

## **Performance and Readability of Corporate Annual Reports of PCBs in Bangladesh**

Md. Shariful Islam \*

### **Abstract**

*Investors, both existing and potential, rely largely on corporate annual reports when making important strategic and financial decisions. Corporate annual reports contain information about the company and its performances that are expressed both in quantitative and narrative texts. Though the principal objective of the narrative texts is to supplement the report's financial statements, they have a great importance to the individual investors, especially to those who don't have sufficient background knowledge in accounting. In recent years readability of corporate annual reports has become a concern of the accounting regulatory agencies in countries like United States of America and Great Britain. In Bangladesh the urgency of improving the readability of corporate annual reports is not felt by concerned people yet. Very few studies attempted to find out the readability of corporate annual reports in Bangladesh. The present study aims at analyzing and comparing readability of corporate annual reports of private commercial Banks (PCBs) in Bangladesh. Readability assessment tools such as Flesch test (1948) and Lix test (1968) have been used. Readability of four text sections of the corporate annual reports such as chairman's address, directors' report, notes to the accounts and auditor's report have been studied. Flesch scores have been calculated using Microsoft Word computer package program. Lix scores have been calculated using manual physical count from the same texts that have been selected for the Flesch score. It is observed from the study that the texts of corporate annual reports are difficult or very difficult to read. This indicates that the corporate annual reports of the PCBs in Bangladesh are persistently maintaining poor readability. One of the important findings of the study is that PCBs of the country with larger deposits have tendency to use difficult languages in their corporate annual reports. Other measures of size of PCBs or their earnings do not have significant association with readability of corporate annual reports.*

**Keywords:** Corporate annual reports, Private commercial Banks, Readability, Flesch score, Lix score, Performance.

---

\* Md. Shariful Islam, PhD, is an Associate Professor, Institute of Business Administration, Rajshahi University, Bangladesh. Email: sharifjibs@gmail.com

## **Introduction**

A number of studies have been conducted on the amount of time spent in reading annual reports (Badaracco, 1988; Rezaee & Porter, 1993; Epstein & Pava, 1994; Oliver, 2000; Curtis, 1982; Wilton & Tabb, 1978). Though these studies provide controversial results about time spent on different sections of corporate annual reports it is found in many research that the most widely read section of corporate annual report is the executive's letter to the stakeholders (Hynes & Bexley, 2003; Curtis, 1982), mainly attributed as texts which differs from quantitative figures presented in financial statements. But unfortunately text sections of corporate annual reports received relatively lesser attentions from regulatory agencies of accounting and from scholars (Yuthas, Rogers, & Dillard, 2002). As a result it is possible that the chapters or sections of the corporate annual reports in texts, which are mostly read by the readers, have been remained problematic.

A group of researchers have focused on the 'readability' of the texts in corporate annual reports and others. Readability expresses the degree of difficulty of language and its structure (Still, 1972). Readability tries to match reader and text and tries to assess the ease to comprehend. It is an area of interest of the researchers to explore the association between readability of the corporate annual reports and the performance of the respective companies. Researchers observed positive association between poor readability of the annual reports and poor performance of the companies (Kohut & Segars, 1992; Subramanian, Insley & Blackwell, 1993; Thomas, 1997; Smith & Taffler, 1992 a,b). Management often tries to suppress bad news consciously or unconsciously through obfuscation or poor readability (Adelberg, 1979). Enron's communications during its immediately preceding three years before collapse were examined and found that while the company's performance began to sink, its financial reports, letters to shareholders and speeches by top executives became more laden with ambiguous words and sentences (Gonsalves, 2003). Therefore, readability of the corporate annual reports is one of the areas where the researchers should focus on and rightly so it has become one of the major issues in recent years. The current study aims at finding out the readability of corporate annual reports of the private commercial Banks (PCBs) listed in the Dhaka stock exchange (DSE). Corporate annual reports of 12 PCBs which are published in English have been used for the purpose. Finally, readability and performance indicators of the PCBs have been compared to explore whether performance of PCBs affect readability of their corporate annual reports or not.

