Positive Versus Negative News: Readability and Obfuscation in Financial Reports

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ABSTRACT

This paper extends prior obfuscation research through an assessment of the readability and obfuscation levels in chairman and/or CEO reports of 30 listed Australian firms. In addition, possible associations between obfuscation and several basic firm level performance indicators as well as possible mitigating factors are assessed. Drawing on prior research, the Flesch readability formula is used to assess readability and obfuscation. However, a novel methodological approach is used to distinguish between cases of positive and negative news. The study finds that the analysed narratives are typically very difficult to read. A significant association is found between the presence/absence of obfuscation and year to year changes of a firm’s net profit, whilst the associations between obfuscation and year to year changes of a firm’s debt ratio, a firm’s level of shareholder concentration, and the proportion to which a firm’s board is staffed with independent directors are non-significant. This paper adds to prior literature by introducing a new basis upon which the readability of positive news and negative news, and thus obfuscation is determined. This new methodology improves the assessment of obfuscation because the definitions of its components are more closely aligned with the assessment intention of the obfuscation hypothesis.

Keywords - Readability, Obfuscation, Australia, Financial Reporting Narratives

Paper Type - Research Paper
1. INTRODUCTION

The successful communication of financial reporting information requires adequate and understandable financial data as well as readily comprehensible narrative information (Subramanian, Insley et al. 1993; Courtis 1995). Important narrative sections within a financial report are the chairman and/or CEO addresses (Kaplan, Pourciau et al. 1990; Smith and Taffler 1992; Smith 1998). Both sections are intended to communicate an organisation’s understanding of future prospects and prior year performances to shareholders, using non-technical language (Subramanian, Insley et al. 1993). As a result, one would expect that the textual complexity of these narrative sections reflect the comprehension ability of financial statement users, and most importantly investors. However, if the structure, wording, or style of these narratives is beyond the comprehension capabilities of the intended target audience, the understanding of the provided information may be hindered (Courtis 1995; Prasad, Green et al. 2009). Such mismatches may also lead to obfuscation, a situation where the reading difficulty of narratives is beyond the comprehension ability of users and the readability variability within the analysed narrative is large (Courtis 2004; Linsley and Lawrence 2007). The existence of obfuscation is typically interpreted as being indicative of a preparer’s attempt to hide negative information behind complex wording, whilst positive information is highlighted through easy to understand language (Courtis 1998).

Prior research into the readability of chairman and/or CEO addresses has highlighted that these narratives are typically difficult or very difficult to read (e.g. Subramanian, Insley et al. 1993; Courtis 1995; 1998; Clatworthy and Jones 2001; Courtis 2004). However, some prior analyses (e.g. Subramanian, Insley et al. 1993; Courtis 1998; Clatworthy and Jones 2001; Courtis 2004; Linsley and Lawrence 2007) have also focused on an assessment of the readability and/or level of obfuscation of positive news versus negative news. This paper extends these investigations through an analysis of the levels of readability and obfuscation of the chairman and/or CEO addresses in the annual financial reports of 30 firms listed on the Australian Stock Exchange. The objective of this study is to determine the readability and obfuscation levels of selected narrative financial reporting information, using a novel methodology where narratives are separated into positive and negative news sentences, with a view to investigate the association between the presence or absence of obfuscation and several basic firm level performance indicators as well as possible mitigating factors.

