Does IFRS and GRI adoption impact the understandability of corporate reports by Chinese listed companies?

Dr. Yanqi Sun, Lecturer in Accounting at Beijing Institute of Petrochemical Technology
Dr. Jenny Jing Wang, Lecturer in Accounting at the University of Wollongong
Dr. Kevin Huang, Lecturer in Accounting at the University of Wollongong

ACCOUNTING & FINANCE

afaanz

IFRS™

Overview

- This paper concerns whether adoption of IFRS & GRI affects the understandability of Chinese listed firms' corporate reports
- Understandability is a key qualitative characteristics of useful financial information
- Readability and conciseness , as two important textual attributes of corporate reports, are used in this paper to measure understandability
- It provides empirical evidences that the adoption of IFRS and GRI could have unfavorable impacts on the usefulness of corporate reports in China
- Overall, this study adds to the literature on the concept of corporate reports' understandability and its determinants.

Background: IFRS and GRI in China

- Over the past decade, the Chinese government has facilitated the convergence of Chinese Accounting Standards (CAS) with IFRS.
- In 2014, the Ministry of Finance issued eight new or revised accounting standards for enterprises, such as financial statement presentation (No. 30) and fair value measurement (No. 39). It was the first time that the Chinese accounting standards have been revised and updated on such a large scale, labeling the significant convergence of CAS with IFRS.
- China's A-share listed companies need to comply with the domestic CAS, but dual-list A- and H-share companies need to prepare their financial statements in compliance with IFRS.

Background: IFRS and GRI in China

- In 2014, GRI published its Chinese version of G4 Sustainability Reporting Guidelines, which becomes a major influence for the non-financial (sustainability/CSR/ESG) reporting by Chinese firms.
- Chinese listed companies adopt GRI voluntarily and publish either stand-alone non-financial reports or as an integral part of their annual reports.

- With the adoption of both IFRS and GRI, the content included in corporate reports is now much broader, leading to heightened concerns of complexity and severe information overload.

Key Definitions

- Readability refers to the level of reading difficulty of a text (Harris & Hodges, 1995; Smeuninx et al., 2016). The value of the information contained in a corporate report cannot be fully conveyed to report users due to the high complexity of the corporate report.
- Conciseness refers to the necessity of avoiding redundant information (Veltri & Silvestri, 2015). Disclosure overload describes corporate reports of excessive length. An unnecessarily long report may negatively influence the understandability of the information.
- There is no consensus on the impact of the adoption of IFRS & GRI on corporate reports' readability and conciseness.

Introduction: contribution

- The Chinese stock market is still immature. Enhance the understandability of corporate reporting in China can benefit stakeholders, especially reporting users, policymakers, regulators and accounting standard-setting bodies.
- Both IFRS and GRI are believed to increase the understandability of corporate reports (Byard et al., 2011; Daske et al., 2013; Ruhnke and Gabriel, 2013; Kuzey and Uyar, 2017). However, no empirical evidence in the Chinese context exist to verify the case.
- A response to the call for research in non-English speaking settings (Jang and Rho, 2016).

Hypothesis Development (IFRS)

Author	Country	Readability	Conciseness
Morunga and Bradbury (2012)	New Zealand		(-)
Richards and van Staden (2015)	New Zealand	(-)	(-)
Jang and Rho (2016)	Korea	(-)	
Cheung and Lau (2016)	Australia	+	(-)

- H1a: There is an association between IFRS adoption and the level of readability of the corporate report.
- H1b: There is an association between IFRS adoption and the level of conciseness of the corporate report.

Hypothesis Development (GRI)

Author	Country	Readability	Conciseness
Harjoto et al. (2020)	Worldwide	+	

- H2a: There is an association between GRI adoption and the level of readability of the corporate report.
- H2b: There is an association between GRI adoption and the level of conciseness of the corporate report.

