

Concentration Breeds Divergence: Mechanisms and Empirical Evidence on the Effect of Supply Chain Concentration on Accounting Information Comparability

Yingyue Tang

School of Economics and Management, Guangxi Normal University, Guilin, Guangxi, 541006, China

Abstract: *Objective: This study aims to explore the impact of enterprise supply chain concentration on accounting information comparability and its underlying mechanism, providing a new perspective for understanding the relationship between supply chain governance and accounting information quality. Methods: Selecting A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2014 to 2023 as the research sample, a multiple regression model was constructed to empirically test the impact of supply chain concentration on accounting information comparability, and the mediating effect test procedure was adopted to examine the mediating role of enterprise operational risk. Results: The empirical results show that the higher the enterprise supply chain concentration, the lower the accounting information comparability; the higher the information transparency, the more pronounced the inhibitory effect of supply chain concentration on accounting information comparability. Mechanism testing reveals that enterprise operational risk plays a partial mediating role between supply chain concentration and accounting information comparability. Heterogeneity analysis indicates that the aforementioned negative effects are more significant in non-state-owned enterprises, non-high-tech enterprises, and enterprises in the eastern region. Conclusion: Reducing supply chain concentration helps to diversify enterprise operational risk, thereby enhancing accounting information comparability.*

Keywords: Accounting information comparability; Supply chain concentration; Enterprise operational risk; Information transparency.

1. INTRODUCTION

The global economic development landscape is undergoing profound changes driven by technological innovation and industrial upgrading. The stability and resilience of the supply chain have become an important pillar for enterprises to cope with potential future risks and a core driving force for global economic growth [1]. Therefore, China places great emphasis on improving supply chain concentration and related management capabilities, aiming to enhance the resilience, security, and collaborative efficiency of industrial supply chains, and to promote the high-quality development of the industrial supply chain system. This has far-reaching significance for building a unified national market, achieving high-quality economic development, and enhancing international competitiveness. In October 2017, the General Office of the State Council issued the Guiding Opinions on Actively Promoting Supply Chain Innovation and Application, which for the first time elevated the construction of the supply chain system to the national strategic level. In 2022, the Central Committee of the Communist Party of China and the State Council issued the Opinions on Accelerating the Construction of a National Unified Market, which explicitly required strengthening supply chain management capacity building from the perspective of modernizing the national governance system. The report of the 20th National Congress of the Communist Party of China further emphasized enhancing the resilience and security level of industrial chains and supply chains as an important strategic task for high-quality development. In September 2024, the Third Plenary Session of the 20th Central Committee of the Communist Party of China adopted a decision that clearly proposed building a security assessment system for industrial chain and supply chain, and striving to develop a modernized, self-controllable industrial chain. In enterprise supply chain management practice, an efficient supply chain system can not only optimize the integration of resources and information but also provide important support for enterprise development and the shaping of competitive advantages by optimizing operations, diversifying risks, and improving customer satisfaction. Supply chain concentration, as one of the important characteristics of enterprise supply chain structure, is mainly composed of two dimensions: customer concentration and supplier concentration. Customer concentration reflects the degree of enterprise dependence on major customers, while supplier concentration measures the degree of enterprise dependence on major suppliers. Supply chain concentration not only affects the resource integration capability of enterprises but may also have a potential impact on the generation

and transmission of accounting information, making it an important factor in analyzing the relationship between supply chain governance and accounting information quality. According to CSMAR data, as of the end of 2019, approximately 48.6 percent of China's A-share listed companies had both the proportion of the top five customers' sales to total sales and the proportion of the top five suppliers' purchases to total purchases exceeding 30 percent [2]. Relevant regulatory authorities have also increasingly recognized the negative impacts of excessive supply chain concentration. In December 2024, the China Securities Regulatory Commission (CSRC) revised the Administrative Measures for Information Disclosure of Listed Companies and related standards, further strengthening the requirements for customer and supplier information disclosure. Entities are required to disclose accounting information accurately, truthfully, and completely in accordance with relevant regulations, effectively alleviating the information asymmetry problem between enterprises and stakeholders, which is conducive to ensuring that financial statement users make scientific decisions.

The International Accounting Standards Board (IASB)'s Conceptual Framework for Financial Reporting lists comparability as the primary qualitative characteristic of accounting information [3], highlighting its core position in financial reporting. Article 15 of China's Ministry of Finance's Accounting Standards for Business Enterprises-Basic Standard clearly stipulates that accounting information provided by enterprises should be comparable, ensuring comparability across different accounting periods and different enterprises, thereby providing consistent and reliable decision-making basis for financial report users. In commodity markets, the roles of upstream suppliers and downstream customers in the supply chain are crucial. As the most frequently contacted non-financial stakeholders in the daily procurement and sales activities of enterprises, suppliers and customers, facing diversified potential cooperation partners, need to comprehensively examine key indicators such as the enterprise's operational stability, financial condition, and market competitiveness as important bases for making procurement and sales decisions. Therefore, stricter requirements are imposed on the comparability of enterprise accounting information [4]. In addition, when enterprises face numerous external uncertainties such as economic globalization, intensified market competition, and technological upgrading, they accelerate product research and development to stand out in the market and meet consumer personalized needs. Enterprises recognize the importance of stable suppliers and customers and gain competitive advantages by optimizing supply chain management. A stable supply chain relationship helps reduce transaction costs and obtain market competitive advantages, thereby achieving excess returns. However, in supply chain management practice, excessive supply chain concentration may trigger a series of potential risks: first, the risk of liquidity resources being encroached upon, such as excessive demands for commercial credit, which directly weakens the enterprise's short-term solvency and capital turnover efficiency; second, the breakdown of cooperative relationships leads to the loss of major customer groups and core suppliers. Enterprises will not only suffer from direct impacts such as declining market share and production interruptions but may also face serious crises of capital chain rupture due to the inability to timely recover accounts receivable, inventory backlog, or interruption of key raw material supply, thereby threatening the enterprise's going concern capability. Therefore, how to effectively avoid the risks brought by excessive supply chain concentration while improving accounting information comparability, ensuring that it can bring economic benefits to enterprises and promote their high-quality development, is a key issue.

