Readability of annual reports: Western versus Asian evidence

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4

Introduction

The corporate annual report is a formal communication document comprising quantitative information, narratives, photographs and graphs. It seeks to inform shareholders, creditors and others about a company's business history, its present financial status, and its expected direction. It is essentially a response to mandatory disclosure requirements of a national Companies or Business Act, and from regulatory agencies. It is also a medium for voluntary disclosures perceived to produce net corporate benefits.

The annual report is a credible database in that, first, it has complied with regulatory specifics; second, it reflects the integrity of management in communicating objectively and comprehensively; and third, its content has undergone due audit process. No matter what the presentation style, organization of content, colour graphics, pictorial choice and overall length, the intelligence that must be communicated via this document is that which will enable diligent readers to perform or confirm *ex ante* risk-return assessment of the company. Principles of effective communication should be adhered to in disclosing this information.

One of the tenets of effective communication is that the messages received by readers are interpreted in the same way as that intended by the sender. An impediment to this correspondence occurs when narrative disclosures within annual reports are written at a comprehension level beyond the capacity of much of the target audience. Whether writing which is difficult to read is executed deliberately to mask some unfavourable aspect of corporate behaviour, or is performed unwittingly out of ignorance, the consequence is the same. At least some investors are hindered in that they are unable fully to utilize information relevant to rational investment resource allocation decision making. Ineffective communication increases the likelihood of investor resource misallocation, with actual and opportunity cost implications at both the individual and societal levels. Responsibility rests on those who prepare annual reports to ensure that investment-influencing information in prose format meets the fluent comprehension skills of the vast majority of those for whom messages are intended.

Annual report readability

Accounting research into the readability of annual reports was first published in 1952. Over the past 40 years or so annual report readability has been

investigated in Australia (Lewis *et al.*, 1986; Parker, 1982; Pound, 1981), Canada (Courtis, 1986), New Zealand (Healy, 1977), the UK (Jones, 1988; Smith and Taffler, 1992a, 1992b; Still, 1972) and the USA (Pashalian and Crissy, 1952; Schroeder and Gibson, 1990; Smith and Smith, 1971; Soper and Dolphin, 1964). Findings have consistently revealed annual report prose passages to be at a reading ease level of difficult to very difficult, and beyond the fluent comprehension skills of about 90 per cent of the adult population and about 40 per cent of the investor population. In other words, those responsible for narrative sections of the annual report typically are writing corporate messages at a reading level beyond the educational skills of their target audience.

The purpose of this article is to extend the literature on this topic by examining the readability of the English sections of Hong Kong annual reports. Hong Kong is especially suitable as a region of study because of its high profile as an important commercial and financial centre of the world, with vibrant foreign exchange and stock markets. In such an environment, one would expect published accounts to be given close scrutiny by rational elements of the investment community pursuing fundamental analysis. Even the speculative elements can be expected to use at least some annual reports to confirm their beliefs, and gain additional knowledge about the companies in which they have an investment interest. A priori, one would therefore expect public companies to make a special effort in writing English prose which is easy to read.

Formula-based readability measures
Narrative disclosures and general discussion augment financial statement information. The question is whether elements in the writing help or hinder reader comprehension. These elements include content, format, organization and style, of which only the latter has been incorporated into readability formulas. Of more than 80 elements of style, approximately 70 versions of readability formula have been developed (Klare, 1964). Within the context of annual reports, two variables have emerged as good indices of estimating readability difficulty: word length and sentence length. The understanding is that word length is related to a reader's speed of recognition, while sentence length is related to memory span, i.e. words recalled. Although sentence complexity is probably the real causal factor in difficulty, length correlates very highly with complexity and is much easier to count. Even though word length and sentence length may not cause difficulty, they have been found to be good indices of difficulty.