Research design: sample selection

- Our sample comprises the top 100 Chinese A-share listed companies measured by market capitalisation at the end of the fiscal year 2014 .
- These companies are business giants or leading enterprises in all major sectors in China.
- In order to gauge the most current status and trend of understandability of corporate reports by Chinese companies, our sample period is 2014 to 2018.
- Each firm's annual report in a single year and its stand-alone CSR/ESG/sustainability report are analyzed.
- Thus, the final data set consists of 500 firm observations over the period from 2014 to 2018.

Research design: dependent variables

Readability

- The Fog index (Melloni et al., 2017) is commonly used to serve as an inverse measure of readability.

- The formula for calculating the Fog index is:

$$Fog = (words\ per\ sentence + percent\ of\ complex\ words) \times 0.4.$$

- In the formula, the words per sentence and the percentage of complex words are measured using the Chinese Readability Index Explorer.

CRIE 文本可讀性指標自動化分析系統3.0
Chinese Readability Index Explorer, CRIE 3.0

Research design: dependent variables

Conciseness

- Conciseness can be captured by the length of the corporate report (Melloni et al. 2017). Pursuing corporate report conciseness means reducing lengthy disclosure to reach less disclosure.

- The number of pages in corporate reports (Page) is used as an inverse proxy for conciseness.

Research design: other variables

- IFRS is a dummy variable with a value of "1" if a company is listed on the Hong Kong Stock Exchange and Chinese mainland Stock Exchange simultaneously, and a value of "0" if a company is only listed on the Chinese mainland Stock Exchange.
- GRI is a dummy variable with a value of "1" if a firm adopts GRI standards, a value of "0" if a firm does not adopt GRI standards.
- We controlled size, leverage, profitability, board size, number of independent directors, duality (CEO/Chairman), and board meeting times (Richards and van Staden, 2015; Cheng et al., 2018; Velte, 2018).

Research design: Model specification

$$Fog_{i,t} = \beta_0 + \beta_1 IFRS_{i,t} + \beta_2 GRI_{i,t} + \beta_3 Size_{i,t} + \beta_4 Profitability_{i,t} + \beta_5 BoardSize_{i,t} + \beta_6 BoardInd_{i,t} + \beta_7 Leverage_{i,t} + \beta_8 Duliaty_{i,t} + \beta_7 BoardMeet_{i,t} + Industry + Year + \varepsilon_{i,t} \quad (1)$$

$$Page_{i,t} = \beta + \beta_1 IFRS_{i,t} + \beta_2 GRI_{i,t} + \beta_3 Size_{i,t} + \beta_4 Profitability_{i,t} + \beta_5 BoardSize_{i,t} + \beta_6 BoardInd_{i,t} + \beta_7 Leverage_{i,t} + \beta_8 Duliaty_{i,t} + \beta_7 BoardMeet_{i,t} + Industry + Year + \varepsilon_{i,t} \quad (2)$$

- Model (1) tests H1a and H1b whereas the Model (2) targets on examining H2a and H2b.
- We control the industry and year fixed effects in the model, and all the standard errors in our regression are clustered at the firm level.

Empirical results (Descriptive statistics)

- The minimum value of readability of corporate report sample companies is 10.6390, while the maximum value is 21.2503. The average value is 16.8160.
- The minimum value of conciseness of corporate report sample companies is 139, while the maximum value is 651; the average value is 305.
- The sample companies comprise 224 dual-listed A- and H-share companies and 276 solo-listed A-share companies.
- 275 firms are GRI framework adopters, and 225 firms are not GRI-adopters.

Understandability	Year				
	2014	2015	2016	2017	2018
Readability (The Fog readability index)	16.4895	16.6244	16.8098	17.0413	17.1150
Conciseness (The number of pages)	282	284	304	318	340

Empirical results (Univariate analysis)

- The pair-wise correlation between variables is examined using the Pearson correlation coefficient and Spearman correlations, respectively.
- IFRS has no association with Fog, while the correlation between GRI and Fog is statistically significant.
- Both IFRS and GRI have a positive association with Page.

