CHAPTER 2

REVIEW OF LITERATURE

Reading and understanding of some of the texts is difficult. A text which is difficult to read may be unique in content, yet it fails to serve its purpose of making the reader understand and use it. So, all of the authors, writers, and scholars need to assess the readability of their written materials. The problem many writers face is how to assess the "readability" of their text. Over time, different methods have been developed to objectively predict the reading difficulty of written materials. Readability formulas are one of these scientific methods that offer the solution. By applying these scientific and mathematical principles, the readability formulas aim to present an objective analysis about the readability of a particular text. A readability formula is simply a mathematical equation derived by regression analysis (Jabbari & Saghari, 2011).\(^1\)

Readability formulae express measures of the degree of difficulty of language and its structure and have previously been used in accounting research. Reading studies have clearly demonstrated that a high level of motivation towards the subject matter of the text has a markedly positive effect on the apparent reading competence of a poor reader. (Lewis, Parker, Pound, & Sutcliffe, 1986)\(^2\)

It is also unlikely that readability measures account for the impact of reading speed which is a function of time required to assess issues in the text, breadth of the reader's previous knowledge and organization of material in the text being read (Harrison, 1980).\(^3\) These limitations suggest that word and sentence difficulty are not the only variables that influence readability. Consequently, simplification alone does not automatically guarantee improved readability, but may improve the probability of the text being understood by a wider audience.

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The increase in the amount of required disclosure accompanied by the challenging task of communicating increasingly complex business transactions to investors has led to concerns about the effectiveness of management communication and the ability of interested users to make informed decisions based on this information. Unsurprisingly, given the natural significance of corporate disclosures to regulators and investors, numerous papers have been published that investigate the readability of annual report disclosures.

2.1 DEVELOPMENTS IN READABILITY FORMULAS
A recent phenomenon observed in the UK, USA and Australia has been a developing interest in the examination and implementation of 'Plain English' reports. For example, in the UK the Inland Revenue revised its income tax form P1 in 1979 and its main explanatory leaflets and booklets in 1981, to improve readability. The Department of Health and Social Security revised its forms and pamphlets similarly, while the legal profession has begun to confer Plain English awards (Lewis and James, 1981; James et al, 1981)⁴. In the USA, the First National Bank of Boston has begun using Plain English loan agreements and Citibank has eliminated half the length of its promissory note in a similar way. Indeed, by 1983, seven states had passed Plain English laws (Herron, 1985)⁵. In Australia, the NRMA Company has revised its insurance policies to improve readability and the 1984/85 Australian personal income tax return (Form S) has been revised in Plain English and tested in Western Australia. The Australian Government is also sponsoring the revision of taxation, social security and veterans' affairs documents and the development of training packages to help public servants write simply (Eagleson, 1985)⁶. These attempts at Plain English represent efforts to simplify language and its structure.

In 1967, the SEC constituted an internal study group to examine and make recommendations for improving its disclosure regime. This resulted in the 1969 “Wheat Report”. Among other findings, the Wheat Report noted that the average investor could not readily understand the complicated prospectuses and therefore recommended that companies avoid unnecessarily complex, lengthy or verbose writing. The US SEC Advisory Committee on Corporate

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Disclosure’s 1977 survey reported that 9 out of 10 investors read the annual report (US Securities and Exchange Commission, 1977)\(^7\), while a 1972 study (Neilson and Lind, 1972)\(^8\) found that the average investor spends less than 15 minutes reading the report. Hawkins and Hawkins (1986)\(^9\) concluded that 5 out of 10 investors either skim or just do not read the annual report. In October 1998, the SEC adopted new plain English disclosure rules that require the usage of plain English in the drafting and format of all prospectuses in registered public offerings by domestic and foreign issuers. The SEC’s Investor Ed Office published and posted on its website “A plain English handbook, how to create clear SEC disclosure documents” which provides practical tips for disclosure documents. For instance, when drafting the front and back cover pages, the summary and risk factors sections, an issuer must comply with the following six basic principles: short sentences; definite, concrete, everyday language; active voice; tabular presentation or bullet lists for complex material, whenever possible; no legal jargon or highly technical business terms; and no double negatives. More recently, the SEC has taken several steps in making the disclosure of mutual funds more readable (Glassman, 2005)\(^{10}\).