Readability of prose passages within accounting communications is concerned with the matching of reader ability and degree of reading difficulty of text. A readability formula is an objective and quantitative method of predicting whether narratives are likely to be readable by a target audience. It seeks to provide information about comprehension ease which would otherwise have been obtained from a comprehension test on written material. A calculated score is matched to predetermined standards of written materials graded according to reading difficulty. At one end of the scale the score could

match with reading material at the very easy-to-read level by the community in general. At the other end of the scale the score could match with scientific or very difficult-to-read literature, readable with fluent comprehension skill by those with postgraduate university education.

Readability formulas produce single summary reading ease scores for measured passages of prose and thereby indicate whether the passages are likely to be read and understood by the intended readership. The success of a formula in being able to predict this depends on how well the formula measures elements in the writing that are related to reader comprehension. These elements could come from content, format, organization and style. Only the last of these has been incorporated into readability formulas. Of the more than 80 elements of style, two variables have emerged as good indices of estimating readability difficulty: word length and sentence length. Their justification is that word length is related to speed of recognition, and sentence length is related to memory span.

The limitations of readability formulas are well documented (Courtis, 1986; Irwin and Davis, 1980; McConnell, 1982). Dreyer (1984) notes that formulas exclude from consideration the unusual positioning of sentence components or clauses. They do not measure word frequency, concept density, level of abstraction, the appropriateness of the organization, coherence and logical presentation of ideas. Nor do they take account of elements of format or graphic design such as length of type line, hyphenated words, long paragraphs, confusing or no punctuation, full pages of type, style and type of typeface, and illustration and colour, all of which can influence readability. Moreover, readability formulas do not examine the match between the conceptual background of the reader and the conceptual load in the text. This means that a formula score will mask the ability of a poorly educated accountant to understand accounting terminology better than a well-educated scientist. Furthermore, formulas do not examine the way new concepts are introduced, nor do they consider how motivational the materials seem.

Despite the limitations of a formula approach, the technique has been justified through an examination of validity data, i.e. the relationship between formula scores and estimates of readability arrived at from independent comprehensive testing. The Flesch (1974) Reading Ease and Gunning (1968) Fog Index formulas used in this article were found to have correlation coefficients of 0.70 and 0.59 respectively with the McCall-Crabbs Standard Test Lessons in Reading[1]. The Lix measure, which is relatively new in the annual report literature (Courtis, 1987; Smith and Taffler, 1992a, 1992b), has been found by Anderson (1983) and Bjornsson (1983) to improve speed and reliability of calculation, and to be a reliable and consistent measure across five languages, making it arguably preferable as a readability measure in an accounting environment.

The Flesch formula has been the most popular approach followed in prior accounting studies of this nature, and facilitates comparability and interpretability. It is straightforward and easy to apply comprising sentence

length and syllables per 100 words: $206.835 - 0.846wl - 1.015sl$, where wl equals the number of syllables per 100 words and sl equals average sentence length. The predetermined standards against which measured reading ease scores can be compared are shown in Table I. The prediction is that the closer a score is to zero, the more incomprehensible is the writing.

The Gunning Fog Index is a slight variant in approach in that instead of counting the number of syllables it counts only words of three or more syllables, which are termed "hard" words. The formula to measure a narrative passage of 100 words is $0.4 (A + T)$, where A equals the average number of words per sentence, and T equals the percentage of hard words in the passage. If an annual report has a Fog Index value greater than 17 it would correspond to scientific and technical literature and be of limited social accessibility to a significant number of private investors. Readability indexes for various types of literature are shown in Table II.

The Lix measure is $S + W$, where S = the average number of words per sentence and W = the percentage of words of seven or more letters. The advantage of a specified word length is that it makes the calculation faster and more reliable. A low Lix score is consistent with high levels of readability. A Lix score of 20 represents very easy, whereas a score of 60 represents very difficult. Table III summarizes these predetermined standards.