2. READABILITY RESEARCH

Preparers of annual financial reports employ numerous techniques, including quantitative information, narratives, pictures, and charts to transfer information to shareholders and other interested user groups. The effective application of these techniques requires users of financial reports to interpret the provided information as intended by the preparer (Courtis 1995; Prasad, Green et al. 2009). Representations whose complexity is beyond the comprehension ability of the intended target audience may lead to a misinterpretation of the provided information, and a reduction of the quality of the resulting decisions made by users of financial reports (Courtis 1995).
Narrative disclosures that supplement quantitative financial reporting information are an important component of this information transfer process. The usefulness of these narratives depends on their individual level of readability and obfuscation (Courtis 1998). Prior research has placed extensive reliance on readability formulas to determine the comprehension difficulty of narrative financial reporting information (e.g. Subramanian, Insley et al. 1993; Courtis 1995; 1998; Clatworthy and Jones 2001; Courtis 2004; Linsley and Lawrence 2007; Prasad, Green et al. 2009). This focus demonstrates that although the comprehension difficulty of textual information depends on multiple elements including content, format, organisation, and style (Courtis 1995; Prasad, Green et al. 2009), an assessment of writing style is widely regarded as a high-quality indicator of the comprehension difficulty of narrative information. Judgements of reading difficulty within the financial reporting context have typically relied on formulas based on word length and sentence length, with word length being indicative of the speed with which the reader recognises words, and sentence length being related to the memory span required of the reader (Courtis 1995; Prasad, Green et al. 2009). Although reading difficulty may not be caused by these variables, they are typically seen as good measurement proxies (Courtis 1995).

Prior explorations of the obfuscation hypothesis (e.g. Courtis 1998; Clatworthy and Jones 2001; Courtis 2004; Linsley and Lawrence 2007) have relied on an assessment of the readability variability of good and bad news firms. Greater differences between easy to read and difficult to read narrative sections within a financial report have traditionally been seen to indicate obfuscation (Courtis 1998; Clatworthy and Jones 2001). However, more recent studies of obfuscation have argued that unwanted information may be obscured best if high levels of readability variability are combined with low overall levels of readability (Courtis 2004; Linsley and Lawrence 2007). Hence, the definition of obfuscation applied in this study uses the existence of low overall readability within the analysed narrative as a second obfuscation indicator.

General criticism regarding the assessment of comprehension difficulty through readability formulas has focused on the imperfect match of readability, whose assessment revolves around an analysis of syntactical difficulty, and understandability, which encompasses a wider range of determinants (Clatworthy and Jones 2001). In fact, assessments of readability fail to account for jargon, concept difficulty, concept density, logic and coherence of arguments, or format and visual aids (Courtis 1995). Readability formulas are also unable to assess the level of matching between conceptually loaded narratives and the conceptual background knowledge of the intended target audience (Courtis 1995; 2004). However, the application of readability formulas also has certain advantages. First, they enable an assessment of syntactical difficulty of narrative information without participation of the intended target audience. Second, readability scores have been shown to be good proxies of comprehension difficulty (Courtis 2004). These advantages are seen to outweigh the criticisms outlined above. As a result, this study relies on a readability assessment to determine the comprehension difficult of narrative financial reporting information.
3. Hypothesis Development

The purpose of this study is two-fold. First, to extend prior obfuscation research such as Subramanian et al. (1993), Courtis (1998; 2004), Clatworthy and Jones (2001), and Linsley and Lawrence (2007) by assessing the readability and obfuscation levels of chairman and/or CEO addresses of 30 firms listed on the Australian Stock Exchange, using a new methodology which distinguishes between positive news sentences and negative news sentences. Second, to investigate possible associations between the presence/absence of obfuscation in the selected chairman and/or CEO addresses and several basic firm level performance indicators as well as possible mitigating factors.

