A longitudinal study of the textual characteristics in the chairman's statements of Guinness - an impression management perspective

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Structured abstract

Purpose - This paper longitudinally analyses the evolution of multiple narrative textual characteristics in the chairman's statements of Guinness from 1948 to 1996, with the aim of studying impression management influences. It attempts to contribute insights on impression management over time.

Design/methodology/approach - The paper attempts to contribute to external accounting communication literature, by building on the socio-psychological tradition within the functionalist-behavioural transmission perspective. The paper analyses multiple textual characteristics (positive, negative, tentative, future and external references, length, numeric references and first person pronouns) over 49 years and their potential relationship to profitability. Other possible disclosure drivers are also controlled.

Findings - The findings show that Guinness consistently used qualitative textual characteristics with a self-serving bias, but did not use those with a more quantitative character. Continual profits achieved by the company, and the high corporate/personal reputation of the company/chairpersons, inter alia, may well explain limited evidence of impression management associated with quantitative textual characteristics. The context appears related to the evolution of the broad communication pattern.

Practical implications - Impression management is likely to be present in some form in corporate disclosures of most companies, not only those companies with losses. If successful, financial reporting quality may be undermined and capital misallocations may result. Companies with a high public exposure such as those with a high reputation or profitability may use impression management in a different way.

Originality/value - Studies analysing multiple textual characteristics in corporate narratives tend to focus on different companies in a single year, or in two consecutive years. This study analyses multiple textual characteristics over many consecutive years. It also gives an original historical perspective, by studying how impression management relates to its context, as demonstrated by a unique data set. In addition, by using the same company, the possibility that different corporate characteristics between companies will affect results is removed. Moreover, Guinness, a well-known international company, was somewhat unique as it achieved continual profits.

Keywords: accounting narratives, functionalist-behavioural, Guinness, impression management, longitudinal, president's letter.

Introduction

Impression management is motivated by management's desire to present a self-serving view of corporate performance (Neu *et al.*, 1998; Beattie and Jones, 2000b; Merkl-Davies and Brennan, 2007). It presupposes that, with an opportunistic attitude, managers exploit information asymmetries between themselves and stakeholders by means of biased reporting. Most narratives in corporate reports are not directly subject to audit, making it easier for managers to manipulate this information. However, if discretionary accounting narratives are used for impression management purposes, financial reporting quality may be undermined and capital misallocations may result (Brennan and Merkl-Davies, 2013).

The annual report has traditionally been the main corporate channel to communicate with stakeholders (Campbell *et al.*, 2006; Amernic *et al.*, 2010) and the chairman's statement/president's letter is cited as the most read section of the annual report (Courtis, 2004; Fanelli and Grasselli, 2006). The annual report should be useful to users for making decisions (IASB, 2010) and accordingly, companies should "use plain language, only well-defined terms, consistent terminology and an easy-to-follow structure" (FRC, 2009, p. 48). Using a consistent terminology reduces the likelihood of reporting bias. However, textual characteristics can also be used to influence stakeholder perspectives and mask bad performance.

Studies analysing multiple textual characteristics in corporate narratives have thus far focused on different companies in a single year, or in two consecutive years (Clatworthy and Jones, 2006; Cen and Cai, 2013). These studies are mainly cross-sectional and provide little meaningful comparable information over time (Beattie *et al.*, 2008). Their design also implies different corporate characteristics between companies may affect the results (Campbell and Rahman, 2010; Cooper and Slack, 2015). In contrast, longitudinal studies offer an opportunity to study changes in reporting practice (Beattie *et al.*, 2008). For example, a specific suggestion raised by Clatworthy and Jones (2006) is to analyse a series of years to examine the possible relationship between performance and textual characteristics. Merkl-Davies and Brennan (2007, p. 172) also suggest that "likely fruitful avenues [for impression management] include case studies and longitudinal analyses using qualitative content analysis techniques". More recently, Cooper and Slack (2015, p. 836) "call for future impression management studies to analyse company specific longitudinal data so that further instances of, and reasons for, discretionary changes in reporting practice can be identified". Moreover, Yang and Liu (2017, p. 18), in relation to new directions for impression management research, argue that "longitudinal studies could provide an opportunity to examine the factors determining disclosure decisions and changes in disclosure patterns over time". In cases focusing on the quantification of one textual characteristic, there are relatively few papers which analyse the evolution over a long number of years; for example, syntactical complexity (Moreno and Casasola, 2016, 81 years; Jones, 1988, 34 years), photographs (McKinstry, 1996, 65 years), attributions (Aerts, 2001, 8 years) and graphs (Beattie and Jones, 2000a, 5 years).

In order to contribute to this limited literature, this study analyses multiple textual characteristics over a 49-year period, with the objective of studying if textual characteristics (positive, negative, tentative, future and external references, length, numeric references and first person pronouns) follow an impression management perspective. In other words, if there is a relationship between textual characteristics and profitability. For this purpose, we use the chairman's statement of a well-known international company, Arthur Guinness, Son & Company Ltd (hereafter Guinness), from 1948 to 1996. The chairman's statement is one of the main communication tools to manage impressions used by companies (and therefore, the most studied by previous literature). Guinness as a brand exists to the present day. It was originally

an Irish-based global brewing company, founded in 1759. Our study starts in 1948, conditioned by the availability of the chairman's statement. Guinness existed as an independent company until 1997 when it became part of Diageo plc (Quinn, 2014). In 1991, it was "the sixth largest [company] in the UK, and one of the top ten in the European Community" (Chairman's Statement, 1991). Guinness was a relatively unique company in the sense that in the period under study, it achieved permanent profits – no one year showed losses. This fact can influence the incentives for impression management. Unusually, the chairman's statement of Guinness reduced in length over time. This was in contrast to the increasing total length of the annual report over time, including the consistent increase of voluntary information. In 1986, a share scandal related to Guinness' major acquisition (of Distillers Company Ltd) brought Guinness under intense media scrutiny, to which we give special attention. Apart from its size, the fact that Guinness was part of a high profile industry, brewing, might attract more general attention than other types of companies.

We build, on the classifications proposed by Merkl-Davies and Brennan (2017) to frame external accounting communication, within the socio-psychological tradition. This approach is part of the functionalist-behavioural transmission perspective. This paper contributes to the narrative disclosure literature in four ways. First, in contrast to most cross-sectional studies on impression management (Beattie *et al.*, 2008), it conducts a longitudinal analysis to identify discretionary changes in corporate reporting over time in a single company. This contributes to research on the longitudinal nature of impression management and increases the insights on the relationship between impression management and its context. Second, previous impression management literature has typically focused on differences between different companies in terms of profits and losses (Clatworthy and Jones, 2006). By contrast, as Guinness has continuous profits, this study therefore focuses on increases and decreases in profits. Third, previous research has usually focused on one textual characteristic. We analysed multiple textual variables that could be used for impression management purposes. They are divided into qualitative and quantitative characteristics to strengthen the interpretation of the results. And fourth, the specific impact on the textual characteristics of a special event, the share scandal of 1986, is also examined.

The paper is structured as follows. The next section presents the framework and hypotheses, and is based on prior literature on impression management. Then, a brief description of Guinness and its context is provided. This is followed by details of the data sources and the statistical methodology employed. The results are then provided, and finally, the discussion and conclusions are presented.

Framework and hypotheses

Impression management derives from social psychology and is concerned with studying how people present themselves to others with the objective of being perceived favourably (Hooghiemstra, 2000). It is a (conscious or unconscious) attempt to control images that are projected in social interactions (Schlenker, 1980). Goffman's (1959) dramaturgy metaphor has been widely used to illustrate this behaviour in a corporate reporting context (Brennan *et al.*, 2009; Brennan and Conroy, 2013; Edgar *et al.*, 2018). Narratives in annual reports "allow managers to stage and direct the play they wish their publics to see, to pick the characters, to select the script and to decide which events will be highlighted and which will be omitted" (Neu *et al.*, 1998, p. 269).

This paper is framed in the socio-psychological tradition as part of the functionalist-behavioural transmission perspective of communication. In this approach, corporate narrative

documents are seen to be used by managers to disclose information in a favourable light. The focus is on the content and effects of messages. It includes the psychological processes underlying the production of information such as motivation, presentation and selection. Research questions involve whether information is misleading, or attempts to change perceptions of performance. It provides insights into the potential biases and motivations of preparers of corporate narrative documents (Merkl-Davies and Brennan, 2017). This approach is related to the transmission communication model (Brennan and Merkl-Davies, 2018).