Reading ease rating	Description of style	Educational attainment level	Typical style of magazine
0-30	Very difficult	Postgraduate degree	Scientific
30-50	Difficult	Undergraduate degree	Academic
50-60	Fairly difficult	Grades 10-12	Quality
60-70	Standard	Grades 8-9	Digests
70-80	Fairly easy	Grade 7	Slick fiction
80-90	Easy	Grade 6	Pulp fiction
90-100	Very easy	Grade 5	Comics

Table I.
Flesch pattern of
reading ease ratings

Category	Fog Index
Technical books	19.5
Scientific literature	17.0
Newspapers	13.7
Instruction manuals	12.6
General circulation magazines	9.7
Youth magazines	8.6

Table II.
Readability indexes
derived using the
Fog Index

Prior annual report research

Annual report readability studies have focused essentially on two issues: first, the prediction of whether prose passages are likely to be readable by a target audience and, second, whether reading ease levels are manipulated deliberately to signal corporate results. The first issue clearly has dominated the attention of investigators, and is also the thrust of the present article. The second issue is emerging as an interesting way of testing agency and signalling theories for predicting management behaviour, but is not considered here.

Specific studies concentrating on the reading ease levels of annual reports have been detailed comprehensively elsewhere (Courtis, 1986; Jones, 1988; Lewis *et al.*, 1986; Smith and Taffler, 1992a, 1992b). The chairman's statement (or president's letter), auditor's report, footnotes to the financial statements, and management's discussion and analysis statement have all been the subject of readability measurement. With very few exceptions, the pervasive findings over more than 40 years which cover five countries have shown readability levels to be too difficult for the bulk of the population. A mounting accumulation of evidence indicates that the degree of reading ease difficulty of prose passages is consistent with the reader having attained an educational level of at least university undergraduate. Since only a small proportion of the population reach this level, the overwhelming conclusion is that most of the adult population (something like 90 per cent) are at present excluded from comprehending (at least some) annual report messages in their present written form.

The present study

Published studies dealing with aspects of annual report readability have been undertaken in Western countries where English is the first language of preparers and users alike. No published evidence is available about the readability of annual reports in Asian countries. The present study examines the trend of annual report readability in Hong Kong over the period 1986 to 1991. These reports are prepared in English[2], but essentially for an Asian readership where English is normally the second language. Under these circumstances, a priori, one would expect preparers to assume special care to ensure that reading ease is consistent with the abilities of the target audience, and that messages are effectively being communicated.

Text difficulty	Lix score
Very easy	20-25
Easy	30-35
Medium	40-45
Difficult	50-55
Very difficult	60 +

Table III.
Lix Index predetermined standards

The study randomly selected the annual reports of 32 Hong Kong public companies, equally divided between the industrial-based and property/construction-based categories (being the two dominant classifications) for the years ending 1986 and 1991. Three 100-word passages were randomly selected from each of the chairmen's addresses and footnotes to the accounts sections of the annual report. Flesch, Fog and Lix readability measures were calculated for each of these sections for 1986 and 1991, and results are summarized in Table IV. Detailed scores for each company are shown in Appendix 1.

The basic research enquiry is to determine the level of readability of Hong Kong annual reports, and to predict whether effective communication is capable of occurring between public companies and readers. A second line of enquiry is to examine whether selected corporate attributes such as industrial classification, size and profitability have any relationship with particular readability levels. The main question is examined by comparing the overall average readability scores for 1986 and 1991 to determine whether improvement/deterioration took place over the five-year period. This is tested in the first hypothesis, which posits that an improvement has occurred, being consistent with a priori expectations as argued earlier. Hypotheses two, three and four focus on whether corporate attributes have any systematic influence on improved readability levels. The four hypotheses are:

H1: Annual report readability improved between 1986 and 1991.

H2: The level of annual report readability is similar for industrial and property/construction-based sets of companies.

H3: Annual reports of large companies are easier to read than annual reports of small companies.

H4: Annual reports of more profitable companies are easier to read than annual reports of less profitable companies.