Therefore, this paper selects A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2014 to 2023 as the research sample, empirically analyzes the impact of enterprise supply chain concentration on accounting information comparability, expands the research on the economic consequences of enterprise supply chain concentration, and further enriches the theoretical framework of the relationship between accounting information quality and enterprise operational environment. This paper provides a new perspective for understanding enterprise accounting information disclosure behavior, aiming to help enterprises pursue supply chain stability while also taking into account the improvement of accounting information quality and protecting the interests of stakeholders.

2. LITERATURE REVIEW

2.1 Research on Supply Chain Concentration

The concept of supply chain concentration was first proposed by Lanier (2010) [5] when studying the relationship between supply chain concentration and corporate financial performance, defining supply chain concentration as the percentage of sales to the largest customer in the enterprise's total sales. As experts and scholars have deepened their research on the supply chain, the definition has been further refined. The current definition of supply chain concentration includes supplier concentration and customer concentration [6-7]. At present, domestic and international scholars' research on supply chain concentration mainly focuses on the following two aspects: First,

the impact of supply chain concentration on enterprise performance. Some studies show that customer concentration has a negative impact on enterprise performance, and relationship-specific asset investment and industry competition both exacerbate the adverse impact of customer concentration on enterprise performance. The negative impact of customer concentration on the performance of non-state-owned enterprises is significantly higher than that of state-owned enterprises (Zhao and Li, 2023) [8]. However, some scholars have found a non-linear relationship between supply chain concentration and enterprise performance. Both supplier concentration (Li et al., 2024) [9] and customer concentration (Shi et al., 2024) [10] exhibit an inverted U-shaped curve relationship with enterprise performance. In addition, some studies have also examined the impact of supply chain concentration in specific industries. For example, in the cross-border e-commerce industry, customer concentration can enhance enterprise value, and managerial ability plays a mediating role between the two (Su et al., 2023) [11]. Supply chain concentration inhibits the operational efficiency of retail enterprises, and internal control can moderate its negative impact (Wang and Luo, 2024) [12]. Second, the impact of supply chain concentration on enterprise innovation. In recent years, research on the relationship between supply chain concentration and enterprise innovation has shown a booming trend. Studies have found that both supplier concentration and customer concentration positively promote the innovation efficiency of specialized and new enterprises (Li and Huang, 2024) [13]. Downstream customer concentration can enhance enterprise innovativeness, while upstream supplier concentration weakens enterprise innovativeness. In non-state-owned enterprises, the effect of customer concentration on enhancing enterprise innovativeness is more pronounced; in state-owned enterprises, the weakening effect of supplier concentration on enterprise innovativeness is more significant (Wang and Guo, 2019) [16]. Research has also found that the higher the supplier concentration of an enterprise, the less R&D investment it makes (Ren and Zhang, 2019) [17].

2.2 Research on Accounting Information Comparability

Accounting information comparability refers to the similarity of financial information generated by different enterprises under the same economic transactions (DeFranco, 2011; Zhang, 2017) [17-18]. Currently, domestic and international scholars have conducted extensive research on accounting information comparability. Studies have found that factors such as corporate culture (Peng, 2024), ESG performance (Zhang and Zhang, 2024), the financial background of directors and executives (Huang and Wang, 2024), and the magnitude of corporate strategic changes (Liu et al., 2024) all affect the comparability of enterprise accounting information. Accounting information comparability also has important economic effects. Research shows that accounting information comparability plays an important role in improving the accuracy of enterprise valuation (Lu et al., 2019), the accuracy of analysts' stock price predictions (Liao et al., 2024), and audit quality (Liu et al., 2019). Accounting information comparability can also significantly improve enterprise investment efficiency (Yuan and Zhang, 2020), promote dual innovation (Zhang et al., 2022), and improve M&A performance (Chen et al., 2018). In addition, improving accounting information comparability can also curb corporate tax avoidance (Lyu and Zhang, 2023) [18]. Empirical evidence proves that accounting information comparability has a significant inhibitory effect on short-term corporate investment, while it has a significant promoting effect on long-term investment (Kang, 2024) [19].

2.3 Research on Supply Chain Concentration and Accounting Information Comparability

In studies related to the relationship between supply chain concentration and accounting information comparability, empirical evidence reveals a complex dynamic relationship between the two. Increased supply chain concentration intensifies the motivation of enterprises for selective disclosure and weakens accounting information comparability, but this negative effect is significantly reduced in regions with well-established legal environments (Fang et al., 2017) [4]. Further research shows that the relationship between customer concentration and accounting information comparability exhibits an inverted U-shaped pattern of first rising and then falling. That is, moderate customer concentration can enhance comparability through external monitoring mechanisms, but beyond a threshold value, excessive customer concentration triggers internal synergy effects, prompting enterprises to reduce information disclosure quality to maintain core customer relationships (Li and Chen, 2023) [1]. It is worth noting that the improvement of corporate governance mechanisms can effectively mitigate the negative impact of customer concentration on comparability. Empirical results show that a high-level governance system, by strengthening internal supervision and risk control, can curb the information distortion behavior caused by supply chain power concentration (Zhang and Pan, 2018) [20]. These studies collectively demonstrate that the pathway through which supply chain concentration affects accounting information quality is influenced by the combined effects of the external institutional environment, internal governance level, and corporate strategic choices, providing a multi-dimensional perspective for understanding the interaction effects between supply chain

governance and accounting information disclosure.

2.4 Literature Commentary

Currently, academic research on the economic consequences of supply chain concentration and the factors affecting accounting information comparability has yielded rich results. However, few scholars have considered the impact of supply chain concentration on accounting information comparability from an overall perspective, or considered the moderating effect of information transparency on accounting information comparability. There is limited literature using operational risk as a mediating variable to explore the influence mechanism among supply chain concentration, enterprise operational risk, and accounting information comparability. Based on this, this paper starts from the perspective of diversified users of accounting information, focuses on the commodity market rather than the capital market, deeply explores the impact of enterprise supply chain concentration on accounting information comparability, and studies the differences in the impact of enterprise supply chain concentration on accounting information comparability under different scenarios from the perspective of information transparency, further examining how enterprise operational risk plays a mediating role in the impact of enterprise supply chain concentration on accounting information comparability. This paper fills the research gaps in existing related fields and helps to enrich and improve the existing theories and analytical frameworks of accounting information quality.

