper, an increase or decrease in net income between two years determines the classification as either positive or negative economic performance. I chose to use this measure instead of others (EBIT, EBITDA, income before special items, unexpected earnings, etc.) because net income encapsulates all revenues earned and expenses incurred by the company, rather than just cash flow or other attributes of performance during a certain period. While this measure has clear benefits, it also includes several economic events that may not be as meaningful in measuring company performance, such as special items and discontinued operations. In this situation, no one measure is perfect, but I believe the benefits of using a change in net income to determine company performance outweigh the drawbacks.

I then used Compustat-Capital IQ, a database within Wharton Research Data Service (WRDS), to find every company's net income for each specific year. WRDS is a program "created by the Wharton School of the University of Pennsylvania that offers business intelligence, data analytics, and financial research, and includes a web query method that allows for specific, personalized searches" (University of Pennsylvania, 2017). Further, Compustat-Capital IQ, a database within WRDS, is a "market database published by Standard and Poor's that includes Global Industry Classification Standards (GICS), pricing data, earnings data, insider and institutional holdings, and other information directed at investors and analysts" (Investopedia, 2010). Using the Compustat Monthly Updates—Fundamentals Annual query tool, I created specific searches for each company's ending net income and NAICS industry code in every two-year block (2010-2011, 2011-2012, etc.). I then manually coded each company for positive or negative economic performance by comparing the first and second years' year end net income, with an increase between the two years indicating positive performance and a decrease between the two years indicating negative performance.

Then, I used the same data sources to create groups of male-led companies with the same characteristics. Again, I separated search terms for this set of queries by the same two-year segments as used in the previous searches and included, for all of the companies in the 2016 Fortune 500, year-end net income, and NAICS industry code.

Identification of Control Variables

I next turned to the question of what factors could affect CEO communication besides gender and economic performance, and how I could create a control for them. Prior studies indicate that several person-specific factors most strongly affect CEO communication: age, years of experience as CEO, prior roles held, heritage, and personality; as well as several company-specific factors: industry, complexity of operations, use of financial instruments, company size, and customer base.

Quantitative data for many of these variables do not exist or cannot be easily collected, but I was able to collect information for the remaining variables. Using WRDS, I searched for each company's NAICS code, used the first digit of each code to represent their industry, and then sorted all companies by this factor. I then searched for the year each CEO was born and the year they took the position, and subtracted it from the year in question, yielding each CEO's age and experience. I also divided each company's actual change in net income by their total assets in that year to provide some perspective on the magnitude of the change, searched for total invested capital to represent complexity and financial instruments, and used total cash as a proxy for size. I then searched for each company's status as international, domestic, or both, and coded them accordingly to represent location of customer base and complexity.

While I ultimately used these factors during statistical analysis, it is important to note that any of their direct effects on CEO communication, if any, are beyond the scope of this paper. I included these variables in an effort to control for any potential effects on the end results, thus allowing for the isolation and analysis of the effects of gender and economic performance on CEO communication.

Evidence

Next, I gathered the text needed to identify differences in communication based on CEO gender and economic performance. I chose to examine transcripts from the fourth quarter final earnings conference call of the second year of each two-year time span, as the CEO would be speaking to the positive or negative change in overall net income from the prior year to then. Using LexisNexis, I gathered the transcripts for each company in the sample (Appendix A)—which are public documents thanks to the SEC imposed Fair Disclosure Wire Act (SEC, 2000). LexisNexis did not contain information for 12 of the companies, thus I deleted them from the initial sample. Similarly, I also eliminated or replaced any companies in the sample owned by a larger corporation as the CEO would be speaking to the earnings of the combination of companies, not just the one in question. As a result of these limitations, the sample shrank from 168 companies to 128 companies (Appendix B).

I then saved all 128 quarter four final earnings conference call transcripts as HTML files, at which point Dr. Joseph Harrison, Texas Christian University's assistant professor of strategy, analyzed them using Python—a coding language which, in this case, was used to “glue existing language components together” (Python). As each HTML file included the words of many different individuals, with sections of text labeled by speaker, Python compared the existing database of companies to each individual HTML file. Thus, by searching each document for a specific year and CEO name, the program selected the correct file and created separate documents containing only the words labeled as belonging to the particular identified CEO (Appendix C). The overall sample size then shrank from 128 to 123 companies as, in some situations, a different member of the management team spoke on behalf of the CEO, or the CEO speaking during the press conference was different from the previously identified CEO.

Text Analysis

With the words of each CEO cleaned and separated, Dr. Harrison conducted text analysis on the new documents using a tool called 'Linguistic Inquiry and Word Count' (LIWC). LIWC compares the text to the contents of a series of dictionaries and counts the occurrence of certain words to make a conclusion about linguistic characteristics of the

text, including measures such as tone, intent, and other specific language characteristics of all of the individual documents. The output of this procedure is a series of numeric measures of the frequency/intensity of communication characteristics such as authenticity, emotional tone, adjectives, and 90 other characteristics of the text (Pannebaker, Booth, Boyd, & Francis, 2015). Regarding the hypotheses of this paper, I used the individual and combined LIWC outputs of six-letter-count, adjective, word count, I, we, cause, money, work, discrepancy, tentative, and certainty dictionaries as the evidence.

For example, using the text shown in Appendix E, the 2014 Kimberly Clark final Q4 earnings conference call, the LIWC output for the above variables are as follows:

WC	6 Letter	I	We	Adjectives	Cause	Discrepancy	Tentative	Certainty	Work	Money
5143	19.23%	0.86%	5.31%	4.8%	2.06%	1.3%	3.56%	0.93%	4.47%	4.88%

The LIWC output for the same variables, but for the 2015 General Motors final Q4 earnings conference call, are as follows:

WC	6 Letter	I	We	Adjectives	Cause	Discrepancy	Tentative	Certainty	Work	Money
1931	21.91%	0.52%	7.98%	4.56%	2.43%	0.62%	0.67%	1.4%	4.56%	2.64%

As you can see, it is easy to note obvious differences between the two sets of data, such as the 3,212-word difference in word count, as well as clear similarities, such as the .09% difference in words relating to the workplace. While it is easy to see these qualities with the naked eye, it is not quite as easy to observe if differences in the data are statistically significant or not. Therefore, to do this, I conducted regression analysis, a process further described in the next section, to determine the significance of any and all differences existing within the data, and relate those differences to the effects of CEO gender and economic performance.

Aside from the variables mentioned above, I also use the output of the analytic, clout, authenticity, emotional tone, power, and non-fluency variable dictionaries to look for further communicative differences beyond those already hypothesized. The abundance of data revealed through LIWC allowed for the possibility of identifying differences in gender communication that I had not yet predicted or accounted for due to lack of existing evidence.

However, prior studies examined earlier do create reasonable suspicion that significant differences may exist regarding these variables as well. As such, while the results section discusses the findings related to the stated hypothesis and overall research question, I also identify and explain unexpected differences as well.

Results

Due to the considerable number of hypotheses and additional tests, I divided this section by significance of results. The first section describes the testing and results of variables that yielded meaningful results, and also offers a brief explanation of the significant results that I further describe in the Discussion section. The second section then describes the testing and results of variables that did not lead to significant findings, and provides a brief summary of all final outcomes.