To test the first hypothesis, overall mean scores for 1986 were compared with those for 1991. The six *t*-tests revealed no statistical significance between the 1986 and 1991 scores on any measure for either the chairman's address or the footnotes. Hence, *H1* is rejected and it is concluded that there has been no statistically significant improvement in annual report readability over the five-year period. Although the chairman's address is easier to read than the footnotes, overall scores on all three measures for both 1986 and 1991 indicate readability is too difficult for fluent comprehension by 90 per cent of the adult

	Flesch		Fog		Lix	
	1986	1991	1986	1991	1986	1991
Chairmen's address	38.35	36.85	18.46	19.21	54.78	57.68
Footnotes	30.72	27.72	19.99	20.67	58.32	60.07

Table IV.
Readability of Hong Kong annual reports: overall mean scores

population[3]. From observation of the 1991 mean scores, it appears that a slight overall deterioration has occurred on each measure. The simple interpretation of this is that English-based narratives are not being written with improved clarity for their Asian audience. However, mean scores mask some of the underlying dynamics taking place. An examination of individual company scores listed in Appendix 1 reveal that an equal number of companies improved/worsened their scores on the Flesch measure over the five years. Similarly, 47.7 per cent of companies showed improvement on the Fog Index and 37.5 per cent on the Lix measure. This indicates that up to half of the sampled companies appear to have improved their readability over this time span. This must be seen as an encouraging sign for those who are concerned with improvements in communication between companies and their audiences, although it is not known whether the improvement is the result of any conscious policy.

The second hypothesis states that the industrial classification of a company has no bearing on the level of readability of its annual report. This was tested for the 1991 set of reports by comparing the overall mean scores for the industrial group with the property/construction group on each of the three measures. For Fog and Lix t-tests there was no statistical difference. The Flesch measure showed significance between industrial classification on the chairman's address, with overall means of 39.1 for property/construction and 34.6 for industry. However, since five of the six t-tests failed to show significance, $H2$ must be accepted. Industrial classification does not appear to have any systematic bearing on annual report readability levels.

The third and fourth hypotheses focus on the influence of two corporate attributes, namely, size and profitability. The argument is that large, profitable companies have more resources to devote to the annual report exercise, and that this should result in improved readability. The size variable was operationalized as the market value of the corporation, and the profitability variable as return on investment (i.e. net income to total assets). For 1991, the 32 companies were ranked from high to low on each of these two attributes, and Mann-Whitney U-tests performed on the readability scores of companies classified in each half. In all, 36 tests were conducted[4]. Appendix 2 summarizes the results of these tests; six were significant at the 5 per cent level[5].

In comparing the set of larger companies with the set of smaller companies, the Lix measure indicated significance for the chairmen's addresses. This implies that, according to this measure, the addresses of chairmen from large companies are easier to read than those of smaller companies. However, no persuasive evidence of any pervasive phenomenon occurring was found from further comparisons. The eight largest companies in each of the industry and property/construction classifications were compared with their counterpart eight smallest. Of the 12 comparisons, only two indicated significance, these being the Lix-chairman's address combination and the Lix-footnotes combination for the property/construction set. The most generous interpretation that can be placed on these findings is that the annual reports of

large property and construction companies are easier to read than their smaller counterparts. All appropriate caveats are in order here, however, because of the small sample size involved.

In comparing the set of more profitable companies with the set of less profitable companies, the Lix-chairman's address combination again showed significance, i.e. the set of 16 highest profitable companies revealed Lix readability scores to be lower (easier to read) than the set of 16 lowest profitable companies. A set of 12 contrasts, but with data arranged according to profitability, revealed significance in two cases. The Lix-chairman's address combination for the industrial group, and the Flesch-footnotes combination for the property/construction group were significant. It is tempting to infer that profitability is related to improved levels of readability, but once again strong caution is recommended because sample sizes are too small to generalize.

On the basis of the U-score results, neither $H3$ nor $H4$ can be accepted. From the limited sample studied, no apparent relationship exists between corporate size or corporate profitability and enhanced annual report readability. Further research is warranted into the role of these attributes, as well as into the unique characteristics of the Lix readability measure and its validity for annual report research.