3. THEORETICAL ANALYSIS AND RESEARCH HYPOTHESES

3.1 The Impact of Supply Chain Concentration on Accounting Information Comparability

Based on information asymmetry theory, the dominant power of enterprise information disclosure is held by management. The information held by the internal management of the enterprise is far more than that of external stakeholders. Under the supply chain form based on relational transactions, suppliers and customers are relatively concentrated. Facing increasing market competition pressure and a complex and changing business environment, enterprises tend to build stable strategic partnership relationships with a few key suppliers and core customers, thus forming close business alliances, conducting private communication through relationship channels, fully disclosing information to the alliance insiders, and selectively disclosing information to the external environment. This differentiated information disclosure model weakens the horizontal comparability basis of accounting information among different enterprises. An increase in supply chain concentration reduces the cost of enterprises violating information disclosure regulations, so enterprises are more likely to engage in selective information disclosure, thereby affecting the comparability of accounting information. Under the supply chain form based on market transactions, suppliers and customers are relatively dispersed, making it difficult for them to access private information channels, thus imposing higher requirements on the standardization of publicly disclosed information. Suppliers and customers evaluate an enterprise's operational condition, profitability, and solvency based on its publicly disclosed accounting information to determine whether to establish business relationships or engage in long-term cooperation. To meet the demand of suppliers and customers for accounting information quality, enterprises need to strictly follow relevant regulations for information disclosure, improve the quality of accounting information, ensure comparability, and thus provide reliable decision-making basis for stakeholders.

In summary, when supply chain concentration is high, informal information channels weaken the enterprise's motivation to disclose accounting information, leading to a decrease in accounting information comparability; conversely, decentralized supply chain concentration can, by strengthening market supervision mechanisms, force enterprises to improve the quality of information disclosure.

Based on the above analysis, the following research hypothesis is proposed:

H1: Supply chain concentration significantly weakens the motivation of enterprises to publicly disclose accounting information, that is, there is a significant negative correlation between supply chain concentration and accounting information comparability.

3.2 The Moderating Effect of Information Transparency

The improvement of information transparency can reduce information asymmetry between the enterprise and external stakeholders. Under circumstances of high supply chain concentration, there may be private information communication between the enterprise and its major suppliers or customers, reducing the enterprise's motivation to publish comparable accounting information. However, when information transparency is high, it is difficult for

enterprises to hide operational risks or financial conditions through selective information disclosure, thus they are more inclined to provide standardized, comparable accounting information. In addition, a high-transparency information environment can enhance the role of external supervision mechanisms. For example, investors, regulatory agencies, and market analysts can more effectively obtain and analyze enterprise financial information, thereby exerting greater pressure on enterprises to improve the comparability of accounting information. External supervision is particularly important in enterprises with high supply chain concentration, as these enterprises may be more susceptible to the influence of major suppliers or customers and deviate from the motivation to provide high-quality accounting information.

Based on this, the following research hypothesis is proposed:

H2: Under the premise that other conditions remain consistent, the higher the information transparency, the more pronounced the inhibitory effect of supply chain concentration on accounting information comparability.

3.3 The Mediating Effect of Enterprise Operational Risk

According to transaction cost theory, the key factor motivating enterprises to establish cooperative relationships with suppliers is the pursuit of minimizing transaction costs and maximizing transaction efficiency [21]. In enterprise operations and supply chain management, transaction costs play a critical role. The level of transaction costs directly affects the efficiency and effectiveness of cooperative relationships. Establishing stable business cooperation with major suppliers can reduce enterprise transaction costs by optimizing transaction processes, reducing uncertainty, and lowering monitoring costs [22]. As supplier concentration gradually increases, the cooperative relationship between the enterprise and its major suppliers becomes closer, and the trust between the two parties deepens, making suppliers more willing to engage in deeper cooperation with the enterprise. Higher supply chain concentration can promote parties to make relationship-specific investments. However, the relationship-specific assets formed may face the risk of value impairment in the event of a supply chain relationship breakdown (Raman and Shahrur, 2008), and the enterprise will face high sunk costs. From the perspective of resource dependence theory, enterprise resources are limited. Enterprises often allocate limited resources to major customers that are more likely to bring excess profits, which can easily lead to customer concentration. Excessive customer concentration indicates that the enterprise's main operating income depends on major customers. The dependency relationship with major customers tilts the transaction power towards customers, giving customers stronger bargaining power, leading to an unequal relationship between customers and enterprises. Customers, relying on their higher market position, may require enterprises to provide more commercial credit (Fang and Zhao, 2021) [23]. If the enterprise provides more commercial credit, it means that customers will occupy part of the enterprise's operating cash flow, which not only reduces the enterprise's risk resistance but may also, when major customers decide to terminate the cooperative relationship, lead to the enterprise facing the risk of capital chain rupture due to the inability to recover receivables in a timely manner (Wang and Bi, 2016) [24], thereby increasing enterprise operational risk. Therefore, higher supply chain concentration exacerbates enterprise operational risk, while reducing enterprise supply chain concentration can diversify enterprise operational risk.

Due to the asymmetry between the risks faced by the enterprise and the timing of economic benefit inflows and outflows, managers may develop short-sighted behavior, inhibiting the level of enterprise risk-taking [25]. When making decisions, if management tends to choose projects with high rates of return, it often means they are willing to take higher risks [26]. It is precisely based on managers' short-sightedness and self-interested psychology that enterprises, in order to obtain excess profits, will reach strategic cooperation with major customers and main suppliers to reduce costs. However, the risks brought by excessive supply chain concentration, such as capital chain rupture and commercial information extraction, cannot be ignored. The higher the enterprise operational risk, the stronger the tendency to hide high-risk projects in accounting information to avoid stock price fluctuations affecting management compensation, thereby reducing the comparability of accounting information. Therefore, the lower the enterprise operational risk, the higher the accounting information comparability.

Therefore, the following research hypothesis is proposed:

H3: Enterprise operational risk plays a mediating role in the impact of enterprise supply chain concentration on accounting information comparability, that is, reducing enterprise supply chain concentration can diversify enterprise operational risk, thereby improving accounting information comparability.