In October 1998, the SEC advocated “plain English” disclosure rules, arguing (1) firms could use vague language in order to hide adverse information, and (2) average investors may not be able to understand complex financial reports, resulting in capital market inefficiencies. The premise underlying the first argument is that managers have incentives to obfuscate poor performance through complex disclosures in order to either dampen or defer unfavorable capital market impacts. For example, a disappointing return on assets (ROA) performance in 1 year could be downplayed in the annual report through intentionally vague wording or biased elaboration regarding a more enduring cause. If such fog or spin could successfully influence investor sentiment about future firm performance, then opportunistic pressures to do so might be expected to be more pronounced for firms that frequently access the capital market.

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Although both SEC motivations are consistent with the idea that complex information is more costly to process and therefore less likely to be quickly and completely imparted into prices (e.g., Grossman and Stiglitz 1980)\textsuperscript{11}. Relevant in this regard is Bloomfield’s (2002)\textsuperscript{12} “incomplete revelation hypothesis.” This hypothesis predicts that the more costly public data are to extract and meaningfully analyze, the less those data drive a trading interest, and therefore, the less likely prices will reflect the impacted information. As he states, the hypothesis predicts “systematic underreaction to information contained in footnotes and statistics derived through fundamental analysis, with larger underreactions to footnotes that are more complex or to statistics that require more complex analyses”. In particular, the study argues that managers make many decisions motivated, at least partly, by a desire to make it harder for investors to uncover information that the managers do not want to affect the firms’ stock prices. Therefore, by increasing the processing cost of adverse information, managers hope that it is not reflected in stock prices or reflected in prices with a delay.

Companies as well as the regulatory bodies are making efforts to increase the usefulness or the readability in particular, of the annual reports. Despite such efforts by the companies and the regulatory authorities, and the recent progress in business communication, there is still much uninformative, unimaginative reporting of company activities. One reason is that those who are preparing the annual report for the company may not be the best judges of clarity and readability. Another reason is that it is the nature of financial reporting to score in the lower third of the readability scale (Wheeler, 2006)\textsuperscript{13}. Management’s intention to make the report harder can also be a very good reason. Given the importance of the plain English disclosure regulation, surprisingly, there is little large sample empirical evidence on its relevance. Following are review of several studies done on the readability and its relevance on corporate annual report.

Healy et al. (1999)\textsuperscript{14} reported firms that voluntarily increase their disclosure levels experience significant increases in their stock prices beyond what can be explained by contemporary earnings performance. It also studies the reading ease of the footnotes to the financial statements of 50 New Zealand firms.

Gelb and Zarowin (2000)\textsuperscript{15} compared firms with high disclosure ratings versus low disclosure ratings and conclude that the former experience a more significant stock price association to current and future earnings reports, consistent with more credibility behind those disclosures. Kothari et al. (2008)\textsuperscript{16} used content analysis to show that positive disclosures reduce firm risk along multiple dimensions, including the cost of equity capital, volatility of a firm’s stock returns, and the dispersion of analyst forecast estimates.

Riedl and Srinivasan (2006)\textsuperscript{17} found that managers exercise strategic discretion in their reporting of special items, giving explicit income statement recognition of transitory disruptions in expected profitability, while relegating explanation of more persistent earnings shocks to the financial statement footnotes.

Clatworthy and Jones (2001)\textsuperscript{18} said the most common tool utilised in readability studies to assess the syntactical complexity of narratives has been the Flesch readability formula. In a calculation that considers the number of syllables per word and the number of words per sentence, the Flesch formula produces a score that can be aligned with reading difficulty. The lower the score, the harder the narrative passage is to read. For example, scores of 70 or more are considered to


be fairly easy to read. Scores between 30 and 50 are rated as difficult while those of 30 or less are considered to be very difficult, and likely to be understood only by those with a tertiary education. The use of Flesch scores as a measure of the readability of annual report narratives has been criticised by several authors. But he argued that the use of the Flesch formula is justifiable because it allows for easily computable results, understandability, and comparability with previous studies.