## **Readability Assessment Tools and the Texts**

Though a number of readability assessment tools are available (Lewis, Parker, Pound & Sutcliffe, 1986), Flesch test (1948) and Lix test (1968) have been used for this study. Flesch test has been selected because it is the most popular and widely used tool for readability test (Clatworthy & Jones,

2001). Moreover, this test is straightforward and easy to apply (Watson, 2005). On the other hand, Lix test has been used because of its suitability for measuring readability of technical languages such as accounting (Lewis, Parker, Pound, & Sutcliffe, 1986).

Readability of four text sections such as Chairman's address, Directors' report, Notes to the accounts and Auditor's report of the corporate annual reports has been assessed. For each readability tool, a passage of 100 words generates acceptable measure (Lewis *et al*, 1986). Here two 100 words passages have been selected from the Chairman's address that contain 'discussion on performance in the current accounting year' and 'discussions on future plan'. Then the scores obtained from the two passages have been averaged to find the readability scores of the Chairman's address. Similar approach have been used on three 100 words passages from introduction, discussion on bank's operation and the concluding remarks of the Directors' report. Two 100 words passages have been used from the Notes to the accounts that discuss 'the bank and its activities' and 'basis of accounting'. A single passage of 100 words has been selected from the Auditor's report for assessing the readability. To get the overall readability scores of the annual reports, the individual scores of the four categories of texts such as Chairman's address, Directors' report, Notes to the accounts and Auditor's report have been averaged.

### **Brief Description of Readability Formulae**

#### ***Flesch Test (1948)***

The Flesch formula is a quantitative method of predicting whether a target audience is likely to be able to read a prose passage. Its ambition is to quickly and succinctly indicate the same kind of information about comprehension ease that a writer would have to judge through experience and feedback from readers, or measure through a comprehension test on the specified passages (Courtis, 1986).

The Flesch index was devised by Rudolph Flesch in 1948. It uses a combination of sentence length and syllable count. The lower the score, the more difficult the passage is to the reader. The Flesch index was developed using the 1925 McCall-Crabbs standard test lessons in reading. The formula was devised using 363 passages of known difficulty level. The ease of comprehension of each was established on the basis of the grade levels of children who could correctly answer 75 percent of questions concerning the passage. Flesch took measurements of average word length and sentence length and found the equation, which combined them to yield the best estimate of the grade levels corresponding to each passage. The equation was then devised so that instead of grade levels it yields a reading ease score which ranges from 0 (more difficult) to 100 (least difficult) (Still, 1972).

Table 1 presents 7 point general reading ease scale and educational attainment level of Flesch test. The Flesch index is expressed as:

$$\text{Reading ease} = 206.835 - (0.846 \times \text{SYLLS}/100\text{W}) - (1.015 \times \text{WDSSSEN})$$

SYLLS/100W=syllables per 100 words

WDSSSEN=average number of words per sentence

(Lewis *et al.*, 1986, P.201)

Table 1: Flesch Reading Ease Scale

General Reading Ease Scale	Flesh Score	Educational Attainment Level
Very Difficult	0-30	Postgraduate
Difficult	30-50	Undergraduate
Fairly Difficult	50-60	Grades 10-12
Standard	60-70	Grades 8-9
Fairly Easy	70-80	Grade 7
Easy	80-90	Grade 6
Very Easy	90-100	Grade 5

(Curtis, 1986, P.286; Lewis *et al.*, 1986, P. 203)

### **Lix Test (1968)**

The Lix test was developed by Bjornsson to assess readability across languages (Anderson, 1981). Anderson's study indicates that this technique is useful across languages. The Lix formula has been tested for Swedish, French, English, German and Greek texts. This tool is also suitable for technical languages such as accounting (Lewis *et al.*, 1986). 5 point general reading ease scale of Lix test is presented in Table 2. The formula is:

$$\text{Lix} = \text{Word length} + \text{Sentence length}$$

Word length = percent of words of more than six letters.

Sentence length = average number of words per sentence.

(Lewis *et al.*, 1986, P.201)

Table 2: Lix Reading Ease Scale

General Reading Ease Scale	Lix Score
Very Easy	20
	25
Easy	30
	35
Medium	40
	45
Difficult	50
	55
Very Difficult	60

(Anderson, 1981, P.11)

## Findings

### *Flesch Reading Ease*

Flesch scores that have been calculated from the text extracts of the corporate annual reports of the PCBs show that the texts are either difficult or very difficult to read. Table 3 shows that Flesch scores of the texts of the corporate annual reports of the PCBs are low to very low. This indicates that the texts are not easily comprehensible to the readers.

