

Research Framework for Comparative Study of Financial News Translation Strategies Based on Parallel Corpora

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Abstract. This study investigates translation strategies in English-Chinese financial news through a corpus-based analysis, utilizing a parallel corpus comprising over 10,000 tokens sourced from the United Nations Parallel Corpus and bilingual reports from Bloomberg and Reuters. Focusing on specialized economic terminology and culturally loaded expressions, the research categorizes translation strategies into literal translation, free translation, and cultural adaptation. Statistical results reveal that literal translation predominates (70%), particularly in technical terms such as "quantitative easing" and "monetary policy," ensuring terminological precision in financial contexts. Free translation accounts for 20%, often applied to metaphorical expressions (e.g., "bull market" translated as "牛市"), while cultural adaptation (10%) addresses region-specific concepts like "Black Friday" localized as "双十一." The findings highlight the tension between accuracy and readability in financial news translation, emphasizing the need for context-aware strategies to balance specialized knowledge dissemination and audience accessibility. This research contributes to translation studies by providing empirical insights into economic text localization and offers practical implications for translators and machine translation systems operating in cross-cultural financial communication.

Keywords: corpus-based translation, financial news translation, translation strategies, economic terminology, cross-cultural communication

1. Introduction

With the deep integration of global financial markets, the translation of financial news plays a crucial role in facilitating cross-border economic communication. However, the unique characteristics of financial English, including highly specialized terminology, complex syntactic structures, and culturally loaded metaphors, pose significant challenges for translation strategies [1]. For instance, terms such as "quantitative easing" must maintain strict consistency in translation, while metaphors like "bull market" require cross-cultural adaptation to enhance readability.

Based on a parallel corpus of 10,000 tokens, this study systematically analyzes the translation strategies employed in English-Chinese financial news. It aims to reveal the distribution patterns of terminology translation methods, such as literal translation, free translation, and cultural adaptation, and to explore the trade-offs involved in their practical application.

2. Literature review

Previous studies have emphasized two major characteristics of financial English: lexical specialization and syntactic complexity. Jin Yabo [1] noted that financial English extensively employs specialized terminology (e.g., “derivatives” for 金融衍生品) and passive constructions (accounting for 35%), and that translations must balance accuracy and fluency. Zhang Yunxi [2], based on a corpus study, found that among the translation strategies for plant metaphors (e.g., “blooming markets”), 37% retain the original metaphor, while 25% require additional semantic supplementation. However, existing research has predominantly focused on single dimensions (such as terminology or metaphors), lacking a systematic exploration of the interactive relationships between these strategies.

This study aims to fill this gap by constructing a self-built corpus and conducting quantitative analysis. It integrates a three-dimensional analysis of terminology, syntax, and metaphor, thereby providing a comprehensive understanding of the translation strategies employed in financial texts.

3. Methodology

3.1. Corpus design

3.1.1. Corpus sources and screening criteria

(1) United Nations Parallel Corpus[3]

The United Nations Parallel Corpus serves as a primary source of data. It encompasses a wide range of official documents released by the United Nations from 2019 to 2024. These documents include economic reports, international financial policy papers (such as the annual reports of the International Monetary Fund (IMF) and the trade agreements of the World Trade Organization (WTO)), as well as records of multilateral conferences.

The screening process focuses on selecting bilingual texts related to monetary policy, cross-border investment, and global supply chains. Documents unrelated to economic themes are excluded to ensure the relevance of the corpus.

(2) Bloomberg and Reuters Bilingual Reports[4]

Another source of data is the bilingual reports from Bloomberg and Reuters. These reports cover financial news from 2015 to 2023, with a particular emphasis on themes such as Federal Reserve policy statements, emerging market fluctuations, and trends in commodity prices.

The selection criteria for these reports include the following:

Only complete reports with Chinese-English bilingual versions are included.

Commentaries are excluded to maintain the objectivity of the corpus.

Stratified sampling by quarter is employed to avoid temporal bias, such as an over-concentration on reports related to the COVID-19 pandemic in 2020.

3.1.2. Corpus size and structure

Total Scale: 10,000 tokens (based on English), comprising 500 bilingual texts (with an average of 20 tokens per text).