4. RESEARCH DESIGN

4.1 Sample Selection and Data Sources

This paper selects A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2014 to 2023 as the research sample, and processes the sample data with the following screening criteria: (1) Eliminate companies that were ST or *ST during the sample period; (2) Eliminate financial industry companies; (3) Eliminate samples with missing core data, ultimately obtaining 15,432 valid sample observations. This paper selects 2014 as the starting point for the sample mainly for the following reasons: In September 2012, the CSRC issued the Standards for the Content and Format of Information Disclosure by Companies Offering Securities to the Public No. 2 (2012 Revision), which explicitly required that from the 2013 annual reporting period onwards, listed companies must fully disclose the detailed information of their top five customers and suppliers. Therefore, data on supply chain concentration in corporate annual reports has become more comprehensive and sufficient since 2013. To ensure the accuracy and reliability of the research results, this paper takes into account the possible impact of the new standards during the empirical process and sets the starting year of the study as the second year after the policy took effect, in order to obtain sufficient and reliable core variable data. In addition, to avoid the interference of extreme values on the empirical analysis results, this paper performs winsorization at the 1% and 99% levels to eliminate the impact of outliers. The data used are all from the CSMAR database.

4.2 Variable Definitions

4.2.1 Dependent Variable

Accounting Information Comparability (CAI). Drawing on the method of DeFranco [17] to estimate accounting information comparability, the average comparability level calculated by pairing company *i* with all other companies in the same industry is taken to obtain the industry average comparability indicator CAI. The larger the value, the higher the accounting information comparability.

4.2.2 Independent Variable

Supply Chain Concentration (SCC) is a comprehensive indicator measuring the degree of concentration of an enterprise's upstream and downstream supply chain. This paper adds the proportion of the enterprise's purchases from the top five major suppliers to the total annual purchases and the proportion of sales to the top five major customers to the total annual sales, and takes the average to represent the enterprise's overall supply chain concentration.

4.2.3 Moderating Variable

Information Transparency (AIT). This paper refers to the research method of Hutton et al. (2009) [27], using the sum of the absolute values of the company's discretionary accruals over the past three years (Opaque) to measure the information transparency of listed companies. The larger the Opaque indicator, the lower the company's information transparency. Discretionary accruals represent the degree of discretion that company management has in the accounting process. If discretionary accruals fluctuate significantly and have consistently high absolute values, it indicates that the company's financial information is more likely to have been manipulated, and the information transparency is lower.

$$OPACITY_{i,t-1} = abs(DACCR_{i,t-1}) + abs(DACCR_{i,t-2}) + abs(DACCR_{i,t-3})$$

Among them, discretionary accruals (DACCR) are estimated using the modified Jones model.

4.2.4 Mediating Variable

Enterprise Operational Risk (Risk). This paper refers to the research method of Zhai et al. (2014) [28], using earnings volatility to measure enterprise operational risk. Given that the average tenure of senior executives in domestic listed companies is three years, the period from *t* to *t*+2 is used as a window period, and the range of industry-adjusted ROA within each window period is calculated on a rolling basis, with the result multiplied by 100 to obtain Risk.

4.2.5 Control Variables

When exploring the relationship between enterprise supply chain concentration and accounting information comparability, supply chain concentration, enterprise operational risk, and information transparency are not the only influencing factors. Other factors also have an important impact on the relationship between enterprise supply chain concentration and accounting information comparability. To ensure the accuracy of the empirical process and eliminate the impact of these factors on the relationship between enterprise supply chain concentration and accounting information comparability, relevant control variables were selected, including Enterprise Size (Size), Book-to-Market Ratio (BM), Profitability (ROA), Management Shareholding Ratio (Mshare), Gross Profit Margin (GrossProfit), Shareholding Ratio of the Top Three Shareholders (TOP3), Quick Ratio (Quick), Administrative Expense Ratio (Mfee), Fixed Asset Ratio (FIXED), Audit Fee (AuditFee), as well as Industry and Year dummy variables.

Table 1: Variable Definition Table

Variable Type	Variable Name	Variable Symbol	Variable Definition
Dependent Variable	Accounting Information Comparability	CAI	Mean of paired comparability
Independent Variable	Supply Chain Concentration	SCC	(Top 5 supplier purchase ratio + Top 5 customer sales ratio)/2
Mediating Variable	Enterprise Operational Risk	Risk	Earnings volatility, industry-adjusted ROA range * 100
Moderating Variable	Information Transparency	AIT	Sum of absolute values of discretionary accruals over 3 years
Control Variable	Enterprise Size	Size	Natural log of total assets
	Book-to-Market Ratio	BM	Shareholders' equity / Market value
	Profitability	ROA	Net profit / Total assets
	Management Shareholding	Mshare	Net cash flow from operations / Total assets
	Gross Profit Margin	GrossProfit	(Revenue - Cost) / Revenue
	Top 3 Shareholders Ratio	TOP3	Top 3 shares / Total shares
	Quick Ratio	Quick	(Current assets - Inventory) / Current liabilities
	Admin. Expense Ratio	Mfee	Administrative expenses / Revenue
	Fixed Asset Ratio	FIXED	Net fixed assets / Total assets
	Audit Fee	AuditFee	Natural log of audit fee
	Industry	Industry	Dummy variable
	Year	Year	Dummy variable

4.3 Model Specification

To test hypotheses H1, H2, and H3, the following models are constructed to examine the relationship between enterprise supply chain concentration and accounting information comparability.

$$CAI_{i,t} = \alpha_0 + \alpha_1 SCC_{i,t} + \alpha_2 \sum Controls_{i,t} + \sum Ind_i + \sum Year_t + \varepsilon_{i,t} \quad (1)$$

This paper constructs Model (1) to test H1. Where i represents the enterprise and t represents the year. If the coefficient α_1 of $SCC_{i,t}$ in Model (1) is significantly less than 0, it indicates that excessive supply chain concentration significantly weakens the motivation of enterprises to publicly disclose comparable accounting information.

To test hypothesis H2, Model (2) is constructed.

$$CAI_{i,t} = \beta_0 + \alpha\beta_1 SCC_{i,t} + \beta_2 SCC \times AIT + \beta_3 \sum Controls_{i,t} + \sum Ind_i + \sum Year_t + \varepsilon_{i,t} \quad (2)$$

If the coefficient β_1 remains significantly negative and the coefficient β_2 is significantly negative, then hypothesis H2 is verified.

