Oral financial reporting: a rhetorical analysis of earnings calls

Abstract

Earnings calls are a key form of voluntary financial reporting through which companies seek to proactively engage investors. Although now quite routine, little is known about their rhetorical dimension. Inspired by Aristotlean classical rhetoric, this paper analyzes the transcripts of earnings calls hosted by company executives to identify expressions of *logos* (reason), *ethos* (credibility) and *pathos* (emotion). Text analysis software was used to generate descriptive data for follow-up qualitative analysis to interpret strategic usage. Results indicate a strong presence of persuasive language that is skillfully juxtaposed with financial information to emphasize success and instill confidence. The findings can be applied towards developing state-of-the-art courses for students of financial communication.

Le teleconferenze per annunciare i risultati finanziari costituiscono una forma di disclosure volontaria che facilita la comunicazione proattiva con gli investitori. Sebbene siano molto frequenti, la loro dimensione retorica rimane ancora in larga parte sconosciuta. Ispirandosi alla retorica aristotelica, questo paper analizza il linguaggio utilizzato nelle trascrizioni di teleconferenze tenute da manager aziendali in termini di logos (ragione), ethos (credibilità) e pathos (emozione). I dati descrittivi generati attraverso software di analisi testuale sono stati sottoposti ad analisi interpretativa di tipo qualitativo. Quest'ultima evidenzia il frequente ed abile utilizzo di elementi retorici, finalizzato ad enfatizzare i risultati finanziari positivi ed ispirare fiducia. I risultati conseguiti risultano utili per lo sviluppo di corsi all'avanguardia per studenti di comunicazione finanziaria.

1. Introduction

The periodic reporting of financial results is one of the primary functions of investor relations within a framework of strategic corporate communication (Argenti, 2008). In recent years, financial disclosure has emerged as an area of intense activity as companies attempt to project an

image of transparency within a more stringent regulatory environment after a series of major accounting scandals (e.g., Enron, Parmalat, Ahold). To comply with new regulations and legislation that aim to prevent unethical financial reporting practices[1], businesses dedicate a great deal of time and resources to the process of financial disclosure. In a survey of Fortune 500 companies carried out by Laskin (2009), preparing financial documentation was identified among the most frequent business activities, spanning across investor relations, finance and communication departments.

Financial reporting may be either mandatory, in the form of financial statements reports filed with regulatory authorities, or voluntary, such as management forecasts, financial news releases and earnings conference calls.[2] Voluntary forms of financial disclosure have been steadily gaining traction as they allow businesses to proactively engage stakeholders in an increasingly competitive environment (Tasker, 1998; Beattie *et al*., 2008). In addition, voluntary financial reporting enables companies to exert more control over the message, achieve greater visibility and enhance perceived value (Williams, 2008).

The focus of this study is an ICT-mediated form of voluntary financial reporting: the quarterly earnings conference call (hereinafter simply earnings call). Since the late 1990s, earning calls have been recognized as the main channel through which companies communicate directly with financial analysts and portfolio managers (Tasker, 1998a). Over the years, thanks also to continuing advances in technology, they have undergone a progressive expansion in scope. Most listed companies now routinely conduct open calls that are webcast and accessible not only to professional financial analysts, but also to an unlimited number of individual investors among the public at large (Skinner, 2003; Roelofsen, 2010). Thus, earnings calls have become a standard venue for financial reporting that involves vast numbers of participants engaged in strategic communication. On one hand, the corporate executives that present financial results are keen to convince the audience that their company is sound and worthy of investment. On the other hand, the audience wants to glean information that

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[1] In the US, the SEC's Regulation FD was introduced in 2000 to inhibit selective disclosure and insider trading. In 2002, the Sarbanes Oxley Act was passed to increase financial disclosure requirements, combat accounting fraud and raise management accountability. In 2004, the EU Commission ratified the European Transparency Directive that requires issuers listed on European stock markets to release annual reports produced according to International Financial Reporting Standards (Sheehan, 2005).