Impression management attempts to influence stakeholders' perceptions of company performance (Gibbins *et al.*, 1990). It reflects an opportunistic managerial behaviour with the objective of manipulating perceptions rather than attempting to provide investors with useful incremental information (Brennan and Merkl-Davies, 2013). This is achieved by selecting and presenting information in a manner intended to manage the interpretation of corporate performance (Godfrey *et al.*, 2003), i.e. reporting bias. This conforms to the idea that managers will have a special interest in emphasising positive firm performance and in hiding or obfuscating poor firm performance (Courtis, 2004). Previous studies on textual characteristics have mainly focused on syntactical complexity (Jones and Shoemaker, 1994; Merkl-Davies and Brennan, 2007) with other textual characteristics receiving less attention. Impression management presumes a relationship between them and profitability. With that in mind, this study will test if textual characteristics are used for impression management purposes. To operationalise this general assumption, we distinguish between qualitative and quantitative-oriented textual characteristics. Qualitative textual characteristics are those more related to meaning and explanations and quantitative textual characteristics those mostly related to quantities and amounts. Thus, we have two over-arching hypotheses as follows:

H1. *Qualitative textual characteristics are used for impression management purposes.*

H2. *Quantitative textual characteristics are used for impression management purposes.*

We have subdivided these two over-arching hypotheses into eight sub-hypotheses (see below). These hypotheses are presented in the direction argued by impression management. We have grouped five of them as qualitative textual characteristics (positive, negative, tentative, future and external references) and three as quantitative textual characteristics (length, numeric references and first person pronouns).

Previous evidence has overwhelmingly documented that, irrespective of financial performance, there is a systematic bias in favour of positive references in corporate reports (Hildebrandt and Snyder, 1981; Gibbins *et al.*, 1990). Extant literature has found that companies with good performance increase positive references and those with bad performance only marginally increase negative references, but net positive tone prevails (Clatworthy and Jones, 2003; Merkl-Davies *et al.*, 2011). This bias trend can be interpreted as impression management. Beyond this bias, because both components of tone are likely to influence readers in different ways (Baumeister *et al.*, 2001)*,* we test the behaviour of positive and negative references separately. The first two sub-hypotheses are thus:

H1.1. *There is a systematic bias in favour of positive references irrespective of profitability.*

H1.2. *There is a systematic bias against negative references irrespective of profitability.*

Language can be certain (clear and unambiguous) or tentative (uncertain and ambiguous). Certain language can be used for good performing companies to attribute

performance clearly and directly to internal causes. For example, Cho *et al.* (2010) found that good environmental performers use more certainty than bad environmental performers. In this vein, impression management argues that a decrease in profitability can result in an increase in tentative references, rather than clear and unambiguous references, in order to present different potential reasons for bad performance. Thus, managers try not to assume a direct and clear responsibility and to blur it. The vagueness of the information opens a variety of possible interpretations from readers and tries to divert attention from real causes of poor performance. Impression management would mean less tentative language for good performance than for poor performance. The next sub-hypothesis is thus:

H1.3. *There is a negative relationship between profitability and tentative references.*

There is extensive evidence that annual reports focus on past information (Staw, 1980; Kohut and Segars, 1992; Pava and Epstein, 1993). Under impression management, it is argued that a decrease in profitability can result in an increase in future references because a focus on future opportunities can divert attention from past poor performance. Previous evidence is in line with this argument (Kohut and Segars, 1992; Cen and Cai, 2013; Athanasakou and Hussainey, 2014; Poole, 2016). Impression management would mean that poor performance will result in more future references than good performance. The next sub-hypothesis is thus:

H1.4. *There is a negative relationship between profitability and future references.*

Previous literature has found that positive performance is commonly associated with internal circumstances and negative performance with external circumstances (Aerts, 2001; Clatworthy and Jones, 2003). This behaviour is considered to be biased and a sign of impression management (Merkl-Davies and Brennan, 2007, 2011). Baginski *et al.* (2004) found that the informativeness of attributions is limited to the subset of external attributions. We therefore focus on these external references. Under impression management, managers with poor performance could increase the external references in an attempt to associate the context with the causes of performance. The next sub-hypothesis is thus:

H1.5. *There is a negative relationship between profitability and external references.*

In general, impression management claims that a decrease in profitability can result in an increase in narrative length. In this sense, poor performance could result in additional length (Rutherford, 2003), with the objective of attributing adverse information to causes other than poor management (Bloomfield, 2008). However, it can also be argued that sometimes companies may use longer narratives to explain things better. Most extant studies did not present evidence to support obfuscation by length (Rutherford, 2003; Clatworthy and Jones, 2006; Palmer-Silveira and Ruiz-Garrido, 2014). Indeed, Baker and Kare (1992), Kohut and Segars (1992) and Cen and Cai (2013) found evidence that contradicted impression management – a positive relationship between length and profitability. In line with a general impression management approach, Li (2008) found a negative relationship between length and profitability and argued that length could be used to publish less transparent information and blur bad news. Thus, based on this general approach the next sub-hypothesis is:

H2.1. *There is a negative relationship between profitability and length.*

From the impression management perspective, a decrease in profitability can result in a decrease in the numeric references with the argument that good news tends to be disclosed quantitatively, and bad news tends to be disclosed qualitatively with the objective of diluting

its effects. Previous evidence is in line with impression management (Skinner, 1994; Clatworthy and Jones, 2006; Cen and Cai, 2013). The next sub-hypothesis is thus:

H2.2. *There is a positive relationship between profitability and numeric references.*

Impression management argues that a decrease in profitability can result in a decrease in personal references, as managers' attempt to distance themselves from poor performance. In contrast, companies with good performance will be likely to use first person pronouns more extensively in an attempt to attribute the achievements to managers. Most of previous evidence is in line with the impression management argument (Thomas, 1997; Hyland, 1998; Clatworthy and Jones, 2006; Li, 2010a; Poole, 2016), although Merkl-Davies *et al.* (2011) and Cen and Cai (2013) did not find a significant relationship between performance and personal references. The next sub-hypothesis is thus:

H2.3. *There is a positive relationship between profitability and first person pronouns.*

Table 1 provides an overview of all the hypotheses. Most previous literature has found impression management in poor performing companies. The fact that Guinness achieved continuous profits in the period of study, as noted in the next section, may reduce impression management incentives. In this vein, Patelli and Pedrini (2014) suggest that impression management is more plausible in companies that are performing poorly, whereas a fairer communication is more plausible in companies with good performance. Managers can feel less need to impress, even in years with reduction in profits (compared to years of losses), because investors show greater sensitivity to losses than to gains (Barberis and Huang, 2001; Zhang and Aerts, 2015). Therefore, this point could reduce the amount of impression management to be found in Guinness.

[INSERT TABLE 1 ABOUT HERE]

Apart from the effect of the profitability on textual characteristics, we also control for the possible effect on textual characteristics of other variables, namely: risk, size, changes in chairperson and changes in title of the document. Risk can be understood as the possibility that a company is unable to pay creditors. From the impression management perspective, the arguments previously used for a decrease in profitability are similar to those associated with an increase in the risk, both representative of poor performance. Consequently, opposite directions argued for the hypotheses on profitability would be expected in relation to the risk (Rutherford, 2003). For instance, in the case of the first person pronouns, impression management would argue that an increase in the risk (to some extent, indicative of poor performance) would be followed by a decrease in personal references, as managers attempt to distance themselves from the risky situation. In relation to size, we initially consider the direction of its possible association with textual characteristics as unpredicted due to opposing arguments (Courtis, 1995; Rutherford, 2003). Calls have been made to include the potential impact on textual characteristics of qualitative variables, such as the influence of individual managers (Merkl-Davies and Brennan, 2007; Li, 2010b). For example, Aerts and Yan (2017) found that different chairpersons could have different style-related impression management profiles. In this regard, the impact of hubris and narcissistic managers on narrative disclosures has also been supported (Brennan and Conroy, 2013; Buchholz *et al.*, 2018). However, research on the influence of other qualitative variables, such as change in title, has been rare, and tends to be focused on syntactical complexity (Jones, 1988; Moreno and Casasola, 2016). Here, we control for the influence of changes in chairperson and changes in title.

Guinness – the company and its context

Guinness context in the period under study (1948–1996)

The post-World War II years witnessed an expansion in consumption, public expenditure and industrial activity in Ireland (O'Gráda, 1997). During the 1950s, the Irish economy faced some years of depression. As a consequence, at the end of the decade the Irish government implemented an economic development plan. It led to strong expansion in the 1960s, when free and foreign trade were encouraged (Buckley and Ruane, 2006). Lifestyle changes also occurred at this time, such as the professionalisation of the Irish working class, migration from rural to urban areas, especially to Dublin, and the spread of television. Fuelled by the general economic growth, increasing demand for beer and efforts to achieve economies of scale, a process of concentration characterised the Irish/British brewing sector. As a result, by the end of the 1960s a small number of companies controlled around three-quarters of the market. At the same time, technology advances generated savings for the sector. Cost accounting also played an important role in this period (Gourvish and Wilson, 1994). Changes in beer consumption habits also occurred, including the emergence of lager as the most popular beer, replacing traditional ales and stout (stout, a dark beer, is the main traditional product of Guinness), and an increasing consumption of spirits and wine (Joyce, 2009).

The Northern Ireland conflict also affected Irish society from the late 1960s (Ruane and Todd, 1996). The 1973 oil crisis dampened growth somewhat. Also in 1973, Ireland and the UK [1] joined the EEC. This favoured the economy and saw an inflow of multinational companies (Buckley and Ruane, 2006). However, macroeconomic problems emerged at the end of the decade and gave rise to spending cuts in the 1980s and political instability. A process of restructuration of the economy was put in practice to attract foreign capital investments and produced increasing exports (O'Grada, 1997). In a more social vein, at the end of the century public concern associated to excessive alcohol consumption was more apparent (Adelman, 2017).