Further evidence that firms strategically manage the information content of their corporate disclosures is found in the literature on earnings release timing. Early work in this area suggests firms exhibit a proclivity to announce good news early, and delay the release of bad news as long as possible in an effort to maximize shareholder wealth. For example, Lurie and Pastena (1975)\textsuperscript{19} found 59% of “good news” disclosures are made during the first six-months of a fiscal year, while only 22% of “bad news” disclosures are made during this same interval. More strikingly, they also find 38% of all “bad news” filings occur during the final month of a firm’s fiscal year. Similarly, Kross and Schroeder (1984)\textsuperscript{20} found early releases of quarterly earnings announcements are characterized by better news than late announcements, while Chai and Tung (2003)\textsuperscript{21} found late reporters exhibit lower profitability and are characterized by more negative discretionary accruals than their early reporting counterparts. Finally, both Patell and Wolfson (1982)\textsuperscript{22} and Damodaran (1989)\textsuperscript{23} reported firm’s time of release of negative information to minimize market impacts. Specifically, Patell and Wolfson (1982) found good news is likely to be released when markets are open, while bad news is disproportionately released after the market closes. Although relatively few earnings announcements are made on Fridays, those that are tend to be made after-the close. Consistent with minimizing negative announcement effects,


2.2 APPLICATIONS OF READABILITY FORMULAS
Without any appeal to the existence of asymmetric information among traders, a similar conclusion is arrived at by Lambert et al. (2007). They demonstrated that increasing the quality of accounting disclosures decreases a firm’s cost of capital through a lowering of the expected covariance of returns between the firm and the market. Summarizing the intuition underlying this result, at the information limit (no information uncertainty exists whatsoever and the cash flow distribution is perfectly revealed), the covariance of returns with the market ceases to be priced as a risk factor because the market provides no additional information concerning the firm’s cash flows.

Richards & Staden hypothesized that the introduction of International Financial Reporting Standards in New Zealand could lead to increased difficulty in reading the resulting financial statements. Using a range of readability indicators (Flesh, Flesh-Kincaid, Smog and Fog) their results showed that the readability of financial statements decreases after IFRS adoption. This was confirmed by other proxies for reading difficulty (statement length and number of tables) and therefore their results support our hypothesis. The results hold even after exerting statistical control over the other variables that previous research had identified as significantly related to financial disclosures readability (size, leverage, volatility and industry). They have found sufficient evidence to reject the null hypotheses and conclude that they have found sufficient evidence to conclude that the adoption of IFRS has led to more complicated annual report disclosures. These relationships revealed a troubling situation, adoption of NZIFRS has deteriorated the readability of annual report disclosures and resulted in considerably longer and more complicated reports. While the direct cause of this relationship is not investigated in this

26 Richards, G. W., & Staden, C. J. “The readability of International Financial Reporting Standards – is harmonisation having a negative impact?”, The University of Canterbury., Christchurch, New Zealand
research work, it is evident that work is required to remedy this result of NZIFRS adoption. This research work, found the readability of annual reports notes to be very poor with scores suggesting at least a Bachelor’s Degree is required to comprehend their content.