Significant Results

While LIWC provides measures of raw differences in the words spoken by one CEO compared to another, I used Ordinary Least Squares regression to determine the statistical significance of all observed differences so as to

be able to determine the differences after controlling for other factors likely to influence the dependent variable in question.

Note that for all tests that follow, I identified and removed the outliers with respect to the dependent variable to increase the likelihood that the results are generalizable. I defined a variable as being an outlier if it fell within the top or bottom 1% of the full distribution. While I only targeted outliers within the dependent variable, it is probable that I removed many cases where associated independent variables might have also been outliers. All in all, removal of the outliers had a negligible effect on the results, and no effect on their final conclusions as significant or not.

I tested the first hypothesis, the prediction that female CEOs will communicate at a higher reading level than males, by examining the six-letter count output for every company in the sample. The six-letter count output measures the percent of the document made up of words six letters or longer, and serves as a proxy for complexity of speech as the higher the six-letter count percentage, the higher the reading level at which the speaker is communicating. Therefore, with females coded as 0 and a t statistic of -4.13, the data supports first hypothesis. Further, removing the outliers from the data pool resulted in the same conclusion.

<u>Dependent Variable</u>			
<u>Six Letter Count</u>			
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	0.6	0.548
Age	0.1	2.1	0.036
Gender	-2.0	-3.9	0.000
NAICS Code	1.2	2.2	0.031
Performance	4.9	0.9	0.367
Total Invested Capital	0.0	1.1	0.260
Cash	0.0	0.2	0.816
IDB Code	-0.5	-0.8	0.422
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
3.3	0.002	0.18	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

I tested the seventh hypothesis, the prediction that when speaking, female CEOs are more tentative than male CEOs, by examining the output of the discrepancy and tentative dictionaries. These dictionaries produce the percentage of the document made up of words such as should, would, and could, and maybe, perhaps, and guess. Therefore, these dictionaries serve as a proxy for tentative communication as they represent hesitant and provisional word choice.

Interestingly, regression analysis revealed contradicting results, indicating that male CEOs use more discrepancy words than female CEOs, but both genders are equally as tentative. Therefore, the data supports neither the null or alternative hypothesis, yet still produced statistically significant results.

<u>Dependent Variable</u>			
<u>Discrepancy</u>			
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	-0.5	0.623
Age	0.0	0.9	0.349
Gender	0.2	2.3	0.024
NAICS Code	0.1	1.8	0.069
Performance	-0.6	-1.0	0.304
Total Invested Capital	0.0	0.0	0.993
Cash	0.0	0.6	0.556
IDB Code	0.0	-0.2	0.823
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
1.3	0.252	0.08	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

<u>Independent Variable</u>	<u>Tentative</u>		
	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	0.7	0.460
Age	0.0	-1.2	0.221
Gender	0.2	1.8	0.067
NAICS Code	0.1	1.0	0.311
Performance	1.2	1.0	0.338
Total Invested Capital	0.0	0.7	0.510
Cash	0.0	-1.0	0.317
IDB Code	0.1	0.9	0.372
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
1.6	0.142	0.10	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

The differences in these findings from the anticipated outcome may be due to specific factors not controlled for in this paper, or, potentially, the fact that females are compensating for the perception that they are powerless communicators. In fact, while the above conclusion states that males are more tentative than females, one may also interpret the results as females are less tentative than males, meaning that female CEOs communicate with more definitive words than their male counterparts.

As mentioned in the literature review, previous research and common stereotypes state that females are less likely to communicate in a way that reflects power. However, it is possible that in a world surrounded by men, female CEOs have actually increased their use of powerful language in order to increase their status and level of respect, thus making them less tentative communicators than male CEOs. The power dictionary, a variable not included in the hypotheses that measures the percentage of references relevant to status and dominance in a piece of text (Pannebaker, Booth, Boyd, & Francis, 2015), further supports this theory. The t statistic of -4.31 indicates with 95% confidence that female CEOs use more words expressing power than male CEOs. Therefore, female CEOs' use of powerful language may serve to explain the surprising results found in hypothesis seven.

<u>Independent Variable</u>	<u>Power</u>		
	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	2.0	0.052
Age	0.0	2.6	0.011
Gender	-0.5	-4.4	0.000
NAICS Code	0.3	2.5	0.013
Performance	0.6	0.5	0.589
Total Invested Capital	0.0	2.4	0.016
Cash	0.0	-1.2	0.243
IDB Code	-0.1	-0.9	0.358
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
4.5	0.000	0.25	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Less surprising is the outcome of the emotional tone variable, also not discussed in the hypotheses, which is expressed as a number between 1 and 100. A high number is associated with positivity, while a low number reveals hostility, and a number around 50 suggests a lack of emotionality (Pannebaker, Booth, Boyd, & Francis, 2015).

As mentioned in the literature review, females commonly communicate with more emotion than males, in order to build relationships with their peers. The output of the emotional tone variable, a t statistic of -2.47, affirms this communication tendency. Therefore, while female CEOs may have been able to overcome the female tendency to avoid powerful language, they retain the inclination to communicate with emotion.

<u>Dependent Variable</u>			
<u>Emotional Tone</u>			
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.3	1.5	0.137
Age	0.1	0.8	0.415
Gender	-4.4	-2.4	0.016
NAICS Code	4.9	2.5	0.013
Performance	0.4	0.0	0.983
Total Invested Capital	0.0	-1.2	0.248
Cash	0.0	0.8	0.446
IDB Code	0.9	0.4	0.655
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
2.2	0.032	0.14	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Unrelated to the above findings, but also significant, is a third variable not yet discussed in the hypotheses—analytical thinking. The analytical thinking output is also expressed as a number, with a high number representing formal, logical thinking, and a low number expressing narrative thinking (Pannebaker, Booth, Boyd, & Francis, 2015). Conducting regression analysis revealed a t statistic of -2.50, meaning that female CEO communication reflects more analytic thinking than that of male CEOs.

Table 6
Analytical Thinking Regression Results

<u>Dependent Variable</u>			
<u>Analytical Thinking</u>			
	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
<u>Independent Variable</u>			
Years of Experience	0.2	1.2	0.251
Age	0.2	1.8	0.082
Gender	-5.0	-2.6	0.010
NAICS Code	0.8	0.4	0.707
Performance	-6.3	-0.4	0.722
Total Invested Capital	0.0	1.1	0.257
Cash	0.0	0.2	0.818
IDB Code	-3.0	-1.3	0.189
<hr/>			
	<i>F</i>	<i>Significance</i>	<i>R Square</i>
	1.8	0.093	0.11

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

While I did not previously account for these results, they assist in explaining the general communicative differences between male and female CEOs, as do the results of the variables included in the hypotheses. Gender does in fact have an effect on CEO communication, and further research including a separate set of controls may explain even more differences in gender communication patterns in the future.

Insignificant Results

I also performed the following tests in which the results were not significant. In testing the second hypothesis, the prediction that female CEOs use more descriptive language than male CEOs, I used the adjective output, which reveals the speaker’s use of adjectives as a percent of the total text sample, as a proxy for descriptive language. The data regression revealed a t statistic of 1.38, meaning that male CEOs use more adjectives than female CEOs, but any differences are insignificant and due to chance. As such, I accept the null hypothesis, meaning male and female CEOs are equally as descriptive.