The company

In an Irish context, Guinness was (and is) a very strong, iconic corporate and brand name with a long heritage and a highly positive emotional attachment. The Guinness name is omni-present in Ireland and Irishness is also imbued in the Guinness name. Irish people, over time, have developed a sense of ownership of Guinness, even though it has strong British connections. Such strong senses of Irishness have been influenced by the fact that Guinness has over the years been considered as a major contributor to Ireland and an extremely good corporate citizen (Muzellec and Lambkin, 2008) – be it offering houses to employees, offering worker's pensions from the 1860s, or offering medical care for staff. A brief reflection on the company history follows.

In 1759, the company founder Arthur Guinness signed a 9,000-year lease on the St. James's Gate Brewery site in Dublin. The site contained a small, poorly equipped brewery. Trade increased gradually and in the 1870's, revenues were on average £1 million annually (Lynch and Vaizey, 1960). In 1886, the business was incorporated as a public company, when Ireland was still part of the UK and thus has always had a quoted stock on the London Stock Exchange. At the time of incorporation, its largest and most representative brewing location was the St. James's Gate Brewery in Dublin, which supplied the Irish and British markets. This remained so for many years. The Board of Directors of the newly incorporated company (Arthur Guinness, Son & Company Ltd) consisted of mainly Guinness family members (Dennison and MacDonagh, 1998). The first annual report of the company from 1887 reports a profit before tax of £0.54 million. International trade (outside the UK and Ireland) was

increased by selling bottled stout rather than its draught form – the non-sterile brewing of the time did not facilitate shipping over long distances. Initial international trade included countries such as South Africa, Canada, Australia and the United States (Dennison and MacDonagh, 1998). By 1920, profits had reached £3.26 million. In 1936, a new brewery was opened in London, the first outside Ireland.

After World War II, profits reached £4.6 million in 1950. In the succeeding years, Guinness was not as involved in the industry consolidation process as its UK-based counterparts, but did purchase some Irish breweries from the late 1950s to the early 1970s. They were expansionary years for Guinness with numerous acquisitions, investments and licensing/contract arrangements (including countries such as Nigeria, Malaysia and Cameroon). Apart from geographic expansion, Guinness started a general strategy of diversification, not only within the drinks trade, but also outside of it. In the case of the drinks trade, it can be seen as a consequence of changes in habits of consumption. The entry of Ireland and the UK into the EEC in 1973 constituted a chance for Guinness to increase sales outside its domestic market (Ireland and the UK), which by 1970, accounted for the 72% of the group's total profit. In 1980, profits reached £49.5 million and turnover was almost £800 million.

By the mid-1980s, economic and social conditions significantly improved. In 1986, Guinness conducted its most ambitious acquisition. It acquired Distillers Company Ltd – owner of brands such as Johnnie Walker, White Horse and Dewars. As a consequence of the takeover of Distillers, Guinness was marred by a share scandal. As noted by Joyce (2009), the Guinness chief executive, among others, was alleged to have developed a share support scheme to inflate share prices around the time of the acquisition. In a defensive move against Argyll (the other party interested in buying Distillers), third parties were paid to buy Guinness and Distillers' shares and they would be indemnified against losses (Joyce, 2009). "Unusual transactions were entered into arranged by certain of the directors of the Company without Board authority and without adequate record" (Guinness Annual Report, 1986). The Guinness chief executive and other directors were forced to resign in January 1987, and Guinness paid compensation to Argyll and Distillers shareholders (Joyce, 2009). "The Guinnesses who had been on the board of the company were exonerated because they had been kept in the dark about what was going on during the takeover battle." (p. 344).

In the following years, Guinness continued to increase turnover and stressed even more its international focus, "with about one fifth of our profits coming from each of five regions – the UK, the rest of Europe, North America, Asia/Pacific, and the rest of the world" (Chairman's Statement, 1989). In 1991, based on market capitalisation, it was the largest British consumer goods company and the second largest in the European Community. It made more profit on exports than any other British company – exports in 1991 reached £849 million (Chairman's Statement, 1991). The 1996 annual report shows the highest ever pre-tax profit of £975 million, on a turnover of £4.73 billion. In 1997, Guinness merged with Grand Metropolitan (owner of brands such as Smirnoff, Burger King and Pillsbury) to create Diageo plc, resulting in a food and drinks conglomerate. In the sample period (1948–1996), Guinness always recorded a profit; indeed in its life as a company from 1886 to 1996, it never recorded a loss.

Sources

The corporate archives of Guinness are held at the St. James's Gate Brewery in Dublin. The archive includes a historical series of published accounts and annual reports. The former runs from 1886 to 1996, with the more modern-day annual reports available over a shorter

timeframe. The holdings have been used in previous accounting studies (Quinn, 2014; Quinn and Jackson, 2014; Hiebl *et al.*, 2015; Cleary *et al.*, 2019).

The chairman's statement is the document utilised in the present research. The president's letter/chairman's statement has been the most analysed document to study the presence of impression management (Jones and Shoemaker, 1994; Merkl-Davies and Brennan, 2007). It has been traditionally considered as the most widely read section of the annual report (Jones, 1988; Subramanian *et al.*, 1993; Courtis, 2004; Fanelli and Grasselli, 2006) and although discretionary, is invariably included by listed and large companies. It functions as an annual report summary and typically contains unaudited information about the main operations, strategies, values and current situation (Balata and Breton, 2005). All these characteristics make it an optimal corporate media for trying to manage impressions (Subramanian *et al.*, 1993; Abrahamson and Amir, 1996).

This study covers the time period from 1948 to 1996. It starts in 1948 as this was the year from which the chairman's statement is regularly available in the archives of Guinness (probably linked to the passing of the 1948 Companies Act). It ends in 1996 as this was the last annual report published independently by Guinness. Therefore, the series under analysis includes 49 chairman's statements.

In line with previous findings (Lee, 1994; Beattie *et al.*, 2008), the length of the Guinness annual report consistently increases over time. However, there is an interesting opposite trend in its most read section, the chairman's statement. Although regularly available from 1948, the chairman's statement was not part of the annual report until 1957. From 1957 it traditionally occupied around 20% of the annual report (even over 30% in 1965 and 1966). From 1961–1979, every chairman's statement contained between six and eight pages. However, particularly from 1972, a consistent increase in the total annual report limited the relative size of the chairman's statement to around 15%. From 1980, the absolute presence was also significantly reduced to only two or three pages (i.e. only around 4% of the total annual report). The traditional content of the chairman's statement was being progressively transferred to other statements, such as the board review or to the managing director's/chief executive's review. For example, in 1984, the chairman's statement consisted of a single page and the chief executive's review consisted of ten pages. From 1986, the operational review contains most of the information previously in the chairman's statement.

The previous paragraph highlights how the communication pattern of Guinness through the chairman's statement changed from 1948 to 1996. These changes seem to reflect the changes in the Irish economy. Table 2 outlines several aspects of this – the total words used, the number of references to Guinness, and the percentage of the total words which the direct references to Guinness comprised. This gives some insight into the level of the company's communication and the emphasis on the Guinness brand.

[INSERT TABLE 2 ABOUT HERE]

The data can be roughly divided into four time periods. The first period is 1948–1960, which was a time when Ireland was in a period of economic depression. In this period the average length of the chairman's statement was the lowest of the four periods. It comprised on average 1,461 words, with the number of direct references to Guinness starting at 1 and ending at 6 with an average of 4.4. The overall percentage of Guinness references to total words was only 0.30%. The second time period was one of expansion, and this expansion was reflected in an increase in the average length from 1,461 to 2,864 words. The Guinness references also increased from 4.4 to 17.8 with the percentage of references increasing from 0.30% to 0.62%.

The third time period was from 1969 to 1979, and was the period in which Ireland joined the EEC. Again, there was growth in all three variables with the average length rising to 4,065 words, the number of Guinness references rising to 28.9 and the average percentage rising to 0.71%. This third period was the most communicative period. The final period represented a dramatic slump in the three communicative aspects. First, the average length slumped to 1,127 words, the lowest of any period. The number of Guinness references fell to 6.7 with the percentage of total words falling to 0.59%. This slump appears to coincide with the Irish macroeconomic issues as well as with the Guinness share scandal in 1986. Interestingly, overall the communication pattern seemed to reflect the changes in the Irish economy. In the last stage, it may also, however, reflect the Guinness's presentation style as the traditional content of the chairman's statement was transferred to other statements.

Methods

To begin our analysis, we converted the content of the chairman's statements from 1948 to 1996 to a text file format. The text files were then loaded into LIWC [2] software to analyse different textual characteristics. Yekini *et al.* (2016, p. 425) argue in favour of "the usefulness of text-analysis software in revealing hidden characteristics of texts and thus […] may be fruitfully employed by investors and regulators alike". LIWC was used to record every textual variable.