[2] See Ettredge *et al*. (2002) for a categorization of voluntary vs. required financial disclosure.

will allow them to write accurate forecasts and determine ratings (in the case of professional analysts), or to make good investments (in the case of private individual investors). Given this scenario, it seems important to gain insights into the persuasive dimension of these ostensibly fact-oriented events through an analysis of the rhetorical language features of the earnings presentations of the corporate executives. More specifically, I aim to answer the following research questions:

- Does the speech of the executives contain distinct rhetorical features?
- If so, which types and to what extent are they used?
- How might they be influenced by the unique interactional setting of earnings calls?

Following this brief introduction, I review previous research dealing with earnings calls (Section 2), explain the analytical framework of the present study (Section 3), describe the methodological approach (Section 4), report and interpret the findings of the analysis (Section 5), and conclude with a summary of the main results and a discussion of their implications (Section 6).

2. Previous research on earnings calls

A considerable amount of empirical research has been undertaken in the over-arching area of voluntary disclosure, focusing mainly on motivations, costs and benefits, and measurement techniques, as thoroughly described in two recent review articles by Beyer *et al.* (2010) and Berger (2011). With particular reference to earnings calls as an instrument of voluntary disclosure, there has been some research on their informative nature. A content analysis of small sample of the quarterly earnings calls of high tech companies performed by Tasker (1998a) revealed that managers discussed various types of information, including quantitative and qualitative, historical and forward-looking, and internal (company-related) and external (industry and competition-related). In another study, the same author found that firms with less informative financial statements (determined by industry measures) were more likely to hold earnings calls than those with more informative statements, suggesting that earnings calls can be a useful means to mitigate information asymmetry (Tasker 1998b). Using a sample of about 1,000 earnings calls, Frankel *et al*. (1999) measured volatility and trading volume during the calls to conclude that earnings calls provide

more information to market participants than what is found in the earnings releases that typically accompany the calls.

The relationship between disclosure policy and information asymmetry was further explored by Brown *et al.* (2004). They measured the level of information asymmetry by means of the Probability of Informed Trade (PIN) method in a large sample of firms that conducted earnings calls over a three-year period. They found that information asymmetry was negatively associated with earnings call frequency. In other words, firms that held regular earnings calls experienced significant declines in information asymmetry. The authors further suggested that holding frequent conference calls can lead to lower costs of capital for firms.

Bushee *et al.* (2003) instead focused on the issue of open vs. closed earnings calls, where closed calls restrict participation to invited professional analysts vs. open calls that allow unlimited access to all interested parties. Their findings indicate that the decision to opt for open or closed calls depends on the characteristics of the firm's investor base, such as number of shareholders, type of ownership (institutional or individual) and level of analyst following. Companies that held open calls tended to have more shareholders, fewer institutional investors and lower levels of analyst following. In addition, they found that open calls were associated with higher volatility, but did not detect differences in trading volume between open and closed calls.

Other studies have adopted a discourse analytic approach to gain further insights into earnings calls as disclosure events. More specifically, these studies made use of the transcripts of earnings calls in order to carry out various types of analysis on the actual speech of earnings calls participants. Crawford Camiciottoli's (2010) analysis of the discursive patterning of earnings calls transcripts indicated a highly regular macrostructure characterized by distinctive and recurring functional steps (e.g., *commenting overall results*, *elaborating financial statements*, *forecasting future trends*, *instilling confidence*), as well as a high level of intertextuality (i.e., cross-references to other spoken and written financial texts) that reflected a cohesive professional community that has shaped and consolidated its own distinctive communication practices. Matsumoto *et al*. (2006) looked at the relationship between the length of earnings calls (measured in terms of transcript word counts) and market performance. They found that both management presentations and the following Q&A sessions with analysts tended to be longer when earnings and stock market performance were poor. This was attributed to management's choice to provide lengthier explanations about poor performance. It is interesting to

contrast this study with one by Li (2008) that instead looked at written annual reports. In this case, poor performance was also associated with longer texts, as well as lower readability scores calculated by means of natural language processing techniques.[3] However, this was interpreted as evidence of attempts to obfuscate poor performance by making reports more difficult to read. Thus, it appears that financial disclosure that takes place via written vs. oral channels may assume different features and connotations.