Prior readability assessments of financial reporting narratives have typically focused on the chairman and/or CEO addresses within annual reports, with much attention being given to the analyses of readability differences between positive and negative news. One (now dated) example in the more recent strain of financial report readability literature is the study of Subramanian et al. (1993) which assessed the readability of the CEO addresses of US firms with predominantly positive news and predominantly negative news. Following the argument that preparers are likely to apply differing levels of syntactical difficulty to highlight positive news and hide negative news, they hypothesised that CEO addresses with predominantly positive news should exhibit higher readability scores (be easier to read) than CEO addresses with predominantly negative news. Although Subramanian et al. (1993) did not find support for this hypothesis, their theme as well as their positive/negative news proxy (change in net profit) have been used in numerous subsequent studies. Whilst this study follows the broader theme of Subramanian et al. (1993) by examining readability differences between positive and negative news, an improved positive/negative news proxy is employed. Instead of treating complete narratives within a report as predominantly conveying positive or negative news, the analysed narrative is separated into positive, negative, and neutral components on a sentence by sentence basis. This enables a more accurate testing of the hypothesis employed by Subramanian et al. (1993) and others, thus adding to the existing financial report readability literature. However, given that prior studies have provided evidence in support of (e.g. Courtis 1998; Courtis 2004) as well as against (Subramanian, Insley et al. 1993; Courtis 1995; Clatworthy and Jones 2001) the hypothesis that preparers attempt to obfuscate negative news and highlight positive news, the null form is chosen for H1.

H1: There is no significant difference between the readability of positive news sentences and the readability of negative news sentences.

The recent financial reporting readability literature has focused on the concept of obfuscation, with special attention being given to the assessment of obfuscation when predominantly positive or negative news are presented. Prior research has deemed narratives to convey predominantly positive news if a firm’s current year net income exceeds its prior year net income, whilst decreases in a firm’s net income are deemed to identify narratives that predominantly convey negative information (Courtis 1998; Clatworthy and Jones 2001; Courtis 2004; Linsley and Lawrence 2007). However, although similar definitions have been used in most prior obfuscation research, only partial support is provided for the underlying hypothesis that obfuscation is used to conceal negative
news and highlight positive news. One possible reason for the divergent findings in prior literature may be the currently inadequate specification of positive and negative news. This study attempts to resolve this issue by introducing a new positive/negative news separation methodology which relies on the identification of positive, negative, and neutral news sentences within each analysed narrative. This separation of positive, negative, and neutral news sentences also enables the computation of new and more refined readability variability and obfuscation assessments which rely on the individual readability of these groups. This analysis of groups of sentences within a narrative is possible because readability formulas, including the Flesch readability formula used in this study, are computed on a sentence by sentence basis and are uninfluenced by the order of sentences (Subramanian, Insley et al. 1993). Given that prior literature is unable to provide a clear indication of the relationship between obfuscation and net profit increases/decreases, the null form is chosen for H2.

**H2:** There is no significant difference in the extent of a firm's net profit change between 2007 and 2008 when obfuscation is present or absent.

Another firm level indicator whose association with the existence or absence of obfuscation is potentially interesting is the debt ratio\(^1\). The rationale behind this analysis is that preparers with an increasing debt ratio may be interested to obfuscate negative news and highlight positive news. The indicator tested in H3 may also be seen to provide a balance sheet focused assessment similar to the income statement focused performance assessment of H2. However, H3 should not be viewed as a direct extension of H2 because a year to year increase (or decrease) of net profit may not always coincide with a decreasing (or increasing) debt ratio. The association between debt ratio changes and obfuscation is tested via H3, stated in the null form.

**H3:** There is no significant difference in the extent of a firm's debt ratio change between 2007 and 2008 when obfuscation of present or absent.

The two remaining hypotheses are used to investigate the association between obfuscation and two possible mitigating factors. The rationale behind both analyses is that environmental factors as well as corporate governance practices may impact on the interest and/or ability of preparers to obfuscate negative news and highlight positive news. H4 focuses on the association between obfuscation and shareholder concentration. Here, it may be argued that a greater reliance on a large number of small shareholders without access to internal financial information causes firms to provide information that is easier to understand, thus reducing obfuscation. Conversely, it may also be argued that small shareholders are unlikely to possess extensive knowledge of the firm or the accounting process, making them less likely to detect obfuscation, thereby providing firms with an obfuscation opportunity. Drawing on research outside the financial reporting readability area (La Porta, Lopez-De-Silanes et al. 1998; Ding, Hope et al. 2007), shareholder concentration is determined by adding the percentages of shares held by a firm’s three largest shareholders. The association between obfuscation and the resulting shareholder concentration indicator is then tested using H4, stated in the null form.