To test hypothesis H3, drawing on the research method of Jiang et al. [29], Model (3) is constructed.

$$Risk_{i,t} = \gamma_0 + \gamma_1 SCC_{i,t} + \gamma_2 \sum Controls_{i,t} + \sum Ind_i + \sum Year_t + \varepsilon_{i,t} \quad (3)$$

If the coefficient α_1 remains significantly negative and the coefficient γ_1 is significantly positive, then hypothesis H3 is verified.

5. EMPIRICAL RESULTS AND ANALYSIS

5.1 Descriptive Statistics

The descriptive statistics of the variables are shown in Table 2. The statistics show that during the period from 2014 to 2023, the average supply chain concentration (SCC) of non-financial A-share listed companies on the Shanghai and Shenzhen stock exchanges was 28.3%, with a median of 25.9%, indicating a relatively high degree of supply chain concentration among listed companies. The mean of Accounting Information Comparability (CAI) was -0.002, with a standard deviation of 0.003 and a median of -0.001, reflecting that the accounting information comparability of most listed companies was at a medium level or above. However, the minimum value was -0.08 and the maximum value was 0, indicating that some listed companies still need to further improve their accounting information comparability.

Table 2: Descriptive Statistics of Variables

Variable	N	Mean	Min	Max	Median	Std. Dev.	Variance
SCC	17,519	0.283	0.000	0.991	0.259	0.172	0.030
CAI	17,519	0.002	0.081	0.000	0.001	0.003	0.000
Size	17,519	22.520	18.640	28.640	22.320	1.320	1.742
BM	17,519	0.606	0.012	1.559	0.596	0.255	0.065
ROA	17,519	0.060	0.710	0.955	0.052	0.058	0.003
Mshare	17,519	14.680	0.000	89.720	1.904	19.870	394.700
GrossProfit	17,519	0.314	0.534	0.989	0.283	0.178	0.032
TOP3	17,519	0.494	0.076	0.975	0.488	0.152	0.023
Quick	17,519	0.021	0.000	1.796	0.013	0.034	0.001
Mfee	17,519	0.082	0.001	5.208	0.066	0.082	0.007
FIXED	17,519	0.209	0.000	0.954	0.177	0.157	0.025
AuditFee	17,519	13.790	11.510	17.950	13.690	0.703	0.494

5.2 Regression Analysis

5.2.1 Test of the Impact of Supply Chain Concentration on Accounting Information Comparability

As shown in Table 3, both before and after adding control variables, there is a negative correlation between supply chain concentration and accounting information comparability, significant at the 1% level. Under circumstances of high supply chain concentration, enterprises are more likely to exchange accounting information through non-public channels with major suppliers and customers. This implicit information exchange mechanism weakens the enterprise's willingness to publicly disclose comparable accounting information, resulting in poorer performance in terms of accounting information comparability. Through verification, research hypothesis H1 is established.

Table 3: Regression Results: Supply Chain Concentration and Accounting Information Comparability

Variable	(1)	(2)
Variable	CAI	CAI
SCC	-0.000*** (-4.008)	-0.000*** (-3.306)
Size		-0.001*** (-10.956)
BM		0.004*** (18.088)
ROA		-0.005*** (-9.210)
Mshare		-0.000*** (-9.589)
GrossProfit		-0.000 (-1.579)
TOP3		-0.002*** (-8.030)
Quick		-0.001* (-1.802)
Mfee		-0.000 (-1.122)
FIXED		0.001*** (6.118)

AuditFee		0.000*** (3.849)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	-0.002*** (-50.241)	0.014*** (9.112)
N	16,919	16,919
Adj. R2	0.722	0.768

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. The same applies below.

5.2.2 Test of the Moderating Effect of Information Transparency

The moderating effect of information transparency on the relationship between enterprise supply chain concentration and accounting information comparability is analyzed, with the regression results shown in Table 4. From Table 4, it can be seen that after adding control variables, the coefficient of the interaction term between enterprise supply chain concentration and information transparency (SCC x AIT) is -0.005, significant at the 10% level, indicating that under circumstances of high information transparency, the inhibitory effect of enterprise supply chain concentration on accounting information comparability is more significant. Hypothesis H2 is verified.

Table 4: Regression Results: SCC, Information Transparency, and Accounting Information Comparability

Variable	(1)	(2)
	CAI	CAI
SCC	-0.002*** (-10.075)	-0.001*** (-8.277)
SCC x AIT	-0.008** (-2.300)	-0.005* (-1.648)
Size		-0.001*** (-14.635)
BM		0.005*** (28.300)
ROA		-0.006*** (-9.288)
Mshare		-0.000*** (-10.973)
GrossProfit		-0.001*** (-6.164)
TOP3		-0.001*** (-4.618)
Quick		-0.004*** (-3.313)
Mfee		0.001** (2.519)
FIXED		0.001*** (8.126)
AuditFee		0.000*** (3.234)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	-0.002*** (-32.403)	0.009*** (12.095)
N	17,519	17,519
Adj. R2	0.123	0.292

5.2.3 Test of the Mediating Effect of Enterprise Operational Risk

Model 1 and Model 3 are used to verify the mediating effect of enterprise operational risk between enterprise supply chain concentration and accounting information comparability. The regression results are shown in Table 5. In the first column, the coefficient of enterprise supply chain concentration on enterprise operational risk is 0.014, showing a significant positive correlation at the 1% level, indicating that reducing supply chain concentration can diversify enterprise operational risk. In the sample with enterprise operational risk, the coefficient of enterprise supply chain concentration on accounting information comparability in the second column is significantly negative at the 1% level, meaning that reducing supply chain concentration can diversify enterprise

operational risk, thereby improving accounting information comparability. Thus, hypothesis H3 is supported.