For positive references, the words related to positive emotions (love, nice, sweet, etc.; 406 words or word stems) were recorded. For negative references, the words related to negative emotions (hurt, ugly, nasty, etc.; 499 words or word stems) were registered. For tentative references, the tentative processes (maybe, perhaps, guess, etc.; 155 words or word stems) were recorded. On the future references, the future tenses (will, shall, etc.; 48 words and word stems) were taken into account. For external references, words related to external references (external, context, environment and crisis) were considered. The number of words was registered to measure the length. On the numeric references, the numerical sequences and numbers as words (second, thousand, etc.; 34 words and word stems) were both taken into account. For first person pronouns, singular (I, me, mine, etc.; 12 words) and plural forms (we, us, our, etc.; 12 words and word stems) were recorded. The frequency of all variables, with the exception of the length, is recorded in relative terms, i.e. divided by the total number of words in the document and multiplied by 100. The categories, previously described, correspond to the pre-defined LIWC 2007 English dictionary, with the exception of the external references, where we created an ad-hoc category. The external validity of LIWC dimensions has been previously tested (Pennebaker and Francis, 1996; Pennebaker and King, 1999; Donohue *et al.*, 2014). In addition, LIWC dimensions have been widely used by previous impression management research (Merkl-Davies *et al.*, 2011; Zhang and Aerts, 2015; Asay *et al.*, 2018).

We constructed a multivariate regression to control for simultaneous effects of the independent variables with the objective of testing the hypotheses outlined earlier (H1.1-5 and H2.1-3), i.e. to analyse whether specific variables (profitability, risk, size, changes in chairperson and changes in report titles) have an impact on the dependent variables (positive, negative, tentative, future and external references, length, numeric and personal references). Based on previous studies (see, for example, Rutherford, 2003; Moreno and Casasola, 2016), we examined different proxies to measure the independent variables under analysis. Table 3 shows the variables and proxy measures finally selected. The data for the independent variables were extracted directly from the Guinness financial statements.

[INSERT TABLE 3 ABOUT HERE]

Profitability is proxied by the return on assets (ROA) and the increase or decrease in earnings before interest and tax from the previous year (IDEB). [3] Risk is proxied by the debt ratio (DEBR). Size is measured using total assets (TASS). [4] Different chairpersons are identified by dummy variables (CHAI$_i$), one for each different chairperson. Different titles are also identified by dummy variables (TITL$_i$), one for each title used in the series. The descriptive statistics for the measures selected for the model are shown in Table 4.

[INSERT TABLE 4 ABOUT HERE]

Figure 1 shows the evolution of the independent variables in the period under study (1948–1996). Figure 1 and Table 4 show that ROA is always positive (mean 6.7%). In 38 years, EBIT increases and in 11 years, EBIT decreases. Therefore, IDEB increases in 77.6% of the years of the sample and decreases in 22.4%. Risk increases especially in the 1960s and 1970s (mean of the debt ratio 43.7). Size growths exponentially from 1986 to 1992 (mean of the total assets deflated £122 million).

[INSERT FIGURE 1 ABOUT HERE]

In relation to the qualitative variables (chairpersons and titles), five different chairmen signed the chairman's statements in the series analysed: Rupert Guinness (1948–1961), Benjamin Guinness (1962–1985), Norman Macfarlane (1986–1988), Anthony Tennant (1989–1991) and Anthony Greener (1992–1996). Most of them signed the chairman's statement with their titles of nobility: Earl of Iveagh, Viscount Elveden, Senator or Sir (Ernest W. Saunders was also chairman from 14 July 1986 to 9 January 1987 but he did not sign any chairman's statement). From Norman Macfarlane onwards, the Guinness family no longer held the chair position. Rupert Guinness was the 2nd Earl of Iveagh (1927–1967). He held multiple titles of nobility. He was a member of the House of Lords and the Chancellor of Trinity College, Dublin (Kay, 1968). Benjamin Guinness (grandson of Rupert) was the 3rd Earl of Iveagh (1967–1992). He also held multiple titles of nobility. He was a member of the Irish Senate in the 1970s and a member of the British House of Lords (Prokesch, 1992). Norman Macfarlane joined Guinness in 1986, previously being chairman of the Macfarlane Group. Anthony Tennant joined Guinness in 1987 as the group chief executive from Grand Metropolitan, where he was deputy group chief executive and chairman of its subsidiary International Distillers and Vintners. Anthony Greener joined Guinness in 1986 as a non-executive director. He was previously chief executive of Dunhill Holdings (Guinness Annual Report, 1986).

In relation to the other qualitative variable (titles), there were four titles for the chairman's address in the period under study – 'Chairman's Speech at Annual General Meeting' (1948–1956), 'Chairman's Statement' (1957–1960), 'Statement by the Chairman' (1961–1980) and 'Chairman's Statement' (1981–1996).

Results

To give a visual overview, Figure 2 shows the evolution of the textual characteristics of the Guinness chairman's statements (1948–1996). In the case of the qualitative-oriented variables (Panel A of Figure 2), positive and external references increase over time. The increase in positive references is especially noticeable from the 1980s. External references are quite low over the whole period. In contrast, negative, tentative and future references decrease over time. The decrease in tentative references is especially notable from the 1980s. In the case of the quantitative-oriented variables (Panel B of Figure 2), the length increases steadily until 1980 and from then, significantly reduces. [5] The numeric references increase over time, in contrast to the first person pronouns. The latter show a visible decrease in the 1960s and 1970s, and a

late subsequent increase from the 1980s. Overall, with the exception of the length which is expressed in absolute values, none of them reaches 8% in any of the years analysed. According to Table 4, first person pronouns and positive references are the characteristics with the highest presence. This finding, linked to the fact that Guinness achieved permanent profits, may tentatively be considered as impression management. However, further comparative research, especially in the case of the first person pronouns, would be useful to compare the presence of this variable. [6] External, negative and future references are those with the lowest presence. The characteristics with the lowest variability are future and external references.

[INSERT FIGURE 2 ABOUT HERE]

Table 5 shows the Pearson correlation coefficients between the dependent and independent variables. Focusing on the profitability measures, on positive references, IDEB (0.212) is weakly correlated [7]. The direction of the association could be interpreted as a (weak) sign of incremental information. However, ROA is not related. The fact of not finding a significant association with ROA, together the constant overwhelming focus on a positive net language (the average of positive references is 4.19 and that of negative references is 0.88), can be interpreted in line with impression management (as tone is consistently positive irrespective of ROA). Therefore, the evidence is somewhat mixed on positive references. The relationship with IDEB, although weak, is in contrast to impression management, but the lack of a relationship with ROA is in line with impression management. Negative references are not significantly correlated with any of the profitability measures. This could be interpreted as impression management given the fact that positive language dwarfs negative language whether profitability is high or low. In the case of the tentative references, ROA is strongly associated (0.346) in the opposite direction argued by impression management. The future references are weakly correlated (0.209) with ROA in the opposite direction argued by impression management. In the case of the external references and length, none of the profitability measures are significantly correlated. In the case of the numeric references, ROA (-0.304) is correlated in the opposite direction argued by impression management. On the first person pronouns, ROA (0.429) is strongly correlated in line with impression management. Overall, if we focus only on the strongest correlations ($p<0.01$), the univariate analysis shows that profitability is strongly related, in the direction argued by impression management, only with the first person pronouns (through ROA); and in the opposite direction argued by impression management, with the tentative references. In addition, the fact of not finding a strong correlation between profitability and positive and negative references, can also be interpreted in line with impression management. Among the rest of the independent variables, change in title and change in chairperson seem to be the most influential on the textual characteristics, according to the univariate analysis.

[INSERT TABLE 5 ABOUT HERE]

In order to evaluate the research hypotheses, for every textual characteristic, a multiple regression model was performed. [8] In Table 6, we show the relationships between each of the eight textual characteristics and the independent variables. We first show the five qualitative characteristics (positive, negative, tentative, future and external references) and then the three quantitative characteristics (length, numeric references and first person pronouns).

[INSERT TABLE 6 ABOUT HERE]

On positive references, on the one hand, language is persistently positive (Panel A of Figure 2). On the other hand, no variable seems to have a significant effect on positive

references (Table 6). Profitability, size, risk and the changes in chairperson are not found significant. Overall, in line with impression management, our results are compatible with H1.1. On negative references, on the one hand, negative language is persistently dwarfed by positive language (Panel A of Figure 2). On the other hand, none of the variables related to profitability are found significant (Table 6). Overall, in line with impression management, our findings are compatible with H1.2. The other variables do not seem to have a significant effect on negative references, with the exception of risk. DEBR (positively related; 0.014) is found significant. An increase in the risk would involve an increase in the negative language, which could be interpreted as a (very limited – as the coefficient is very low) sign of incremental information.

On the tentative references, ROA (negatively related as expected) and one of the titles are found strongly significant. In addition, one of the chairpersons is also found weakly significant. Risk and size do not seem to have a significant effect on the tentative references. Consequently, although IDEB is not found significant, the strong significance of ROA could lead us to conclude that there is a certain negative relationship between ROA and tentative references in line with impression management, when other variables are controlled (differently to the univariate analysis), and consequently, H1.3 is supported. On the future references, the model highlights one of the titles as the most significant variable. In addition, one chairperson and TASS are weakly correlated. Profitability, size and risk do not seem to have a significant effect on the future references. Therefore, the results are not in line with impression management in this case and H1.4 is not supported. On the external references, only IDEB is found significant, in the expected direction, when other variables are controlled (differently to the univariate analysis). No other variable is found significant. Consequently, the significant presence of IDEB signifies a negative relationship between IDEB and external references, in line with impression management, and consequently H1.5 is supported. To sum up, most of the qualitative textual characteristics (positive, negative, tentative and external references, although not future references) are compatible with impression management.