Asian versus Western evidence
This section compares the readability of the Hong Kong reports with that in Western countries. The easiest basis of comparison is a cross-country review of the Flesch chairman's address and footnote combinations, which have been examined in the USA, UK, Canada and New Zealand. A summary of comparable studies is shown in Table V. For the chairman's address, the weighted average readability score of USA studies (Pashalian and Crissy, 1952; Schroeder and Gibson, 1990; Soper and Dolphin, 1964) is 34.58 or difficult. For Canada (Courtis, 1986) it is 29.73 or very difficult, and for the UK (Jones, 1988; Smith and Taffler, 1992a, 1992b; Still, 1972) it is 40.49 or difficult. For Hong Kong it is 37.6 or difficult. The Hong Kong results lean towards the UK score, which *might* be explained by the presence and influence of managers in Hong Kong corporations who either are British or were educated in England.

For the Flesch footnote combinations, the weighted average readability score of USA studies (Schroeder and Gibson, 1990; Smith and Smith, 1971) is 24.26 or very difficult. For Canada (Courtis, 1986) it is 26.64 or very difficult, and for New Zealand (Healy, 1977) it is 34.29 or difficult. For Hong Kong it is 29.22 or very difficult. Based on Flesch evidence, Hong Kong evidence is consistent in degree of difficulty with Western evidence for both the chairman's address and footnotes. Fog and Lix evidence is as yet too sparse to undertake meaningful cross-country comparisons.

Conclusions and implications
Selected prose passages within Hong Kong annual reports, as measured by Flesch, Fog and Lix formulas, are classified as very difficult-to-read literature.

	Chairmen's address	Footnotes
USA studies		
Pashalian and Crissy (1952)		
1949, $n = 26$	34.47	
Soper and Dolphin (1964)		
1961, $n = 25$	28.76	
Smith and Smith (1971)		
1969, $n = 49$		23.49
Schroeder and Gibson (1990)		
1986, $n = 40$	33.63	25.22
Weighted average	34.58	24.26
Canadian study		
Courtis (1986)		
1982, $n = 46$	31.34	28.06
1983, $n = 96$	28.96	25.96
Weighted average	29.73	26.64
UK studies		
Still (1972)		
1971, $n = 50$	42.51	
Jones (1988)		
1952-85, $n = 32$	47.2	
Smith and Taffler (1992a and b)		
1978-85, $n = 66$	35.71	
Weighted average	40.49	
New Zealand study		
Healy (1977)		
1971-76, $n = 50$		34.29
Hong Kong study		
1986, $n = 32$	38.35	30.72
1991, $n = 32$	36.85	27.72
Weighted average	37.6	29.22

Table V.
Annual report Flesch-based readability evidence

This means that fluent comprehension of the messages contained within these passages is limited to only 10 per cent of the adult population of Hong Kong who have attained commensurate educational levels. This restricts effective communication and one means of facilitating rational resource decision making.

The first step in remedying this situation is for preparers to become aware of the problem. Until preparers acknowledge that written communications are not capable of being read with fluent comprehension by a significant proportion of their intended audience, the situation is not likely to change. The second step is for preparers actively to improve readability levels by measuring their narrative disclosures and analyses to determine whether scores are predictive of readability. Prose should become more readable through a conscious attempt to write more clearly, and through iteration with employees and investors via

the submission of various drafts for comment. Improvements may be accomplished by first, writing shorter sentences, second, using shorter and simpler words in place of more complex and longer ones, and third, attention to layout and format of information to enhance reader interest.

Notes

1. The McCall-Crabbs Standard Test Lessons in Reading has been used extensively as the basis for testing reader comprehension.
2. Because there is also a section in Chinese, the fair question is whether readers would gravitate to the English or Chinese versions. A convenience sample indicated overwhelmingly that the English section is preferred because many accounting and business concepts have no literal Cantonese equivalent. Moreover, the majority of readers of annual reports have been educated in English at tertiary level, and they are familiar with the English words.
3. Based on Hong Kong 1991 population statistics for educational attainment levels, Main Tables, Census and Statistics Dept, pp. 74-5,78-9.
4. The 36 U-tests consist of $2 \times 3 \times 3 \times 2$: two sets of readability scores (chairmen's addresses, footnotes), three formulas (Flesch, Fog, Lix), three categorizations (overall, industry, property/construction), and two corporate attributes (size, profitability).
5. A limitation of this approach is that, because the set of 32 companies was dichotomized into two equal halves on each of the size and profitability measures, the presence of a likely self-selection bias is acknowledged.