Table 5: Regression Results: SCC, Enterprise Operational Risk, and Accounting Information Comparability

Variable	(1)	(2)
	Risk	CAI
SCC	0.014*** (2.706)	-0.000*** (-2.915)
Risk		-0.001*** (-2.630)
Size	-0.023*** (-10.710)	-0.001*** (-9.980)
BM	-0.006 (-0.975)	0.004*** (16.553)
ROA	-0.117** (-2.382)	-0.004*** (-8.691)
Mshare	-0.000*** (-4.725)	-0.000*** (-8.799)
GrossProfit	0.033** (2.441)	-0.000* (-1.742)
TOP3	-0.007 (-0.690)	-0.002*** (-7.390)
Quick	0.167*** (4.876)	-0.001 (-1.070)
Mfee	0.015 (1.119)	-0.000 (-1.043)
FIXED	-0.034*** (-4.214)	0.001*** (5.512)
AuditFee	0.019*** (7.338)	0.000*** (4.471)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.318*** (8.037)	0.016*** (8.418)
N	15,432	15,432
Adj. R2	0.319	0.729

5.3 Robustness Test and Endogeneity Test

5.3.1 Robustness Test

To verify the robustness of the conclusions, this paper adopts the method of replacing the explanatory variable for the robustness test. Supply chain concentration can be measured by the Herfindahl-Hirschman Index. This paper takes the logarithm of the Herfindahl Index (lnSCC) and uses the new explanatory variable measurement indicator to re-conduct regression analysis, re-verifying hypothesis H1. The robustness results are shown in Table 6. Columns (1) and (2) respectively represent that, without control variables and with control variables, enterprise supply chain concentration is significantly negative at the 5% and 1% levels, consistent with the previous regression results, supporting the verification result of hypothesis H1.

Table 6: Robustness Test: Replaced SCC Indicator

Variable	(1)	(2)
	CAI	CAI
lnSCC	-0.000** (-2.584)	-0.000*** (-2.843)
Size		-0.001*** (-9.036)
BM		0.004*** (15.875)
ROA		-0.004*** (-7.621)
Mshare		-0.000*** (-7.606)
GrossProfit		-0.000 (-1.170)

TOP3		-0.002*** (-7.348)
Quick		-0.001 (-1.624)
Mfee		-0.000 (-0.414)
FIXED		0.001*** (5.042)
AuditFee		0.000* (1.717)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	-0.002*** (-84.581)	0.015*** (7.836)
N	11,916	11,916
Adj. R2	0.740	0.778

Table 7 uses Model 1 to conduct a robustness test for the moderating effect by dividing the sample into high information transparency and low information transparency groups for separate regression. The regression results show that supply chain concentration has a significant inhibitory effect on accounting information comparability, while the coefficient of the low transparency group did not pass the significance test. That is, the higher the information transparency, the more obvious the inhibitory effect of enterprise supply chain concentration on accounting information comparability. Research hypothesis H2 is verified.

Table 7: Group Regression Results by Information Transparency

Variable	(1) High Transparency	(2) Low Transparency
	CAI	CAI
SCC	-0.000*** (-2.690)	-0.000 (-1.021)
Size	-0.001*** (-8.890)	-0.001*** (-8.257)
BM	0.003*** (19.490)	0.006*** (10.444)
ROA	-0.006*** (-7.539)	-0.003*** (-4.860)
Mshare	-0.000*** (-7.140)	-0.000*** (-5.147)
GrossProfit	0.001** (2.246)	-0.001** (-2.300)
TOP3	-0.002*** (-7.620)	-0.003*** (-4.408)
Quick	-0.001 (-1.476)	-0.001 (-0.341)
Mfee	-0.002*** (-2.823)	-0.000 (-0.170)
FIXED	0.001*** (6.202)	0.002*** (3.267)
AuditFee	0.000*** (3.225)	0.000 (1.564)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.011*** (7.599)	0.020*** (6.575)
N	10,777	4,982
Adj. R2	0.816	0.736

Using the replaced explanatory variable, the mediating effect of enterprise operational risk on supply chain concentration and accounting information comparability is tested. The regression results are shown in Table 8. The coefficient of supply chain concentration (lnSCC) is 0.002, and the coefficient of enterprise operational risk is -0.001, both significant at the 1% level, indicating that enterprise operational risk plays a mediating role between supply chain concentration and accounting information comparability. That is, reducing supply chain concentration can diversify enterprise operational risk, thereby improving accounting information comparability.

Table 8: Robustness Test: lnSCC, Enterprise Operational Risk, and CAI

Variable	(1)	(2)
	Risk	CAI
lnSCC	0.002*** (3.167)	
Risk		-0.001*** (-2.693)
Size	-0.026*** (-8.933)	-0.001*** (-9.912)
BM	-0.007 (-1.034)	0.004*** (16.566)
ROA	-0.162*** (-2.879)	-0.004*** (-8.677)
Mshare	-0.000*** (-4.440)	-0.000*** (-8.818)
GrossProfit	0.040** (2.449)	-0.000* (-1.680)
TOP3	-0.022 (-1.647)	-0.002*** (-7.381)
Quick	0.152*** (4.273)	-0.001 (-1.145)
Mfee	0.016 (0.544)	-0.000 (-0.956)
FIXED	-0.049*** (-4.991)	0.001*** (5.544)
AuditFee	0.019*** (5.282)	0.000*** (4.683)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.383*** (7.109)	0.015*** (8.261)
N	10,822	15,432
Adj. R2	0.329	0.729

5.3.2 Endogeneity Test

To overcome the endogeneity problem, this paper adopts the instrumental variable method for the endogeneity test. The impact of supply chain concentration on enterprise accounting information comparability may have a time lag effect, affecting the accuracy of estimation results. To eliminate this time lag effect, this paper lags supply chain concentration by one period (l_SCC) as the instrumental variable affecting enterprise supply chain concentration in the first-stage regression. After controlling for the estimation bias caused by the time lag effect, the regression results in Table 9 show that the research conclusions are relatively robust.