Shifting the focus to specific features of the language found in earnings calls, Larcker and Zakolyukina (2010) devised a model based on word categories to predict deceptive reporting by CEOs and CFOs during the unrehearsed Q&A sessions of earnings calls. When these were compared to financial restatements subsequently issued by the same companies, they found that that 'deceptive' Q&A sessions contained fewer self-references, more impersonal pronouns, fewer negative and more positive emotion words, fewer expressions of both certainty and hesitation, and made less mention of shareholder value and value creation than 'truthful' ones. Also investing the Q&A sessions of earnings calls, Crawford Camiciottoli (2009) used text analysis software as an application of natural language processing to investigate patterns of analysts' questions. She found that indirect requests for information (e.g., *I'd love to hear more about…*) were twice as frequent as direct requests (e.g., *What are the…?*), even if the latter would seem entirely appropriate in such routine informative events. Follow-up interpretive analysis suggested that the motivation behind this usage was the analysts' aim to hold the floor as long as possible in order to extract maximum information in this technology-constrained setting which limits their access to the executives.

The research reviewed in the preceding paragraphs has been undertaken from different analytical perspectives and has thus provided a range of insights into the earnings call as an instrument of financial reporting. However, there has recently been a call for additional work using natural language processing as a way to expand the scope of empirical disclosure research (Beyer *et al*., 2010; Berger, 2011). Indeed, Berger (2011, p. 216) affirms that: "Natural language processing techniques represent one innovative way to capture both broad aspects of disclosure and aspects of

[3] Natural language processing refers to the use of computer applications to analyze, manipulate and generate natural spoken and written texts. It is closely linked to the field of artificial intelligence and has a wide range of applications, such as information retrieval/extraction, machine translation and speech recognition.

disclosure not readily measured by other means". Moreover, the language-focuses studies described above have highlighted the strong rhetorical undercurrent in the speech of the participants which would merit further investigation. The present study aims to make a contribution towards both goals, as will be explained in the next two sections dedicated to the analytical framework and methodological approach.

3. Classical rhetoric as an analytical framework

In an entry to the *New Palgrave Dictionary of Money and Finance*, entitled *The Rhetoric of Finance*, McCloskey (1992, p. 350) writes "the jargon of the financial market is of course ripe for rhetorical study". This claim is supported in the ensuing discussion of features of financial language (e.g., metaphor, figures of speech, story-telling) whose origins can be traced back to Aristotle's masterpiece *Rhetoric*.

In the context of financial reporting, Hyland's (2005) study of CEOs' letters to shareholders embedded in annual reports demonstrated the presence of language that could be linked to the three modes of persuasion described by Aristotle in *Rhetoric* (Book I, Chapter II): logos (appeals to reason), ethos (appeals to good character) and pathos (appeals to emotions).[4] In particular, the CEOs letters were found to contain a range of linguistic features that could be interpreted as expressions of logos, ethos and pathos. For example, textual connectives (e.g., *therefore, due to, in spite of*) encode logos through a process of rationalization that tells readers how ideas should be connected and thus understood. The presence of phrases such as *we strongly believe* and *our duty* serve to foster ethos, i.e., a perception of the writer's (and consequently the company's) credibility and reliability. Pathos is communicated through language that conveys emotions (e.g., *pleased, confident, concerned*), as well as first and second person pronouns that establish an interpersonal connection with readers.

Building on this previous work, I also analyze expressions of logos, ethos and pathos in the language used by executives during earnings calls, a key form of oral financial reporting that has not yet been investigated from

[4] See the online version at http://www.public.iastate.edu/~honeyl/Rhetoric/index.html, based on the translation of the classical scholar W. Rhys Roberts, and made available electronically by Lee Honeycutt.

a rhetorical perspective. Of particular interest is the impact of the communicative setting, distinguished by a 'virtual audience', on the language that is used.

4. Methodology

4.1. The dataset

The dataset used for this study is based on the transcripts of the earnings calls of ten major companies, all with global name recognition. The transcripts contain approximately 97,000 words and were accessed from Internet sources. This was possible due to the rapidly changing panorama of financial disclosure characterized not only by a growing audience of individual investors, but also by constantly improving technology to both diffuse and access information (Skinner, 2003). Until relatively recently, the transcripts of earnings calls were available primarily to professionals at high costs through Web-based providers of documentation. Now thanks to services such as *Seeking Alpha*, an increasing number of earnings calls transcripts can be freely accessed via Internet, thus contributing to what has been called the 'democratization' of the earnings call (Jones, 2008).