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Appendix 1: Readability scores

Company name	Flesch 1986	Flesch 1991	Fog 1986	Fog 1991	Lix 1986	Lix 1991
	Average score result					
Everygo International Holdings Co. Ltd (I)	27.33	28.00	21.00	20.33	59.00	61.67
Hong Kong Aircraft Engineering Co. Ltd (I)	23.33	29.33	21.33	20.67	64.33	64.67
Johnson Electronic Holdings Ltd (I)	49.67	51.33	15.67	15.00	47.00	42.67
Lai Sun Garment (International) Ltd (I)	40.00	43.67	19.00	15.67	53.67	48.33
Luks International Co. Ltd (I)	30.33	44.33	21.00	17.00	63.67	51.00
Playmates International Holdings Ltd (I)	46.00	27.67	16.33	19.00	50.33	57.33
South Sea Development Co. Ltd (I)	41.33	26.33	18.00	21.33	58.67	61.33
Stelux Holdings Ltd (I)	54.33	28.33	13.67	21.67	45.33	65.67
Cheung Kong (Holdings) Ltd (P/C)	31.67	46.67	20.33	18.00	55.33	53.00
Hang Lung Development Co. Ltd (P/C)	25.00	45.33	20.33	15.33	64.33	50.67
Hong Kong Land Holdings Ltd (P/C)	21.33	39.33	22.67	17.33	68.33	55.33
Hopewell Holdings Ltd (P/C)	44.00	38.33	19.00	19.33	57.67	56.67
Hysan Development Co. Ltd (P/C)	39.67	45.33	18.33	17.33	53.33	54.00
New World Development Co. Ltd (P/C)	34.33	36.00	18.00	19.33	52.00	56.00
Sino Land Co. Ltd (P/C)	48.00	35.33	15.33	18.33	48.00	51.33
Sun Hung Kai Properties Ltd (P/C)	41.67	40.00	18.67	16.67	52.00	51.33
Conic Investment Co. Ltd (I)	26.67	34.67	22.00	21.00	59.67	61.33
Crocodile Garments Ltd (I)	39.00	31.00	19.00	21.00	54.67	61.67
Elec & Eltek (Bermuda) Co. Ltd (I)	20.33	29.67	22.33	20.67	63.00	61.33
Island Dyeing & Printing Co. Ltd (I)	39.67	44.33	19.00	16.67	53.67	49.67
Kam Shing International Ltd (I)	43.33	29.33	16.33	22.33	46.00	64.33
Nanyang Holdings Ltd (I)	39.67	24.33	17.33	25.67	55.00	74.00
Raymond Industrial Ltd (I)	41.33	52.33	17.00	15.00	42.33	49.00
Yangtzekiang Garment Mfg Co. Ltd (I)	30.00	29.00	20.33	20.67	54.00	64.00
Chevalier International Holdings Ltd (P/C)	42.67	32.33	16.67	19.00	55.33	60.33
Far East Consortium International Ltd (P/C)	39.33	27.00	19.67	21.67	57.33	65.33
Hon Kwok Land Investment Co. Ltd (P/C)	35.67	41.33	19.67	19.67	56.33	54.67
Kai Ming Investment Co. Ltd (P/C)	44.67	48.67	17.33	20.00	52.67	57.67
Keck Seng Investment (Hong Kong) Ltd (P/C)	47.00	42.00	17.00	22.33	48.67	64.67
Kwong Seng Hong International Ltd (P/C)	49.67	35.33	15.33	20.67	48.00	62.33
Lee Hing Development Ltd (P/C)	53.67	37.67	15.33	18.33	48.33	55.33
Tak Wing Investment (Holdings) Ltd (P/C)	36.67	35.00	17.67	17.67	55.00	59.00

