

# A Comparative Study of the Readability of MD&A Discourse of Chinese and American Listed Companies from a Cross-Cultural Perspective

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## ABSTRACT

In recent years, with the accelerated development of globalization, many Chinese companies have opted for internationalization strategies to better integrate into the global market, with listing on the U.S. securities market emerging as a top choice for many. In the U.S. securities market, the “Management’s Discussion and Analysis” (MD&A) section of the annual reports of listed companies serves as a crucial conduit for information exchange between companies and investors and a primary focus of scrutiny by the U.S. Securities and Exchange Commission. Consequently, ensuring the accuracy, completeness, and comprehensibility of the MD&A section has become a focal point for many businesses and researchers. This study employs a comprehensive array of research methodologies to delve deeper into this issue. Firstly, to scientifically assess the readability differences in the MD&A texts of Chinese and American listed companies, this research utilizes the TAALES corpus tool to measure four psycholinguistic lexical feature indices of the MD&A text: specificity, familiarity, imagery, and meaningfulness. Additionally, the widely used Dale-Chall Readability Formula is employed to evaluate the readability of the annual reports. Independent sample t-tests were conducted on the readability metric data of Chinese and American enterprises’ MD&A, revealing significant differences in specificity, familiarity, imagery, and overall readability, with Chinese enterprises’ MD&A texts being less readable than their American counterparts.

**Keywords:** Management’s Discussion and Analysis; readability; cross-cultural; critical discourse analysis

## INTRODUCTION

### Research background

Since the 1990s, more than 500 Chinese companies have gone public on the New York Stock Exchange (NYSE), reaping substantial gains from their initial public offerings (IPOs). Factors like the need for economic recovery during the COVID-19 pandemic are expected to drive more Chinese companies to consider future listings in the United States. According to data from the U.S.-China Economic and Security Review Commission, as of January 9, 2023, 252 Chinese companies have gone public in the United States, with a combined market capitalization of \$1.03 trillion.

In 2020, a record-breaking number of 32 Chinese companies went public in the U.S., collectively raising approximately \$12.1 billion in IPOs, marking the highest amount since Alibaba’s landmark IPO on the NYSE in 2014. The United States hosts the world’s largest stock exchanges, providing Chinese companies access to a broader investor base than domestic listings, ultimately leading to higher valuations. As a result, the U.S. stock market has become a pivotal platform for Chinese companies seeking financing.

Annual reports of publicly listed companies are mandatory disclosure documents that encompass vital activities and performance of the enterprise in the previous year, future objectives, letters from the CEO or company president to shareholders, audit reports, and detailed financial statement data. Chinese companies listed in the United States are subject to rigorous and comprehensive scrutiny by the U.S. Securities and Exchange Commission. They must adhere to U.S. regulations governing annual report information disclosure. Additionally, they must understand the differences in language expression and culture between China and the U.S. and significantly emphasize managing relationships with U.S. investors.

Among all the textual information in annual reports, the “Management’s Discussion and Analysis” (MD&A) section has increasingly garnered the attention of investors. MD&A is written in non-technical language and includes the management’s evaluation of historical performance and their assessment of future risks and investment opportunities. Language serves as the code for transmitting information, and its usage profoundly affects the effectiveness of information transmission. Most investors in publicly traded companies are non-accounting professionals, so the MD&A section plays a pivotal role in facilitating communication between companies and their shareholders and investors.

Companies seeking listings in the U.S. must emphasize the translation quality of the MD&A section, as this will enable them to convey their investment value more comprehensively and accurately, attracting foreign investors’ attention. In translating and composing annual reports, it is crucial to delve into how Chinese companies can enhance the quality of their report translations by drawing insights from the experiences of U.S. companies in annual report information disclosure. Only when companies thoroughly understand annual report users’ reading habits and cultural perceptions can they use accurate translation practices and effectively convey information.

The U.S. Securities and Exchange Commission introduced the “Management’s Discussion and Analysis” (MD&A) information disclosure system in 1968. Its purpose is to provide investors with a management perspective on a company’s historical performance and future directions through a short-term and long-term analysis of its business. Unlike financial statements and data summaries in the annual report, the MD&A presents an interpretation of significant historical events and an evaluation of substantial future risks from a management viewpoint, aiming to compensate for the inherent limitations of traditional financial statements. At the same time, due to frequent accounting scandals, the U.S. Securities and Exchange Commission has increasingly emphasized the regulation and scrutiny of the MD&A. The MD&A is a narrative interpretation that includes a degree of subjectivity in language, wording, and length. The U.S. Securities and Exchange Commission has repeatedly stressed the need for the MD&A to be clear and highly readable. When Chinese companies go public in the United States, it is essential to pay attention to legal, regulatory, and cultural differences between China and the United States during the translation process, prioritize accuracy and completeness in disclosing information, and adhere to the relevant regulations of the U.S. Securities and Exchange Commission. Companies seeking listings in the U.S. may have highly standardized and rigorous language expressions to enhance credibility while also considering U.S. investors’ reading habits and cultural perceptions.

### **Research purpose**

This study will employ critical discourse analysis, psycholinguistics, Hofstede’s cross-cultural theories, and in-depth comparative analysis of the textual features and communicative functions of annual report discourse in Chinese and American corporations. The main research objectives of this paper are as follows:

Firstly, this paper will conduct empirical research to compare the significant differences in readability in the “Management’s Discussion and Analysis” discourse between annual reports of Chinese and American publicly traded companies.

Secondly, this paper aims to analyze the significant differences in the readability of MD&A texts between Chinese and American listed companies from the perspectives of cross-cultural theory and critical discourse analysis.

Finally, based on the research findings, this paper will attempt to propose several specific suggestions from the perspective of enhancing the readability of annual reports to improve the information disclosure quality and enhance communication efficiency with American investors for Chinese companies listed in the United States.

### **Research significance**

The significance of this study lies in its in-depth exploration of the readability of MD&A texts in Chinese companies going public in the U.S. It combines various theoretical frameworks and methods to offer valuable insights and inspiration for the field of International Business English. The following are the critical research significances of this study.

### **Academic significance**

Culture can mediate information communication, and this study can further illustrate how culture serves as a bridge for information dissemination. Comparing the MD&A of Chinese and American companies can help reveal the impact of different cultures and business environments on corporate information disclosure. This enriches the research on how cultural values, national traditions, beliefs, and business practices influence corporate communication.

### **Practical significance**

The practical significance of this study lies in enhancing information disclosure quality for Chinese enterprises and enriching business English education. The specific practical implications of this study are as follows:

#### (1) Enhancing information disclosure quality and external communication capability for Chinese enterprises:

China is currently accelerating the implementation of its “go global” strategy, actively participating in international cooperation and competition. The success of Chinese enterprises’ international business strategies relies on the dissemination and communication of information. In this process, it is essential to consider language and cultural differences between nations. The “Management’s Discussion and Analysis” (MD&A) section of corporate annual reports is critical in companies’ attempts to communicate information externally. It is essential in information communication, image building, and reputation management. Whether for multinational corporations or domestic enterprises, the well-established MD&A system in the United States is worth learning from. Research on effective value transmission through textual discourse can help Chinese enterprises improve their annual report writing and translation skills, enhance information management capabilities, and elevate the quality of external information communication. This study recommends improving the readability of MD&A texts for Chinese companies going public in the United States. Companies can optimize their financial disclosures based on the research findings, improving investors’ understanding and confidence in the company. This can help attract more international investors and maintain market reputation.

#### (2) Practical application value for business English education in China:

This study utilizes corpus tools to analyze differences in Chinese and English business discourse, providing practical examples and insights for business English reading, writing, and translation education. The multi-perspective analysis of the functional characteristics of corporate annual report discourse in this study can be applied to business English reading instruction, helping business English students and teachers understand the discourse feature differences between Chinese and English business genres. Studying language forms and content features can enhance students’ comprehension of business discourse. Furthermore, this study explores the communicative functions and expression strategies behind the linguistic features of corporate annual report discourse, aiding business English learners in improving cross-cultural communication skills

and practical application abilities for business English events. Additionally, the research on information in American corporate annual report discourse can help business English students better understand and read English annual reports, assisting them in further study and exploring the strategies of overseas corporations and Chinese multinational corporations.

## LITERATURE REVIEW

### Related concept

#### Concept of management's discussion and analysis

“Management’s Discussion and Analysis” (MD&A) began in 1968 and was a significant contribution by the United States to financial information disclosure. It was initially part of the “Guides for the Preparation and Filing of Registration Statements.” In 1980, the U.S. Securities and Exchange Commission (SEC) established MD&A as a separate requirement, shifting the focus from a company’s operating results to the overall financial statements. The SEC formally required companies to analyze and discuss issues and trends related to liquidity, capital resources, and operating results. This move significantly enhanced the readability of annual reports at the time.

The SEC designated the MD&A project as an ongoing initiative and invested substantial resources and effort in its improvement. In 1987, the Securities and Exchange Commission adopted suggestions from two proposals, requiring more disclosures about risk factors in the MD&A and formal audits of MD&A. In 1990, Nicholas Schroeder and Charles Gibson’s research showed that improved readability and comprehensibility could enhance communication effectiveness with readers. They emphasized that management’s narrative form of financial information should prioritize “expression” rather than “leaving a lasting impression.”

With the increasing complexity of market information, investors and regulatory authorities demand higher text quality in corporate information disclosures, including “Management’s Discussion and Analysis.” Both domestically and internationally, scholars have become increasingly concerned about the quality of MD&A information for research purposes. In 1968, the primary purpose of the SEC introducing MD&A into annual report preparation requirements was to require companies to explain inherent risks and future uncertainties, allowing investors to assess a company’s financial information and operational condition from the management’s perspective. The SEC emphasized that leadership should communicate with investors clearly and directly during the writing process of MD&A. Throughout the development of the MD&A system, the SEC has consistently regulated the overall quality of corporate MD&A by establishing rules. The SEC also pointed out that a company’s MD&A should provide potential changes in profit and cash flow situations so that investors can gauge a company’s future operations based on its past performance. Users of financial reports also include non-financially savvy investors and some disclosures containing professional terminology may increase reading barriers for readers. Therefore, MD&A should not reiterate traditional financial statements. In 1980, the SEC strengthened the MD&A requirements for the final rule form of disclosure. In 1989, the SEC’s Regulation S-K explicitly defined how items should be grouped for discussion and analysis purposes to avoid redundant disclosures and address disclosure matters that needed consideration in various MD&A items, including required forward-looking information, long-term and short-term liquidity and capital analysis, significant changes in financial statement items, highly leveraged transactions or non-investment grade loans and investments, and the impact of federal financial assistance on the operations of financial institutions. While gradually refining the disclosure rules for “MD&A,” the SEC issued numerous interpretive guides to assist companies in enhancing the overall disclosure quality of MD&A. The SEC also took various enforcement actions against companies suspected of violating the requirements to ensure the rigor of company writings.