It is also observed from Table 3 that, the annual reports of Pubali Bank Ltd. are most difficult to read with the lowest Flesch scores. Annual reports of Mercantile Bank Ltd., Prime Bank Ltd., Dhaka Bank Ltd. and City Bank Ltd. are also very difficult to read. Since the Flesch scores of the annual reports of Mutual Trust Bank Ltd. are the highest among all, it can be said that the annual reports of this bank are the least difficult among all banks.

It is observed from table 4 that corporate annual reports of 5 PCBs are ‘very difficult’ to read, while the annual reports of the rest 7 PCBs are ‘difficult’ to read. None fall in the remaining five classes of the Flesch reading ease scale.

Table 3: Flesch Score and Reading Ease of Annual Reports of PCBs

Serial No.	Name of PCBs	Average Flesch Score	Overall Flesch Reading Ease
1.	Bank Asia Ltd.	34.60	2 (D)
2.	Exim Bank Ltd.	32.27	2 (D)
3.	Mercantile Bank Ltd.	26.94	1 (VD)
4.	Mutual Trust Bank Ltd.	38.97	2 (D)
5.	One Bank Ltd.	34.26	2 (D)
6.	Prime Bank Ltd.	28.94	1 (VD)
7.	Pubali Bank Ltd.	25.44	1 (VD)
8.	Southeast Bank Ltd.	30.11	2 (D)
9.	Standard Bank Ltd.	34.52	2 (D)
10.	Al-Arafah Bank Ltd.	30.11	2 (D)
11.	The City Bank Ltd.	29.10	1 (VD)
12.	Dhaka Bank Ltd.	28.83	1 (VD)

*Note: D = Difficult; VD = Very Difficult.*

Table 4: Number of PCBs in the Flesch Reading Ease Scale

Serial No.	Level of Reading Ease	Frequency
1	Very Difficult (VD)	5
2	Difficult (D)	7
3	Fairly Difficult (FD)	Nil
4	Standard (S)	Nil
5	Fairly Easy (FE)	Nil
6	Easy (E)	Nil
7	Very Easy (VE)	Nil

### Lix Reading Ease

Table 5 presents the average Lix score and Overall Lix reading ease of annual reports of PCBs in Bangladesh. It is observed from Table 5 that the text of annual reports of Prime Bank Ltd. have the highest average Lix score (65.00), while the lowest score is observed in the text of annual reports of Bank Asia ltd. (55.00). Therefore, the annual reports of Prime Bank Ltd. are most difficult to read and the annual reports of the Bank Asia Ltd. are the easiest of the sample. Table 5 presents that overall Lix reading ease of all the corporate annual reports are 1. Therefore, Lix suggests that the annual reports of the Banks are very difficult to read.

Table 5: Lix Score and Reading Ease of Annual Reports of PCBs

Serial No.	Name of Banks	Average Lix Score	Overall Lix Reading Ease
1.	Bank Asia	55.00	1 (VD)
2.	Exim Bank	61.50	1 (VD)
3.	Mercantile Bank	63.00	1 (VD)
4.	Mutual Trust	57.00	1 (VD)
5.	One Bank	59.50	1 (VD)
6.	Prime Bank	65.00	1 (VD)
7.	Pubali Bank	63.00	1 (VD)
8.	Southeast Bank	62.00	1 (VD)
9.	Standard Bank	63.00	1 (VD)
10.	Al-Arafah Bank	61.50	1 (VD)
11.	City Bank	59.00	1 (VD)
12.	Dhaka Bank	62.00	1 (VD)

*Note: VD = Very Difficult.*

Table 6: Number of PCBs in the Lix Reading Ease Scale

Serial No.	Level of Reading Ease	Frequency
1	Very Difficult (VD)	12
2	Difficult (D)	Nil
3	Standard (S)	Nil
4	Easy (E)	Nil
5	Very Easy (VE)	Nil

Table 6 presents the number of PCBs in the five classes of the Lix reading ease scale. It is observed from the table that annual reports of all the PCBs under the study are ‘very difficult’ to read. None of the annual reports of the PCBs are in the remaining four classes of the Lix reading ease scale.