In an effort to ensure a uniformity of financial reporting practices, the companies included in the dataset are all headquartered in the US and listed on major US stock exchanges. All the transcripts refer to the third quarter of 2009, a period in which the worldwide financial crisis was still in full swing. The decision to delimit the timeframe of analysis to an overall negative environment was motivated by two factors. Firstly, the executives may need step up efforts to explain and justify declines in performance which could provide more opportunities for rhetorical analysis. Secondly, if all the companies were affected at least to some extent by the downturn, it would be easier to identify key recurring patterns of persuasive language. In fact, none of the companies reported overall results that represented a substantial improvement over previous periods. An overview of the dataset is shown in Table 1.[5]

[5] Company names have been removed throughout the article for reasons of privacy.

Table 1. Firms comprised in the earnings calls dataset

Firms	Business Sector	N. Executives	N. Analysts	Word count
1	Pharmaceuticals	4	9	9,558
2	Oil & gas	3	11	10,800
3	IT services	3	16	9,437
4	Restaurants	3	9	10,808
5	Computer services	3	13	9,355
6	Food processing	2	10	8,732
7	Financial services	1	10	9,533
8	Electronic commerce	3	21	8,237
9	Telecommunications	2	9	7,396
10	Document services	3	6	12,802

As can be seen from the table, the firms included in the dataset cover a variety of business sectors. The number of corporate participants ranged from one to four, most typically the CEO, CFO and the Director of Investor Relations. These professional figures represent the leadership of the company and consequently play a crucial role in shaping and communicating corporate values (Den Hartog and Verburg, 1997). According to Larcker and Zakolyukina (2010), participating in earnings calls is one of their most important activities which involves careful preparation and rehearsal.

The number of financial analysts connected via telephone ranged from six to twenty-one. These professionals are employed by major securities firms and investment banks, and include both buy-side and sell-side analysts. They are typically specialized in the particular business sector and regularly follow the same companies to gather data for their reports.

4.2. The analysis

Broadly speaking, the study integrates quantitative and qualitative research methods, using text analysis software to identify rhetorical expressions and follow-up manual discourse analysis in the transcripts to interpret the findings in their context of usage. The quantitative analysis is based on natural language processing which, as previously discussed, relies on computers to extract and elaborate information from texts. More specifically, I use the analytical techniques of *corpus linguistics*, a field that is grounded in natural language processing and studies 'real-life' language transformed into machine-readable format, so that it can then be processed

with text analysis software.[6] This type of software is able to generate descriptive statistics of frequencies, distributions, word patterns and multi-word clustering. Corpus software can also automatically tag all words according to grammatical or semantic criteria.

As an initial phase, the earnings calls transcripts were analyzed with *Wmatrix* (Rayson, 2008), a powerful analytical tool that is able to classify (or tag) each word according to its semantic domain, on the basis of 21 over-arching semantic fields (e.g., *World & environment*, *Emotional actions*, *states & processes*, and *Money & commerce*), which are then further articulated into over 200 specific semantic tags.[7] According to the developer of the software, the semantic tagger has an accuracy rate of 92%. This procedure was utilized to identify items used by the executives during earnings calls that could be mapped onto the rhetorical constructs of logos, pathos and ethos. The emerging items were then further elaborated with the software suite *Wordsmith Tools* (Scott, 2010) to fine tune results and look for rhetorical patterning. Finally, the findings were interpreted qualitatively in the transcripts in order to shed light on underlying motivations and strategic usage in this particular interactional context.

5. Results and discussion

Processing the entire dataset with *Wmatrix* returned a key semantic domain cloud with individual items depicted according to frequency of occurrence. This is illustrated in the software screenshot reproduced in Figure 1. The domains that appear in large font sizes have significantly higher frequencies in comparison to those that appear in smaller font sizes. The software calculates statistically significant differences by comparing a given dataset to a standard normative text using the log-likelihood method.[8] This procedure enables the identification of domains that are significant in the data under investigation.