Table AI.
Readability scores of
chairmen's statements

	Average score result					
	Flesch		Fog		Lix	
Company name	1986	1991	1986	1991	1986	1991
Everygo International Holdings Co. Ltd	28.33	20.00	21.00	22.33	57.67	64.00
Hong Kong Aircraft Engineering Co. Ltd	17.67	20.33	24.00	22.33	68.00	64.00
Johnson Electronic Holdings Ltd	46.00	39.67	16.00	17.00	46.33	51.67
Lai Sun Garment (International) Ltd	37.00	21.33	20.00	22.33	55.00	62.67
Luks International Co. Ltd	28.00	20.00	21.00	23.00	61.00	67.67
Playmates International Holdings Ltd	39.67	33.67	17.33	18.00	53.33	55.00
South Sea Development Co. Ltd	36.00	28.00	17.67	20.67	51.33	61.67
Stelux Holdings Ltd	26.33	28.33	20.00	20.33	59.00	58.67
Cheung Kong (Holdings) Ltd	22.00	21.67	21.33	22.33	61.67	63.00
Hang Lung Development Co. Ltd	17.00	28.33	22.67	19.67	64.33	60.00
Hong Kong Land Holdings Ltd	20.00	27.33	26.67	19.67	79.00	58.00
Hopewell Holdings Ltd	26.33	20.33	22.67	22.67	60.67	63.00
Hysan Development Co. Ltd	30.33	36.67	20.00	18.67	58.00	54.00
New World Development Co. Ltd	23.00	24.33	21.33	22.33	63.67	63.00
Sino Land Co. Ltd	28.67	27.67	24.33	20.00	68.33	59.33
Sun Hung Kai Properties Ltd	31.00	30.33	21.67	20.33	61.00	57.67
Conic Investment Co. Ltd	36.67	25.33	18.67	21.33	53.67	59.33
Crocodile Garments Ltd	35.33	22.00	17.33	24.00	55.33	65.67
Elec & Eltek (Bermuda) Co. Ltd	31.67	36.33	19.67	17.00	58.00	52.33
Island Dyeing & Printing Co. Ltd	39.33	35.67	17.00	18.33	48.00	53.67
Kam Shing International Ltd	31.33	19.67	19.00	25.00	56.00	70.00
Nanyang Holdings Ltd	34.33	31.00	17.67	19.00	53.00	56.67
Raymond Industrial Ltd	30.33	27.33	21.33	19.67	59.00	56.00
Yangtzekiang Garment Mfg Co. Ltd	28.33	33.33	19.00	18.67	56.00	58.33
Chevalier International Holdings Ltd	34.33	31.33	18.33	19.33	58.33	56.67
Far East Consortium International Ltd	29.00	23.67	20.33	22.67	59.00	66.33
Hon Kwok Land Investment Co. Ltd	30.00	33.33	21.00	19.67	62.33	59.00
Kai Ming Investment Co. Ltd	32.67	30.00	19.00	24.67	55.67	68.67
Keck Seng Investment (Hong Kong) Ltd	28.67	32.67	18.33	18.33	54.33	55.33
Kwong Seng Hong International Ltd	36.00	21.00	18.33	22.33	56.33	64.67
Lee Hing Development Ltd	32.00	27.33	19.00	20.67	59.00	56.67
Tak Wing Investment (Holdings) Ltd	35.67	29.00	18.00	19.00	54.00	59.67

Table AII.
Readability scores of
footnotes to the
financial statements

Appendix 2

	Size			Profitability		
	Overall	Industry	Property/ construction	Overall	Industry	Property/ construction
Flesch-chairman	122	26	20	76	21	19
Flesch-footnotes	100	26	31	104	19	12*
Fog-chairman	102	23	31	78	14	28
Fog-footnotes	91	29	15	91	32	32
Lix-chairman	60**	31	6*	59**	4*	31
Lix-footnotes	109	22	9*	114	23	36

Note:
* Ux critical 13 (at alpha = 0.05) H is accepted
** Ux critical 75 (at alpha = 0.05) H is accepted

Table AIII.
Results of Mann-
Whitney U-tests, size
and profitability
contrasts