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H4: There is no significant difference in the level of shareholder concentration when obfuscation is present or absent.

The final hypothesis focuses on the association between obfuscation and the proportion of independent board members. Independent board members are, given their knowledge about the individual firm, likely to be able to detect obfuscation. However, it is unclear whether or not independent directors are interested and/or able to prevent obfuscation. The association between the proportion to which a firm’s board is staffed with independent directors and obfuscation is tested using H5:

H5: There is no significant difference in the proportion of independent directors when obfuscation is present or absent.

4. Sample Selection and Methodology

The employed sample selection process reflects the shareholder/investor focus imminent in this study through the following procedure. First, all Australian Stock Exchange listed industrial firms incorporated in the ORBIS database as of August 2009 were downloaded. This download yielded a total of 1,668 firms. The reasons for focusing on listed firms were two-fold. First, it is ensured that all firms potentially available for analysis are exposed to a consistent financial reporting environment. Second, the interest of investors in listed firms typically exceeds their interest in unlisted firms. Next, a total of 30 firms were randomly selected, and the full PDF version of each firm’s 2007/2008 annual report was downloaded from the ORBIS database or the firm’s webpage.

The readability of the overall chairman and/or CEO addresses contained in the collected annual reports was initially assessed using the Flesch readability analysis of MS word. The Flesch readability formula is one of the most widely used measures of syntactical complexity (Courtis 1995; Courtis 1998; Clatworthy and Jones 2001). It was originally designed in 1948 to analyse the reading ability of school children in the United States but has since been used to analyse adults as well as children’s texts in a large number of academic fields (Clatworthy and Jones 2001). Although the use of the Flesch readability formula in financial reporting readability research has attracted some criticism (see Clatworthy and Jones 2001; Courtis 2004), its extensive application in recent studies (e.g. Courtis 1998; Clatworthy and Jones 2001; Courtis 2004; Linsley and Lawrence 2007; Prasad, Green et al. 2009) demonstrates its wide acceptance. Next, positive and negative news sentences within each analysed narrative were transferred to individual documents, and their readability was assessed using the Flesch readability analysis of MS word. The readability scores of these positive and negative news sentence groups were then used to address H1. The low readability of narrative financial reporting information (high reading difficulty) is indicated by lower Flesch scores, whilst higher Flesch scores point towards higher readability (low reading difficulty). The Flesch scores derived from these analyses

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may potentially range from 0 (very difficult to read) to 100 (very easy to read) (Linsley and Lawrence 2007), with Flesch scores around 60 being regarded as normal everyday English (Prasad, Green et al. 2009). The subsequent testing of H2 to H5 required an assessment of the presence/absence of obfuscation. Following the obfuscation definition of Courtis (2004) and Linsley and Lawrence (2007), obfuscation was deemed to exist when narratives exhibited low overall readability scores as well as high levels of readability variability. The existence of obfuscation was thus determined by ranking all analysed narratives in two separate arrays, with array one ranking narratives depending on their overall readability score, and array two ranking narratives depending on their readability variability. Narratives falling into the low readability half of array one (15 narratives with lowest overall readability score) as well as the high variability half of array two (15 narratives with highest overall variability) were regarded as exhibiting obfuscation (Courtis 2004). Narratives that did not meet one or both of these criteria were conversely regarded as being free of obfuscation.

5. Results and Discussion

An initial readability analysis of the complete chairman and/or CEO addresses included in this study revealed a mean Flesch readability score of 29.59, indicating a very high reading difficulty of these narratives, which is consistent with prior literature (e.g. Subramanian, Insley et al. 1993; Courtis 1995; 1998; Clatworthy and Jones 2001; Courtis 2004). The subsequent separation of the analysed narratives into positive (mean score 29.03) and negative (mean score 26.06) news sentences produced mean Flesch scores similar to those of the overall narrative. However, although the differences between the mean readability scores of both groups were small and non-significant (Table 1), it is interesting to note that positive news sentences in the chairman and/or CEO addresses of 20 (out of 30) firms were easier to comprehend than negative news sentences.