In conclusion, by understanding the history, regulations, and purposes of MD&A, researchers can better assess the quality of the MD&A section in corporate annual reports and its effectiveness in communicating

with investors. Furthermore, researchers can utilize the SEC's regulations and guidelines to examine the compliance of the MD&A section in corporate annual reports and whether it meets the relevant requirements. Therefore, these theories and information are crucial in providing a solid foundation and methodology for analyzing the MD&A section in corporate annual reports.

Annual report inquiry refers to the examination and questioning process conducted by securities regulatory authorities on the annual reports of listed companies. This process is typically led by regulatory bodies such as the Securities and Exchange Commission (SEC) and aims to ensure that listed companies adhere to relevant regulations, provide truthful, accurate, and complete financial information, and disclose the company's operational and financial status to investors in a timely and transparent manner.

## **Related studies**

### **Critical discourse analysis**

Critical Discourse Analysis views language as a multifunctional system, with Halliday's Systemic Functional Linguistics being its primary theoretical foundation and methodological source. This aspect also determines that Critical Discourse Analysis has an interdisciplinary and multi-perspective approach to studying the relationship between language and society. Critical Discourse Analysis is a form of discourse analysis that, through the analysis of discourse forms, examines the relationship between discourse, power, and ideology from linguistic, sociological, psychological, and communication perspectives. It aims to understand and expose imbalances in power through speech and works to correct the current use of language to achieve equality. Therefore, Critical Discourse Analysis studies discourse and emphasizes the analysis of the discursive practices and social contexts.

Critical Discourse Analysis (CDA) theory originated in the late 1970s when British linguists proposed that language is not an objective means of communication, but a social practice directly involved in constructing social relations. Subsequent research on critical discourse primarily revolved around its role in explaining language's involvement in ideology, power, and social change. The term "critical linguistics" was first used in the book *Language and Control* (Fowler, Hodge, & Trew, 1979). "Critical discourse analysis" was first introduced in *Language and Power*. (Fairclough, 1989) The founding of the academic journal *Discourse & Society* has contributed significantly to developing the theory and methodology of critical discourse analysis (Van Dijk, 1990). Fairclough believed that Critical Discourse Analysis provided a theoretical and methodological foundation for studying the relationship between discourse and the socio-cultural developments in various domains.

Later, scholars further distinguished between "critical linguistics" and "critical discourse analysis." Critical linguistics and critical discourse analysis are two separate concepts. Compared to critical linguistics, critical discourse emphasizes analyzing the role of language from the perspective of specific social development issues. (Wodak, 2001) Wodak viewed discourse as a representation of meaning from a particular perspective within a specific domain and argued that discourse practices anticipate a constructed and being-constructed relationship within the field of action, with context playing a crucial role.

Critical discourse analysis is built upon the theoretical foundation of systemic functional linguistics, represented by Halliday. Also, it draws on the research foundations of pragmatics, social semiotics, psychology, and other disciplines. Critical discourse analysis provides more than a single theory and analytical model (Weiss & Wodak, 2003). Psychological factors such as knowledge, motivation, and emotion drive human behavior, including discourse and language. However, a significant issue with critical discourse is that it needs to pay more attention to the relationship between these psychological factors and discourse (Chilton, 2005). As a result, Chilton proposed a cognitive model for critical discourse analysis. Therefore, regardless of the research theory, methodological paradigm, discipline, or school of thought, if it can analyze

the relationship between language, power, and ideology and produce convincing results, it is considered valid. In summary, critical discourse analysis aims to make the relationship between discourse practices, social practices, and social structures, which may need to be more transparent to laypeople.

In the 1990s, Critical Discourse Analysis rapidly developed in China. Firstly, the publication of “Language, Power, and Ideology: Critical Linguistics” introduced and elaborated on Western critical discourse analysis theory. It mainly focused on Chinese and English news discourses, especially the intertextuality and dialogicity in news discourses and the reported speech within them, conducting extensive critical analysis research (Xin Bin,1996). Subsequently, domestic scholars studied the meaning of political discourse and the development and research methods of political discourse studies. They pointed out that the uniqueness of political discourse research lies not only in studying language but also in examining “how participants in political activities use language to achieve their political goals and how the public perceives these participants (e.g., whether they are affable or autocratic) through the language they use.”(Tian Hailong,2002) Tian Hailong noted that CDA can be categorized into different approaches with different perspectives, which correspond to discourse theory, critical discourse analysis, and discourse social function research, distinguishing them based on textual analysis and critical consciousness.

Critical discourse analysis has also extended to the issue of gender in fairy tale narratives, suggesting that the gender distinctions in fairy tales imply a power relationship of possession and domination, reflecting the control and constraints of capitalism on women. In the analysis of the implicit dialogue in fairy tale narratives, it is pointed out that “discourse criticism is like archaeology; its task is to search for scattered meanings and their multiple origins from the fractured strata of discourse.” The seemingly “flawless” discourse is actually “fractured,” filled with noise and polyphony (Din Jianxin,2009). Subsequent scholarly research has made significant efforts to enable critical discourse analysis to achieve interdisciplinary and cross-cultural shifts. Applying critical discourse perspectives to specific cultural heritage practices and research broadens the field of critical discourse analysis contributes to education, and promotes change, holding significant importance in the exploration of localization (Wu Zongjie,2012).The academic community in China subsequently began to reflect on its socio-cultural responsibilities and established a discourse research system and teams with Chinese characteristics (Shi Xu,2006). Shi Xu proposed the following suggestions: (1) Building a discourse system and teams with Chinese characteristics should be an essential goal for Chinese scholars and students today; (2)The subject of “discourse research with Chinese characteristics” should mainly focus on significant discourse issues arising from China’s historical changes; (3)This research should consider the historical and cultural context of China and emphasize the integration of Eastern and Western wisdom to develop an open new theoretical and methodological system; (4)It should adopt a multidisciplinary, cross-cultural, cross-border, and multilingual perspective; (5)In writing and teaching, more attention should be paid to Chinese context, traditional Chinese scholarship, and the integration of Eastern and Western knowledge;(6)Efforts should be made to promote research results globally to encourage cultural diversity and innovation in international discourse research; (7)To establish a discourse research system and teams with Chinese characteristics, various development strategies should be adopted, including leveraging the strengths of universities and research institutions, applying for major national research projects, establishing corresponding efficient academic organizations, hosting domestic and international conferences, publishing book series and special issues, revising and offering relevant courses, and more.

In the 1990s, scholars began using corpus tools to analyze large corpora of specific language domains. Corpus analysis combined with analysis software provides critical discourse analysis research with data primarily consisting of word frequency, collocations, semantic prosody, and more. Based on previous scholars’ research, critical discourse analysis is a multifunctional approach within the language system, relying on theoretical foundations such as systemic functional linguistics. This emphasizes the comprehensive and multidisciplinary nature of critical discourse analysis in studying the relationship between language and society, drawing from linguistics, sociology, psychology, and communication studies.

Critical discourse analysis finds applications in various domains, including political discourse, news discourse, and issues related to gender. This underscores the extensive utility of critical discourse analysis in explaining and exploring social, political, and cultural issues. Therefore, critical discourse analysis plays a significant role in the cross-cultural analysis in this study.

### **Readability theory**

Research on the theory of “readability” among foreign scholars originated in the 1920s, primarily in education. Initially, research on “readability” was conducted to assist educators in selecting paragraphs suitable for children and adults and evaluating whether books were appropriate for students of specific grades or ages. The results of this research were mainly applied to the selection of reading materials for students. Teacher’s work introduced a method to measure the difficulty level of words, and for the first time, it listed a large corpus of English vocabulary based on word usage frequency (Thorndike,1921). Vocabulary size is one of the factors in assessing text difficulty (Chall and Dale,1995). In systematic research on readability, Thorndike found that readers perceived texts with higher readability more quickly and were easier to understand.

During the study of word frequency, it was found that people recognize high-frequency words faster than low-frequency words, making it easy to understand and learn high-frequency words (Kare,1968). Research on vocabulary readability can be summarized into three aspects: Firstly, the interest and appeal of the text material content or topic to the reader; secondly, the way the text material is expressed that is easy for readers to understand; and finally, the text format and language organization of the text material that is easy for readers to comprehend (Gray & Leary,1935). Considering the factors affecting the difficulty of the text from three different perspectives: text printing, reader interest, and writing style, readability refers to the collection of all elements in a printed material that influence the reader’s familiarity with the text material or the degree to which the reader can quickly read the material and find it interesting (including the interaction between elements) (Chall,1949).

Many scholars began to research the factors influencing readability while building on the definition of readability. In the application research of primary education, during the discussion of factors promoting interest in readability research at the sentence and vocabulary levels, it was inferred that if there are more uncommon words, types of dishes, polysyllabic words, prepositional phrases, and complex long sentences in the reading material, its reading difficulty is relatively high; if there are more personal pronouns, familiar words, and short sentences in the reading material, the reading difficulty is relatively low (Betts,1949). By comparing the features of difficult-to-understand text materials with those of easier-to-understand text materials, it was found that as the number of uncertain modifiers and probability words in the text increases, the difficulty of the text also increases. In addition, deviating from the main topic and repetitive elaboration of content also increases the problem of the text material. However, if the text frequently contains conjunctions that indicate explanatory meaning and content that provides case illustrations, the text becomes easier to understand (Rosenshine,1986). Whether the grammar is evenly distributed in the text and whether the reader needs to determine the frequency of grammar usage in the text will affect the sentence’s difficulty. At the same time, the problem of the sentence is also related to the number of word items contained in the sentence and the ambiguity of the sentence.

Scholars have measured the readability of linguistic information, linking vocabulary difficulty to its frequency of occurrence, and invented the first readability formula (Lively & Pressey,1921). This has since initiated numerous scholars to conduct quantitative analyses of linguistic text features and research on readability formulas. Among them, widely used formulas include Flesh, Fry, Powers-Sumner-Kearl, Automated Readability Index, Fog, Lix, etc. Additionally, exploring the factors influencing text readability has been a focal point of research, with significant contributions from scholars like Betts, Dechant & Smith, Bruee & Rubin, and others. Foreign scholars have applied readability research to fields such as education,

healthcare, book publishing, military materials, government documents, economic reports, and commercial websites.