<u>Independent Variable</u>	<u>Dependent Variable</u>		
	<u>Adjectives</u>		
	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	0.8	0.447
Age	0.0	-2.1	0.034
Gender	0.2	1.4	0.158
NAICS Code	0.3	2.2	0.031
Performance	0.1	0.1	0.958
Total Invested Capital	0.0	-0.3	0.768
Cash	0.0	-1.0	0.301
IDB Code	0.0	-0.1	0.958
<hr/>			
	<i>F</i>	<i>Significance</i>	<i>R Square</i>
	2.9	0.005	0.17

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Similarly, I tested the third hypothesis, female CEOs speak more than male CEOs, by comparing the word counts of each piece of text. As expected, the word count output produces a count of all of the words in a piece of text, thus serving as a proxy for amount spoken. Regression analysis revealed a t statistic of 1.25, meaning that male CEOs actually speak slightly more than female CEOs, but the difference is insignificant, and likely due to chance. Therefore, I accept the null hypothesis—male and female CEOs speak the same amount.

<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	-4.7	-0.2	0.841
Age	-45.0	-3.0	0.003
Gender	340.2	1.6	0.114
NAICS Code	252.8	1.1	0.270
Performance	-498.7	-0.3	0.797
Total Invested Capital	0.0	2.5	0.012
Cash	0.0	-0.9	0.347
IDB Code	-196.7	-0.8	0.427
<u>F</u>	<u>Significance</u>	<u>R Square</u>	
2.7	0.008	0.16	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

The fourth hypothesis states that male CEOs are more narcissistic than female CEOs. As it is not possible to confirm individual levels of narcissism solely through text analysis, I combined the outputs of the "I" and "we" dictionaries to create a proxy for inferring CEO narcissism. With the I output expressing the percent of the document containing "I" or a form of "my" and the we output expressing the percent of the document containing "we" or "us," dividing the I dictionary by the we dictionary reveals the percent of time a CEO referred to themselves alone versus the times they referred to themselves in a group. While admittedly over-simplified, the larger the number, the more narcissistic the CEO may be. Knowing this, the final t statistic of 1.37 means that, as expected, male CEOs are more narcissistic than female CEOs, but the difference is insignificant and likely due to chance. Therefore, I accept the null hypothesis, which states that male and female CEOs are equally narcissistic.

<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	-2.0	0.046
Age	0.0	1.1	0.276
Gender	0.0	1.1	0.291
NAICS Code	0.0	1.8	0.083
Performance	0.1	0.5	0.622
Total Invested Capital	0.0	-1.0	0.321
Cash	0.0	-1.4	0.153
IDB Code	0.0	2.1	0.038
<u>F</u>	<u>Significance</u>	<u>R Square</u>	
1.8	0.085	0.11	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

The final three hypotheses (H5,6,8) refer to economic effects on gender communication, thus I made a slight adjustment when conducting the regression analyses. The fifth hypothesis, male CEOs use more defensive attributions following negative performance, only looked at the companies in the sample with negative performance. As such, I sorted the data by performance and estimated the regression model using only the companies with negative figures. I examined the product of the cause and money outputs, which measure the percent of the document containing mentions of words such as “because” and “effect” and references to economy related terms (LIWC), to create a proxy for identifying defensive attributions. The t statistic of the gender variable was -1.35, meaning that female CEOs actually use more defensive attributions following times of poor economic performance than male CEOs, but the difference is insignificant and likely due to chance. As such, I accept the null hypothesis, which states that male and female CEOs use the same amount of defensive attributions following a time of poor economic performance.

<u>Dependent Variable</u>			
<u>Cause*Money</u>			
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.1	1.0	0.329
Age	0.1	0.9	0.362
Gender	-0.9	-1.2	0.219
NAICS Code	0.4	0.4	0.666
Performance	-9.9	-1.4	0.168
Total Invested Capital	0.0	-0.7	0.512
Cash	0.0	0.3	0.764
IDB Code	-0.2	-0.2	0.835
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
1.0	0.449	0.13	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Conversely, the sixth hypothesis, female CEOs use more enhancing attributions following positive performance, only looks at companies with positive performance. Thus, with the data still sorted by performance, I estimated the model using the product of the work and cause outputs (with the work output representing references to internal causes and the product serving as a proxy for enhancing attributions) from the remaining companies with positive performance measures. The t statistic was -0.16, meaning that female CEOs use slightly more enhancing attributions following times of positive economic performance than male CEOs, but the difference is insignificant and likely due to chance. Therefore, I accept the null hypothesis—male and female CEOs use the same amount of enhancing attributions following times of positive economic performance.

<u>Dependent Variable</u>	<u>Cause*Work</u>		
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	-0.3	0.765
Age	0.0	0.1	0.941
Gender	0.5	0.4	0.699
NAICS Code	1.4	1.2	0.243
Performance	-5.9	-0.3	0.770
Total Invested Capital	0.0	0.2	0.822
Cash	0.0	0.8	0.404
IDB Code	0.8	0.6	0.525
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
0.6	0.786	0.08	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

I then tested the eighth and final hypothesis, the prediction that male CEOs use more certainty than female CEOs following poor economic performance. As the certainty output represents the percent of the speech made up of words such as “always” and “never,” I used the certainty output of only companies with negative performance figures as a proxy for certainty used following periods of economic performance. Regression analysis revealed a t statistic of 1.17, meaning male CEOs use more words expressing certainty when explaining poor performance than female CEOs, but the difference is insignificant and likely due to chance. Therefore, I accept the null hypothesis, male and female CEO’s use the same amount of certainty following times of poor economic performance.

<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	-1.4	0.177
Age	0.0	0.5	0.603
Gender	0.1	0.8	0.401
NAICS Code	0.2	1.5	0.134
Performance	1.6	1.4	0.165
Total Invested Capital	0.0	-1.3	0.217
Cash	0.0	0.6	0.531
IDB Code	0.1	0.5	0.638
<u>F</u>	<u>Significance</u>	<u>R Square</u>	
1.1	0.409	0.14	

Age-Age of CEO in years

NAICS Code- industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Finally, I also examined three other variables not yet discussed in this paper: clout, authenticity, and non-fluencies. The output of the clout dictionary is expressed as a number, with higher numbers suggesting expertise and confidence, and low numbers suggesting a humble, anxious style (Pannebaker, Booth, Boyd, & Francis, 2015). The authenticity variable is also expressed as a number, with high numbers associated with honest, personal disclosures, and low numbers suggesting a more guarded form of discourse (Pannebaker, Booth, Boyd, & Francis, 2015). The output of the non-fluencies dictionary expresses the percent a piece of text contains filler words such as “uh” and “um.” The t statistics for all of these variables were between 2 and -2, meaning that male and female CEOs are effectively equal in these measures.