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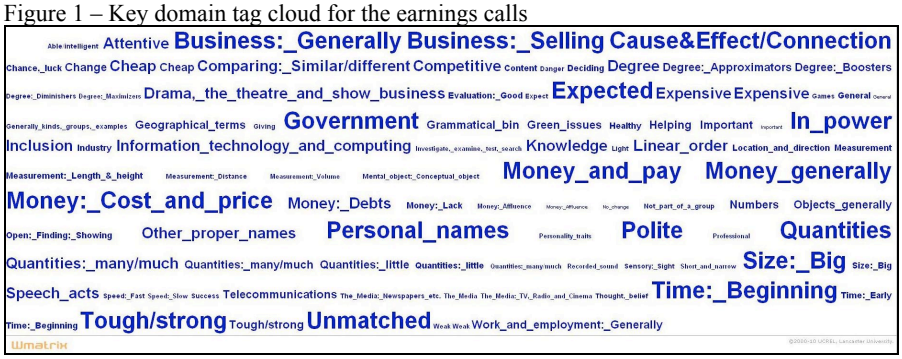
6 A collection of naturally-occurring language is known as a corpus. Corpus linguistics represents a fast-developing methodology capable of providing empirical evidence of language phenomena.

7 For the complete tagset, see http://ucrel.lancs.ac.uk/usas/semtags.txt.

8 In this case, the normative dataset is the BNC (British National Corpus) Spoken Sampler which contains approximately one million words of English speech from various contexts, including education, public institutions, business and leisure, as well as everyday informal conversation.

Figure 1 – Key domain tag cloud for the earnings calls



Source: Wmatrix (Rayson, 2008)

As the figure shows, not surprisingly, several of the most frequently occurring semantic domains (in large font) were linked to business, money and quantitative entities. However, closer examination of other domains showed trends that shed light on rhetorical strategies linked to reasoning (logos), credibility (ethos), and emotions (pathos). In the following sub-sections, I report the findings of this follow-up analysis according to these three key modes of persuasion.

5.1. Logos

Further processing of the tag *Cause&Effect/Connection* revealed a total of 754 items across 42 different forms that were classified in this semantic domain. The items are shown in Table 2, ranked according to their relative frequency counts (N). Each item is listed in its root form. For example, the root *result* groups together *result, results, resulted*, *resulting* and *resultant*.

Table 2 – Items classified as Cause&Effect/Connection

Item root		N	Item root		N
1.	result	128	22.	incur	6
2.	impact	104	23.	connect	5
3.	based_on	91	24.	stem_from	4
4.	relate	78	25.	tie	4
5.	why	54	26.	trigger	4
6.	due_to	35	27.	determine	3
7.	reason	30	28.	link	3
8.	generate	25	29.	has_to_do_with	2
9.	effect	21	30.	in_connection_with	2
10.	with_respect_to	20	31.	in_light_of	2

11.	depend	19	32.	lead_to	2
12.	join	17	33.	to_do_with	2
13.	combine	14	34.	correspondingly	1
14.	because_of	13	35.	implications	1
15.	stimulate	11	36.	in_regard_to	1
16.	produce	10	37.	in_relation_to	1
17.	derive	8	38.	in_response_to	1
18.	with_regard_to	8	39.	influence	1
19.	attribute	7	40.	motivate	1
20.	cause	7	41.	prompted	1
21.	consequence	6	42.	rationale	1

Several items in the table can be easily interpreted as expressions of logos, or how speakers signal the relations between their ideas and thus pilot listeners toward the intended meaning (Hyland, 2005). Expressions based on *result*, *why*, *due to*, *reason*, *effect*, *because of*, *cause*, *consequence*, *determine*, *lead to* and *influence* all explicitly map out the cause-effect sequence for listeners. However, there are also a number of alternative and more dynamic forms, such as *impact*, *generate, trigger,* and *stimulate*.