Research on text readability in China began relatively late. The first study on the readability of Chinese text appeared in 1971, and domestic readability research gradually developed based on foreign readability research. As research progressed, Chinese scholars realized that Chinese characters convey meaning in text, which is different from the phonetic script of English. They began to explore the factors that affect the readability of Chinese text. In recent years, scholars have discovered that factors influencing text readability in China are primarily analyzed at four levels: characters, vocabulary, sentences, and discourse. Domestic scholars have begun to focus on traditional Chinese character text information, analyzing various factors that influence the readability of Chinese, and exploring readability formulas suitable for Chinese texts. (Yang, 1971). Based on the readability of Chinese texts, scholars define readability as the degree or nature to which a text is easy to comprehend and learn. (Li Shaoshan, 2000) Domestic scholars have summarized the research on readability into two main points: the exploration of factors affecting text readability and the method to determine whether a text is too difficult for a specific reader. Later, discussions on readability extended to English teaching in China. Conducting readability analyses on texts and categorizing reading materials based on readability scores helps readers choose materials of appropriate difficulty. Especially for second language learners, selecting suitable reading materials can facilitate the learning and development of the second language. It prevents learners from choosing overly simple materials that do not enhance their foreign language skills and avoids dampening their enthusiasm for learning due to extremely challenging materials. (Lv Zhongshe, 2003) The application of readability theory is comprehensive, and the concept of readability has also become generalized. It is no longer limited to studying the readability of educational materials but extends to areas such as news reports, scientific papers, pharmaceutical instructions, and the readability of visual elements. Measuring readability can be approached from various aspects, including characters, words, phrases, sentences, grammar, and semantics. Presently, the methods for measuring readability mainly involve formula-based approaches, text classification based on complex features, and experimental methods.

However, readability still needs to be improved, such as the need for a redefined concept of readability, the selection of readability metrics, the lack of authoritative and targeted readability measurement formulas and models, and the relationship between readability and reading difficulty. In conclusion, the prior research conducted by scholars has provided valuable background and a theoretical foundation for analyzing the readability and influencing factors of MD&A discourse in the annual reports of listed companies in both China and the United States in this study.

#### (1) Readability research on corporate annual reports

Since the early 1980s, scholars have conducted in-depth research on annual reports, essential documents businesses use to disclose their financial condition, operational performance, and plans to investors and other stakeholders. In recent years, an increasing number of researchers have employed interdisciplinary approaches, including linguistics, economics, psychology, and more, to conduct discourse analysis of annual reports.

In foreign countries, scholars studied the readability of annual reports as early as the 1970s to 1990s. These studies have reached a similar conclusion: the information in annual reports is often challenging to comprehend and may even exceed the cognitive abilities of the intended audience. Numerous studies have confirmed this viewpoint. For example, scholars have pointed out that annual reports are generally categorized as “highly difficult” or “extremely challenging” (Courtis, 1998), and reading and comprehending the annual report of a public company typically requires at least a college education, a level most people do not attain (Jones & Shoemaker, 1994). Through a comparative analysis of the president’s letter to shareholders, the general textual overview in the annual report, and the notes in the consolidated financial



statements section of the annual report, it is shown that at least 50% of American shareholders find it difficult to understand the content of the annual report. In contrast, business magazines popular among investors, such as *Business Week*, *Fortune*, and *Forbes*, are more readable than annual reports (Heath & Phelps, 1984). In 1990, Mark Sever and Ronald Boisclair of Ernst & Young published their view in *The Journal of Accountancy*, suggesting that in the 1990s, a developing trend in financial reporting is the increasing importance of the MD&A section for report users, and readability is crucial for effective communication with readers when preparing the MD&A section. Whether investors can understand these texts has further sparked profound concerns about the readability of annual reports. In a study on the performance differences of information users with different professional levels in understanding annual reports, it was found that only accounting professionals could barely achieve the level of understanding required for the sample annual report. In contrast, there is a significant gap between the ability of fourth-year accounting students and the level of understanding needed for the annual report (Simth & Taffler, 1992). This finding emphasizes that the difficulty of understanding annual reports is relatively high.

In interdisciplinary research on the readability of annual reports, the relationship between a company's profitability and the readability of its annual report was revealed. After comparing the readability and performance of annual reports of profitable and loss-making companies, it was found that the annual reports of profitable companies are more readable and use a more concise writing style. In contrast, the annual reports of loss-making companies are more complex and challenging to understand (Ram Subramanian, Robert G. Insley & Rodney D. Blackwell, 1993). This finding is essential for understanding the relationship between a company's external communication methods and market performance. The study also proposed some directions for future research, including the impact of external corporate communication on market performance and the ethical issues of companies pursuing different strategies. Research on the construction of corporate image in annual reports through discourse analysis and linguistic methods found that companies use specific language strategies and rhetorical techniques in the reports to shape their ethical image (Alon Lischinsky, 2011).

Scholars have studied the linguistic structure of management information in corporate annual reports. By analyzing how companies convey this information to shareholders, the motivations and priorities of the management are revealed. The research method is based on systemic theory, applying systemic transitivity (verb structure), thematic structure (subject), context and coherence, and compression. The verb structure shows an increase in passive structures over time and with decreasing profits. However, for other verb structures, the results are more complex, including an increase in the use of "existential" verbs. Combined with the analysis of thematic structure, there is an increase in non-human subjects, and the contextual features shown by coherence and compression conclude that as the news becomes more negative, the language structure indicates an objective situation caused by circumstances, and this situation cannot be attributed to anyone who might be considered responsible (Jane Thomas, 1997). In 2008, Robert Bloomfield pointed out the relationship between the readability of annual reports, current earnings, and earnings persistence in the *Journal of Accounting and Economics*. Robert analyzed the correlation between yearly reports' length and readability, recent payments, and industry. He found that companies with losses or short-term earnings tend to use longer sentences and larger vocabularies in their annual reports. Text analysis plays a role in revealing market efficiency and corporate disclosure and is essential for understanding the motivations and influences behind yearly report writing.

Compared to overseas research, domestic studies on the discourse of corporate annual reports started later. However, it has become one of the hot topics among domestic scholars in recent years. A corpus analysis of metadiscourse markers in the president's letters in Chinese and Western bank annual reports found some differences in the use of metadiscourse between China and the West. Chinese bank annual report letters from the president contain more transitional markers, while Western bank annual report letters use more frame and explanatory markers. However, there is no significant difference between the two in the use of endophoric markers and evidential markers. These findings suggest differences in discourse coherence between Chinese and Western bank annual report letters from the president. Chinese bank annual report letters emphasize

formal cohesion, while Western bank annual report letters focus more on rational appeals (Huang Ying,2012). Through automatic mining and comparative analysis of the emotional tendency features of corporate English annual reports, it was found that both Chinese and American corporate annual reports convey positive emotional evaluation tendencies and impression management characteristics. However, there are significant differences in the distribution of emotional evaluation themes between Chinese and American corporate annual reports, covering various aspects such as positive evaluations of activities and achievements (Wang Lifei & Bu Han,2017). Domestic research has also focused on the content of the Management Discussion and Analysis section in annual reports. Different management tone variables were constructed and added to the traditional financial distress prediction model by analyzing the company's combination of financial data. The research results show that the tone variable model can provide additional information and precisely predict financial distress (Chen Yiyun,2019).

## (2) Study of readability research on annual report inquiries

Firstly, from the perspective of earnings management, financial reporting inquiry letters have a positive impact on the readability of corporate annual reports. Specifically, given their access to more information resources, corporate management might opt for a more complex disclosure strategy to obscure their earnings manipulation activities, aiming to maximize their benefits. However, this strategy is challenged when the securities exchange issues inquiry letters regarding listed companies' missing, ambiguous, or anomalous disclosures. To mitigate the potential risk of a stock market crash (Zhang Junsheng et al., 2018), the management has to reduce earnings management and decrease the complexity of financial reports (Li, 2008). Such inquiries not only prompt companies to enhance their disclosures, providing external stakeholders with a clearer picture of the company's actual situation, but also constrain the room for management's earnings manipulation.

Additionally, due to the negative nature of the inquiry content and the authority of the issuing body, investors might become apprehensive, leading to a decline in their confidence in the company. To prevent a significant drop in stock prices, management might choose to reduce earnings manipulations and increase the transparency and readability of financial reports. Furthermore, securities exchanges also recommend that companies receiving inquiry letters establish dedicated teams to respond, which might further urge the management to intensify their scrutiny of subsequent accounting disclosures, ensuring that the financial reports produced are more accurate and understandable. Once involved in this process, management might enhance their review of later accounting disclosures (Bens et al., 2016), producing more accurate and readable financial reports.

## Cross-culture theory

### (1) Previous studies of cultural dimensions theory

Hofstede's Cultural Dimensions Theory is one of the classic theories in international cross-cultural research. This theory was developed by the Dutch information scientist Geert Hofstede. The initial cross-cultural dimension model began being investigated in 1967 and was eventually formulated into a comprehensive cultural dimension's theory in the 1970s. This theory has become a central framework for understanding cross-cultural communication. The cross-cultural dimensions theory is based on research involving over 11,000 questionnaires from more than 40 countries, covering a wide range of social strata, including workers, doctoral-level individuals, and business executives. These surveys also included people from various income ranges to gain insights into their work attitudes and values from a cross-cultural perspective. Currently, Hofstede's theory encompasses six dimensions. In 1984, Hofstede published *Culture's Consequences*, proposing that organizations are constrained by culture.

The cross-cultural dimension theory initially included the Power Distance Index, individualism or collectivism tendencies, Uncertainty Avoidance Index, and masculinity or femininity orientation,

summarizing the differences in various cultures from these four dimensions. Later, Hofstede introduced a fifth cultural dimension in 1990, initially termed the Confucian Work Dynamic. The “Chinese Cultural Connection” organization conducted a Chinese Value Survey (CVS) based on traditional Chinese cultural values. In 1990, Hofstede published “Cultures and Organizations: Software of the Mind,” incorporating this Eastern cultural dimension as the fifth work-related cultural dimension, renaming it Long-Term Orientation (LTO). After conducting independent research in the Hong Kong region and adopting supplements from scholars like Michael Minkov, using data from the World Values Survey, Hofstede and Michael Minkov co-authored *Cultures and Organizations: Software of the Mind* in 2010, introducing a new dimension: Indulgence vs. Restraint.