<u>Dependent Variable</u>			
<u>Clout</u>			
<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	-0.1	-1.0	0.344
Age	-0.1	-1.6	0.102
Gender	-1.1	-1.2	0.216
NAICS Code	-0.7	-0.7	0.471
Performance	1.7	0.2	0.837
Total Invested Capital	0.0	1.2	0.252
Cash	0.0	0.5	0.642
IDB Code	-1.7	-1.7	0.100
<hr/>			
<i>F</i>	<i>Significance</i>	<i>R Square</i>	
1.2	0.278	0.08	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	-0.2	-1.2	0.236
Age	-0.1	-1.1	0.264
Gender	1.7	1.0	0.316
NAICS Code	-2.6	-1.4	0.158
Performance	26.4	1.7	0.099
Total Invested Capital	0.0	-0.1	0.920
Cash	0.0	-1.6	0.124
IDB Code	1.7	0.9	0.386
<u>F</u>	<u>Significance</u>	<u>R Square</u>	
1.1	0.354	0.07	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

<u>Independent Variable</u>	<u>Coefficients</u>	<u>t statistic</u>	<u>p value</u>
Years of Experience	0.0	-1.7	0.088
Age	0.0	0.2	0.854
Gender	0.0	0.3	0.799
NAICS Code	0.1	1.7	0.086
Performance	0.3	1.1	0.253
Total Invested Capital	0.0	-0.8	0.453
Cash	0.0	0.6	0.549
IDB Code	0.0	-0.8	0.426
<u>F</u>	<u>Significance</u>	<u>R Square</u>	
1.2	0.285	0.08	

Age-Age of CEO in years

NAICS Code-Industry code classification based on the first digit

Performance-Calculated as change in net income between two years divided by the total assets in the second year

Total Invested Capital-The sum of total long-term debt, preferred stock, minority interest, and common equity

IDB-Stands for international, domestic, or both when discussing customer base

I achieved all results by removing outliers and conducting regression analysis. With respect to the dependent variable alone, I removed all outliers by removing numbers that fell within the top or bottom 1% of the distribution. In this case, only 2 outliers existed, shrinking the sample from 123 to 121 companies.

Therefore, the results discussed above go a long way in answering the research question: does the gender of the CEO and the performance of the company affect how the CEO will communicate the financial results in the earnings release press conference? While gender may affect some aspects of CEO communication, it does not affect them equally, if at all. Additionally, while economic performance had no effect on the aspects of CEO communication examined in this paper, that does not mean performance has no effect on CEO communication. It is possible that a different measure of performance or controlling for different variables not controlled for in this paper could yield completely different results.

Discussion

As shown in the results section, the communication styles of male and female CEOs are much more similar than initially hypothesized. However, while I tested all hypotheses created for significant differences in communication between male and female CEOs, I could have just as easily designed many of the hypotheses to test for significant similarities in communication due to the several gaps and contradictions in existing research. For example, Tessarolo and Pagliarussi (2010) found that CEOs frequently use self-serving attributions when communicating financial results, while Ober, Zhao, and Davis (1999) found CEOs are more likely to express their messages with a heightened use of certainty. Therefore, the multiple unsupported hypotheses found in testing are not entirely surprising, and likely due to the fact that, as mentioned in the literature review, female CEOs are likely accustomed to working in a world dominated by men (Smeltzer & Watson, 1986), and thus communicate in a similar manner.

Men have held the monopoly on executive positions in the business world for many years, and women are only just beginning to crack the ceiling and make their presence known in the CEO arena. As such, in an attempt to fit in and gain respect from their coworkers and male counterparts, it is possible that female CEOs have either consciously or subconsciously chosen to adapt their communication styles to reflect a more masculine approach.

Like picking up an accent, over time, female CEOs may have begun to alter their natural, stereotypical communication tendencies from descriptive and powerless to the more masculine concise and goal driven style solely because that is how male executives communicate to their peers in the office and investors during the earnings press release. If the male style is what is most often used when communicating financial results, and thus generally agreed upon as the norm, it is understandable that female CEOs would begin communicating similarly, thus minimizing the significance of any communicative differences between male and female CEOs.

To explore these conjectures further, I conducted two separate interviews, one with the CEO of a private company and another with the CFO of a different private company. Though both executives work for private companies and thus do not participate in a year-end earnings release press conference, they have both worked in the business world for many years and have experience communicating year end results with independent parties, such as the board of directors. I designed a series of interview questions to discover how the gender make up of both executives' work environments have affected their communication styles, and how they engage in these styles when communicating financial results (Appendix D).

Through these interviews I discovered that both female executives had differing ideas of how each gender of CEO communicates. While one executive believed male CEOs engage in quick, direct communication and female CEOs tend to use more descriptive language, the other stated she found female CEOs to be more transparent than males. Therefore, the inability of the executives to agree on one consistent style to assign each gender points to the fact that gender may have a significant impact on communication for some CEOs, and minimal bearing on communication for others, thus leading to a relatively small average effect. However, the remainder of the executives' answers were surprisingly similar.

I discovered that both women operate in an environment where at least 60% of the executives are male; however, neither believed the ratio of male to female executives had any impact on their communication styles over time. While both executives believed they had become more articulate, knowledgeable, confident, and authentic communicators since the beginning of their business careers, they also both stated that they are, and always have been straightforward, transparent communicators.

Therefore, while both executives may have improved the overall effectiveness of their communication over time, they believe their natural communicative tendencies have remained constant from the time they first started working to their current statuses as executives of million-dollar companies. As such, in contrast to the theory formed above, conscious or subconscious choices may not be the only factors that influence CEO gender communication. In fact, the communication styles of male and female CEOs may be more similar than the styles of regular men and women because of certain characteristics that make them who they are.

As humans are born with personalities, but without the ability to verbally communicate, we learn throughout our childhood how we are to share our thoughts and opinions with others. Therefore, individual communication styles are a function of both nature and nurture. While we communicate differently throughout our lives based on our education and those around us, we tend to revert back to communication tendencies we have always used. But, what if the natural communication styles of all CEOs were the same, regardless of gender?

Similar to how risk-seeking, confident, determined individuals are inherently better suited to be entrepreneurs than those who are not, it is possible that driven, passionate, goal-oriented individuals, both male and female, are more likely to become successful CEOs. Thus, as these communication characteristics are more related to nature than nurture, any changes in CEO gender communication due to environment are not entirely impossible, but likely minimal and subconscious.

These findings have the largest implications on analysts as my research examined CEO gender communication specifically during the year-end earnings press conference. The purpose of these press conferences is for management, namely the CEO and CFO, to discuss financial results from a given reporting period. Following the conference, investors then use the reported numbers and CEO explanations to set the new company stock price. Therefore, stock prices are primarily objective in nature, yet investors' interpretations of CEOs communication styles add a significant subjective aspect.

With such a small percent of female CEOs compared to male CEOs, and a stark lack of research on the topic of CEO gender communication, it is entirely likely that investors interpret the same information differently based on the gender of the CEO sharing it. For example, when receiving negative financial information from a female CEO, investors may believe that females are more descriptive and truthful than male CEOs, who prefer to gloss over the negatives for fear of losing face. As such, when both a male and female CEO share equally negative financial information, investors may bestow a company led by a female CEOs with a higher stock price than a company led by a male CEO as they are more confident that the female CEO has a plan to turn the economic performance around.

Conversely, when male and female CEOs share equally positive information, investors may perceive males as more confident and females as less direct, thus influencing them to set a higher stock price for the male led company. Therefore, above all, the results discussed in this paper serve to inform analysts that male and female CEO communication styles when reporting year-end earnings are incredibly similar. Any pre-existing ideas investors carry regarding which gender's communication is best are likely incorrect, as the main differences in CEO gender communication are minimal and likely due to individual personality. Further, as the year-end earnings press conference occurs annually, it is possible that CEOs have learned over time which communication tactics investors respond most positively to. Thus, the "male" style that females are potentially adapting to might not be inherently male at all. Through the many decades that males have served as executives, they may have learned through trial and error which communication styles are most effective when communicating financial results to analysts. As female CEOs seek positive analyst responses as well, they may have also adopted the style that males have discovered to yield the best results. Therefore, whether this style used by CEOs is inherently male or not, it appears that most CEOs are using it in an effort to please analysts.