In the case of length, the model confirms a significant impact of the changes in title. No other variable (including profitability) seems to have a significant effect on length. Consequently, H2.1 is not supported. Quite similarly, on the numeric references, the model highlights the strong impact of one of the titles. No other variable (including profitability) is found significant. Again, the results do not support H2.2. In relation to first person pronouns, the model reveals changes in title as the only strong significant variable. In addition, one of the variables related to profitability, IDEB, is found weakly significant (negatively related in contrast to expected). Risk, size and changes in chairperson do not seem to have a significant effect on first person pronouns. Therefore, as ROA is not found significant and IDEB is weakly significant in contrast to expected, H2.3 is not supported. To sum up, the quantitative textual characteristics (length, numeric references or first person pronouns) are not used for impression management purposes. However, first person pronouns are universally present.

In summary, our results are compatible with four of the five hypotheses related to the qualitative textual characteristics (H1.1, H1.2, H1.3 and H1.5). Thus, findings are mainly in line with H1 and we have found that the qualitative-oriented variables are used for impression management purposes. Specifically, positive, negative, tentative and external references are in line with impression management. We have found the following relationships between each of them and profitability: no relationship with the positive and negative references, a negative relationship with the tentative references and a negative relationship with external references. In contrast, the three hypotheses related to the quantitative textual characteristics (H2.1, H2.2 and H2.3) are not supported. H2 is not supported and we have not found that the quantitative-oriented variables are used for impression management purposes.

Overall, the change in title is the variable with the greatest impact on most textual characteristics (tentative, future, length, numeric and first person pronouns). The only variables not affected by the changes in title are positive, negative and external references. Within the titles, the period of the fourth title (1981–1996) had the highest impact on the textual characteristics (Table 6). Profitability only affects tentative, external and first person pronouns (in the case of tentative, ROA is strongly negatively related, in line with impression management; in the case of external, IDEB is negatively related, in line with impression management; and in the case of first person pronouns, IDEB is weakly negatively related, in contrast to impression management). Risk only affects negative references. Changes in chairperson seem to have a limited impact of the textual characteristics of the Guinness chairman's statement. They are weakly significant only in the case of tentative and future references. Specifically, Tennant –CHAI$_4$– increased tentative references and Greener – CHAI$_5$– decreased future references. [9] Size (only for future) is only found weakly significant. No variable explains permanent positive references.

Supplementary analysis: top and bottom years

To complement our results above, we analysed the textual characteristics between the 20% top and 20% bottom years (10 years each group) ranked by annual change in net profit. The 20% top years show an average annual change in profit of 39%. The 20% bottom years show an average annual change in profit of -40%. In order to hide lower profits (net profit is always positive), the company could manage textual characteristics in a self-serving way (Courtis, 1995). Table 7 shows the differences in textual characteristics between the 20% top and bottom years ranked by annual change in net profit. Three textual characteristics show significant differences and all of them are consistent with impression management. First, tentative references are found significantly higher (at 10%) in the bottom years. This is consistent with impression management as tentative language can be used to hide the real causes of poor performance. Second, future references are found to be higher (at 5%) in the bottom years. Impression management argues that prospective comments can be used to divert attention from current performance. The use of future references is again consistent with impression management. Third, numeric references are also significantly higher (at 10%) in the top years than in bottom years. The better results are disclosed quantitatively, and the worse results qualitatively. The use of numeric references is therefore consistent with impression management. In addition, the fact of not finding significant differences in the positive and negative language between top and bottom years, taking also into account that net tone is permanently positive, could also be construed as impression management.

[INSERT TABLE 7 ABOUT HERE]

To sum up, the results confirm, in line with the main analysis, consistent evidence of impression management in the qualitative variables (in four of the five variables: positive, negative, tentative and future references). In contrast to the main analysis, the results also show that one of the quantitative variables (numeric references) was used in line with impression management. Generally, the quantitative variables are not found mainly in line with impression management.

Supplementary analysis: share scandal in the takeover of Distillers by Guinness

The main focus of the paper is to identify the potential longitudinal relationship between profitability and textual characteristics. The accounting profitability was not directly affected by the share scandal (described in the Guinness company section). However, in order to study

the potential impact of this major negative event in the years under study on the textual characteristics of the chairman's statement, we have scrutinised 1986 in comparison to the previous and later years. The first paragraph of the chairman's statement was clear about the importance of this event "1986 was undoubtedly the most important and the most traumatic year in the long and distinguished history of your fine Company. It started with the acquisition of The Distillers Company and ended with the announcement of the DTI inquiry, about which I have written to you separately." (Chairman's Statement, 1986). The evidence from our research shows that, in line with Figure 2 and specifically with Table 8, in a period of five years (1984–1988), 1986 had the highest negative references, the highest external references, the highest length, the lowest positive references and the lowest level of first person pronouns. The highest negative and lowest positive references and the highest length might be reasonable in this situation. The highest external references and the lowest first person pronouns could reasonably be interpreted as impression management, in an attempt by the company to distance itself from the scandal. The company discussed more about external forces and, interestingly, did not use personal pronouns as extensively as in the prior and later years. This appears to be defensive. Interestingly, in the following two years (1987-1988) tentative references, future references and first person pronouns all steadily increase.

[INSERT TABLE 8 ABOUT HERE]

We additionally analysed the potential impact made by the different CEOs on the chairman's statement. This analysis could be especially relevant in the case of Saunders. [10] He was the CEO from 1981 to 1986. Specifically, he was the CEO when the chairman's statements from 1981 to 1985 were published. He was the first external CEO, i.e. not previously in the Board of Directors (he came from Nestlé, with a marketing background). When Saunders was CEO, the chairman's statement significantly decreased the tentative references and increased numeric references. However, he was not the most influential CEO on the chairman's statement – according to the significances in the regressions, Lennox-Boyd, Viscount Boyd Merton (1961–1966) was. [11] Having said this, it is true that Saunders had a clear impact on the annual report, although this may not be extremely large in the chairman's statement. For the first time, the 1982 annual report (one year after his appointment) contains a Managing director's/Chief executive's review. This practice was extended until 1985 (coinciding with the last annual report prepared under his management), although later this report was temporarily reintroduced in 1987 and 1988.

Conclusion, discussion and practical implications

To the best of our knowledge, this is the first paper to analyse the evolution of multiple textual characteristics in accounting narratives over an extended period of years from an impression management context. For the analysis in this paper, we build on classifications proposed by Merkl-Davies and Brennan (2017) to frame external accounting communication, within the socio-psychological tradition. Thus we adopt a functionalist-behavioural transmission perspective as outlined by Merkl-Davies and Brennan (2017). We use the chairman's statements of Guinness from 1948 to 1996. Guinness was (and is) a very strong, iconic corporate and brand name with a long heritage and a highly positive emotional attachment (Muzellec and Lambkin, 2008). By using the same company, there is no possibility that different inter-company characteristics will affect the results (Cooper and Slack, 2015). In addition, the fact that Guinness has permanent profits over the period under study provides unique conditions to test impression management. The paper contributes to research on the longitudinal nature of impression management and shows how impression management relates to its context, as demonstrated by a unique data set. The development of the context seems to

be related to the evolution of the broad communication pattern. The results show that Guinness consistently used qualitative textual characteristics with a self-serving bias, but did not use those with a more quantitative character. Our study of qualitative variables broadly confirms impression management.

For the qualitative-oriented variables, in relation to the tone, our results show that irrespective of the financial performance, there is an overwhelming focus on positive references, similar to previous evidence (Hildebrandt and Snyder, 1981; Gibbins *et al.*, 1990). Positive and negative references do not seem to be related to profitability. This can be considered as impression management. Tentative references do increase with poor performance. This may be interpreted as an attempt to blur information by presenting a variety of potential causes of poor performance so as not to take responsibility for poor results, in line with impression management. On future references, the main analysis does not show that they are used to divert attention from poor performance, dissimilar to those who found impression management (Kohut and Segars, 1992; Cen and Cai, 2013; Athanasakou and Hussainey, 2014; Poole, 2016). However, our investigation of the bottom and top years does show this. Finally, we found that external references increase with poor performance. This can be considered to be biased and a sign of impression management (Merkl-Davies and Brennan, 2007, 2011).

For the quantitative-oriented variables, the results confirm most prior research (Rutherford, 2003; Clatworthy and Jones, 2006; Palmer-Silveira and Ruiz-Garrido, 2014) that length was not used from an impression management perspective to publish less transparent information or to blur poor performance. We have found that first person pronouns were consistently used by Guinness. However, we have not found they were used differentially between good and poor performance (similar to Merkl-Davies *et al.*, 2011 and Cen and Cai, 2013, but in contrast to Thomas, 1997; Hyland, 1998; Clatworthy and Jones, 2006; Li, 2010a and Poole, 2016). In relation to numeric references, the main analysis does not show they are positively related to profitability. However, the supplementary analysis, with a more similar methodology to previous literature (Clatworthy and Jones, 2006; Cen and Cai, 2013) by comparing differences between top and bottom profitability, showed differences in the numeric references in line with impression management, similar to previous literature.