Hofstede proposed the cross-cultural dimension theory primarily to compare and analyze the deep-rooted cultural impressions on the values of their society members formed over the long term in different countries worldwide, based on six dimensions. He utilized structured weight analysis to describe the relationship between these values and people’s behaviors. This theory delves into the multi-dimensions of culture, providing a scoring system for dimensional comparison. Hofstede believes that different countries and ethnicities form distinct cultural values. These differences are embedded in the long-established cultural backgrounds of each country and race. Today, organizational culture has also emerged, originating from various institutional norms established by different organizations. Changing corporate culture is challenging because these norms are deeply rooted in people’s daily work practices.

Domestically and internationally, scholars have been continuously developing and revising Hofstede’s cultural dimensions in theory and practice. Based on the cultural dimension’s view, Robert J. House and other scholars jointly launched the Global Leadership and Organizational Behavior Effectiveness Research Project in 1991. The project explored the relationship between leadership, organizational behavior effectiveness, and culture. Its primary objective was to understand better how culture influences leadership and organizational behavior. The research mainly focused on cultural dimensions, leadership styles, corporate culture and behavior, and the effectiveness of leaders and teams. The findings of this research have provided significant references for global enterprises in the fields of cross-cultural management and international business.

Domestic scholars began systematic research on the cultural dimension theory in 1991. *The General Theory of Cross-Cultural Human Resource Development* pioneered the study of cross-cultural human resource management in China (Lu Hongjun, 1991). Chinese scholars have introduced the cultural dimension theory into the human resource management of multinational companies in China. They suggest cultural management is the main challenge global companies face in China. Cultural differences can lead to communication barriers, misunderstandings, and high expectations. Cross-cultural management is essential to address these issues, promoting mutual adjustment and cooperation between different cultures through training and mutual understanding (Zhao Shuming, 1997).

Methodological issues in cross-cultural research should be approached from perspectives such as “standards, simplification of methods, sampling and testing methods, data collection and analysis, levels, and the universal applicability of results” to reduce and overcome methodological challenges in cross-cultural studies (Na Xifu & Wang Yongliang, 1993). In comparative research on the national character of the Chinese with Japan, Russia, and the United States, scholars have raised questions about the measurement scales used by Hofstede in his survey and proposed the possibility of studying the national character of the Chinese from historical and cultural traditions perspectives (Tong Huijie, 1999). Starting from this, Hofstede’s cultural dimension theory has gradually received widespread attention and discussion in the practice and application of cross-cultural communication in China.

Hofstede’s cultural dimension theory has extensive value in practical applications, especially in international business and cross-cultural management. Managers often use this theory to guide companies and organizations’ global strategies and organizational culture. Hofstede’s achievements laid the foundation for

other research in cross-cultural psychology. Also, they promoted further research by more scholars in various international business and communication areas. The dimensions established by Hofstede elucidate the deeply rooted values in different cultures. These values influence people's daily behaviors and affect how they act in a work environment.

## (2) Cross-cultural dimensional differences

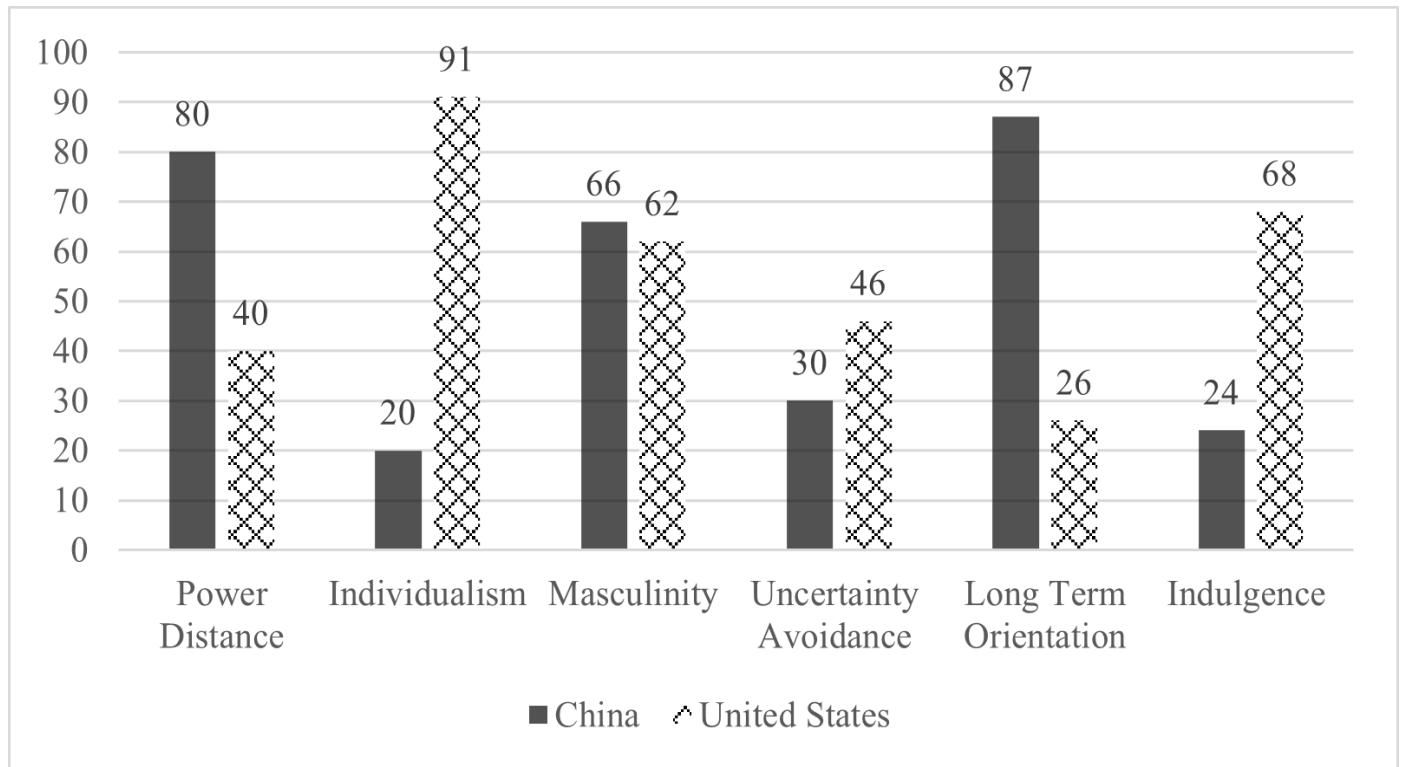


Figure 2.1 Comparison of cross-cultural dimensions between China and the United States

Data source: <https://www.hofstede-insights.com/country-comparison-tool>

### (1) Power Distance

The Power Distance dimension reveals that only some have equal societal power and status. Power Distance refers to the extent to which individuals or groups in a community, especially those with lower social class or less power, accept the unequal distribution of rights and privileges in that society. The Power Distance score varies from country to country based on the degree each country believes in and accepts hierarchical power structures.

In the Power Distance dimension, China scores higher than the United States. Among the surveyed countries, China ranks relatively high in PDI (above the lower 80s) and significantly higher than the United States. Compared to the United States, China is a society where people are more accepting of inequality. Hierarchical relationships tend to be more polarized, and individuals and groups in the community generally place greater faith in the power of authority. In many of China's enterprises and employment organizations, the structure is pyramid-like, with individual positions and ranks marked from top to bottom, strictly hierarchical and non-confrontational. Within corporate management, the hierarchy of jobs is also apparent. Decision-makers in companies are often adept at assuming leadership roles, and people tend to have an optimistic view of their leadership abilities. However, cases of superiors abusing their authority may be more prevalent.

In contrast, the United States scores lower on the Power Distance dimension. Compared to China, Americans have a lower tolerance for unequal power distribution. Therefore, the emphasis on power could be more

pronounced in American culture. American corporate organizations tend to be flatter, and individual capabilities are often more important than job titles. In corporate management, the importance of laws and regulations is emphasized.

## (2) Individualism

Regarding Individualism, China scores significantly lower than the United States. This dimension measures the degree of interdependence among society's members and assesses whether an organization focuses on individual or collective interests. In individualistic cultures, relationships between individuals are loose, and people tend to be concerned with their interests and immediate families. In contrast, societies with a collectivist tendency emphasize relationships within the group and care about extended families. Strong group relationships provide ongoing protection, and individuals must be loyal to the group.

China scores only 20 on the Individualism dimension, indicating a highly collectivist culture in which people prioritize the interests of the collective over their claims. They may even be willing to sacrifice their interests to contribute to the joint. China's clan culture is also an important social organization and cultural transmission method. Clan culture emphasizes family inheritance and continuity, including values, traditional customs, and moral norms, often passed down through generations through family education. In clan culture, family members have specific responsibilities, including caring for older family members, supporting family affairs, and upholding the family's honor. Regarding corporate organizational culture, Chinese employees exhibit strong team spirit and are more willing to collaborate towards a collective goal. When individual interests conflict with collective interests, Chinese employees are more inclined to sacrifice their interests.

The United States scores very high on this dimension, indicating it is one of the most individualistic cultures globally. Individualistic values emphasize individual power and freedom, and relationships between individuals in society are loose. People tend to focus on their interests and immediate families. In business activities, Americans are accustomed to doing business or engaging in commercial interactions with unfamiliar individuals, and they are more willing to obtain business information through a broader network.

## (3) Uncertainty Avoidance

Uncertainty avoidance refers to whether, in a society, people choose to strictly adhere to laws, regulations, or guidelines when faced with unpredictable rules or events to avoid potential threats. In countries that score high on this dimension, people are more likely to perceive threats in vague or unknown situations.

China scores lower on the Uncertainty Avoidance dimension compared to the United States. People are more willing to flexibly follow laws, regulations, and guidelines based on the specific situation. Chinese people are also more accepting of ambiguity. Chinese tend to be very indirect in their language expression and prefer to express their opinions subtly. There is a lower tolerance for extreme language and behavior.

The United States scores relatively higher on this dimension. Compared to the Chinese, Americans are accustomed to proactively avoiding uncertain events or environmental threats through formal channels and specific methods. They tend to adhere to laws and regulations to protect their rights strictly. Some rules and regulations are more detailed compared to China. They are more direct in language expression and prefer simple language to express their views and opinions. American society is also more tolerant of unconventional behaviors and beliefs.