Table 1: Statistical Results Positive/Negative News Sentences (t-test)

<table>
<thead>
<tr>
<th></th>
<th>Positive Sentences (N=30)</th>
<th>Negative Sentences (N=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Flesch Readability Score</td>
<td>29.030</td>
<td>8.922</td>
</tr>
</tbody>
</table>

The t-test result presented in Table 1 led to an acceptance of H1, thus supporting prior literature (e.g. Subramanian, Insley et al. 1993; Courtis 1995; Clatworthy and Jones 2001) which argues that the readability of positive news and negative news is not significantly different. However, the application of a methodology which distinguishes between positive and negative news on a sentence by sentence basis expands prior literature by enabling a more detailed assessment of the readability differences between both groups. Hence, additional support for the notion that readability is largely uninfluenced by the content of the conveyed information is provided. As a result, it seems likely that the preparers of chairman and/or CEO addresses are largely uninterested in, or deliberately avoid, the use
of dissimilar levels of comprehension difficulty when conveying positive or negative information. However, given that all computed mean readability scores indicate the use of very difficult syntactical constructs throughout the analysed chairman and/or CEO addresses, it appears that preparers have instead elected to reduce the overall amount of easy to comprehend information within the analysed narratives.

The assessment of the remaining hypotheses (H2 - H5) required a judgement regarding the presence or absence of obfuscation within each analysed narrative. Overall, obfuscation was found in 7 (out of 30) analysed narratives. Hypotheses 2 to 5 were then tested using a Mann-Whitney U test. This non-parametric test was applied because an initial group by group distribution assessment of the employed variables revealed the existence of non-normal distributed variables.

Table 2: Statistical Results Obfuscation and H2 - H5 (Mann-Whitney U test)

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Obfuscation Present (N=7)</th>
<th>Obfuscation Absent (N=23)</th>
<th>U (2 tailed)</th>
<th>p (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2 = Change of Net Profit (000')</td>
<td>-18431.000</td>
<td>100892.321</td>
<td>7199.000</td>
<td>63809.038</td>
</tr>
<tr>
<td>H3 = Change of Dept Ratio (% points)</td>
<td>1.990</td>
<td>4.730</td>
<td>-0.190</td>
<td>6.891</td>
</tr>
<tr>
<td>H4 = Shareholder Concentration (%)</td>
<td>39.340</td>
<td>17.950</td>
<td>39.340</td>
<td>12.689</td>
</tr>
<tr>
<td>H5 = Proportion of Indep. Directors (%)</td>
<td>85.700</td>
<td>8.411</td>
<td>75.000</td>
<td>12.330</td>
</tr>
</tbody>
</table>

H2, which predicts similar changes of net profit regardless of the presence/absence of obfuscation, is closely aligned with prior assessments of the readability and obfuscation differences between positive and negative news (e.g. Clatworthy and Jones 2001; Courtis 2004). In fact, the "change of net profit" variable used in this study recreates the positive/negative news separator used by Clatworthy and Jones (2001) as well as Courtis (2004). The main difference between this analysis and prior literature is the dissimilar base upon which readability and obfuscation is computed. Readability assessments in prior research are typically based on the readability of three different parts (i.e. beginning, middle, and end) within the analysed narrative, whilst this study relies on readability scores derived from positive news sentences, negative news sentences, and the complete analysed narrative. This newly introduced methodology is likely to improve the assessment of obfuscation because the definitions of its components are more closely aligned with the assessment intention3 which underlies the definition of obfuscation. Based on the results of the conducted Mann-Whitney U test (Table 2), H2 was rejected, indicating the existence

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of a significant association between obfuscating behaviour and year to year changes in net profit (the positive/negative news separator employed in prior literature). This result supports the strain of prior obfuscation literature which has found similar associations (e.g. Courtis 2004), by providing additional evidence based on a new and conceptually improved assessment of obfuscation. However, given that positive news sentences and negative news sentences exhibited similar levels of reading difficulty (see H1), it remains unclear which factors drive the presence/absence of obfuscation. This question was addressed via an assessment of the readability differences and readability variance differences between narratives where obfuscation was present, and those were obfuscation was absent.