#### *Comparative Flesch and Lix Reading Ease of Different Sections*

Table 7 presents comparative Flesch and Lix reading ease for the text extracts of corporate annual reports of the PCBs. The average of the scores of the two years has been presented as average score over years. It is observed from the table that both Flesch and Lix suggest Chairman’s address as difficult to read, while Notes to the accounts as very difficult. According to Flesch, Director’s report and Auditor’s reports are difficult to read, while according to Lix reading ease, these sections of corporate annual reports are very difficult to read.

Table 7: Comparative Flesch and Lix Score and Reading Ease

<i>Text Extracts</i>	<b>Average Score Over Years</b>	
	<b>Flesch</b>	<b>Lix</b>
Chairman’s Address	38.31 (D)	54.00 (D)
Director’s Report	31.14 (D)	60.30 (VD)
Notes to the Accounts	22.27 (VD)	68.04 (VD)
Auditor’s Report	38.12 (D)	59.92 (VD)
Overall Text	32.15 (D)	60.91 (VD)

*Note: D = Difficult; VD = Very Difficult.*

#### *Readability and its Predictors*

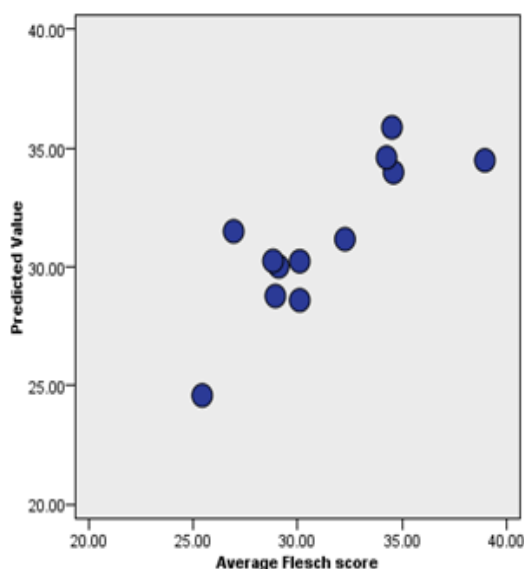
R square and Adjusted R square of Lix score are 0.399 and 0.056 respectively. Therefore, the regression model of the Lix score is not satisfactory, while R square and Adjusted R square of Flesch score are 0.699 and 0.527 respectively. Therefore, the regression model of the Flesch is score is satisfactory. Table 8 shows that, deposits (sig. 0.027) of the private commercial Banks in Bangladesh that measure size of business of

the Banks, is the only variable that can successfully predict the readability of corporate annual reports of the same at 5% level of significance when measured in Flesch scores. Other variables are not capable enough to predict the readability of corporate annual reports. Deposits have negative standardized beta coefficients (-0.842), which indicates negative association of deposits with Flesch scores. Therefore, private commercial Banks in Bangladesh with higher deposits have lower reading ease and thus requires higher skill in English language to comprehend.

Table 8: Regression Model

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	41.585	4.627		8.987	.000
Deposits	.000	.000	-.842	-2.784	.027
Profit after tax	.001	.012	.017	.051	.961
Earnings per share (EPS)	-.021	.011	-.445	-1.903	.099
Paid up capital	-.002	.005	-.114	-.410	.694

a. Dependent Variable: Average Flesch score  
 b. R Square= 0.699, Adjusted R Square= 0.527



**Figure 1:** Scattered Diagram Showing Predicted Values of Average Flesch Scores

**Conclusion**

Analysis of corporate annual reports of individual PCBs shows that, corporate annual reports are either difficult or very difficult to the individual



investors. Significant difference has been observed in readability of different text sections of corporate annual reports. It is also observed that, larger PCBs measured by higher deposits have tendency to use difficult languages in their corporate annual reports. The present study argues for ensuring enhanced readability of texts of the corporate annual reports of PCBs, so that the individual investors could comprehend them with ease. Immediate attention should be paid on the Notes to the accounts, which is currently suffering from worst readability. At the same time, the accounting regulatory agencies of Bangladesh should adopt 'Plain English' in corporate annual reports so that uniformity in readability could be ensured in every annual report and in each section of the annual reports. This step may also discourage larger PCBs in Bangladesh in using difficult languages in their corporate annual reports. Finally, the study suggests further research to explore relationship between performance and readability of the corporate annual reports of companies in other sectors. The study also suggests research to understand possible causes of poor readability of corporate annual reports by interviewing the concerned people inside respective companies. That may help to understand behavioral setup of concerned people inside companies of different size and performance, which may help to explore association of those factors with readability of the respective corporate annual reports.