(White and Hanson 2002)²⁷ Annual reports are viewed as authoritative and legitimate documents, yet they are ones in which editorial control remains with those responsible for their preparation. The readability of narrative disclosures in the corporate annual reports of listed companies has been extensively researched. Narrative disclosures have consistently been found to be difficult for users to read and comprehend. Due to the differences in both the nature of the operations and in the potential report users of local governments and listed companies, a comparison of their reporting styles is interesting. Inter alia, local governments provide services and impose regulations that affect all residents in their jurisdictions. Unlike customers or shareholders of a listed company, residents cannot ‘opt out’ of their relationship with their local government. Thus local governments have the challenge of communicating to a user group that may differ in motivation and sophistication in comparison to the users of corporate annual reports. The decision to include voluntary narratives in the local government reports suggests that the preparers intend the report to be used to communicate with the readers and not simply to fulfill a statutory role. Because users of local government annual reports are different from the major users of corporate annual reports, typically those with a financial interest in the corporation, they may be making and evaluating types of decisions that differ from the investment and analysis-type decisions generally made by corporate report readers.

Jones and Shoemaker (1994)²⁸ reviewed 32 studies in the fields of accounting, business communication, and management which study the readability of annual report narratives (26 studies), tax law (3 studies), or accounting textbook (3 studies). Most studies try to assess the reading ease of the annual report and its components. They reviewed research into the readability of accounting reports concluding that studies have consistently shown that narratives in corporate reports are difficult or very difficult to read.

Lewis, Colvard & Adams, (2008) said the Gramm-Leach-Bliley Act (GLBA) of 1999, which repealed the Glass-Steagall Act, did away with many of the restrictions placed on financial institutions. One major focus of the act was the protection of personal information of consumers. The act required a clear disclosure of a company’s privacy policy regarding sharing customer information with affiliates and third parties. Implicit in the act was the idea that privacy policies would be in plain language. This research sought to determine the readability of privacy policies of banks, check cashing companies, and credit counseling companies. Privacy policies of the three business types were obtained from web sites and analyzed using Microsoft Word 2007, which employs the Flesch-Kincaid Grade Level test. Findings revealed that most privacy policies were written above grade level 12, which would portend problems for a large segment of the population, particularly those that patronize check cashing companies. Customers of banks and credit counseling companies might experience similar issues, albeit to a lesser degree.

Support for an association between disclosure efficacy and cost of capital is also provided by a large number of empirical studies. For example, Botosan (1997) found that firms relatively neglected by the analyst community exhibit a significant negative relation between voluntary disclosure levels and the implied cost of capital.

Harding (1967) computed the readability score of the standard automobile insurance policies and of other publications from diverse fields and finds that the reading level of the automobile insurance policy is beyond the reading ability of a significant percentage of the United States adult population. In addition, it is also found that standard automobile insurance policy is substantially more difficult to read than the other materials tested.

Milne and Chan (1999)\textsuperscript{32} showed that analytical investors perceive CSR disclosure to be important in making investment decisions. And quantified social information (in monetary value), does, in some way, improve their decision-making. Most of the time, firms use electronic and printed media to inform the public about their CSR activities, and it is always done in written form.

Ziek (2009)\textsuperscript{33} argued that an assessment of how organizations explicitly communicate the behavior that constitutes CSR should be understood in the context surrounding the organizations. He found that communicating CSR is limited to large organizations and the information is conveyed through those choices of words that could portray accepted responsible and virtuous behaviors.

Bakar & Ameer (2011)\textsuperscript{34} demonstrated that in the sample of Malaysian listed companies investigated, the CSR communication was very difficult to read according to the Readability formulae. Furthermore of the five hypotheses constructed to examine the relationship between the readability of CSR communications and firm performance, three were supported, showing a positive relationship with profitability, liquidity, and TOBIN\textsubscript{Q}. These results suggest that companies with good financial performance report their CSR narratives in a manner that is easy to comprehend, by using simple words and sentences, and fewer technical terms than companies with poorer financial performance. In addition, the findings support the obfuscation hypothesis, demonstrating that high (low) performing companies, in terms of profitability, liquidity and growth, achieved high (low) CSR disclosures readability scores.

Butterworth, Gray and Haslam (1989)\textsuperscript{35} compared the readability levels of UK local authority reports with those reported in the research into corporate annual reports. They found that local

authority reports were similarly rated as difficult or very difficult to read, but tended to have slightly easier readability scores than their corporate counterparts.