However, the purpose of this section is not to announce perfectly definitive results, as the study I conducted was imperfect, and limited by several factors. First, it is all but impossible to control for the infinite number of independent variables that impact communication styles. While the sheer number of factors alone is daunting, many of the factors that have the greatest impact, such as personal preference and disposition, are innate and are not quantifiable. Further, the sample size examined in this paper is relatively small compared to those of other academic research due to the limited number of female CEOs of public companies in our country's history. Using a larger sample size increases the likelihood of discovering correct, conclusive results as a larger sample size reduces the likelihood of encountering atypical results.

And finally, the choice of examining the earnings press conference may have actually minimized gender communication differences as the event is fairly routine and does not offer significant room for personality. Examining a different communicative event, such as the letter to shareholders, may reveal different, or further strengthen, conclusions drawn in this paper. However, the limitations of this study do not mean that the conclusions are not true. Identified limitations simply mean future research could make several improvements, such as increasing controls, expanding the sample, and examining different instances of CEO communication, to further bolster and expand upon all theories created and discussed.

Thus, future studies should not only improve upon this one, but explore the other gaps identified relating to the relatively unexamined topic of CEO gender communication. For example, listening to recordings and watching videos of the earnings press conference may reveal gender communication differences not revealed in the actual transcripts, such as vocal pitch, body positioning, and facial expressions. Examining these measures may reveal that the substance of what CEOs say may be very similar, yet how they physically communicate is incredibly different. Further, future studies could also examine analyst perceptions and responses to CEO gender communication. By examining the stock prices before and after male and female CEOs communicate, while controlling for economic performance, results may reveal which type of communication styles and attributes analysts prefer, regardless of the actual information discussed. The results of a study of this nature would not only build upon the differences identified in this paper, but identify several “best” communication attributes.

Conclusion

This paper serves to bridge the gap between gender communication and CEO communication research by answering the question: does the gender of the CEO and the performance of the company affect how the CEO will communicate the financial results in the year-end earnings release press conference? To answer this question, I conducted text and statistical analysis on a number of earnings press conference transcripts, and concluded that CEO gender communication is strikingly similar, regardless of economic performance. This similarity may be due to a number of factors, but is likely due to the combined forces of inherent communication tendencies that predispose individuals to becoming CEOs, female CEOs’ subconscious choices to adapt their communication styles to the majority male executive environment, and the shared goal of pleasing analysts during the year-end earnings press release.

Therefore, on a smaller scale, the results of this study reveal the similarities between male and female CEO communication. Yet on a larger scale, the results of this study open the door for more, prescriptive studies related to CEO gender communication and analysts’ perceptions. With the ever-increasing presence of women in the business world, and existence of female CEOs for that matter, conducting these studies should only become easier and more interesting as time goes on.

Appendices

Appendix A

The following is an excerpt of the Q4 2014 Kimberly Clark Final Earnings Conference Call. I collected documents of the same nature for the other 127 companies remaining in the sample.

OPERATOR: Ladies and gentlemen, thank you for your patience in holding. We now have your presenters in conference. Please be aware that each of your lines is in a listen-only mode. At the conclusion of today's presentation, we will open the floor for your questions. At that time, instructions will be given as to the procedure to follow if you would like to ask an audio question. It is now my pleasure to introduce today's first presenter, Mr. Paul Alexander.

PAUL ALEXANDER, VP, IR, KIMBERLY-CLARK: Thank you, and good morning, everyone. Welcome to Kimberly-Clark's year-end earnings conference call. Here with me today are Tom Falk, Chairman and CEO; Mark Buthman, Senior VP and CFO; and Mike Azbell, Vice President and Controller. Here's the agenda for the call. Mark will begin with a review of our 2014 results focusing mostly on the full year. Tom will then provide his perspectives on our results and then address the (inaudible) 2015. Then, we'll finish with Q&A.

As usual, we have a presentation of today's materials in the investor section of our website. That presentation and this morning's news release both include our detailed planning assumptions for 2015.

As a reminder, we will be making forward-looking statements today. Please see the risk factors section of our latest annual report on Form 10-K for further discussion of forward-looking statements. We'll also be referring to adjusted results and outlook. Both exclude certain items described in this morning's news release. The release has further information on these adjustments and reconciliations to comparable GAAP financial measures. And now, I'll turn it over to Mark.

MARK BUTHMAN, SVP & CFO, KIMBERLY-CLARK: Thanks, Paul. Good morning. Let's start with the headlines for the year. First, we generated mid-single-digit growth in organic sales and adjusted earnings per share from continuing operations. Second, we improved our margins boosted by significant cost savings. And, third, we delivered another strong performance managing our balance sheet.

Now let's cover the detail of our results. Fourth-quarter sales were \$4.8 billion down 1 point versus prior year. That brought full-year sales to \$19.7 billion, up 1 point compared to 2013. If you exclude currency and restructuring impacts, our organic sales were up 3% for the quarter and 4% for the full year. Our momentum in K-C International continues to be strong as organic sales were up 7% in the fourth quarter and 10% for the full year.

Fourth-quarter adjusted gross margin was 33.9% with the full year at 34.3%. That's up 20 basis points year on year. Adjusted operating margin was 15.9% in the fourth quarter, 16.1% for the full year. That's up 70 basis points compared to the prior year. I was really encouraged to see our operating margins up in North America, in Europe and in K-C International.

We delivered \$320 million of forced cost savings in 2014. That's the second-highest amount we've ever achieved. We expect another strong year in 2015 with a savings target of at least \$300 million for the year. In addition, we expect to deliver \$60 million to \$80 million in savings from our 2014 organizational restructuring program.

We absorbed \$240 million of input cost inflation in 2014. Currencies were also a drag on earnings. Translation was a \$75 million negative, and transaction effects were also unfavorable.

Equity income was down 29% in 2014, and that's well below our original plan for the year. That was driven by performance in K-C de Mexico which continues to face challenging economic and competitive conditions in Mexico. Because the Mexican peso has depreciated significantly over the last few months, we now expect that equity income will be down somewhat year on year in 2015.

Fourth-quarter adjusted earnings per share from continuing operations were \$1.35 bringing the full year to \$5.51. That's up 5% year on year. Net growth is consistent with the 4% to 7% target we set at the beginning of 2014.

Our overall capital management was strong in 2014 as well. We continue to allocate capital in shareholder-friendly ways. Cash from operations was healthy at \$2.8 billion although we're down somewhat year on year. Comparisons were impacted by higher tax payments and transaction costs related to our spinoff in the healthcare business.

We reduced primary working capital in 2014 with a seven-day improvement in our cash conversion cycle. Return-on-invested capital improved nicely climbing 160 basis points to 19.1% for the year.

We returned \$3.3 billion to shareholders through share repurchases and dividends in 2014. And, for 2015, we expect to repurchase \$800 million to \$1 billion of KMB stock. Regarding the dividend, we expect a mid-single digit increase this year consistent with our growth and adjusted earnings per share from continuing operations in 2014.

Let me briefly recap segment results for the year. In personal care, organic sales rose 6% continuing our track record of delivering strong growth in this segment. Full-year operating margins were solid at 18.7%. That's an increase of 90 basis points.