The variable with the highest effect on most textual characteristics is change in title. The change in title probably signifies a major change in the elaboration of the annual report (e.g. strategy, structure of the departments involved, image, regulation, etc.). This was the case, for instance, in the first years of the 1980s, where a change in the title of the chairman's statement was accompanied by a major change in the whole structure of the annual report.

The share scandal of 1986, which brought Guinness under intense media scrutiny, had a significant short term impact. There are clear signs this may be interpreted as impression management. The highest external references and length and the lowest first person pronouns found in 1986 in relation to contiguous years could reasonably be interpreted as an attempt of the company to defend itself, by giving more information, discussing more external facts and distancing itself from the scandal.

In Guinness, according to the main analysis, we find consistent evidence of impression management in the qualitative, but not in the quantitative textual characteristics analysed. Other studies analysing multiple textual characteristics also found a self-serving bias in the quantitative-oriented characteristics (Clatworthy and Jones, 2006; Cen and Cai, 2013). However, their approach is different as such studies compare a group of good performing companies with a group of bad performing companies in the same period. Specifically, they

compare top and bottom performing companies based on profitability. From a methodological point of view, it is not the same to analyse profitability by comparing means between two different performing groups versus performing a multivariate regression. In an attempt to use a similar methodology to previous literature, in the supplementary analysis we therefore analysed differences between the 20% top and bottom years ranked according to annual change in profit. The results obtained in this case showed that consistent support for impression management was found for qualitative variables. For quantitative variables, only numeric references were in line with impression management. They were found to be used more in top years. Using this approach, the evidence based on quantitative-oriented variables was closer to previous literature: similar to Cen and Cai (2013), although still lower than Clatworthy and Jones (2006). This demonstrates that multivariate regression has a different explanatory power than comparing top and bottom companies.

As well as the methodological aspects, there may be some specific reasons to explain the reduced use of impression management in the case of the quantitative textual characteristics analysed in Guinness. Potentially the main reason could be the fact that Guinness was always profitable during the period under study. It could be speculated that companies engage more in impression management in the case of losses (as found by Clatworthy and Jones, 2006 and Cen and Cai, 2013) than in the case of a decrease in profits. Patelli and Pedrini (2014) argue that impression management is more plausible in companies that perform poorly. Managers may not feel the same need to impress in the case of losses as in the case of lower profits. In relation to stakeholders' expectations (Mellers *et al.*, 1997), unexpected losses are much more troubling than unexpected lower profits. Stakeholders are also disproportionally more sensitive to losses than to gains (Zhang and Aerts, 2015). Therefore, the motives to impress are greater in the case of losses. Moreover, there is always a risk of engaging in impression management because implausible explanations could be regarded as 'cheap talk' (Barton and Mercer, 2005; Merkl-Davies and Brennan, 2007) and lead to a potential loss of legitimacy and reputation (Yuthas *et al.*, 2002). Potentially managers inherently tend to adopt impression management to show the most possible favourable view of themselves. However, only when potential incentives surpass the potential risks (which generally only happens with losses), they are ready to assume the eventual consequences of indulging in pervasive impression management. This type of pervasive or "hard" impression management could be associated with the quantitative textual characteristics, whereas a "soft" impression management could be associated with the qualitative textual characteristics. This latter type of subtle impression management could be present in most companies and not only in those companies with losses, as we have found in Guinness.

The continual profits earned by Guinness may also be one of the factors which help to explain the decrease in the length of the chairman's statement over time. This contrasted with the increase in length in the annual report over time. Arguably, the characteristics of the chairman's statement (widely read, almost universal, feature of the annual report and generally unaudited; Clatworthy and Jones, 2006), have caused it to be one of the main tools to manage impressions (Subramanian *et al.*, 1993; Abrahamson and Amir, 1996). However, if in Guinness there was less need to impress given its perpetual profitability, the company probably might feel less need to produce a lengthy chairman's statement.

Guinness has also been widely considered as a highly reputed company, and is also part of a high profile industry. This could also play a particular role in the limited evidence of impression management in the quantitative textual characteristics. Geppert and Lawrence (2008) show that high reputation companies use less complex, less varied and more concrete words. All of these linguistic features are associated with perceived truthfulness and credibility.

In this sense, Guinness was recognised as one of the Top 100 most valuable brands globally (Business Week, 2001). In addition to corporate reputation, Patelli and Pedrini (2014) argue that individual reputation is also at stake in CEO letters and that persistent self-serving behaviour inconsistent with firm performance would lead to a personal loss of reputation. As noted earlier, the chair of Guinness was occupied by highly reputed nobles (Earl, Viscount or Sir) from a strong family lineage. Such individuals might not to want to put their personal reputation at risk.

Gray *et al.* (1995) also provide evidence on the capital market pressures on annual report disclosures. Our study is based on a longitudinal case throughout the second half of the twentieth century. The pressures and incentives for impression management could change over the years. For this reason, and supported by the apparent relationship between the communication pattern of the chairman's statement and the Irish context as evidenced in the Sources section, we also tested for potential differences in impression management between different periods of time (1948–1960; 1961–1980; 1981–1996). The differences between periods were not significant, and at the same time not significantly different from the main results. A plausible explanation could be that even the most recent period analysed (1981–1996) was still part of the twentieth century, while the most profound transformation of the capital markets and of the economy occurred at the beginning of the twenty-first century (Gilpin and Gilpin, 2000). Time could thus be more significant between the twenty-first century and the rest. We also investigated the potential specific impact of the incorporation into the EEC (1973) on the textual characteristics, but no significant impact was found. All of this seems to point out that the development of the Irish context was more related to the evolution of the broad communication pattern, rather than the evolution of the impression management variables.

The potential reasons for the reduced findings for impression management in the quantitative textual characteristics open avenues for future research. In this sense, it would be useful to carry out more longitudinal research into companies that generated both profits and losses. To broaden the role that individual reputation plays, the analysis of leadership changes in companies might be fruitful. In addition, to extend knowledge about the significance of time, it would be appropriate to compare textual characteristics in companies between, for instance, the last decade of the twentieth century and the first decade of the twenty-first century. In addition, this study focuses on the transmission (preparer perspective) of narrative information with impression management purposes. The efficacy of these techniques may be influenced by different cognitive characteristics of users (Cardoso *et al.*, 2018). Moreover, specifically, analysts may perceive graphs differently from texts (Cardoso *et al.*, 2016). Future research might also extend graphical disclosure studies from a longitudinal approach.

The broad communication pattern seems to be affected by the evolution of the context. Overall, our results also confirm the view that impression management is a rhetorical method of persuading shareholders and other stakeholders that a company is doing better than it actually is. It confirms the evidence found by Brennan and Merkl-Davies (2014) and Shrives and Brennan (2017) that language can be used to persuade and influence account readers. Users, particularly investors, should be aware impression management is likely to be present in some form in the corporate disclosures of most companies, not only those reporting losses. Companies with a high public exposure such as those with a high reputation or profitability may use impression management in a different way. Chairman's statements are generally unaudited. However, auditors and regulators should be aware that accounting narratives could be subject to impression management. They should possibly consider whether they investigate this and potentially try to reduce it.

Notes

1. Ireland and the UK economies and markets were traditionally closely related each other. Even the Irish pound was pegged one for one to Sterling until 1979. They also had similar accounting environments, as both are common law countries (Doupnik and Salter, 1995; La Porta *et al.*, 1997).
2. This software has been used in other accounting studies (Li, 2010a; Merkl-Davies *et al.*, 2011). It has been designed by psychologists to calculate different linguistic dimensions in a text (Pennebaker *et al.*, 2007). The LIWC 2007 English dictionary contains almost 4,500 words and word stems. Each word or word stem is part of one or more word categories. For more information, see www.liwc.net.
3. Profitability was initially also proxied by earnings before interest and tax (EBIT), net profit (NP), return on equity (ROE) and increase or decrease in net profit from the previous year (IDNP). However, the correlations between the different proxies made us to remove them to avoid multicollinearity in the model and finally only select ROA and IDEB.
4. The variables in absolute terms (length and TASS) are transformed. They are expressed as its logarithm minus the sample mean.
5. As argued earlier, from 1980, a considerable amount of the traditional content of the chairman's statement was gathered by other statements.
6. It is difficult to compare numerically with previous literature, especially in the case of the first person pronouns, because different papers use different software, categories or words to compute this variable.
7. We mention there is a weak correlation (when the significance is at 10%), a correlation (at 5%) and a strong correlation (at 1%).
8. In addition, to complement the results offered by the full models, we also performed reduced models via stepwise regression, where only the variables found significant are retained. The lower number of independent variables suggested by the reduced models decreases the possibility of interactions between them, and constitutes their main advantage. However, some concerns have been raised about the stepwise models (Cook and Weisberg, 1999; Ryan, 1997). In any case, we omit the results of the reduced models because they were mainly in line with those of the full models.
9. One of the reviewers suggested testing changes in chairpersons, by creating a dummy variable which assumes the value of 1 only in the year of the change. However, these regression models were less significant than the original models and we have therefore maintained the original regression models in the paper.
10. We are grateful to one of the reviewers for pointing this issue. S/he suggested the potential influence that an incoming CEO could have on the style of writing the chairman's statement, even if it is signed by the chairman, especially in the case of Saunders. The full data of this analysis are available on request.
11. He also acted as a joint managing director from 1959–1960.