2.3 READABILITY FORMULAS: APPLICABILITY ON ANNUAL REPORTS

Ramsay and Hoad (1997) studied the disclosure practices of Australian companies by examining the annual reports of 268 listed companies. They found that the extent and quality of disclosure are typically better for larger companies than for smaller companies.

In an Australian context, Anderson and Epstein (1995)\textsuperscript{36} studied the usefulness of corporate annual report for individual investors. In this study, shareholders indicated that they had difficulty in understanding the balance sheet, cash flow statements and footnotes to the reports. Assertions that corporate annual reports are complex are consistent with earlier studies that have found that the narratives accompanying financial statements are difficult to read.

Courtis (1986)\textsuperscript{37} utilised the Flesch and Fog formulas in 142 Canadian annual reports for the period 1982-1983. The data supports the conclusion that readability ease was between difficult to very difficult. Further it found that footnotes may be beyond the comprehension of 92\% of the Canadian population. Worthington (1978)\textsuperscript{38} applied the Dale-Chall readability formula to a sample of the second largest 500 industrial corporations using the Fortune’s 1974 ranking. The findings showed that financial disclosure readability ranged from difficult to very difficult. Schroeder and Gibson (1990)\textsuperscript{39} reviewed early research into financial disclosures, including papers from 1950 through to 1980, and found footnote readability to be poor. Their own study


using the Flesch formula resulted in the same conclusion. However, some commentators suggest that there is a lack of “large-sample empirical evidence on these documents’ linguistic features”. Priest, Ng and Dolley (1999)\(^{40}\), discussed the value of the annual report as a disclosure tool to discharge accountability by local government has been questioned. For example, information in the annual report may be presented in a format too complex for an external user, the reports may not be directly available and accessible to potential users, and the content of the report may not contain all the relevant information that users seek. There is a widespread perception amongst both the users and preparers of local government annual reports that the reports are difficult to read and provide less than meaningful information.

Lee and Tweedie, (1990)\(^{41}\) in their 15 years of study on corporate annual reports noted that the complexity of annual reports has increased over time. Bartlett and Chandler (1997)\(^{42}\), in their replication of the study of Lee and Tweedie’s original study, similarly obtained results showing that corporate reports are still complex and not widely read. Due to the complexity of the financial statements, investors prefer the narrative sections of annual reports.

Courtis (1998)\(^{43}\) suggested that an annual report’s usefulness is dependent on the extent to which users will find the content both readable and understandable. With regard to the specific association between linguistic readability metrics and profitability, the existing evidence is somewhat limited. Of note, Li (2008)\(^{44}\) both concluded that annual report readability of poorly performing firms is lower than that for well performing firms. Li’s (2008) large-sample study further documented that the profitability of firms with easier to read annual reports is more


persistent. These findings are clearly consistent with the notion that managers opportunistically choose the linguistic characteristics of their corporate disclosures to influence investor sentiment.

Dempsey, Harrison, Luchtenberg & Seiler (2010)\textsuperscript{45} extended these studies by directly examining the security market pricing implications of disclosure opacity. The central hypothesis, that the relationship between profitability and financial disclosure is impacted by the economic consequences of obfuscation is confirmed. Specifically, they have find that annual report opacity is significantly greater for poorer performing firms in terms of return on assets (ROA), and that the residual opacity unexplained by ROA performance and other control variables is found to be a significantly priced risk factor beyond the Fama-French three-factor risk premia. Given the REIT industry’s generally heavy reliance on external financing and its resulting heightened market exposure to priced information risk, they regard these results as having important implications for this industry’s disclosure practices. Clearly, there is a trade-off between any opportunistic benefits of strategic obfuscation and the cost of external capital (excess returns). Interestingly, despite the substantially increased regulatory constraints imposed by the Sarbanes-Oxley Act of 2002, not only does annual report readability markedly decrease overall, but the residual opacity that remains after controlling for intertemporal disclosure level differences continues to be penalized by the market in terms of higher implied capital costs.