Follow-up analysis with software *Wordsmith Tools* (Scott, 2010) investigated the patterns of usage of the two most frequent items: *result* and *impact*. A detailed examination of the 128 items based on *result* within their context of usage was possible thanks to the *concordance* output, i.e., a vertical list with the search item displayed in the middle of some accompanying text to the right and left. For illustrative purposes, Figure 2 provides a sample of ten concordances of *result**.

*Figure 2 – Samples of concordances based on result**

N	Concordance
1	per share for pension settlement losses resulting from our separation plans.
2	When I look at the quarter, I believe the results showed good financial discipline
3	better we will see improvements in our results. We are also taking longer-term
4	year. Similar to last quarter, topline results were mixed. All of our strategic
5	by the end of 2010, which alone should result in about $2 billion of capital
6	Street's consensus forecast and as a result, the consensus Street estimate for
7	and our lower net interest expense as a result of our lower debt balances also
8	by a net 43 stores in the quarter. As a result of this domestic and international
9	million or 8.3%, which is primarily the result of lower cheese prices during the
10	fuel prices, and utilities were down as a result of lower gas and electric rates.

Source: Wordsmith Tools (Scott, 2010)

This process determined that the plural form *results* accounted for almost two-thirds of the occurrences, where it was used to refer to the company's earnings for the period, and therefore not to logically connect ideas. However, the remaining items were sufficient to generate recurring clusters based on the patterns *as a result*, *as a result of*, *a result of* and *result/resulting/resulted in*. Examples 1-3 illustrate how these patterns were used by the executive speakers to explain declining performance, which was often counterbalanced by pointing out some positive trend.

(1) By the end of the second quarter we've seen a slowdown in most verticals [...]. *As a result*, revenue declined six percent on a five percent decline in units. Operating income margins, however, increased 130 basis points sequentially to 8.1 percent of revenue. (C3/IT services)
(2) We continued to see domestic store closures with a net 30 stores closed this quarter. These were *a result of* our efforts to eliminate weak operators, but also a sign of the difficult economy over the past 18 months. (C4/Restaurants)
(3) In certain hard-hit developing markets, access to credit is still a challenge, *resulting in* slower demand for new technology. We are maintaining or growing market share by focusing on innovation and customer value. (C10/Document services)

In addition, the item *impact* proved to be a preferred choice among executives to explain the cause of a negative trend which was typically attributed to a source outside the company, as shown in examples 4-6 below. Interestingly, *impact* appeared only six times with positive adjectives/adverbs (e.g., *favorable, positively*) compared to 28 times with negative adjectives/adverbs (e.g., *adverse*, *negatively*).

(4) As you may recall, we were negatively *impacted* $3.6 million from the significant strengthening of the US dollar in the fourth quarter of 2008. (C4/Restaurants)
(5) Of all of our businesses, it is clear that this is the one that has been most *impacted* by reductions in consumer spending and also cutbacks in government spending. (C1/Pharmaceuticals)
(6) While the economy continues to create headwinds for us, we are taking steps to offset the adverse *impacts* as much as possible. (C9/Telecommunications)

The above analysis of language that encodes cause and effect is in line with Hyland's (1998, p. 235) study of "resultative logical connectives" (e.g., *as a result, therefore, as a consequence*) in CEOs' letters to shareholders, which were often used to explain results to readers through overt appeals to reason (logos). However, during the earnings calls, the executive presenters often integrated such traditional textual connectives with more dynamic alternatives (e.g., *impact*). In the context of oral financial reporting, this could indicate a strategic awareness of a competent and demanding audience of listeners whose acute sense of rationality needs to be met with strong and well-articulated explanations.

5.2. Ethos

Two other semantic domains that emerged as significant in the earnings calls were *Time: Beginning* and *Expected* (see Figure 1). Upon closer analysis, although neither domain contained items that could immediately be interpreted as ethos-related (e.g., *duty, trust, belief, responsibility*), some interesting alignments were nonetheless found. Within the domain *Time: Beginning*, there were 273 root items *continue*, while the domain *Expected* contained 196 root items *expect*. These relatively high frequencies prompted further investigation.