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Figures and tables

Figure 1. Evolution of independent variables (1948–1996)
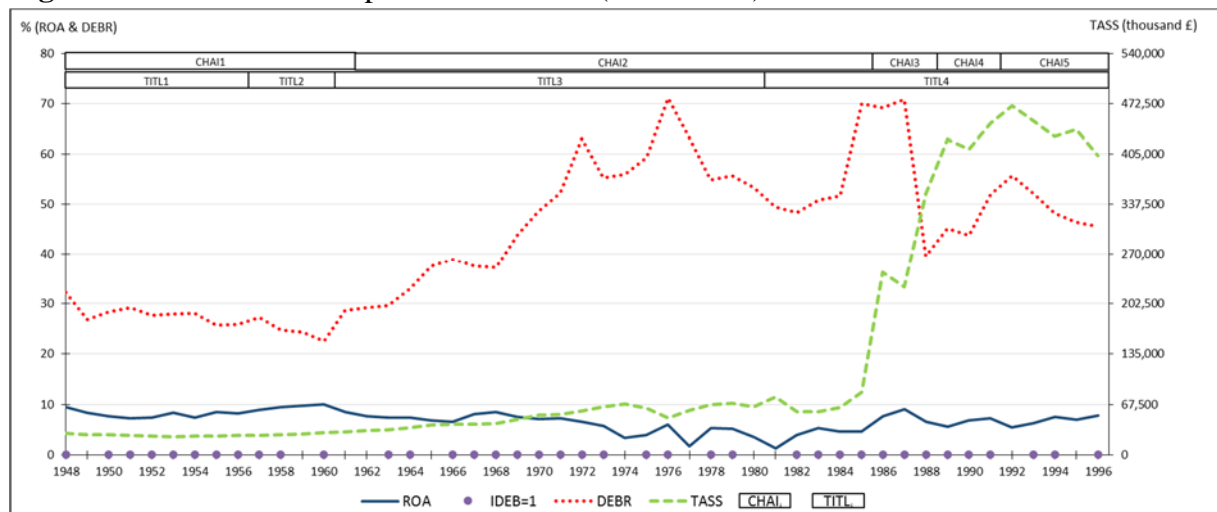
ROA: Return on assets; IDEB: Increase or decrease in earnings before interest and tax from the previous year; DEBR: Debt ratio; TASS: Total assets (after deflation and before transformation); CHAI$_i$: Different chairpersons; TITL$_i$: Different titles

Figure 2. Evolution of dependent variables (1948–1996)

Panel A. Qualitative textual characteristics (positive, negative, tentative, future and external references)
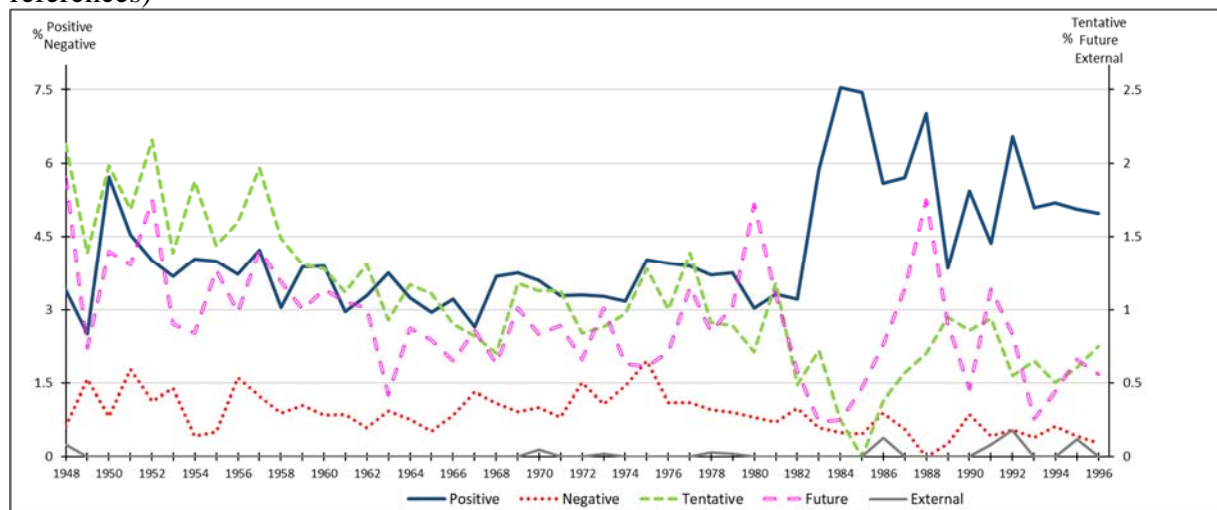
Panel B. Quantitative textual characteristics (length, numeric references and first person prns.)

[a] Before transformation

1
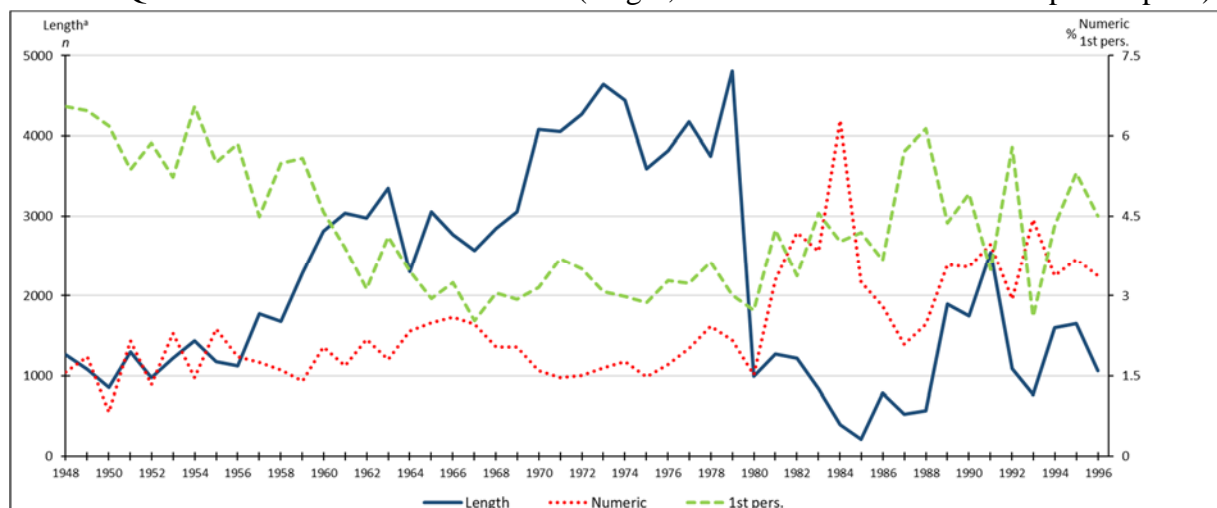
Table 1. Textual characteristics and their relationships with impression management

Hypothesis	Textual characteristic	Expected relationship with profitability (IM)
H1.1	Positive references	No (bias in favour)
H1.2	Negative references	No (bias against)
H1.3	Tentative references	–
H1.4	Future references	–
H1.5	External references	–
H2.1	Length	–
H2.2	Numeric references	+
H2.3	First person pronouns	+

Table 2. Average length of the chairman's statement and specific 'Guinness' references

Period	Average length	Average Guinness references (n)	Average Guinness references (%)
1948–1960	1,461	4.4	0.30
1961–1968	2,864	17.8	0.62
1969–1979	4,065	28.9	0.71
1980–1996	1,127	6.7	0.59

Table 3. Variables and proxy measures selected

Variable	Proxy measure	Definition
Dependent variables		
Positive	LIWC 2007 word category	Positive emotions (%)
Negative	LIWC 2007 word category	Negative emotions (%)
Tentative	LIWC 2007 word category	Tentativeness (%)
Future	LIWC 2007 word category	Future focus (%)
External	Ad-hoc word category	External-oriented (%)
Length	Total words (LIWC 2007)	Number of total words[a]
Numeric	LIWC 2007 word categories	Numerals + Numbers (%)
First person pronouns	LIWC 2007 word categories	Singular + Plural first person pronouns (%)
Independent variables		
Profitability	Return on assets (ROA)	Net profit divided by total assets $\times$ 100
	$\triangle/\triangledown$ EBIT (IDEB)	0 = decreasing; 1 = increasing (compared to previous year)
Risk	Debt ratio (DEBR)	Total liabilities divided by total assets $\times$ 100
Size	Total assets (TASS)	Total assets deflated using CPI[b] with 1948 base (thousand £)[a]
Chairperson	Different chairpersons ($CHAI_i$)	Defined as one dummy for each different chairperson
Title	Different titles ($TITL_i$)	Defined as one dummy for each different title