## (4) Masculinity

The masculinity dimension refers to whether the culture of a social group leans toward masculinity. Masculine cultures place more emphasis on "achievement," "assertiveness," "power," and the accumulation of social wealth. They value the drive to climb to the top. In contrast, feminine cultures prioritize harmony in

relationships, empathy, and humility. Research results from the cross-cultural dimensions theory show that in cultures focusing on masculinity, individuals tend to pursue wealth, have a substantial career orientation, and exhibit confidence as prominent traits. Countries that lean toward masculinity often have a culture characterized by assertiveness and a strong drive for success.

China and the United States score relatively similarly on this dimension, with no significant differences. On a global scale, both the United States and China are societies that lean toward masculinity. People in these societies may sacrifice family and leisure activities for their work's sake. For instance, Chinese students place great importance on their academic performance, and rural migrant workers may leave their families to seek better job opportunities and higher incomes in larger cities. Americans generally have a strong desire for success and being winners, tending to believe that they are "born to work" and strive to excel in their careers to attain higher status.

#### (5) Long-Term Orientation

Long-term and short-term orientation refers to whether social groups focus on long-term benefits or short-term gains. The score on this dimension represents the extent to which members of a society are willing to delay gratification of material, emotional, and social needs to prepare more adequately for the future. In countries with higher scores on this dimension, people often emphasize values related to ethics and morality.

China's score on this dimension differs significantly from that of the United States, being notably higher. This indicates that Chinese culture is more pragmatic, emphasizing savings, long-term investment, and frugality, displaying a spirit of long-term persistence. In contrast, American culture places more value on short-term achievements and gains. American businesses often base performance on short-term results and release quarterly financial statements. This also encourages people to pursue quick results in their work.

#### (6) Indulgence

Indulgence, in the context of this dimension, is interpreted as the extent to which groups under different cultural values accept individual desires for pleasure. The larger the numerical value on this dimension, the higher societal tolerance for personal indulgence.

China scores lower on this dimension than the United States. In Chinese society, individuals are taught and influenced from a young age to limit their desires and needs to preserve the interests of the family, community, and even the nation. People tend to have a more pessimistic outlook on the future, do not emphasize leisurely enjoyment of free time, and exercise control over their desires. Individual behavior is easily constrained by social norms, and indulgence or pleasure-seeking behavior often leads to feelings of guilt. In contrast, the United States scores higher on this dimension. In American society, people strongly emphasize leisure, relaxation, and enjoyment. Consequently, because individuals are less constrained by societal norms, certain activities like drug trade and other criminal behaviors are more prevalent.

### **Psycholinguistic properties of word**

The psycholinguistic features of words refer to specific attributes and characteristics of vocabulary in human language comprehension and production. These features help us understand words' meaning, usage, and perception in particular contexts. Standard psycholinguistic features include concreteness, familiarity, meaningfulness, and imagery.

Their parameters are evaluated by studying the concreteness, abstractness, and pronounceability of nouns. There is a specific correlation between these parameters. For example, the abstractness of a noun is negatively correlated with its concreteness, such as "chair" is considered more concrete, while "independence" is considered more abstract. The meaning of a noun is positively correlated with its concreteness. Concrete nouns are considered more meaningful, while abstract nouns are considered less

meaningful (Spreen & Schulz, 1966). These correlations can predict nouns' cognitive processing and learning outcomes to a certain extent. The definitions and interrelationships of these parameters are of great significance for understanding and researching the mental process of language and the use of semantics in both standard and brain-damaged populations. The study of the effects of lexical abstractness and frequency on the recognition memory of nouns found that abstractness and frequency significantly impact short-term recognition memory. Specifically, both abstractness and frequency had a highly significant effect on recognition memory. An interaction between abstractness and order was also discovered (Aloysia M. Gorman, 1961). This research provides a foundation for controlling the variable of abstractness when studying learning and meaning using English words.

The Dual Coding Theory's introduction-initiated discussions on how humans process memory and information, especially in handling lexical and visual information (Allan Paivio, 1971). *The Handbook of Semantic Word Norms* was a large-scale project initiated by a research team from the University of Colorado in the early 1970s. It aimed to develop a comprehensive set of linguistic norms as a foundation for cognitive psychology, neuroscience, and linguistics research. (Toglia & Battig, 1978) This research project spanned 6 years and involved rating 2,854 words across seven dimensions, providing nearly 20,000 average scores, including imagery, concreteness, meaning, familiarity, number of attributes, categorizability, and pleasantness. These normative data continue to be widely cited and used today and are considered one of the most extensive datasets. These norms have been extensively applied in various research fields and continue to hold enduring value.

Subsequently, scholars employed the Dual Coding Model and the Context Availability Model to investigate the performance of abstract and concrete words in context availability and lexical decision-making. The Dual Coding Model posits that the poorer understanding of abstract concepts is due to the lack of availability of imagistic representations, while concrete concepts are more easily understood because they have both imagistic and verbal representations available (Paula J. Schwanenflugel, 1988). The Context Availability Model suggests that the difficulty in understanding abstract materials arises because people need help to retrieve relevant world knowledge when comprehending these materials. In lexical decision-making, abstract words take longer decision times due to the lower availability of relevant contextual information. Later research supported the perspective of the Context Availability Model, indicating that providing relevant contextual information can enhance the understanding of abstract concepts and the efficiency of linguistic decision-making.

The study of the impact of meaningfulness and imagery on vocabulary learning outcomes found that materials with greater meaningfulness and stronger intentionality provide more learning opportunities because they are associated with word representations in semantic memory. Additionally, researchers discussed two stages of keyword intervention: the connection between the keyword and the native language vocabulary, and the similarity between the keyword and the foreign language vocabulary. Through experiments, researchers validated the importance of the imagery of the keyword and its similarity to foreign language vocabulary in vocabulary learning. (Nick C. Ellis & Alan Beaton, 1993)

The connection between words encompasses both a system based on phonetics and a system based on the word's semantic meaning. Additionally, the encoding method in long-term memory is predominantly driven by meaning (Zhou Guoguang, 2003). Chinese scholars, using the UK MRC database as a reference and leveraging the written corpus of Chinese learners, investigated the cross-grade developmental trends of four psycholinguistic attributes of vocabulary output in Chinese second language learners: concreteness, imagery, semantic relatedness, and familiarity. The research results indicate that introducing the MRC database into second language vocabulary research is beneficial for deepening the study of second language vocabulary acquisition (Li Hai & Zhang Shujing, 2013).

This theory provides a comprehensive understanding of the psycholinguistic properties of vocabulary, offering essential background information and theoretical foundations for this study. It aids in better analyzing the readability of MD&A discourse in annual reports of publicly traded companies in China and

the United States. Previous research results regarding vocabulary memory, recognition, learning outcomes, and semantic processing, as mentioned by scholars, can guide the selection of methods and interpretation of data in this study.

## RESEARCH DESIGN

### Research methods and research innovation

#### Research methods

##### (1) Quantitative methods

This study employed quantitative and qualitative research methods to thoroughly investigate the differences in MD&A text readability between Chinese and American publicly listed companies.

**Use of Corpus Tools:** This study utilized corpus tools, including TAALES, Wordless, and AntConc, to collect a large volume of MD&A text data. These tools allowed researchers to quantitatively analyze language features of the text, such as word frequency and sentence structure.

**Measurement of Familiarity, Concreteness, Imagery, and Meaningfulness:** Utilizing tools like TAALES, this study quantitatively measured psychological and linguistic features such as familiarity, concreteness, imagery, and meaningfulness in MD&A text. These measurements enabled researchers to quantify the text's characteristics, facilitating cross-cultural comparisons and statistical analyses.

**Independent Sample t-tests:** This study used SPSS software to conduct independent sample t-tests, comparing text readability differences. This statistical method allowed researchers to determine if there were significant readability differences among the study samples.

##### (2) Qualitative methods

**Critical Discourse Analysis:** This study employed critical discourse analysis as part of the qualitative analysis. This approach allows researchers to delve into aspects of the discourse structure, implicit messages, power relations, and more within the MD&A texts to comprehend deeper layers of meaning.

**Cross-Cultural Comparison:** This study conducted a cross-cultural comparative analysis between China and the United States to understand how cultural factors impact the readability of MD&A texts. This helps in identifying the influence of cultural differences on textual language features.

### Research questions and research hypotheses

#### Research questions

This study primarily addresses the following questions:

(1) Are there differences in the readability and other aspects of the MD&A section in the annual reports of Chinese companies listed on U.S. stock exchanges?

(2) If there are significant differences in the MD&A sections of Chinese and American companies, how can these differences be explained from a linguistic and cultural perspective?

(3) How can Chinese companies improve the translation quality of their MD&A during overseas listing to enhance information disclosure quality and external communication capabilities?



## Research hypotheses

Due to significant differences between Chinese and American companies in terms of language, culture, and MD&A management levels, Lundholm, Rogo, and Zhang (2014) found that the financial texts of foreign companies listed in the United States differ significantly in terms of readability from those of domestic U.S. companies. Therefore, Chinese companies listed in the U.S. may also exhibit significant differences in readability in their MD & A texts compared to U.S. domestic companies. Based on this, this study proposes the following hypotheses:

Hypothesis 1: There are significant differences in the specificity of vocabulary in the MD&A text between Chinese and American-listed companies.

Hypothesis 2: There are significant differences in the imagery of vocabulary in the MD&A text between Chinese and American-listed companies.

Hypothesis 3: There are significant differences in the meaningfulness of vocabulary in the MD&A text between Chinese and American listed companies.

Hypothesis 4: There are significant differences in the familiarity of vocabulary in the MD&A text between Chinese and American-listed companies.

Hypothesis 5: There are significant differences in the Dale-Chall readability index of vocabulary in the MD&A text between Chinese and American-listed companies.

## Source of corpus

This study selected the Management's Discussion and Analysis (MD&A) sections from the 2022 10-K annual reports of 53 U.S. domestic companies listed on the New York Stock Exchange (NYSE) and NASDAQ, and the Business and Financial Review and Outlook sections from the 2022 20-F annual reports of 53 Chinese companies. The corpus created for this study consists of 106 MD&A reports sourced from the NASDAQ Stock Market website (<https://www.nasdaq.com>). Nontextual materials such as tables, headings, images, page numbers, and the like were excluded from the sample to improve the precision and accuracy of corpus tool measurements. The final corpus contains 1,514,750 tokens, with 718,694 tokens from Chinese companies and 796,056 from American companies. Additionally, this study collected the MD&A text from the annual reports of Chinese companies over the past three years from the EDGAR website. Furthermore, the inquiry letters related to these annual reports were also searched for and downloaded from the EDGAR website.