Moving into consumer tissue, organic sales were up 2%. Operating margins of 16% were up 110 basis points driven by cost savings and higher net selling prices. And, lastly, K-C Professional organic sales increased 4%. Operating margins were a healthy 17.8% although they were down slightly year-on-year.

Now, I want to cover two additional topics, and I'll start with Venezuela. As you'd expect, we have been closely monitoring events and conditions in the country for some time. Given the increased uncertainty and inconsistent liquidity at the end of the year, we decided to move from measuring results at the official exchange rate of 6.3 Bolivars per US dollar to using the government SICAD II floating exchange rate. The SICAD II rate has been trading at about 50 Bolivars per dollar recently. As a result of this change, we re-measured our year-end balance sheet in Venezuela at the SICAD II rate with a resulting charge to earnings of \$462 million. Looking ahead for 2015, using the SICAD II rate to translate results in Venezuela will reduce total Company sales by about 3% and adjusted operating profit by about 4%.

Now to wrap up. Starting next quarter, we will be making a small change in how we talk about our businesses outside of North America. As you know, we've spent the last year bringing our European operations together with our K-C International organization. That integration is right on track. And, as a result starting next quarter, we'll describe our businesses outside of North America in two groups. Developing and emerging markets and developed markets. That will replace K-C International in Europe.

Developing and emerging markets will comprise Eastern Europe, the Middle East and Africa, Latin America, and Asia-Pacific and will exclude Australia and South Korea. Developed markets will consist of Western and Central Europe, Australia and South Korea.

So, for some perspective in 2014, our D&E markets' business represented 33% of our Company sales. 30% if you take into account the currency rate change in Venezuela. The business generated organic sales growth of 11%, excluding Venezuela, and improved operating margins year on year. We expect high single-digit to low double-digit organic growth in 2015 for our developing and emerging markets business.

Our developed markets business was approximately 21% of Company sales in 2014. Organic sales were up 1% with healthy and improving operating margins. That wraps up my comments, and I'll turn it over to Tom.

TOM FALK, CHAIRMAN & CEO, KIMBERLY-CLARK: Thanks, Mark, and good morning, everyone. I'll share my perspectives on our full-year 2014 results, and then I'll address our outlook for 2015.

Let's start with 2014. We delivered on our financial commitments while making strategic changes to further improve our Company. As Mark just mentioned, our organic sales grew 4% in 2014, and that was right in line with our long-term target. K-C International had another great year including excellent progress with our key growth initiatives.

For example, in our diaper business in KCI, organic sales were up 25% in Eastern Europe, 25% in China, and 10% in Brazil. We continue to benefit from innovation in these markets. And, in China, Huggies diapers are now sold in 105 cities, and that's up from just 90 cities at the end of 2013. We're targeting to be in 115 cities by the end of this year.

Our feminine care organic sales rose at a double-digit rate in K-C International. We continue to grow our brands and launch innovations in this category around the world. Our adult care organic sales were also up double digits in KCI, and baby wipes rose high single digits.

Elsewhere in K-C International, our K-C Professional sales, organic sales were up double digits. This is now a \$1 billion business for us with attractive margins. So, we will be making additional investments in this part of our portfolio to drive further growth in the future.

Moving to our North American consumer business, we generated solid sales growth and launched innovations on several brands in 2014. That included Viva towels, Good Nights youth pants, Huggies baby wipes, and our Poise and Depend adult care brands. Our North American market shares were up or even with the prior year in six of the eight categories that we track. One of our businesses had a soft year in North America, and that was mainline Huggies diapers. To improve our performance in 2015, we will be making investments in innovation, marketing and relative value to key competition.

Turning to K-C Professional in North America. We delivered high single-digit volume growth in safety products while volumes were down in washroom. We have made some investments to be more competitive in this category, and with better execution and an improving US economy, we expect to drive more growth in this business in 2015.

Mark has already highlighted how we continue to manage our Company with financial discipline so I'll just add that I'm pleased with our cost savings, our margin improvement, and our cash returns to shareholders during the year. I'm also pleased that we delivered on our bottom line growth target in a challenging environment.

We also made some important strategic changes to the business this past year. We successfully executed the spinoff of our healthcare business. And, that has allowed both Kimberly-Clark and Halyard Health to further increase focus on their own strategies.

We initiated our 2014 organization restructuring. This will help us improve our efficiency, will offset the impact of stranded overhead cost from the spinoff, and will increase our flexibility to invest in future growth. We expect to make significant progress with this program in 2015.

We also completed our European strategic changes initiatives, and we are realizing the benefits we expected. Over the past two years, our European consumer business has increased operating profit by 10% and improved operating margin by 300 basis points. And, we're growing volumes in our high-volume childcare and baby wipes businesses. So, all in all, I'm encouraged with our accomplishments in 2014, and our teams are focused on driving further improvements going forward.

Now, let's move to our outlook for 2015. The environment has become significantly more volatile recently particularly with currency rates and commodity costs. So, planning in this environment has become much more dynamic. Regardless, our teams continue to focus on our global business plan strategies and the fundamentals that create long-term shareholder value.

So, in 2015, we'll leverage our brands, our growth initiatives, our innovations, and marketing investments to drive organic sales growth. We'll deliver healthy levels of cost savings to improve our margins and fund reinvestments in the business. And, we'll generate strong cash flow, improve return-on-invested capital, and allocate capital in shareholder-friendly ways.

In terms of our specific 2015 targets. On the top line, we expect organic sales growth of 3% to 5%. We will continue to focus on driving rapid growth in personal care and K-C Professional in developing and emerging markets. We will launch innovations throughout our businesses. Near-term activity in North America will include upgrades on Huggies diapers, Huggies baby wipes, and in our adult care business.

Internationally, we'll introduce new or improved products across a number of categories. To support our innovations and growth initiatives, our advertising spending should be up somewhat as a percent of sales.

On the bottom line, we're targeting adjusted earnings per share in the range of \$5.60 to \$5.80. That's up 2% to 5% compared to adjusted earnings per share from continuing operations in 2014. Similar to this past year, we expect that earnings in 2015 will be higher in the second half of the year as compared to the first half of the year.

Like other multinational companies, we're facing significant currency headwinds. Including the rate change in Venezuela we, expect that translation effects will reduce our sales by 8% to 9% and reduce earnings by 9% to 10%. Adding in transaction effects, currency is likely to hurt our bottom line by more than 15% in 2015.

On the commodity front, the outlook has improved some in the past three months, but at this point, we are not planning for a big commodity windfall. Oil-based costs have started to fall recently but not nearly as much as the drop in oil prices. We expect pulp costs, including secondary fiber, to be similar to last year or even up slightly. We're also assuming that local inflation will continue in some of our international markets.

Adding it all up, our plan assumes cost deflation in 2015 of zero to \$150 million. At the midpoint, that's only a 2-point benefit to the bottom line. So, the primary ways that we will offset currency headwinds will be by raising selling prices where we can, delivering cost savings, and controlling our overhead spending.

We will continue to focus on cash generation and capital allocation in 2015. Cash provided by operations should be similar to 2014 or perhaps up somewhat despite the lost cash flow from the spun-off healthcare business. We expect to allocate at least \$2.1 billion to dividends and share repurchases in 2015. That represents a cash return of about 5% based on our current market capitalization.