Table 4: Correlation analysis

	Fog	Page	**IFRS**	**GRI**
Fog	1	0.08*	**0.02**	**0.24*** **
Page	0.05	1	**0.46*** **	**0.39*** **
IFRS	**-0.02**	**0.46*** **	1	0.26***
GRI	**0.22*** **	**0.39*** **	0.26***	1

Empirical results (Regression results)

- IRFS adoption has a significantly negative impact on the Fog index, which supports H1a.
- There is a significant positive correlation between GRI adoption and the Fog index; therefore, H2a is also supported.
- We find a significantly positive association between IFRS adoption and the length of the corporate report; thus, H1b is supported.
- There is a significant and positive association between GRI adoption and the length of the corporate report, which also supports H2b .

Table 5: Regression Results

Variable	Fog	Page
IFRS	-0.035***	0.118***
	(-2.90)	(3.10)
GRI	0.024**	0.125***
	(2.35)	(4.68)
BoardMeet	-0.023**	0.091***
	(-2.48)	(2.89)
Duality	0.021*	-0.076**
	(1.84)	(-2.11)
Size	0.016***	0.077***
	(3.56)	(5.82)
ROE	-0.076	-0.197
	(-1.26)	(-0.95)
Leverage	0.033	0.148
	(0.85)	(1.10)
Board	0.016	0.034
	(0.69)	(0.55)
Ind	-0.080	-0.087
	(-1.11)	(-0.39)
Cons	2.685***	4.421***
	(34.43)	(16.68)
Industry	Yes	Yes
Year	Yes	Yes
N	500	500
R^2	0.293	0.602
Adj. R^2	0.271	0.590
F	5.828***	18.162***

Empirical results (Regression results)

Robustness tests

- **1.** Newey and West (1987) method.
- **2.** Cluster standard errors by firm and by year, and control for year and industry.
- **3.** Use a lead-lag approach by one year for the independent variable and control variables.
- **4.** Change the proxies of two important control variables: profitability and firm size.
- The results are consistent with the main findings, indicating their reliability.
- The subsample test partitioned based on whether a firm is a state-owned company produces qualitatively similar results to those obtained from the main analysis.

Empirical results (Regression results)

Robustness tests: alternative measures of readability and conciseness

- In referring to the Chinese Fog readability index developed by Xu et al. (2019), our paper adopts another inverse proxy variable of readability of the corporate report (Fog2) to demonstrate the robustness of the above regression results.

$$Fog = (words\ per\ clause + percent\ of\ adverbs\ and\ conjunctions\ in\ each\ sentence) \times 0.5$$

- Also, for robustness, we use the natural logarithm of the number of words (Word) to gauge the conciseness of corporate report.

Discussion (Readability)

- The readability of corporate reports of Chinese companies is in the “difficult” zone (*Fog 14-18) and displays a worsening trend.
- These corporate reports are complicated, which information are only fully accessible to a very sophisticated reader with at least 16 years of education.
- Compared to the findings of prior studies, the readability of corporate reports by Chinese firms is quite poor.

Discussion (Conciseness)

- Compared with the findings of prior studies, the level of conciseness of Chinese firms' corporate reports is lower.
- One explanation for the downward trend in conciseness is that Chinese companies have been trying to disclose more information in their corporate reports to ensure the reports are informative.
- Materiality plays a crucial role in the balance between conciseness and comprehensiveness.

Discussion (The effects of IFRS and GRI)

- Our results confirm Hypothesis 1a and 1b that IFRS adoption positively impacts the level of readability of corporate reports but negatively impacts the level of conciseness.
- Our results further confirm Hypothesis 2a and 2b that GRI adoption negatively affects the level of readability and conciseness of corporate reports.

Conclusion

- Both the levels of readability and conciseness of corporate reports by Chinese companies are not satisfactory and exhibit a downward trend.
- IFRS adoption results in a more readable but longer report, whereas GRI adoption leads to a less readable and longer report.

Implication

- This study provides new findings regarding whether IFRS adoption and GRI adoption impact the textual attributes of corporate reports.

- For Chinese policymakers and regulators
- For the IASB
- For GRI

Limitation

- The findings are only applicable in the Chinese context, and thus the generalisability of these findings is limited.

- This study only focuses on large companies in China.