Table 3: Statistical Results Obfuscation and Readability (t-test & Mann Whitney U test)

<table>
<thead>
<tr>
<th></th>
<th>Obfuscation Present</th>
<th>Obfuscation Absent</th>
<th>t</th>
<th>p (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readability of Complete Narrative (t-test)</td>
<td>25.014</td>
<td>30.978</td>
<td>1.913</td>
<td>.066</td>
</tr>
<tr>
<td>Readability of Positive News (t-test)</td>
<td>26.057</td>
<td>29.935</td>
<td>1.007</td>
<td>.323</td>
</tr>
<tr>
<td>Readability of Negative News (t-test)</td>
<td>19.600</td>
<td>28.026</td>
<td>1.484</td>
<td>.149</td>
</tr>
<tr>
<td>Readability Variance (Mann-Whitney U-test)</td>
<td>37.300</td>
<td>15.700</td>
<td>38.000</td>
<td>.037</td>
</tr>
</tbody>
</table>

The conducted analysis demonstrated that the presence/absence of obfuscation was largely driven by the different levels of variance between the readability of positive news sentences, negative news sentences, and the overall narratives (Table3). In fact, the difference between the readability variance of cases where obfuscation was present, and cases where obfuscation was absent was the only statistically significant association in this analysis. This highlights the importance of the “readability variance” variable in the applied obfuscation assessment, and indicates that a mere assessment of the reading difficulty of narrative financial reporting information is unlikely to produce high quality results. In addition, it can also be concluded that the readability of positive and negative news sentences is not significantly influenced by the presence/absence of obfuscation. However, given that no significant differences in the readability of positive and negative news were found in H1 (Table 1), whilst the results of H2 (Table 2) revealed a significant association between the presence/absence of obfuscation and the “change of net profit” variable (the positive/negative news proxy used in prior studies), an additional analysis was required. Following the assessment structure of H1, the groups containing positive/negative news sentence were split into two sub-groups, defined by the presence/absence of obfuscation, and sub-group level t-tests were conducted.
Table 4: Statistical Results Obfuscation and Positive/Negative News (t-test)

<table>
<thead>
<tr>
<th></th>
<th>Positive Sentences</th>
<th>Negative Sentences</th>
<th>t</th>
<th>p (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flesch Redability Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obfuscation present (N=7)</td>
<td>26.057 7.906</td>
<td>19.600 13.783</td>
<td>1.075</td>
<td>.303</td>
</tr>
</tbody>
</table>

Although this analysis revealed that the mean Flesch readability score difference between positive news sentences and negative news sentences was approximately 3.4 times larger when obfuscation was present than in a situation where obfuscation was absent, no significant differences were detected (Table 4). These results, in combination with the findings of H1, provide additional support for those strains of literature (e.g. Subramanian, Insley et al. 1993; Courtis 1995; Clatworthy and Jones 2001) that assign similar levels of readability to positive and negative news sentences because the presence/absence of obfuscation does not lead to a significant difference between the readability of positive/negative news sentences. However, given the low readability of positive news sentences, negative news sentences, and the overall narratives in all conducted analyses, it must be reiterated that even the narratives of non-obfuscating firms are likely to be beyond the comprehension ability of a substantial proportion of the intended target audience.