[a] The variables in absolute terms (length and TASS) are transformed. They are expressed as its logarithm minus the sample mean.
[b] CPI (Consumer Price Index) extracted from the Office for National Statistics (http://www.ons.gov.uk)

Table 4. Summary distribution statistics of variables selected

Variable	Mean	Std. Dev.	Minimum	Maximum
Positive	4.1916	1.2208	2.50	7.54
Negative	0.8763	0.4091	0.00	1.95
Tentative	1.0647	0.4785	0.00	2.16
Future	0.9131	0.3873	0.24	1.90
External	0.0145	0.0383	0.00	0.18
Length[a]	2158.96	1300.5330	215.00	4812.00
Numeric	2.4194	1.0241	0.82	6.29
1st person pronouns	4.2767	1.2076	2.53	6.55
ROA	6.7411	1.9567	1.27	9.97
IDEB	0.7755	0.4216	0.00	1.00
DEBR	43.6546	14.1938	22.57	71.05
TASS[b]	122,218.6311	151,348.0016	24,142.38	469,323.38
$CHAI_1$	0.29	0.46	0.00	1.00
$CHAI_2$	0.49	0.50	0.00	1.00
$CHAI_3$	0.06	0.24	0.00	1.00
$CHAI_4$	0.06	0.24	0.00	1.00
$CHAI_5$	0.10	0.31	0.00	1.00
$TITL_1$	0.18	0.39	0.00	1.00
$TITL_2$	0.08	0.28	0.00	1.00
$TITL_3$	0.41	0.50	0.00	1.00
$TITL_4$	0.33	0.47	0.00	1.00

N=49

[a] Before transformation

[b] After deflation and before transformation

Table 5. Correlation coefficients of variables

	Positive	Negative	Tentative	Future	External	Length	Numeric	1st pers.	ROA	IDEB	DEBR	TASS	CHAI1	CHAI2	CHAI3	CHAI4	CHAI5	TITL1	TITL2	TITL3
ROA	-0.109	-0.009	0.346***	0.209*	0.029	-0.020	-0.304**	0.429***												
IDEB	0.212*	0.007	-0.081	-0.181	-0.128	0.087	0.028		0.278**											
DEBR	0.336***	-0.088	-0.656***	-0.341***	0.255**	-0.027	0.281**	-0.461***	-0.601***	0.033										
TASS	0.520***	-0.525***	-0.630***	-0.284**	0.435***	-0.227*	0.571***	-0.086	-0.236*	0.007	0.546***									
CHAI1	-0.189*	0.275**	0.756***	0.483***	-0.145	-0.159	-0.431***	0.673***	0.570***	0.015	-0.744***	-0.598***								
CHAI2	-0.259**	0.191*	-0.316***	-0.315**	-0.245**	0.409***	0.000	-0.739***	-0.569***	-0.060	0.415***	-0.236*	-0.620***							
CHAI3	0.404***	-0.246**	-0.278**	0.202*	0.194*	-0.376***	0.008	0.192*	0.129	0.137	0.295**	0.352***	-0.162	-0.250**						
CHAI4	0.076	-0.227*	-0.080	-0.053	0.082	0.056	0.324**	-0.003	-0.026	0.137	0.061	0.471***	-0.162	-0.250**	-0.065					
CHAI5	0.330**	-0.352***	-0.324**	-0.319**	0.405***	-0.185	0.381***	0.066	0.007	-0.142	0.143	0.629***	-0.213*	-0.330**	-0.086	-0.086				
TITL1	-0.092	0.254**	0.676***	0.395***	-0.070	-0.282**	-0.314**	0.667***	0.317**	0.129	-0.528***	-0.464***	0.750***	-0.465***	-0.121	-0.121	-0.160			
TITL2	-0.106	0.097	0.282**	0.212*	-0.114	0.078	-0.212*	0.190*	0.428***	-0.018	-0.401***	-0.270**	0.471***	-0.292**	-0.076	-0.076	-0.101	-0.141		
TITL3	-0.527***	0.307**	-0.081	-0.097	-0.186	0.743***	-0.390***	-0.730***	-0.241**	-0.150	0.222*	-0.270**	-0.433***	0.765***	-0.212*	-0.212*	-0.280**	-0.394***	-0.248**	
TITL4	0.690***	-0.588***	-0.638***	-0.348***	0.319**	-0.591***	0.792***	0.103	-0.259**	0.062	0.437***	0.825***	-0.440***	-0.247**	0.367***	0.367***	0.484***	-0.330**	-0.208*	-0.578***

N=49

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 6. Full regression models

Variable	Positive		Negative		Tentative		Future		External		Length		Numeric		1st person pronouns	
	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value	B	p-value
Constant	3.823	0.008***	0.688	0.205	2.174	0.000***	2.534	0.000***	-0.035	0.523	-0.085	0.747	1.511	0.085*	6.660	0.000***
ROA	0.031	0.832	-0.047	0.401	-0.111	0.008***	-0.032	0.511	0.008	0.146	-0.012	0.662	-0.015	0.866	0.134	0.202
IDEB	0.430	0.263	0.004	0.981	0.080	0.446	-0.090	0.486	-0.031	0.045**	0.010	0.888	0.200	0.400	-0.465	0.095*
DEBR	0.009	0.623	0.014	0.047**	-0.004	0.452	-0.010	0.114	0.001	0.145	0.000	0.970	-0.012	0.301	-0.012	0.354
TASS	1.754	0.504	-0.903	0.376	-1.154	0.114	1.616	0.075*	0.061	0.556	0.012	0.981	-1.201	0.461	2.427	0.201
CHAI2	-0.304	0.769	-0.030	0.940	-0.107	0.706	-0.350	0.322	0.015	0.711	-0.002	0.992	0.581	0.368	-0.338	0.650
CHAI3	-0.986	0.673	0.443	0.625	1.035	0.111	-0.436	0.582	-0.010	0.912	0.018	0.968	-0.337	0.816	-1.048	0.532
CHAI4	-2.742	0.328	0.783	0.469	1.456	0.062*	-1.310	0.170	-0.016	0.887	0.517	0.332	0.990	0.567	-2.448	0.225
CHAI5	-1.794	0.523	0.705	0.517	1.229	0.115	-1.613	0.095*	0.000	0.999	0.290	0.587	0.977	0.574	-2.412	0.234
TITL2	-0.207	0.737	0.060	0.803	-0.028	0.867	-0.094	0.652	-0.024	0.323	0.280	0.021**	0.000	0.999	-1.295	0.005***
TITL3	-0.775	0.461	-0.147	0.717	-0.411	0.158	-0.375	0.294	-0.045	0.278	0.436	0.034**	0.220	0.735	-2.701	0.001***
TITL4	1.018	0.379	-0.598	0.185	-0.971	0.004***	-0.916	0.023**	-0.045	0.322	-0.300	0.177	2.611	0.001***	-1.730	0.042**
p-value	0.000***		0.008***		0.000***		0.001***		0.076*		0.000***		0.000***		0.000***	
Adjusted R²	0.475		0.298		0.744		0.401		0.167		0.702		0.713		0.724	

N=49

CHAI1 and TITL1 are considered as the reference categories

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 7. Differences in textual characteristics between the 20% top and bottom years ranked by annual change in net profit

	Positive	Negative	* Tentative	** Future	External	Length	* Numeric	1st pers.
Mean (top)	4.6260	0.9570	0.7400	0.6680	0.0240	-0.0411	2.9690	3.6520
Mean (bottom)	4.0240	0.8700	1.1770	1.0120	0.0300	-0.0183	2.1040	4.7410
Std. Dev. (top)	1.4420	0.4467	0.3635	0.2538	0.0453	0.3995	0.9460	0.7331
Std. Dev. (bottom)	1.3333	0.3954	0.4967	0.3475	0.0648	0.2648	0.9072	1.4960
Mann-Whitney U	36.000	40.000	25.000	22.000	47.000	49.000	26.000	30.000
Wilcoxon W	91.000	95.000	80.000	77.000	102.000	104.000	81.000	85.000
Z	-1.058	-0.757	-1.891	-2.117	-0.298	-0.076	-1.814	-1.512
Asymp. Sig.	0.290	0.449	0.059	0.034	0.766	0.940	0.070	0.131
Exact Sig.	0.315[a]	0.481[a]	0.063[a]	0.035[a]	0.853[a]	0.971[a]	0.075[a]	0.143[a]

N=20 (top=10 and bottom=10)

[a] Not corrected for ties

*,**,*** represent significant differences at 0.1, 0.05 and 0.01, respectively, between the two groups

Table 8. Values of the textual characteristics in the years near the share scandal (1986)

Textual characteristic	1984	1985	**1986**	1987	1988
Positive	7.54	7.44	**5.59**	5.71	7.01
Negative	0.50	0.47	**0.89**	0.57	0
Tentative	0.25	0.00	0.38	0.57	0.70
Future	0.25	0.47	0.76	1.14	1.75
External	0.00	0.00	**0.13**	0.00	0.00
Length[a]	398	215	**787**	525	571
Numeric	6.29	3.26	2.8	2.09	2.46
1st person pronouns	4.03	4.19	**3.68**	5.72	6.13

[a] Before transformation