Table 9: Instrumental Variable Method

Variable	(1) First Stage	(2) Second Stage
	SCC	CAI
L_SCC	0.807*** (120.838)	
SCC		-0.002*** (-8.000)
Size	0.001 (0.456)	-0.001*** (-14.234)
BM	-0.024*** (-5.288)	0.006*** (28.154)
ROA	-0.019 (-0.811)	-0.006*** (-8.192)
Mshare	-0.000 (-0.216)	-0.000*** (-9.568)
GrossProfit	-0.041*** (-3.742)	-0.001*** (-5.732)
TOP3	0.009 (1.607)	-0.000 (-0.768)
Quick	0.090	-0.004*

	(1.244)	(-1.916)
Mfee	0.043	0.003***
	(0.863)	(5.456)
FIXED	0.022***	0.001***
	(3.289)	(7.861)
AuditFee	-0.009***	0.000***
	(-4.778)	(2.742)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.217***	0.011***
	(9.013)	(13.459)
N	12,046	12,046
Adj. R2	0.707	0.276

5.4 Further Analysis: Heterogeneity Test

5.4.1 Nature of Equity

Differences in the nature of enterprise equity may affect the degree of enterprise supply chain concentration, leading to variations in the impact of supply chain concentration on accounting information comparability among different enterprises in the same industry. This paper divides enterprises into state-owned enterprises (SOEs) and non-state-owned enterprises (non-SOEs) for regression analysis. The regression results in Table 10 show that the coefficient of supply chain concentration for non-SOEs in column (1) is -0.000, significantly negative at the 1% level, while the coefficient for SOEs in column (2) is not significant, indicating that the negative impact of supply chain concentration on accounting information comparability exists in non-SOEs, but not in SOEs.

The possible reasons are: On one hand, regarding goal orientation, SOEs not only pursue economic benefits but also bear social responsibilities. Their business decisions are constrained by government and public interest, and they pay more attention to long-term stable development rather than short-term financial indicators. Therefore, even with high supply chain concentration, SOEs are more inclined to provide high-quality, comparable accounting information to meet regulatory requirements and public interests. In contrast, non-SOEs usually aim to maximize shareholder interests and pay more attention to short-term financial performance and market competitiveness. High supply chain concentration may lead enterprises to establish close relationships with a few suppliers or customers, thereby engaging in earnings management through relationship transactions to meet shareholders' expectations for short-term performance, which reduces the comparability of accounting information. On the other hand, regarding governance mechanisms, the governance structure of SOEs is relatively standardized and subject to strict supervision by the government and regulatory agencies. This external supervision mechanism can effectively constrain management behavior, reducing the motivation for earnings management through relationship transactions, thereby ensuring the comparability of accounting information. The governance structure of non-SOEs is relatively flexible, but internal supervision mechanisms may be inadequate, making them susceptible to the influence of controlling shareholders or management. Under circumstances of high supply chain concentration, management may be more inclined to conceal operational risks or engage in tunneling through opaque information disclosure.

Table 10: Regression Results by Enterprise Equity Nature

Variable	(1) Non-SOE	(2) SOE
	CAI	CAI
SCC	-0.000***	-0.000
	(-2.609)	(-1.006)
Size	-0.001***	-0.001***
	(-9.458)	(-7.473)
BM	0.004***	0.005***
	(19.089)	(9.280)
ROA	-0.005***	-0.002*
	(-8.504)	(-1.675)
Mshare	-0.000***	-0.000***
	(-6.692)	(-3.607)
GrossProfit	0.000	-0.001***
	(0.681)	(-2.998)
TOP3	-0.002***	-0.001
	(-6.499)	(-1.455)

Quick	-0.001 (-0.989)	-0.006 (-1.307)
Mfee	-0.000 (-0.726)	0.005* (1.762)
FIXED	0.001*** (4.678)	0.001** (2.244)
AuditFee	-0.000 (-0.991)	0.000** (2.527)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.017*** (7.336)	0.016*** (5.212)
N	8,275	3,357
Adj. R2	0.808	0.624

5.4.2 Technology Attribute

The internal technological foundation and level of science and technology of an enterprise have a significant impact on the degree of digital development, and the degree of digital development further affects the comparability of enterprise accounting information. Based on this, this paper divides the full sample into high-tech enterprises and non-high-tech enterprises and conducts group regression. The regression results, as shown in Table 11, indicate that the SCC of non-high-tech enterprises in column (1) shows a negative correlation at the 1% significance level, while the SCC coefficient of high-tech enterprises in column (2) is not significant, indicating that the higher the enterprise supply chain concentration, the more obvious the inhibitory effect on the accounting information comparability of non-high-tech enterprises.

The possible reason is that, compared with high-tech enterprises, non-high-tech enterprises show a lag in digital development, with imperfect digital infrastructure construction, failing to reach the high level achieved by high-tech enterprises. This lag is not only reflected in the construction of hardware facilities but also in the depth and breadth of the enterprise's application of digital technology. Non-high-tech enterprises have a lower degree of acceptance and application of emerging technologies (such as big data, cloud computing, artificial intelligence, etc.), which limits their capabilities in information processing, data analysis, and decision support. Due to the weaker digital foundation of non-high-tech enterprises, their ability to improve information efficiency and governance efficiency through digital means is largely restricted.

Table 11: Regression Results by Enterprise Technology Attribute

Variable	(1) Non-High-Tech	(2) High-Tech
	CAI	CAI
SCC	-0.000*** (-3.413)	-0.000 (-1.188)
Size	-0.001*** (-7.708)	-0.001*** (-7.850)
BM	0.004*** (12.857)	0.004*** (12.947)
ROA	-0.004*** (-6.778)	-0.006*** (-6.964)
Mshare	-0.000*** (-6.685)	-0.000*** (-6.871)
GrossProfit	-0.001** (-2.104)	-0.000 (-0.740)
TOP3	-0.002*** (-5.219)	-0.003*** (-7.170)
Quick	-0.003*** (-2.702)	-0.001 (-1.066)
Mfee	-0.000 (-0.702)	-0.001 (-1.003)
FIXED	0.001*** (5.067)	0.001*** (3.684)
AuditFee	0.000*** (3.205)	0.000 (1.319)
Ind FE	Yes	Yes
Year FE	Yes	Yes

_cons	0.011*** (6.430)	0.021*** (6.985)
N	9,322	7,479
Adj. R2	0.764	0.772

5.4.3 Enterprise Location

Considering that there are differences in economic conditions and development environments across regions, these differences have varying degrees of impact on enterprise supply chain concentration, further causing different effects of enterprise supply chain concentration on accounting information comparability across enterprises in different regions within the same industry. Based on this, this paper takes the full sample as the basis, groups the eastern region as one group, and combines the central and western regions as another group, conducting regression analysis separately. The regression results, as shown in Table 12, indicate that the impact of enterprise supply chain concentration on accounting information comparability in the eastern region is significantly negative at the 1% level, while the impact in the central and western regions is not significant, indicating that there is a negative impact of supply chain concentration on accounting information comparability in the eastern region.