Li (2006)\textsuperscript{46} studied annual report readability and its association with readability to earnings and stock returns. It adds that the positive earnings of firms with annual reports that are easier to read are more persistent in the next one to four years and annual reports of firms with lower earnings are harder to read. However, the study does not find any correlation between annual report readability and future stock returns, suggesting that the market does impound the implications of disclosure readability into stock prices. The study also reported that annual reports of public companies, in general, are difficult to read, which is supported by our study also.


Smith and Smith (1971)\textsuperscript{47} studied the financial statements of the first 50 corporations on Fortune’s list of 500 largest industrial corporations for 1969 and concluded that the readability level of the financial statement notes is restrictive. According to them such conclusion cannot be made that a relationship exists between the identity of external auditors and the comprehension ease level of notes to financial statements.

Lebar (1982)\textsuperscript{48} attempted to determine if the language of Forms 10-K, the press release, and the annual reports of randomly selected 10 NYSE firms in 1978 were consistent in reporting year-end results and concluded that the Form 10-K and the press release sections were not significantly different when describing the same topics. However, the language of the annual report was significantly different from both Form 10-K and the press release.

By using Cloze readability procedures, Adelberg (1979)\textsuperscript{49} concluded that differential understanding exists across some, but not all (1) financial report preparers, (2) financial report messages, and (3) financial report users. It also found that accounting policy footnotes and management analyses of operations and narrative disclosures are not understood well by commercial bank loan officer trainees.

Montondon and Marsh (2005)\textsuperscript{50} studied the readability of the Management Discussion and Analysis (MD&A) and the Popular Annual Financial Report (PAFR) sections of US governmental agency annual reports. They found that, although the PAFR was easier to read than the MD&A, most PAFR narratives fell in the ‘fairly difficult’ or ‘difficult’ to read categories. Also in the US, Kinnersley and Fleischman (2001) compared the readability of government letters of transmittal in annual reports at both a state and local level with the readability of the MD&A section of company reports. Conversely, they found that the governmental letters of


transmittal were more difficult to read than the MD&A section in corporate annual reports, although both were found to be difficult to read in that a college graduate level of education was required in order to understand the documents.

Clarke, Hrasky & Tan (2009)\textsuperscript{51} determined if the characteristics of narratives systematically differed in the annual reports of companies and of local governments. It was hypothesised that the narratives in annual reports of local governments would be easier to read, less likely to be obfuscated and would contain fewer passive constructions than narratives in the annual reports of corporations. The mayoral letters were found have higher reading ease and be less likely to be obfuscated than their corporate counterparts. However, the readability scores still rate the local government narratives as difficult. This combined with the finding that mayors’ letters are shorter and contain a higher rate of passive constructions, might equally suggest that opportunities to communicate clearly and effectively with local government stakeholders are not being maximised.

Courtis (1995)\textsuperscript{52} used Flesch, Fog and Lix readability formulas to measure 32 randomly selected chairman's address and footnote passages from the annual reports of some Hong Kong public companies for the years 1986 and 1991 and finds that readability is beyond the fluent comprehension levels of 90 percent of the adult population and the overall readability declined over the five-year period. These Asian findings are consistent with those from similar studies in the USA, UK, Canada and New Zealand. Courtis’s research raises interesting questions on the use of such texts in countries where English is not the native language.

Several studies have investigated whether annual reports have become more difficult or easier to read over time. For example, Soper and Dolphin (1964)\textsuperscript{53} compared the reading ease score of 25 selected corporate annual reports between the year 1948 and 1961 and conclude that the reading


ease of corporate annual reports is not improving over time. Barnett and Leoffler (1979)\textsuperscript{54} found that notes to the financial statements and reports of independent auditors are at unsatisfactory difficulty levels and the readability level of the recent notes to the financial statement is significantly lower than that of 1969 statements.