In summary, we delivered on our growth targets in 2014 while making strategic changes to improve our Company. We continue to focus on the fundamentals that drive our long-term performance, and we remain optimistic about our prospects to generate attractive shareholder returns. So, that wraps up our prepared remarks, and now, we'll begin to take your questions.

Appendix B

Year	Female Company	F NAICS Code	Male Company	M NAICS Code
2010	AMN HEALTHCARE SERVICES INC	561311	EXPEDIA INC	561510
2010	VENTAS INC	531110	AUTOMATIC DATA PROCESSING	518210
2010	XEROX CORP	518210	ADOBE SYSTEMS INC	511210
2010	DINEEQUITY INC	533110	AUTODESK INC	511210
2011	PEPSICO INC	311919	UNDER ARMOUR INC	315
2011	LIFEWAY FOODS INC	311511	PVH CORP	315
2012	INGREDION INC	311221	HORMEL FOODS CORP	311611
2012	ARCHER-DANIELS-MIDLAND CO	31122	TYSON FOODS INC -CL A	311611
2012	LIFEWAY FOODS INC	311511	COCA-COLA CO	312111
2012	MONDELEZ INTERNATIONAL INC	311	SMUCKER (JM) CO	311421
2012	GENOMIC HEALTH INC	325413	PFIZER INC	325412
2012	DU PONT (E I) DE NEMOURS	3252	CHEVRON CORP	324110
2012	AMN HEALTHCARE SERVICES INC	561311	AT&T INC	517210
2012	VENTAS INC	531110	FACEBOOK INC	519130
2013	ARCHER-DANIELS-MIDLAND CO	31122	HERSHEY CO	311351
2013	INGREDION INC	311221	TESORO CORP	324110
2013	DU PONT (E I) DE NEMOURS	3252	SMUCKER (JM) CO	311421
2013	MYLAN NV	325412	CHEVRON CORP	324110
2013	MONDELEZ INTERNATIONAL INC	311	TYSON FOODS INC -CL A	311611
2013	CAMPBELL SOUP CO	311422	COCA-COLA CO	312111
2013	KEYCORP	522110	EBAY INC	519130
2013	INTL BUSINESS MACHINES CORP	541519	ADOBE SYSTEMS INC	511210
2013	VENTAS INC	531110	DISNEY (WALT) CO	515120
2013	XEROX CORP	518210	EXPEDIA INC	561510

2013	AMN HEALTHCARE SERVICES INC	561311	NETFLIX INC	532230
2013	CARE.COM INC	519130	WASTE MANAGEMENT INC	562111
2013	PEPSICO INC	311919	FORD MOTOR CO	33611
2013	GENOMIC HEALTH INC	325413	MONSTER BEVERAGE CORP	312111
2014	MYLAN NV	325412	3M CO	322220
2014	DU PONT (E I) DE NEMOURS	3252	CHEVRON CORP	324110
2014	LOCKHEED MARTIN CORP	336414	UNDER ARMOUR INC	315
2014	HP INC	33411	PRAXAIR INC	325120
2014	CAMPBELL SOUP CO	311422	HERSHEY CO	311351
2014	MONDELEZ INTERNATIONAL INC	311	KELLOGG CO	311230
2014	ARCHER-DANIELS-MIDLAND CO	31122	SMUCKER (JM) CO	311421
2014	INGREDION INC	311221	KIMBERLY-CLARK CORP	322121
2014	YAHOO INC	519130	TIME WARNER INC	512110
2014	GANNETT CO INC	511110	ADOBE SYSTEMS INC	511210
2014	GENERAL DYNAMICS CORP	336411	NIKE INC	316210
2014	AVON PRODUCTS	325620	VF CORP	315220
2014	AMN HEALTHCARE SERVICES INC	561311	COMCAST CORP	515210
2014	CARE.COM INC	519130	ACCENTURE PLC	541611
2015	MONDELEZ INTERNATIONAL INC	311	COCA-COLA CO	312111
2015	PEPSICO INC	311919	CUMMINS INC	333618
2015	INGREDION INC	311221	MONSTER BEVERAGE CORP	312111
2015	CAMPBELL SOUP CO	311422	INTEL CORP	334413
2015	VENTAS INC	531110	ADOBE SYSTEMS INC	511210
2015	HCP INC	531120	TRIPADVISOR INC	519130
2015	GENERAL DYNAMICS CORP	336411	DR PEPPER SNAPPLE GROUP INC	312111
2015	AVON PRODUCTS	325620	CONSTELLATION BRANDS	312130
2015	GENERAL MOTORS CO	33611	HANESBRANDS INC	315190
2015	DU PONT (E I) DE NEMOURS	3252	KIMBERLY-CLARK CORP	322121
2015	KEYCORP	522110	ACCENTURE PLC	541611
2015	YAHOO INC	519130	NETFLIX INC	532230

2015	INTL BUSINESS MACHINES CORP	541519	FACEBOOK INC	519130
2015	XEROX CORP	518210	IRON MOUNTAIN INC	531120
2015	LIFEWAY FOODS INC	311511	DOW CHEMICAL	325211
2015	GENOMIC HEALTH INC	325413	JOHNSON & JOHNSON	325412
2015	CARE.COM INC	519130	VERIZON COMMUNICATIONS INC	517210
2015	WEX INC	518210	BLOCK H & R INC	541213
2015	DUKE ENERGY CORP	2211	EVERSOURCE ENERGY	2211
2015	HAWAIIAN ELECTRIC INDS	22111	XCEL ENERGY INC	2211
2016	LOCKHEED MARTIN CORP	336414	UNDER ARMOUR INC	315
2016	CAMPBELL SOUP CO	311422	MEAD JOHNSON NUTRITION CO	311514

Appendix C

The following text is an excerpt of only CEO Tom Falk's words spoken during the Q4 2014 Kimberly Clark Final Earnings Conference Call. Joseph Harrison created this text by running the Python code over entire conference call transcript. This method was used to gather the CEOs' spoken words for all remaining companies in the sample.