The absence of a significant association between obfuscation and the change of an analysed firm’s debt ratio led to an acceptance of H3, although the p-value (Table 2) associated with this analysis suggested the existence of some limited association. The existence of such a suggestive relationship is unsurprising, given that H3 is expected to act as an indirect balance sheet extension of H2. A subsequent examination of the “change of net profit” and “change of debt ratio” variables in Table 2 revealed the existence of inverted change directions for both variables. In other words, the existence of obfuscation is associated with mean net profit decreases as well as mean debt ratio increases, whilst the absence of obfuscation is related to increasing net profit means as well as decreasing debt ratio means. Whilst this result indicates that H3 may in fact act as an indirect extension of H2, it also demonstrates that debt ratio changes are, individually, not significantly associated with obfuscation (Table 2). Investors with holdings in highly geared firms may thus be given some assurance that greater levels of debt are, individually, unlikely to lead to a significantly greater probability of obfuscation within a chairman and/or CEO address. One possible explanation for this phenomenon may be that preparers are less concerned with the obfuscation of debt ratio increases than the obfuscation of profit declines. However, since the assessment methodology employed in this study is unable to reflect the contents of individual positive, negative, and neutral news sentences, no empirical support for this possible explanation can be provided.

The two remaining analyses focused on two possible mitigating factors and their association with obfuscation. The results of the Mann-Whitney U test presented in Table 2 led to an acceptance of H4, which tested the association between shareholder concentration and obfuscation, as well as H5, which assessed the association between
obfuscation and the proportion to which a firm’s board members were independent
directors. The acceptance of H4 demonstrates that neither of the two arguments presented
in the development of this hypothesis is able to explain the presence or absence of
obfuscation. Instead, obfuscation appears to be unrelated to shareholder concentration,
lending support to the argument that preparers seem to apply a “one size fits all”
approach when creating the analysed narratives. One possible explanation for such
behaviour may be the influence of marketing and/or legal factors on the analysed
narratives, with most preparers aiming for similar promotional effects whilst being limited
by generally applicable legal limitations. The results derived for H5 are similarly
interesting, as they appear to demonstrate that independent directors are either unwilling
or unable to prevent obfuscation. Here, it seems likely that the analysed narratives were
prepared by a firm’s chairman and/or CEO without substantial input from the remaining
board members. However, although this reasoning appears to explain the results of H5, it
must be noted that it may not be readily transferable to other financial reporting narratives
whose preparation is less reliant on individual preparer personnel.

6. Conclusion

This study aimed to extend prior obfuscation research by assessing the readability and
obfuscation levels of chairman and/or CEO addresses of 30 industrial firms listed on the
Australian Stock Exchange, using a new methodology which distinguishes between
positive and negative news sentences. In addition, possible associations between the
presence/absence of obfuscation in the analysed chairman and/or CEO addresses and
several basic firm level performance indicators as well as possible mitigating factors were
assessed.

Overall, high levels of reading difficulty were found for positive news sentences, negative
news sentences, and the analysed narratives as a whole. In addition, no significant
association was found between the presence/absence of obfuscation and year to year
changes of a firm’s debt ratio, a firm’s level of shareholder concentration, and the
proportion to which a firm’s board is staffed with independent directors. However, the
existence of a significant association between a firm’s year to year change of net income
and the presence/absence of obfuscation was demonstrated. A subsequent analysis of this
relationship failed to reveal a statistically significant association between the
presence/absence of obfuscation and the readability of positive news sentences, negative
news sentences, or the complete analysed narrative. Instead, the presence/absence of
obfuscation appeared to be driven by the “readability variability” variable.

Whist these results have interesting implications for financial report users, it is important
to note that the findings of this study are limited to chairman and/or CEO addresses and
may not be readily transferable to other financial reporting narratives. However, this study
concentrates on chairman and/or CEO addresses because their importance in the
information transfer process has been highlighted by prior research (e.g. Kaplan, Pourciau
et al. 1990; Smith and Taffler 1992; Smith 1998). The chosen sections are also less
regulated than most other section within an Australian financial report, which increases
the scope available to preparers when conveying information and amplifies the potentially
available readability variability. The results of this study may thus be regarded as magnifying existing readability differences whose partial suppression in other, more highly regulated, financial reporting narratives appears likely.
REFERENCES