## Selection of corpus tools and measurement indicators

The corpus tools selected for processing and quantifying textual information in this study are TAALES (Tool for the Automatic Analysis of Lexical Sophistication), Wordless 3.4.0, and Antconc 4.2.2. The chosen measurement metrics include lexical specificity, intentionality, meaningfulness, familiarity, and readability index.

## Measures of psycholinguistic properties of word

TAALES 2.0 is a tool designed to analyze lexical complexity and sophistication in texts automatically. TAALES was created to explore lexical complexity efficiently and reproducibly in various fields, including educational psychology, cognitive science, artificial intelligence, and many others. Research by Kristopher Kyle, Scott Crossley, and Cynthia Berger (2017) has shown that TAALES 2.0's structural coverage has improved the predictive validity of models related to lexical complexity. They argue that the nature of lexical complexity is multifaceted and intricate, extending beyond the independent properties of individual words involving extensive collocational knowledge.

Word attributes, such as concreteness, familiarity, meaningfulness, imaginability, and age of acquisition, have been used to model writing quality scores (Crossley & McNamara, 2011; Guo et al.). TAALES, a corpus tool, includes indices related to concreteness, familiarity, meaningfulness, and age of acquisition. The four indices selected in this study are derived from the MRC database (Coltheart, 1981). The MRC database is widely used in psycholinguistics and cognitive linguistics research and was initially established with support from the UK Medical Research Council (MRC). The primary purpose of creating this database was to provide researchers with substantial linguistic material for the study and comprehension of language processing. This material encompasses words, word meanings, syllables, letters, word frequencies, phonetic information, and other language-related data. The content of the MRC database spans various fields, including linguistics, psychology, cognitive science, and neuroscience.

This study used TAALES to analyze lexical familiarity, concreteness, imaginability, and meaningfulness in the MD&A text for the selected sample. The following table explains the four psycholinguistic word features used in this study, which were used to score the MD&A texts of 106 annual reports from Chinese and American-listed companies.

Table 3.1 Familiarity characteristics of the word

Index meaning	Example	
	Strong degree	Weak degree
This refers to how familiar or common a vocabulary is for a speaker or listener. Familiarity can impact the speed and comprehension of vocabulary. In vocabulary processing, individuals tend to find it easier to process words they are more familiar with because the connections in the brain's vocabulary storage are stronger for familiar words.	buy	purchase
	ask	inquire
	get	obtain
	start	commence
	finish	complete
	tell	inform
	help	assist
	hurt	injure
	big	large

Source: Sorted by the author

Table 3.2 Concreteness characteristics of the word

Index meaning	Example	
	Strong degree	Weak degree
Concreteness involves the degree of abstraction in vocabulary. Concreteness can impact comprehension and memory because concrete words are typically easier to visualize and understand, while abstract words may require more cognitive effort.	Residence	Abode
	Creature	Being
	Vegetation	Greenery
	Vehicle	Machine
	Bird	Avian
	Masterpiece	Work of Art
	Building	Edifice
	Landform	Geological Formation
	Flora	Plant Life
	Musical Instrument	Musical Device

Source: Sorted by the author

Table 3.3 Imageability characteristics of the word

Index meaning	Example	
	Strong degree	Weak degree
Imaginability is related to concreteness and describes whether a word can evoke a mental image or picture in people’s minds. Words with high imaginability often trigger stronger sensations and images, while words with low imaginability are less likely to generate vivid mental images.	Roaring	Loud
	Scorching	Hot
	Gleaming	Shiny
	Exhilarating	Exciting
	Raging	Intense
	Dazzling	Bright
	Melodic	Musical
	Soothing	Comforting
	Captivating	Fascinating
	Dazzling	Bright

Source: Sorted by the author

Table 3.4 Meaningfulness characteristics of the word

Index meaning	Example	
	Strong degree	Weak degree
Meaningfulness refers to the semantic meaning or significance of vocabulary. This feature involves how a word is associated with other words or concepts and its specific role in language. The meaningfulness of vocabulary is crucial for language comprehension and use, as it determines how we place words in sentences to convey thoughts and information.	Adore	Love
	Hate	Despise
	Brilliant	Smart
	Gorgeous	Beautiful
	Terrified	Afraid
	Enormous	Huge
	Exquisite	Delicate
	Furious	Angry
	Devastated	Miserable
	Ridiculous	Absurd

Source: Sorted by the author

### Dale-Chall readability index measurement

“Wordless” was developed by Chinese scholar Lei Ye. It is a multilingual corpus integration tool that can be used in linguistic, literary, and translation research. It is also used for measuring text readability and lexical diversity. This study used the corpus software “Wordless” to measure the readability of MD&A texts from Chinese and American companies. The readability measurement formula used in this study is the Dale-Chall Readability Formula. This formula, developed by Edgar Dale and Jeanne S. Chall in 1948, is a mathematical formula for assessing text readability. It aims to determine how easy or difficult a text is to understand for readers of different ages and reading abilities.

The calculation method for the Dale-Chall readability formula is as follows:

$$\text{Raw Score} = 0.1579(\text{PDW}) + 0.0496(\text{ASL})$$

Grade Level = 0.1579 (PDW) 0.0496(ASL)3.6365

The Dale-Chall Readability Formula is based on two main factors:

- (1) Unfamiliar Words: These are the words in the text that are not common or frequently used. These words may increase the text's difficulty, making it harder for readers to understand.
- (2) Sentence Length: The average length of sentences. Longer or more complex sentences may make the text more complicated to understand.

PDW (Percentage of Difficult Words) is the percentage of unfamiliar words in the text, calculated by dividing the number of unfamiliar words in the text by the total number of words.

ASL (Average Sentence Length) is the average length of sentences in the text, calculated by dividing the number of sentences in the text by the total number of words.

The formula calculates the score by combining the number of unfamiliar words and the average sentence length. Generally, the lower the score in the Dale-Chall Readability Formula, the easier the text is to understand. The score is often expressed in grade levels to indicate which grade of readers the text is suitable for.

## COMPARISON OF MD&A READABILITY IN CHINESE AND AMERICAN COMPANIES

### Comparative analysis of MD&A discourse readability

#### Word concreteness

- (1) Concreteness independent samples t-test

Table 4.1 Concreteness Group Statistics

Index	Nation	N	Mean	Std. Deviation	Std. Error Mean
Concreteness	China	53	294.849	3.055	0.420
	USA	53	298.866	5.143	0.706

Table 4.2 Concreteness Independent Samples Test

t-test for Equality of Means				
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
-4.889	84.637	0.000	-4.017	0.822

The results of an independent sample t-test show that there is a significant difference in the vocabulary specificity index dimension of MD&A discourse text between Chinese and American listed companies ( $t = -4.889$ ,  $df = 84.637$ ,  $p < 0.01$ ). Hypothesis 1 is supported, indicating that the vocabulary specificity index in Chinese listed company MD&A discourse text is significantly lower than that in American company MD&A.

- (2) Case analysis

Example 1: The success of our business expansion depends on our ability to develop, market and deliver quality development projects on time. In addition, the progress and costs of a development project can be adversely affected by many factors, such as delays in obtaining necessary licenses, permits or approvals from

relevant government authorities, failure by local contractors to comply with our designs, specifications or standards, and disputes with our third-party contractors. (Selected from Chinese corporate annual reports XIN-2022)

Example 2: We expect spending in technology and content will increase over time as we add computer scientists, designers, software and hardware engineers, and merchandising employees. Our technology and content investment and capital spending projects often support a variety of product and service offerings due to geographic expansion and the cross-functionality of our systems and operations. We seek to invest efficiently in several areas of technology and content, including AWS, and expansion of new and existing product categories and service offerings, as well as in technology infrastructure to enhance the customer experience and improve our process efficiencies. (Selected from American corporate annual reports AMZN-2022)

Example 3: Aesthetics revenue growth driven by global expansion and increasing market penetration of Botox and Juvederm Collection. (Selected from American corporate annual reports ABBV-2022)

Example 1 is taken from a Chinese company’s annual report, while Examples 2 and 3 are from American companies. When describing market expansion, Example 1 uses the less specific term “business expansion” to describe the company’s business growth without specifying the particular aspects of the market expansion. The original text also needs more specific explanations. In Examples 2 and 3, more specific terms, “geographic expansion” and “market penetration,” are used when describing the company’s market expansion. “Geographic expansion” refers to the company expanding its business into new geographical regions, such as foreign markets or the Asian market. “Market penetration” involves expanding the market by increasing market share and typically includes specific marketing strategies.

### Word imageability

#### (1) Imageability independent samples T-test

The independent samples t-test results indicate a significant difference in the imagery of vocabulary in MD&A text between Chinese and American listed companies ( $t = -2.249$ ,  $df = 104$ ,  $p < 0.05$ ). Hypothesis 2 is supported, as the imagery of vocabulary in the MD&A text of Chinese listed companies is significantly lower than that of American companies ( $MD = -1.997$ ).

Table 4.3 Imageability Group Statistics

Index	Nation	N	Mean	Std. Deviation	Std. Error Mean
Imageability	China	53	319.744	3.454	0.474
	USA	53	321.741	5.463	0.750

Table 4.4 Imageability Independent Samples Test

t-test for Equality of Means				
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
-2.249	104	0.027	-1.997	0.888

#### (2) Case analysis

Example 4: Certain members of our senior management spearhead our research and development efforts and set strategic directions for the advancement of our products and manufacturing processes. (Selected from Chinese corporate annual reports JKS-2022)

Example 5: We believe the company’s industry-leading asset network and strategic focus on investing in our people and our digital platform will give the Company the necessary tools to address the evolving challenges impacting the Company and our industry. (Selected from American corporate annual reports WM-2022)

Example 6: If projected sales do not materialize, we will need to take further actions to reduce costs and expenses or explore other cost reduction options. (Selected from Chinese corporate annual reports UTSI - 2022)

Example 7: The decrease in other expenses in 2020, as compared with 2019, was primarily due to lower litigation costs and proactive measures taken to reduce discretionary costs, such as travel and entertainment, companywide. These cost decreases were offset, in part, by increased technology infrastructure costs in 2020 to support strategic investments in our digital platform. (Selected from American corporate annual reports WM-2022)

Examples 4 and 6 are taken from Chinese company MD&A text, while examples 5 and 7 are from American company MD&A text. When describing the company’s development strategy, example 4 uses “strategic directions” to represent the company’s strategic objectives, usually without detailing specific steps or plans. In contrast, example 5 uses “strategic focus” to emphasize the company’s clear strategic goals and areas of concentration. Compared to “strategic directions” in example 4, “strategic focus” has higher imagery.