Table 3 – Items classified as Time: Beginning and Expected

Time: Beginning			Expected		
Item root		N	Item root		N
1.	continue	273	1.	expect	196
2.	remain	34	2.	hope	21
3.	sustain	20	3.	look_forward	10
4.	ongoing	13	4.	optimistic	8
5.	steady	11	5.	pessimistic	3
6.	relentless	1			

Cluster analysis determined recurring usage of the patterns *we continue* + positive infinitive verb phrase (e.g. *to make progress*, *to stay focused*, *to do well*) and *we expect*. Examining some of these items in their context of usage provided additional insights. In examples 7 and 8 *we continue* is juxtaposed with references to difficulties experienced in the negative economic environment. This portrays the company as steadfast and reliable, capable of rising above challenging circumstances and moving successfully forward. In examples 9 and 10, *expect* signals the speakers' optimism for

the future, evoking an image of a company that is on the rebound and thus investment worthy.

(7) Even in the worst of times, our business model works well. We *continue to be blessed* by the fact that our diverse portfolio of businesses [...] really minimizes risk. (C4/Restaurants)
(8) We *continue to have excellent visibility* into our future financial performance […] despite the challenges of a tough competitive landscape and weak economy. (C6/Food processing)
(9) We're *expecting* to grow much faster than the Street's consensus forecast. (C8/Electronic commerce))
(10) With this improvement we *can expect* revenue growth for supplies in local currency to begin to accelerate starting next quarter. (C5/Computer services)

Although there were only a few occurrences of the item *pessimistic*, one CEO used it cleverly to foster a positive ethos, by showing how the company could be trusted to operate with rigorous discipline (example 11).

(11) Our worst case scenario is very *pessimistic*. We really create a situation where we close a bunch of stores that we don't ever believe that would be closed. We have significant negative sales [...] And what I'm here to report is even at that what I consider to be overly *pessimistic* approach to stress testing the model, we get there. (C4/Restaurants)

These examples suggest that the executives tended to communicate ethos indirectly, without explicit references to responsibility and trustworthiness. In fact, while such overt references have been found in written 10-K reports (Loughran *et al.*, 2009), they were completely absent from this dataset. This penchant for indirectness on the part of the executives could be influenced by the interactive forum of earnings calls, where there is an audience of expert professionals and increasingly sophisticated individual investors who might be skeptical of blatant rhetoric aimed at boosting credibility.

5.3. Pathos

To identify language that conveys emotions (pathos), a different approach was required. Because the semantic tag cloud (Figure 1) did not highlight domains that could be linked to the expression of emotions, a query was performed directly on the tag that *Wmatrix* (Rayson, 2008) assigns to the domain *Emotional actions, states and processes*. The list of items that were classified as such then were then manually analyzed to distinguish only those that referred to the emotional states of the executive speakers. This was accomplished by identifying items with first person pronouns (*I* or *we*) as subjects.[9] Table 4 shows the 156 items that were found across thirteen different forms.

Table 4 – Items expressing emotional states of speakers

Item root		N
1.	pleased	37
2.	feel	35
3.	confident	31
4.	excited	16
5.	happy	9
6.	like	8
7.	encouraged	6
8.	love	4
9.	proud	4
10.	glad	3
11.	celebrate	1
12.	concerned	1
13.	suffered	1

From the table, it can be seen that only two items (*concerned* and *suffered*) are negatively-charged. Apparently, the executive speakers preferred to emphasize the brighter side as much as possible, despite the overall negative environment in which they were reporting. Clatworthy and Jones (2003) found a similar tendency in their analysis of chairman's statements in UK annual reports. More specifically, a keyword analysis of the accounting narratives of companies classified as declining performers showed a bias towards reporting the good news rather than the bad news.

Further processing of the top two items *pleased* and *feel* identified recurring clusters based on 1) *we feel* + positive adjective, such as *good, great, comfortable*, sometimes intensified with *very*, and 2) *we are pleased*. As shown in examples 12-15, the speakers often combined these and other

[9] The "corporate *we"* (Bargiela and Harris, 1997, p. 175) is often found in business discourse to refer to the company spokesperson and the company as an integrated entity.

pathos-related items in consecutive utterances, thereby further reinforcing the rhetorical effect.