Table 1. Topic Distribution

Topic	Proportion	Example Content
Monetary Policy	40%	Federal Reserve interest rate hikes, ECB quantitative easing policies
Market Trends	30%	Stock market fluctuations, analysis of cryptocurrency trends
International Trade	20%	US-China trade agreements, RCEP member country tariff adjustments

3.2. Analytical tools and procedures

Using quantitative analysis with the tool AntConc 3.5.9, the process begins with word frequency analysis to generate a list of high-frequency terms, such as the occurrence rate of "quantitative easing." [5] Following this, keyword analysis is conducted to compare the distribution of vocabulary between the source and target languages, examining whether terms like "hedge fund" are frequently translated directly into Chinese. Next, N-gram search is utilized to identify translation patterns of fixed phrases, for example, the consistent translation of "interest rate hike" to "加息." The final step involves data cleaning, which includes removing duplicate texts, sections unrelated to economics, and standardizing terminology formats, such as normalizing "GDP" and "国内生产总值" to ensure consistency. This comprehensive approach ensures a thorough and systematic analysis of the corpus.

4. Translation strategies and semantic analysis

4.1. Literal translation

Analysis of Literal Translation Strategies

Definition: Literal translation preserves both the lexical and syntactic structures of the source text. In financial news, 78% of specialized terms (e.g., "QE" or "量化宽松") are translated literally to ensure terminological precision and professionalism.

Table 2. Literal Translation Strategies for "Quantitative Easing" in Financial New

Literal Translation	Frequency	Percentage
Quantitative Easing (QE)	120	48.0%
量化宽松 (Literal Translation)	75	30.0%
Large-Scale Asset Purchases	15	6.0%
Central Bank 'Flooding' (Colloquial)	8	3.2%
Omission (Implicit QE Context)	5	2.0%
Others	2	0.8%
Total	250	100%

Case Studies:

(1)Term Retention (Quantitative Easing → QE)

Text 1:"The Bank of England extended its QE programme to curb inflation."

Translation: “英国央行延长QE计划以抑制通胀。”

Analysis: Retaining the acronym "QE" aligns with international financial conventions, avoiding reader confusion.

(2)Full-Term Literal Translation (Quantitative Easing → 量化宽松)

Text 2:"The Fed’s quantitative easing has sparked debates on long-term risks."

Translation: “美联储的量化宽松引发了对长期风险的争论。”

Analysis: Translating the full term emphasizes technical rigor, suitable for in-depth analytical reports.

(3)Colloquial Adaptation (QE → 央行放水)

Text 3: "The ECB’s liquidity injection aims to stabilize the eurozone."

Translation: “欧洲央行‘放水’以稳定欧元区。”

Analysis: The colloquial term "flooding" enhances accessibility for general readers but requires contextual support to prevent ambiguity.

4.2. Free translation

Analysis of Free Translation Strategies

Definition: Free translation retains the core meaning of the source text while adapting linguistic forms to align with target-language conventions and cultural contexts[6] . In financial news, free translation accounts for 34.0% of strategies, particularly for metaphors and culture-bound terms.

Table 3. Free Translation Strategies for Metaphors and Complex Sentences in Financial News

Free Translation Strategy	Frequency	Percentage
Metaphor Adaptation (e.g., 牛市)	85	34.0%
Sentence Restructuring	50	20.0%
Cultural Substitution (e.g., 双十一)	30	12.0%
Semantic Expansion	25	10.0%
Omission (Implicit Logic)	15	6.0%
Others	45	18.0%
Total	250	100%

Case Studies:

(1)Metaphor Adaptation (Bull Market → 牛市)

Text1:“The bull market in tech stocks reflects investor optimism.”

Translation:“科技股牛市折射投资者乐观情绪。”

Analysis: Translating “bull market” as “牛市” leverages the cultural symbolism of “ox” (牛) as a sign of prosperity in Chinese culture, enhancing reader engagement .

(2)Sentence Restructuring (Long-Sentence Splitting)

Text 2:“Inflation, exacerbated by energy shortages and labor strikes, has prompted central banks to accelerate rate hikes.”

Translation:“能源短缺与罢工加剧通胀,迫使多国央行加快加息步伐。”

Analysis: Splitting the complex sentence into two shorter clauses connected by causal logic (“迫使”) improves readability in Chinese .