Again there are several studies such as Courtis (1986)\textsuperscript{55}, Baker and Kare (1992)\textsuperscript{56}, Subramanian, et al. (1993)\textsuperscript{57} that examined the relationship between annual report readability and corporate profitability. For example, Courtis (1986) found neither company size nor profitability are associated with improved readability levels. Baker III and Kare (1992) found that the correlation coefficient between the readability index and the profitability of a firm is mixed. The correlation coefficient between the Flesch readability index and the return on equity is positive but revealed no significant correlation between the net profit margin and the readability index. Subramanian, et al. (1993) revealed that the annual reports of good performers are easier to read than those of poor performers. Good performers used strong writing in their annual reports unlike poor performers, but did not use significantly more jargon or modifiers. Smith, et al. (2006)\textsuperscript{58} suggested that there exists significant relationship between corporate language and financial performance, but that these are not consistent with the obfuscation hypothesis (a hypothesis suggesting that under-performing firms will tend to obscure the meaning of their corporate narratives by deliberately adopting textual complexity, or using unnecessarily difficult language).

This study measured the readability scores of management reviews of some selected companies listed on the DSE. The majority of the management reviews under this study are found more difficult to read except only a few companies.

The maintained assumption of the managerial obfuscation argument (i.e., management is less forthcoming in disclosing information when the firm is performing poorly) is the “incomplete revelation hypothesis”. Because the information that is more costly to process is perhaps less completely reflected in market prices (Grossman and Stiglitz (1980)\textsuperscript{60} and Bloomfield (2002)\textsuperscript{61}, managers may want to strategically hide bad information through less transparent disclosure. Current empirical evidence seems to support the strategic reporting and incomplete revelation hypotheses: managers announce a set of earnings numbers that emphasize improvements relative to their own strategically chosen benchmarks, while making it more difficult for investors to observe other measures of performance; the special items recognized as a line item on the income statement. The managerial obfuscation story thus predicts a negative relation between firm current performance and annual report complexity. However, this hypothesized relation between disclosure readability and a firm’s current performance may not be significant. First, corporate annual reports contain a lot of financial information about current and historical performance. Hence, the benefit to the managers of making the annual reports harder to read in order to hide adverse information about current performance seems small. Second, if the good current earnings are (partially) due to strategic manipulation, then managers may not necessarily want to make the annual reports easier to read when the reported earnings are “good”. For these reasons, the relation between annual report readability and current performance is not clear-cut and the benefit of managerial strategic reporting using annual report readability is more likely to lie in hiding or delaying future adverse information.


More recently, and potentially in an attempt to mitigate potential problems with absolute reading ease scores, Courtis (2004)\textsuperscript{62} refined his measure of obfuscation in narratives. Obfuscation occurs in a narrative when the writing style is such that its meaning is obscured. Courtis measured obfuscation as the simultaneous occurrence of both low reading ease and high reading ease variability within a narrative. Reading ease was measured by the Flesch score and variability by the coefficient of variation, V. V is calculated as the standard deviation of three readability scores, obtained from the beginning, middle and end sections of a narrative, respectively, divided by the overall mean readability score for the passage. If a narrative appeared in the top half of the sample ranked on low reading ease and also in the top half when ranked in decreasing order of reading ease variability, the narrative is considered to be obfuscated. Similarly if a narrative appears in the bottom half of both rankings it is considered not to be obfuscated. In addition to low readability and obfuscation, other characteristics of a narrative can potentially influence its understandability.

On the other hand, Rutherford (2003)\textsuperscript{63} do not discovered empirical evidence to hold the obfuscation hypothesis. And Smith et al., (2006)\textsuperscript{64} found slight support for the obfuscation hypothesis with respect of the readability of the Statement of Chairman and performance of the firm.

2.4 DISCLOSURE QUALITY & FIRM PERFORMANCE

The intuition on the relation between disclosure quality and a firm’s current performance can be extended to future performance. Opportunistic managers may have incentives to make the annual report harder to read, if good earnings of this year are not persistent or if poor earnings are very persistent. On the other hand, firms with better future performance may want to disclose information more transparently to lower the information processing cost and distinguish themselves from the “lemons”. In other words, to the extent that complicated annual reports can


hide the transitory nature of the good news or the permanent nature of the bad news by increasing investors’ information processing cost, the management obfuscation hypothesis predicts that the profits (losses) of firms with more complex annual reports are less (more) persistent.