(12) We're *encouraged* by the stability that we're beginning to see in the market but not yet at a point that we're ready to call it a turn. I think we've seen improved stability and we *feel good* about that. (C5/Computer services)
(13) The third quarter was obviously flat, but as we benchmark versus other players out there and look at the overall environment, we *feel very good* about this. (C4/Restaurants)
(14) I'm *confident* that as the economy gets better we will see improvements in our results. (C9/Telecommunications)
(15) We're *pleased* with the results we have posted in the third quarter and are on track to deliver stronger results in 2009 and 2010. More importantly, we are *excited* to take this opportunity to build an even stronger <company name> for the future. (C6/Food processing)

In sum, the analysis of language linked to the emotional states of the executive speakers shows how they skillfully embedded pathos-oriented phrases in a message with an overall negative slant, thus steering listeners towards a more optimistic interpretation. The sense of pathos conveyed through these expressions also seems to create a more informal and friendly atmosphere which is more likely conducive to persuasion.

6. Conclusions

The findings of this study provide insights into how corporate executives are able to put their companies in the best light possible in an overall negative business environment during earnings calls. By mapping the Aristotlean constructs of logos, ethos and pathos onto the data that emerged from the analysis, some distinctive rhetorical features were clearly identified in the speech of the executives. Expressions of logos that explicitly encourage listeners to interpret information on the basis of cause and effect (e.g., *as a result*, *impact*) were particularly frequent in the dataset, serving also to attribute negative results to external factors, thus corroborating Clatworthy and Jones' (2003) work on annual reports.

There was also a strong presence of ethos-related language to enhance perceived credibility and instill confidence in the future. However, in this case, the executives opted for more subtle forms (e.g., *continue*, *expect*)

which are not inherently linked to ethos, but were systematically found in ethos-evoking phrases. This suggests a sharp understanding of the mindsets and expectations of a knowledgeable and experienced audience.

Although the language used by the executives to transmit pathos (e.g., *pleased, feel, confident*) was somewhat less prominent, its presence nonetheless revealed the interpersonal side of the speakers. Their choice to shift onto a more informal and personal level can be interpreted as a strategy to better engage, and therefore more effectively persuade, an audience with whom they are able to interact in this technology-mediated setting.

In terms of methodology, the use of text analysis software to automatically distinguish the semantic features of the dataset responds the previous calls for more research based on natural language processing applications. Indeed, even in this small sample of ten earnings calls, a semantic analysis on the micro level of words and phrases would not have been possible without computer-assisted techniques. Yet the small size of the dataset also means that the findings cannot be broadly generalized. Clearly, it would be necessary to collect additional data to confirm the tendencies that emerged.[10] Despite this limitation, it is important to point out that this type of quantitative/qualitative language analysis still requires a significant amount of labor-intensive manual content analysis and is therefore not feasible with very large samples. The value of this two-pronged approach is its ability to signal potentially important features of discourse and suggest underlying motivations, as well as future research. It would be interesting to carry out parallel studies on earnings calls of companies all reporting consistently strong performance and on written earnings releases. This could determine possible differences in rhetorical strategies linked to positive vs. negative economic results and spoken vs. written financial reporting. Taking inspiration from ethnographic research, it would also be useful to conduct interviews with the participants of earnings calls for additional insights. While it may prove difficult to gain access to corporate executives, their input would certainly illuminate the rhetorical dimension of financial reporting via earnings calls.

Beyond descriptive insights, this study of rhetorical strategies of company executives during earnings conference calls offers new and

[10] Although accessing authentic spoken language in sensitive corporate settings has been notoriously difficult for language analysts (Bargiela-Chiappini and Harris, 1997; Warren, 2004), the increasing public availability of earnings calls transcripts may help to remediate this problem.

authentic input for financial communication courses. While recent textbooks mention audio/video conferencing, they do not provide sufficient information about their rhetorical features or include activities to help students learn them. Participating in conference calls involves strong oral communication skills which remain a top priority for both students and the professional community (Zhao and Alexander, 2004; Gray, 2010). Therefore, it is essential to help students become more aware of rhetorical strategies in order to become effective communicators in contexts of oral financial reporting.

7. References

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