When describing the actions taken by the company, example 6 uses “further actions” to indicate general actions taken by the company. In example 7, “proactive measures” are used, emphasizing that the company is taking proactive actions to address issues or achieve goals. Compared to the vocabulary used in example 6, the words in example 7 have more vital imagery. When people encounter vocabulary with higher imagery, they find it easier to imagine and understand the specific meanings in the text. In contrast, when encountering vocabulary with lower imagery, such as in examples 4 and 6, the text may be perceived as abstract and more complicated to understand in terms of specific connotations.

## Meaningfulness

(1) Meaningfulness independent samples t-test four

Table 4.5 Meaningfulness Group Statistics

	Nation	N	Mean	Std. Deviation	Std. Error Mean
Meaningfulness	China	53	322.29	3.368	0.463
	USA	53	323.776	5.826	0.800

Table 4.6 Meaningfulness Independent Samples Test

t-test for Equality of Means				
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
-1.608	83.264	0.112	-1.486	0.924

The results of an independent samples t-test show that there is no significant difference in the vocabulary meaningfulness index dimension of MD&A text discourse between Chinese and American listed companies ( $t=-1.608$ ,  $df=83.264$ ,  $p>0.05$ ). The mean of the vocabulary meaningfulness index in American companies MD&A is slightly higher than that in Chinese companies. However, the difference is insignificant, indicating that Chinese listed company MD&A text is comparable to American companies regarding vocabulary meaningfulness.

### Word familiarity

#### (1) Meaningfulness independent samples t-test

Table 4.7 Familiarity Group Statistics

	Nation	N	Mean	Std. Deviation	Std. Error Mean
Familiarity	China	53	578.979	1.808	0.248
	USA	53	577.773	1.879	0.258

Table 4.8 Familiarity Independent Samples Test

t-test for Equality of Means				
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
3.368	103.848	0.001	4.206	4.538

#### (2) Case analysis

Example 8: ATHM: For the new car vehicle transaction, we act as the platform for users to review automotive-related information and inquiry, and facilitates of transaction by delivering sales leads to the automakers. (Selected from China corporate annual reports ATHM-2022)

Example 9: Workers' compensation, automobile liability and general liability insurance claims may take several years to resolve. (Selected from American corporate annual reports UPS-2022)

Example 10: The decline in volume by our other primary insurers was primarily due to lower workers' compensation and commercial automobile volumes and the effect of the divestiture of Applied Underwriters in October 2019. (Selected from American corporate annual reports BRK-2022)

Example 11: We expect that our sales and marketing expenses will continue to increase in absolute amounts in the foreseeable future, as we plan to expand the sales and marketing team and engage in more sales and marketing activities to attract new customers and additional purchases from existing customers. (Selected from China corporate annual reports JKS-2022)

Example 12: We expect that our sales and marketing expenses will continue to increase in absolute amounts in the foreseeable future, as we plan to expand the sales and marketing team and engage in more sales and marketing activities to attract new customers and additional purchases from existing customers. (Selected from China corporate annual reports JG-2022)

Example 13: Estimation of client incentives relies on forecasts of payments and transaction volume, card issuance, and card conversion. Performance is estimated using client-reported information, transactional information accumulated from our systems, historical information, market, and economic conditions, and discussions with our clients, merchants, and business partners. (Selected from American corporate annual reports V-2022)

Examples 8 and 11,12 are taken from the MD&A text of Chinese company annual reports, while examples 9, 10, and 13 are taken from American company annual reports' MD&A. Chinese companies tend to use more high-familiarity vocabulary, such as “car” and “customer,” which are more frequently used by people. In contrast, American companies prefer slightly less frequently used vocabulary, such as “automobile” and “client,” when expressing the same concepts. The reason for such differences might be that Chinese MD&A reports are translated and written by Chinese individuals, who may have a slightly lower English proficiency than native English speakers and thus tend to use higher-frequency English vocabulary.

### Dale-Chall readability

The independent samples t-test results show a significant difference in the 4.1 Dale-Chall readability between the MD&A texts of Chinese and American listed companies ( $t = 7.364$ ,  $df = 96.731$ ,  $p < 0.05$ ). Hypothesis 5 is supported. Chinese companies have higher Dale-Chall Readability in their MD&A compared to American companies, indicating that Chinese MD&A texts have a higher reading difficulty and lower readability than American ones.

Table 4.9 Dale-Chall Readability Group Statistics

	Nation	N	Mean	Std. Deviation	Std. Error Mean
Dale-Chall Readability	China	53	8.608	1.347	0.185
	USA	53	6.345	1.786	0.245

Table 4.10 Dale-Chall Readability Independent Samples Test

t-test for Equality of Means				
t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
7.364	96.731	0.000	2.263	0.307

### Interpretation from Hofstede’s culture dimension theory

Based on the research results of Chinese and American companies in vocabulary specificity, imagery, familiarity, and Dale-Chall Readability overall readability in Chapter Four, this chapter will explain the reasons for these differences from three dimensions of Hofstede’s cultural dimension theory (Power Distance, Uncertainty Avoidance, Indulgence) using critical discourse analysis theory.

Table 5.1 Comparison of Cultural Dimensions between China and the United States

	Power Distance	Uncertainty Avoidance	Indulgence
China	80	30	24
the United States	40	46	68

Data source: <https://www.hofstede-insights.com/country-comparison-tool>

### Power distance

Power Distance, a critical dimension analyzed in this study, is the indicator of focus for understanding the differences in MD&A readability between China and the United States. This dimension reveals the inherent inequality of power and status within a society. As discussed in Chapter 2, China scores significantly higher in this dimension than the United States, indicating a higher level of belief in power and greater acceptance of inequality in Chinese society. Consequently, individuals in China are generally less likely to challenge instances of injustice. In contrast, Americans tend to have lower trust in the authority of power and are more



sensitive to instances of inequality. The concept of “all men are created equal” is more pronounced in American social and cultural values.

French philosopher Michel Foucault introduced the concept of discourse power in 1979. Discourse power refers to the intertwining of knowledge and power within society, emphasizing how knowledge constructs, shapes, and maintains power relationships through specific forms and structures of discourse. This concept highlights that speech and text serve as manifestations and instruments of power.

Corporate managers typically author MD&A in corporate annual reports. Before the introduction of the MD&A system, annual reports had a relatively small audience, making it difficult for those without specialized accounting knowledge to comprehend the underlying state of a company’s operations. Furthermore, due to limited access to annual report information in the past, the audience for such reports was also restricted, primarily comprising stakeholders such as shareholders. With economic growth and globalization, the readership of corporate annual reports has been expanded. Several factors have contributed to the increase in readership, including:

**Regulatory and compliance requirements:** Some regulations and regulatory bodies may necessitate companies to disclose more information and details to ensure transparency and compliance. Reports with higher information disclosure quality increase credibility and attract a larger readership.

**Accessibility of information:** With the internet’s and digital technologies’ development, information has become more accessible and quickly disseminated. Online archives, digital reports, and financial data platforms on the internet have made annual reports more readily available, attracting more potential investors and researchers. **Investor demand:** When companies implement expansion strategies, they require more investors. One of the critical areas of interest for potential investors, as they assess a company’s operational status and future trends, is the information in the company’s annual reports.

As a result, today’s readership of corporate annual reports can include a variety of stakeholders such as investors, analysts, regulatory bodies, company management, employees, suppliers, customers, media, academic researchers, and others.

Therefore, the inclusion of the MD&A system by the SEC aims to make annual reports more comprehensible to a broader audience, allowing investors to understand a company’s operations clearly. The overall readability quality of MD&A from U.S. companies is generally higher than that of Chinese companies.

The differences between the U.S. and China in terms of power distance manifest in the readability of textual information as follows:

When writing MD&A, U.S. companies may strive to use plain and direct language to explain various aspects of the company, including its financial situation and future outlook. Consequently, they employ fewer vague terms.

The readership for U.S. MD&A is more diverse and requires minimal education or specialized training. This is reflected in the Dale-Chall Readability Index, where the calculated “Grade Level” represents the text’s readability level, typically expressed in terms of school grade. For instance, if a text has a readability level of 5.0, it means that the text’s level of comprehension is roughly equivalent to that of a fifth-grade student. The higher Dale-Chall Readability scores in China compared to the U.S. suggest that Chinese MD&A texts require a higher level of understanding.

CDA, as proposed by Liu Yongbing and Yu Yuanfang (2015), involves critical research on power relations, interests, and other phenomena hidden within discourse and socio-cultural formation. It aims to uncover inequalities, injustices, hierarchical relationships, discrimination, etc. CDA seeks to challenge these power relations and maintain one’s subject position and rights.

The disparities in text readability between the U.S. and China also indicate that U.S. MD&A text caters to a broader audience and tends to be more egalitarian. Corporate managers are more likely to focus on fairness to each investor, using straightforward and concrete language to make the specialized knowledge in annual reports more understandable to a broader readership.

### **Uncertainty avoidance**

Cultures with high uncertainty avoidance tendencies tend to be risk-averse because they fear the negative consequences that uncertainty may bring. In uncertainty avoidance, the United States scores higher than China. This may be reflected in business activities: U.S. companies tend to have more detailed and specific regulations, and people are more accustomed to signing detailed contracts or adhering to regulatory guidelines to mitigate potential future risks. In business discourse, this might manifest as U.S. language expressions being more direct, clear, and specific. In contrast, due to a greater willingness among Chinese individuals to accept ambiguity, language expressions may be more abstract and indirect.

The research conducted in Chapter Four on the differences in lexical specificity between Chinese and U.S. companies in their MD&A texts revealed that U.S. companies exhibit higher lexical specificity. Managers in the U.S. tend to use vocabulary with explicit references when drafting their MD&A. In contrast, Chinese companies score lower on the specificity index, and the case analyses also indicate that the vocabulary used in Chinese corporate texts tends to be more general and abstract.

### **Individualism & indulgence**

On the dimensions of individualism and indulgence, we can use them to explain the differences in imagery between Chinese and U.S. companies in psycholinguistic vocabulary features. American culture is more inclined toward individualism and indulgence than Chinese culture. In individual language behavior, this may be reflected as Americans being more self-assertive, humorous, and lively than the Chinese. American business discourse may be more vivid, expressive, and image-driven when looking at business texts. Therefore, compared to China, U.S. corporate MD&A texts tend to have more vital vocabulary imagery. Conversely, the Chinese are more conservative and cautious in their language expressions, avoiding the emphasis on individualism. This can lead to weaker vocabulary imagery in MD&A texts.