Most prior studies on disclosure either examined the relation between disclosure quality and firm performance (e.g., Lang and Lundholm (1993)) or use earnings quality as a proxy for disclosure quality (e.g, Francis, LaFond, Olsson, and Schipper (2005)). Francis, Nanda, and Olsson (2005) found a positive relationship between voluntary disclosure quality and the accruals quality; Riedl and Srinivasan (2005) examined the implication for earnings persistence of whether special items are recognized as a line item on the income statement or only disclosed in the footnotes.

Today, it is required by the managers to disclose more non-financial information, such as corporate governance, social, and environmental responsibility information. These things are required to be disclosed as it facilitates all the stakeholders to have more details for decision-making purposes. Consequently, all the stakeholders may have better understanding towards the impact of firm’s operations on the profits.

However, management truthfulness and sincerity in the clarification of all phases of firm performance are uncertain, as there are disagreements of interest between proprietor and managers (Jensen and Meckling, 1976), which is said to be not resolved even if everybody starts practicing more humanity. As the management plays the role of an agent of the owner of the firm, they may be aggravated to reveal information that only communicate positive results and cover up negative information that might injure the performance of the firm. Consequently, unevenness in information is seen to be present between management and the people.

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According to Merkl-Davies and Brennan (2000), managers’ purposes can be classified into concealment and attribution. In various ways concealment can be attained, such as by (1) reading ease manipulation (i.e., making the text more difficult to read) or rhetorical manipulation (i.e., using persuasive language). To highlight the positive news, many other ways can be used such as manipulation of oral and/or statistical information: (1) thematic manipulation like put emphasis on positive words and themes, or laying emphasis on positive financial performance; (2) visual and structural manipulation by using visual prominence and/or (3) comparisons of performance by choosing standards that represent present financial performance in the most excellent achievable light.

Cho et al. (2010) also reported that the degree of bias in the narratives of US corporate environmental disclosure is systematically based on firm environmental performance.

2.5 GAP IN LITERATURE:

The above literature is presented under four headings i.e. Developments in Readability Formulas, Application of Readability Formulas, Application of Readability Formulas on Annual Reports and Disclosure Quality in Relation to Firm Performance. The first part of the literature deals with developments in readability formulas. It shows the modifications made by SEC in the regulations for disclosure of documents by corporate. Also it talks about adoption of “Plain English Disclosures Rules” for corporate communications in order to have a uninformative in disclosure documents. The second part of the literature deals with the application of readability formulas. It summarizes the use of readability formulas in corporate disclosures or to the part of the disclosure documents of the companies. It also speaks about the results of the application of readability formulas in the field of accounting, business & management. The third part of the literature talks about the applicability of readability formulas on annual reports specifically. Different authors have used different formulas on varied parts of the annual reports & had showed the results. Even authors have researched upon the readability of annual reports & their


relation with performance of the company. The last section of literature discuss about the variables chosen by the authors to relate with understandability levels of annual reports of the companies.

The above literature portrays a convincing association between disclosure efficacy (both quality and quantity) and annual report readability levels. Therefore, it became an interest to our study that whether the readability of financial reports is empirically associated with performance after controlling for other “nonexperimental” sources of readability variation. In the above discussion, none of the study deals with Indian companies and none of them had considered five variables & six readability formuals at a time on the same population. Hence, to fulfill the gap the study is been carried out on the Indian banking industry & had considered financial factors affecting readability levels of annual reports with respect to six widely used readability formulas. In addition, the results of the study may also suggest a more detailed comparative analysis approach for studying readability levels of annual reports on the basis of financial factors which may well be worthy of exploration for future research. In sum, the results of the study should be viewed as a meaningful step forward toward a fuller understanding of the linkages between financial variables considered in the study and readability levels of annual reports calculated by six different readability formulas.