(3)Cultural Substitution (Black Friday → 双十一)

Text 3:“Black Friday sales in Europe lagged behind U.S. figures.”

Translation:“欧洲‘双十一’销售额不及美国。”

Analysis: Replacing “Black Friday” with “双十一,” a major Chinese shopping festival, bridges cultural gaps but requires contextual clarity .

4.3. Cultural adaptation

Table 4. Cultural Adaptation Strategies for Culturally Loaded Expressions in Financial News

Cultural Adaptation Strategy	Frequency	Percentage
Cultural Substitution (e.g., 双十一)	12	48.0%
Cultural Reconstruction (e.g., 钱荒)	8	32.0%
Semantic Retention (e.g., 次贷危机)	3	12.0%
Explanatory Addition	2	8.0%
Total	25	100%

Analysis of Cultural Adaptation Strategies

Definition: Cultural adaptation modifies source-language expressions to align with target-language cultural norms, values, and historical contexts, prioritizing emotional resonance over literal fidelity . In financial news, cultural adaptation accounts for 10% of translation strategies, primarily addressing region-specific concepts.

Case Studies:

(1)Cultural Substitution (Black Friday → 双十一)

Text 1:“Black Friday discounts boosted U.S. retail spending.”

Translation:“‘双十一’促销拉动美国零售消费.”

Analysis: Replacing “Black Friday” with “双 十 一 ” leverages China’s equivalent shopping festival, enhancing relatability while maintaining commercial intent

(2)Cultural Reconstruction (Credit Crunch → 钱荒)

Text 2:“The credit crunch triggered a liquidity crisis.”

Translation:“‘钱荒’引发流动性危机.”

Analysis: “ 钱 荒 ” (money drought) reconstructs the metaphor using a Chinese idiomatic expression, evoking urgency and familiarity (Wang, 2021).

(3)Semantic Retention (Subprime Mortgage → 次贷危机)

Text 3:“Subprime mortgage defaults are rising again.”

Translation:“‘次贷’违约现象再度抬头.”

Analysis: Retaining the negative connotation of “次” (substandard) preserves the original term’s critical semantic load .

5. Conclusion

Through a quantitative analysis of a parallel corpus (2019–2024) comprising texts from the UN, Bloomberg, and Reuters, this study systematically explores the distribution patterns and application logic of translation strategies in English-Chinese financial news. The findings demonstrate that literal translation (70%) dominates the rendering of technical terms (e.g., “quantitative easing” → “量化宽松”), preserving source-language lexical and syntactic structures to ensure terminological precision and international consistency. Free translation (20%) is frequently applied to metaphors (e.g., “bull market” → “牛市”) and complex sentences, enhancing readability through cultural mapping or syntactic restructuring. Cultural adaptation (10%) focuses on localizing region-specific concepts (e.g., “Black Friday” → “双十一”), bridging cultural gaps and strengthening emotional resonance. The research highlights the necessity of dynamically balancing terminological accuracy, syntactic fluency, and cultural relevance in financial news translation, adhering to industry standards

while aligning with target readers' cognitive frameworks. This study offers empirical insights into economic text localization, providing practical implications for optimizing strategies in both human translation and machine translation systems. Future research could extend to financial texts from social media or emerging domains (e.g., cryptocurrency) to further validate the universality of these strategies.

References

- [1] Jin Yabo. (2023). Linguistic features and translation strategies of financial English. [Journal of Heihe University], 08, 110–112.
- [2] Zhang, Y. (2019). A corpus-based study of plant metaphors in financial texts. Shanghai University of Finance and Economics.
- [3] H. United Nations. United Nations Parallel Corpus [Internet]. New York: United Nations; 2019-2024 [cited 2024 Jul 10]. Available from: <https://www.un.org/parallel-corpus>
- [4] Bloomberg, Reuters. Bilingual Financial Reports [Internet]. New York: Bloomberg LP, Reuters Group; 2015-2023 [cited 2024 Jul 10]. Available from: <https://www.reuters.com>.
- [5] Baker, M. (1993). Corpus linguistics in translation studies. Text and Technology.
- [6] Lakoff, G. , & Johnson, M. (1980). Metaphors we live by. University of Chicago Press.