### **Summary**

In summary, there are significant differences in the readability of MD&A texts between Chinese and American-listed companies regarding specificity, imagery, and familiarity. Specifically:

Compared to American companies, Chinese companies listed in the U.S. have lower scores in the vocabulary specificity index in their MD&A, indicating that Chinese companies tend to use more abstract vocabulary, increasing the difficulty for readers when writing and translating MD&A compared to American domestic companies.

Regarding the vocabulary imagery index, Chinese companies have lower scores than American companies. This suggests that the vocabulary used in Chinese companies' MD & A needs to be more imagery, which hinders readers from quickly forming mental images and associations, reducing the efficiency of information dissemination.

In the vocabulary familiarity index, Chinese companies score higher than American companies, indicating that Chinese MD&A texts frequently use words and expressions with high usage frequency, reducing the reading difficulty.

In the Dale-Chall Readability index, Chinese companies score higher than American companies, meaning that the MD&A texts of Chinese companies are more challenging and complex to understand. Therefore,

Chinese companies' MD&A texts have lower readability overall than American companies. The next chapter will explore the specific reasons behind these differences from a cross-cultural dimension and critical discourse perspective.

## CONCLUSION

### Major findings

Significant differences exist in the discourse readability of MD&A Texts of Chinese and American listed companies.

This study found significant differences in vocabulary specificity, imagery, and familiarity features in the psycholinguistic vocabulary characteristics of MD&A texts between Chinese and U.S. listed companies, with no significant differences in vocabulary meaningfulness.

Significant differences were observed in vocabulary specificity between Chinese and U.S.-listed companies. The average for Chinese companies was 294.848, while U.S. companies had an average of 298.866 (MD = -4.017,  $t = -4.889$ ,  $df = 84.637$ ,  $p < 0.05$ ), supporting hypothesis 1. This suggests that Chinese companies listed in the U.S. tend to use more abstract vocabulary in writing and translating MD&A texts, which increases reading difficulty and reduces readability.

Significant differences were observed in vocabulary imagery between Chinese and U.S.-listed companies. The average for Chinese companies was 319.744, while U.S. companies had an average of 321.741 (MD = -1.997,  $t = -2.249$ ,  $df = 104$ ,  $p < 0.05$ ), supporting hypothesis 2. This implies that relative to U.S.-based companies, Chinese companies listed in the U.S. use vocabulary with poorer imagery in their MD&A texts, making it less intuitive and increasing noise in information dissemination, reducing text readability.

There were no significant differences in vocabulary meaningfulness between Chinese and U.S. listed companies ( $p > 0.05$ ), rejecting hypothesis 3.

Significant differences were observed in vocabulary familiarity between Chinese and U.S.-listed companies. The average for Chinese companies was 578.979, while U.S. companies had an average of 577.773 (MD = 1.206,  $t = 3.368$ ,  $df = 103.848$ ,  $p < 0.05$ ), supporting hypothesis 4. This indicates that Chinese companies listed in the U.S. have higher vocabulary familiarity in their MD&A texts. Their vocabulary is more frequently used in people's daily lives, increasing text comprehensibility and readability.

Significant differences were observed in the Dale-Chall Readability Index between Chinese and U.S. listed companies. The average for Chinese companies was 8.608, while U.S. companies had an average of 6.344 (MD = 2.263,  $t = 7.364$ ,  $df = 96.731$ ,  $p < 0.05$ ), supporting hypothesis 5. This suggests that U.S. companies' text information requirements for understanding MD & A should be higher regarding readers' educational levels.

### Suggestions of the study

High-quality MD&A and translation contribute to building investor trust and ensuring the accurate dissemination of information. Therefore, writing and translation should receive special attention, complying with professional standards and legal requirements. Through careful work, it can be ensured that investors can better understand the company's financial position and prospects, thereby supporting the company's development in international markets. It also helps to convey better the company's financial performance, risks, and prospects, improving investors' understanding of the company. Here are some suggestions that can help Chinese companies enhance the readability of their MD&A:

### (1) Enhancing concreteness

Use specific examples and data to support the points and statements in the text, as this can help readers better understand and remember. Avoid excessive use of abstract terms and concepts unless they are necessary. If they must be used, ensure that clear definitions or explanations are provided to the reader. For instance, when mentioning the company's growth, don't merely state, "The company has seen significant growth this year." Instead, be specific, such as: "The company's net profit grew by 20% this year, reaching \$500 million."

To avoid being overly abstract, if the text mentions that "the company's strategic transformation was successful," further clarify what this means. For example: "The company's strategic shift from traditional retail to digital retail has resulted in a 30% increase in our online sales."

### (2) Increasing familiarity

Use vocabulary that is frequently employed by most people, avoiding complex technical terms. Opt for common words to ensure the majority of readers can grasp the content. For instance, instead of using a term like "synergy," explain it in simpler terms like "working together effectively."

When introducing new concepts or terms, ensure they are explained clearly and concisely. Avoid professional jargon, such as "EBITDA," without explaining. If used, it should be presented as: "Our EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) grew by 15%."

In the MD&A, new concepts should be explained. If the annual report introduces a new business module or technology, like "blockchain," ensure a brief description is provided, for instance: "We are exploring blockchain technology, a distributed ledger technology that enhances the transparency and security of transactions."

### (3) Strengthening imagery

Firstly, when managers draft or translate the company's MD&A text, they should employ vivid descriptions. Such imagery can help readers form clear mental pictures, facilitating better comprehension of the information. For instance, instead of merely stating, "Our new product is very popular," a more illustrative description would be, "Since the launch of our new product, we have received thousands of positive feedback entries daily." When describing the company's new office environment, don't just say, "Our new office offers a better working environment." Instead, provide specifics, such as, "Our new office space features spacious open-plan work areas, green plants, and ample natural light, creating a comfortable and highly productive environment for our employees."

Additionally, visual aids can be used to enhance the reader's imagination. Graphs and images offer readers a direct visual representation of information, assisting them in quickly grasping complex data or concepts. For example, bar charts or pie charts can be incorporated to visually depict sales distribution or growth.

### (3) Ensuring meaningfulness

When drafting the MD&A, it's essential to ensure the content closely aligns with the needs and focal points of the target audience. At the same time, it's crucial to provide readers with relevant background information and context to help them grasp the significance and relevance of the text. When referencing industry trends, market shifts, or other external factors, offer ample background to help readers understand how these elements impact the company. For instance, if the company has seen significant growth in the Asian market, it could be articulated as: "In the Asian market, our sales have grown by 25%, signaling a positive development for our investors and partners in the region." When mentioning market trends or shifts, ensure that readers are provided with sufficient context, such as: "With the rollout of 5G technology, we anticipate a 20% increase in mobile device sales over the next two years." For example, when discussing the impact of

blockchain technology, elucidate: “We are delving deep into blockchain, a distributed ledger technology aimed at enhancing the transparency and security of transactions.”

#### (4) Simplifying the language expression

As Chinese companies expand globally, the size of these enterprises and their business structures and financial transactions are becoming increasingly complex. This has resulted in many companies presenting MD&A disclosure information that is lengthy, convoluted, difficult to comprehend, and disorganized. Therefore, while writing MD&A, companies should strive to present information clearly and straightforwardly. Without compromising the integrity and accuracy of the information, using plain and straightforward language can enhance the readability and comprehensibility of MD&A. Refusing excessive use of professional or complex administrative terms and jargon is essential. Employ easily understood language, ensuring that even investors without a financial background can grasp the content. Keep sentence structures concise and avoid overly lengthy sentences. Each sentence should convey a clear idea.

#### (5) Highlighting essential material

Companies should consider employing a “layered” approach to information disclosure in the context of information complexity. This involves first disclosing the most critical information within the scope of significant information, emphasizing substantial information that facilitates understanding. When external or macroeconomic issues and industry-specific matters are addressed during the disclosure process, explanations of relevant indicators should be provided. MD&A should focus on crucial information such as financial indicators, risk factors, business strategies, and prospects. This information should be visible within the text to capture readers’ attention. Organize the text using headings, subheadings, paragraphs, and punctuation marks to help readers quickly navigate and find the information of interest.

#### (6) Incorporating business case studies

Utilize case studies and real-world examples to illustrate the company’s business strategies, success stories, and risk management practices. This makes abstract information more concrete and vivid. Describe past challenges and solutions to demonstrate the company’s adaptability and decision-making capabilities. Avoid simply copying and pasting previous MD&A or using templated text. Each MD&A should be unique, reflecting the specific circumstances and changes of the company.

#### (7) Meeting the regulations

Ensure that MD&A and its translation comply with relevant laws and accounting standards, such as Generally Accepted Accounting Principles (GAAP) in the United States or International Financial Reporting Standards (IFRS). Enhancing MD&A readability requires an investment of time and resources. Allocate sufficient time and engage professionals in writing and translating the text to ensure quality.

In conclusion, improving the readability of MD&A not only helps investors better understand the company but also contributes to building trust and transparency. A transparent, honest, and engaging MD&A text can provide a competitive advantage for companies seeking to go public in the United States, attracting more attention from investors and analysts. Therefore, Chinese companies should consider enhancing MD&A readability as an essential task for improving financial disclosure.

### **Limitations of the study**

Regarding this comparative study of MD&A readability in Chinese and U.S. companies, there may be the following limitations:

#### (1) The study needs long-term trend analysis.

This study offers a comparison of language data from a specific timeframe. It does not extensively address potential long-term trends in MD&A readability differences between Chinese and U.S. publicly listed companies. Long-term trend analysis could provide deeper insights. Company-specific differences should have been considered: The study may need to fully account for specific differences among different companies, such as industry, size, business models, etc. These factors could impact MD & A readability.

(2) This study needs to provide research on translation quality.

The study does not offer an analysis of translation quality, including the translation process and its impact on MD&A readability. Comparative analysis has yet to be conducted with other countries or regions, such as the United Kingdom or Canada. A more extensive international comparison could provide a more comprehensive understanding of MD&A readability.

To further enhance the comprehensiveness and depth of future research, it is recommended to address these limitations for a more accurate understanding and evaluation of MD&A readability in Chinese companies seeking U.S. listings.

(3) This study did not consider external environmental factors.

There may be external factors not considered in this study, such as differences in the macroeconomic environment of different countries or variations in specific characteristics of different industries.

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