## Reference

- Adelberg, A.H. (1979) Narrative disclosures contained in financial reports: Means of communication or manipulation? *Accounting and Business Research* (Summer), pp.179-189.
- Anderson, R., (1981) The Usefulness of Accounting and Other Information Disclosed in Corporate Annual Reports to Institutional Investors in Australia. *Accounting and Business Research*, Autumn, pp.259-265.
- Badaracco, C. (1988) Smoke and substance: Trends in annual reports. *Public Relations Quarterly*, Spring, pp. 13-17.
- Clatworthy, M., & Jones, M. J. (2001). The effect of thematic structure on the variability of annual report readability. *Accounting, Auditing & Accountability Journal*, Vol. 14(3), pp. 311-326.
- Courtis, J. K. (1982) Private shareholder response to corporate annual reports. *Accounting and Finance*, 22, pp. 53-72.
- Courtis, J.K. (1986) An investigation into annual report readability and corporate risk return relationships. *Accounting and Business Research* (Autumn), pp. 285-294.
- Epstein, M. J., & Pava, M. L. (1994) Individual investors' perceptions on the summary annual report: A survey approach. *Journal of Applied Business Research*, vol. 10(3), pp. 60-67.

## Performance and Readability of Corporate Annual Reports

- Gonsalves A. 2003. Business Software Detects Jargon, Scrubs Away Hype, June 17, Retrieved on 02 February 2006 from [http:// www.Techweb.com/wire/26801530](http://www.Techweb.com/wire/26801530).
- Hynes, G. E. and J. B. Bexley. Understandability of Banks' Annual Reports, Proceedings of the 2003 Association for Business Communication Annual Convention, Retrieved on 03 June 2005 from internet.
- Kohut, G. F. and Segars, A. H. (1992) The president's letter to stockholders: An examination of corporate communication strategy. *Journal of Business Communication*, Vol. 29(1), pp. 7-21.
- Lewis, N.R., L.D. Parker, G.D. Pound, and P. Sutcliffe (1986) Accounting report readability: The use of readability techniques. *Accounting and Business Research* (Summer), pp. 199-213.
- Oliver, S. (2000) Message from the CEO: A three-minute rule? *Corporate Communications*, 5(3), pp. 158-165.
- Rezaee, Z., & Porter, G. L. (1993) Can the annual report be improved? *Review of Business*, Vol. 15(1), PP. 38-41.
- Smith, M., and R. Taffler. (1992a). The chairman's statement and corporate financial performance. *Accounting and Finance*, pp. 75-90.
- Smith, M., and R. Taffler. (1992b). Readability and understandability: Different measures of the textual complexity of accounting narrative. *Accounting, Auditing: and Accountability Journal*, Vol. 5, pp. 84-98.
- Still, M.D. (1972) The Readability of Chairman's Statements, *Accounting and Business Research*, Vol. Winter, P.37.
- Subramanian, R., Insley, R. G., and Blackwell, R. D. (1993) Performance and readability: A comparison of annual reports of profitable and unprofitable corporations. *Journal of Business Communication*, Vol. 30, (1), pp.. 49-61.
- Thomas, J. (1997) Discourse in the marketplace: The making of meaning in annual reports. *Journal of Business Communications*, Vol. 34, (1), pp. 47-66.
- Watson, M. L. (2005) "Illusion of trust: A comparison of corporate annual report executive letters before and after SOX", Paper presented at the eighth international public relations research conference, March 10-13, 2005. The institute of public relations, PO Box 118400, Gainesville, FL 32611-8400.
- Wilton R. L. and Tabb J. B. (1978) An Investigation into Private Shareholder Usage of Financial Statements in New Zealand, *Accounting Education*, May, pp. 93-101.
- Yuthas, K., Rogers, R., & Dillard, J. F. (2002) Communicative action and corporate annualreports. *Journal of Business Ethics*, 41(1), pp. 141-157.