Thanks, Mark, and good morning, everyone. I'll share my perspectives on our full-year 2014 results, and then I'll address our outlook for 2015. Let's start with 2014. We delivered on our financial commitments while making strategic changes to further improve our Company. As Mark just mentioned, our organic sales grew 4% in 2014, and that was right in line with our long-term target. K-C International had another great year including excellent progress with our key growth initiatives. For example, in our diaper business in KCI, organic sales were up 25% in Eastern Europe, 25% in China, and 10% in Brazil. We continue to benefit from innovation in these markets. And, in China, Huggies diapers are now sold in 105 cities, and that's up from just 90 cities at the end of 2013. We're targeting to be in 115 cities by the end of this year. Our feminine care organic sales rose at a double-digit rate in K-C International. We continue to grow our brands and launch innovations in this category around the world. Our adult care organic sales were also up double digits in KCI, and baby wipes rose high single digits. Elsewhere in K-C International, our K-C Professional sales, organic sales were up double digits. This is now a \$1 billion business for us with attractive margins. So, we will be making additional investments in this part of our portfolio to drive further growth in the future. Moving to our North American consumer business, we generated solid sales growth and launched innovations on several brands in 2014. That included Viva towels, Good Nights youth pants, Huggies baby wipes, and our Poise and Depend adult care brands. Our North American market shares were up or even with the prior year in six of the eight categories that we track. One of our businesses had a soft year in North America, and that was mainline Huggies diapers. To improve our performance in 2015, we will be making investments in innovation, marketing and relative value to key competition. Turning to K-C Professional in North America. We delivered high single-digit volume growth in safety products while volumes were down in washroom. We have made some investments to be more competitive in this category, and with better execution and an improving US economy, we expect to drive more growth in this business in 2015. Mark has already highlighted how we continue to manage our Company with financial discipline so I'll just add that I'm pleased with our cost savings, our margin improvement, and our cash returns to shareholders during the year. I'm also pleased that we delivered on our bottom line growth target in a challenging environment. We also made some important strategic changes to the business this past year. We successfully executed the spinoff of our healthcare business. And, that has allowed both Kimberly-Clark and Halyard Health to further increase focus on their own strategies. We initiated our 2014 organization restructuring. This will help us improve our efficiency, will offset the impact of stranded overhead cost from the spinoff, and will increase our flexibility to invest in future growth. We expect to make significant progress with this program in 2015. We also completed our European strategic changes initiatives, and we are realizing the benefits we expected. Over the past two years, our European consumer business has increased operating profit by 10% and improved operating margin by 300 basis points. And, we're growing volumes in our high-volume childcare and baby wipes businesses. So, all in all, I'm encouraged with our accomplishments in 2014, and our teams are focused on driving further improvements going forward. Now, let's move to our outlook for 2015. The environment has become significantly more volatile recently particularly with currency rates and commodity costs. So, planning in this environment has become much more dynamic. Regardless, our teams continue to focus on our global business plan strategies and the fundamentals that create long-term shareholder value. So, in 2015, we'll leverage our brands, our growth initiatives, our innovations, and marketing investments to drive organic sales growth. We'll deliver healthy levels of cost savings to improve our margins and fund reinvestments in the business. And, we'll generate strong cash flow, improve return-on-invested capital, and allocate capital in shareholder-friendly ways. In terms of our specific 2015 targets.

On the top line, we expect organic sales growth of 3% to 5%. We will continue to focus on driving rapid growth in personal care and K-C Professional in developing and emerging markets. We will launch innovations throughout our businesses. Near-term activity in North America will include upgrades on Huggies diapers, Huggies baby wipes, and in our adult care business. Internationally, we'll introduce new or improved products across a number of categories. To support our innovations and growth initiatives, our advertising spending should be up somewhat as a percent of sales. On the bottom line, we're targeting adjusted earnings per share in the range of \$5.60 to \$5.80. That's up 2% to 5% compared to adjusted earnings per share from continuing operations in 2014. Similar to this past year, we expect that earnings in 2015 will be higher in the second half of the year as compared to the first half of the year. Like other multinational companies, we're facing significant currency headwinds. Including the rate change in Venezuela we, expect that translation effects will reduce our sales by 8% to 9% and reduce earnings by 9% to 10%. Adding in transaction effects, currency is likely to hurt our bottom line by more than 15% in 2015. On the commodity front, the outlook has improved some in the past three months, but at this point, we are not planning for a big commodity windfall. Oil-based costs have started to fall recently but not nearly as much as the drop in oil prices. We expect pulp costs, including secondary fiber, to be similar to last year or even up slightly. We're also assuming that local inflation will continue in some of our international markets. Adding it all up, our plan assumes cost deflation in 2015 of zero to \$150 million. At the midpoint, that's only a 2-point benefit to the bottom line. So, the primary ways that we will offset currency headwinds will be by raising selling prices where we can, delivering cost savings, and controlling our overhead spending. We will continue to focus on cash generation and capital allocation in 2015. Cash provided by operations should be similar to 2014 or perhaps up somewhat despite the lost cash flow from the spun-off healthcare business. We expect to allocate at least \$2.1 billion to dividends and share repurchases in 2015. That represents a cash return of about 5% based on our current market capitalization. In summary, we delivered on our growth targets in 2014 while making strategic changes to improve our Company. We continue to focus on the fundamentals that drive our long-term performance, and we remain optimistic about our prospects to generate attractive shareholder returns. So, that wraps up our prepared remarks, and now, we'll begin to take your questions.

I think industry [operary] rates are still hovering around 90%. And so, that's maybe down a tick. As we look at the industry capacity increase in 2015, it looks like there's maybe net 1% additional capacity coming on line. That's pretty much what the market grows every year. So, there's not a huge imbalance at this point in time. I'd say, we're cautiously optimistic about how that will play out.

I think that when—it's something that Mark and I have been spending a lot of time watching and working with Elane Stock and the K-C International team to monitor what is going on on the ground in Venezuela. And really, if you look at what happened with the oil price shock and that economy is so dependent on oil. We really expected probably some other deflation or devaluation action to happen. And, we got to the end of the year and felt like it was the right thing to do to move to a rate that may be more reflective of economic reality on the ground. We're still getting foreign exchange at the 6.3 rate. But, translating into our US dollar results felt like we should use a rate that was a little closer to economic reality. And so, it's something that we spent a lot of time thinking about and talking about in the fourth quarter. But, the drop in oil prices certainly made a difference. It's also a key that we—as we said on the last call, that we've kept our US dollar exposure there. And so, we started to take some down time in the country due to lack of foreign exchange, and that also was a factor in our decision. In terms of the impact on Venezuela, it has been about a 1-point tailwind to KCI growth. If you look at it in total—if you took Venezuela out of the KCI growth rates, it would probably drop by about 1 point, if that makes sense.

That's a good question. In 2014, basically the difference was the Halyard dividend. And so, as part of the spin, we pulled the Halyard dividend out so that boosted us up to the top end. But Mark, maybe you want to give a little bit more color on 2015, and how you're thinking about that?

Good question. A fair amount of it is follow-up through. And, it's not going to be broadly-based. So, it's going to be targeted in key markets. So, where you've seen big currency moved like Russia, Argentina, you will see a disproportionate amount of pricing in markets like that. If you see a market like Australia where you've had currency weakness—or the euro zone—where you have seen currency weakness, it will be much tougher to get pricing in those markets. And, I think the commodity factor that you mentioned as well will make it more difficult. But, in a market like Russia, you could see double-digit, mid-teens kind of pricing in Russia and Eastern Europe just because of the shock that you've seen to currencies in those markets.

In Brazil, we took some pricing on November 1. And so, we had a little bit of a late third quarter, early fourth quarter buy-in ahead of that. And so, it was a little softer in the end of the quarter as a result of that. We were probably—year-over-year, our promotional timing was not quite as heavily back-end loaded. So, I'd say overall we felt pretty good about our volume in Brazil being up double digits in diapers for the year. We've got great momentum and innovation coming, and I'm expecting them to have a very solid year in 2015.

Appendix D

1. In general, based on your experience, how do males communicate in comparison to females?
2. Again, based on your experience, how do male CEOs communicate in comparison to female CEOs?
3. What is the ratio of men to women in the groups you interact with at work?
4. How do male and female executives interact inside of those work groups?
5. Do you find that you communicate differently when publicly explaining financial results than when communicating in those work groups? How so?
6. What tactics do you use when communicating positive economic results? What about when communicating negative results?
7. Do you think investors respond more positively to certain types of communication? Do you try to match these expectations?
8. Do you think that you communicate differently as an executive than you did when you first entered the business world? How so?
9. Do you think your personal communication style is more characteristic of the stereotypical male or female?

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