The possible reason is that, compared with the central and western regions, the eastern region has a higher level of economic development, more intense market competition, and enterprises face greater performance pressure and stronger earnings management motivation. High supply chain concentration makes the relationship between the enterprise and its major suppliers or customers closer, and enterprises may engage in earnings management through close relationship transactions to meet market expectations, thereby reducing the comparability of accounting information.

Table 12: Regression Results by Enterprise Region

Variable	(1) Central & Western CAI	(2) Eastern CAI
SCC	-0.000 (-0.951)	-0.000*** (-3.351)
Size	-0.001*** (-5.803)	-0.001*** (-10.256)
BM	0.004*** (8.919)	0.004*** (19.658)
ROA	-0.005*** (-4.714)	-0.005*** (-8.237)
Mshare	-0.000*** (-5.840)	-0.000*** (-7.898)
GrossProfit	-0.000 (-0.346)	-0.000 (-1.434)
TOP3	-0.002*** (-3.749)	-0.002*** (-8.962)
Quick	-0.002 (-0.997)	-0.001 (-1.526)
Mfee	-0.002*** (-2.679)	0.000 (0.298)
FIXED	0.001*** (2.884)	0.001*** (5.564)
AuditFee	0.000 (1.403)	0.000*** (3.980)
Ind FE	Yes	Yes
Year FE	Yes	Yes
_cons	0.017*** (6.148)	0.013*** (7.555)
N	4,826	12,085
Adj. R2	0.647	0.797

6. CONCLUSIONS AND FUTURE RESEARCH PROSPECTS

This study selects the supply chain concentration data disclosed by A-share listed companies on the Shanghai and Shenzhen stock exchanges from 2014 to 2023 as the research sample to explore the relationship between enterprise supply chain concentration and accounting information comparability. The study finds that the higher the

enterprise supply chain concentration, the lower the enterprise's accounting information comparability; the higher the information transparency, the more pronounced the inhibitory effect of supply chain concentration on accounting information comparability. Mechanism testing reveals that enterprise operational risk plays a mediating role in the impact of enterprise supply chain concentration on accounting information comparability, that is, reducing supply chain concentration can diversify enterprise operational risk, thereby improving accounting information comparability. Heterogeneity analysis indicates that the negative impact of enterprise supply chain concentration on accounting information comparability exists in non-state-owned enterprises, non-high-tech enterprises, and the eastern region. After conducting a series of robustness tests, the above conclusions remain valid.

6.1 Policy Recommendations

6.1.1 Improve the Policy Regulatory System to Strengthen Institutional Safeguards

Currently, China's relevant institutions have clearly stipulated that listed companies are required to disclose information on their top five suppliers and customers. However, problems of insufficient information disclosure and concealment of important information still exist. To solve this dilemma, it is necessary to improve the information disclosure regulatory system by introducing tiered disclosure standards and dynamic adjustment mechanisms to enhance the endogenous motivation of enterprises to voluntarily disclose high-quality accounting information. A cross-departmental credit regulatory coordination mechanism should be established to integrate resources and form a two-wheel-driven model of government supervision plus market rating, effectively alleviating information asymmetry. At the same time, close attention should be paid to non-state-owned enterprises, non-high-tech enterprises, and enterprises with high supply chain concentration, strengthening the supervision of enterprise information disclosure, increasing the litigation costs for accounting information, and strengthening the penalties for violations to curb management's opportunistic behavior. By increasing the cost of violations, enterprises are forced to strengthen compliance management, prompting them to more strictly adhere to accounting standards and improve the comparability of accounting information.

6.1.2 Strengthen Corporate Governance Mechanisms to Solve the Information Asymmetry Predicament

In response to the governance challenges caused by supply chain concentration, enterprises need to construct a dual-track solution of structural governance plus technological empowerment. At the structural optimization level, a full lifecycle management system for suppliers should be established. Through introducing strategic supplier cultivation plans, implementing multi-source procurement strategies, and other combined measures, the diversification and flexible transformation of the supply chain structure can be achieved. The number of small and medium-sized customers should be increased to achieve customer diversification and reduce dependence on major customers. At the technological innovation dimension, an intelligent risk control platform can be built, using big data early warning models to monitor key indicators such as capacity fluctuations and delivery cycles of core suppliers in real time. When the monitored values deviate from industry benchmarks beyond the threshold, a risk assessment process is automatically triggered. The collaborative mechanism of human prevention plus technical prevention can both reduce excessive dependence on a single supplier and enhance the dynamic response capability to supply chain risks.

6.1.3 Strengthen Investor Risk Awareness to Promote Rational Investment Behavior

For investors, when incorporating key indicators such as the enterprise's supply chain index and customer concentration into investment decision models, and establishing a multi-dimensional assessment framework to quantitatively analyze the target enterprise's supply chain risk, liquidity risk, and industry competition risk, their investment decisions will exhibit stronger rational characteristics. Investors should also focus on examining the strategic measures of enterprises in optimizing supply chain layout, including but not limited to supplier diversification progress, emerging market development effectiveness, and active development of new customers. By reducing irrational investment behavior, investors can effectively reduce irrational fluctuations in the securities market and provide strong support for the healthy development of the capital market.

6.2 Research Limitations and Future Prospects

This study has achieved certain results through empirical analysis, but there are still limitations: (1) This paper uses the comprehensive indicator of overall supply chain concentration to measure the supply chain. Future

research can enhance the accuracy of enterprise supply chain concentration assessment by refining supplier and customer information data, providing a more sufficient decision-making basis for enterprise supply chain relationship management. (2) This study adopts the industry average comparability indicator for quantitative analysis, but this method is difficult to comprehensively measure the complex accounting information comparability among different industries and enterprises. Future research needs to consider multi-dimensional factors to more accurately characterize the quality characteristics of accounting information. (3) This paper focuses on the analytical framework from the supply chain perspective but does not incorporate external stakeholder groups into the analysis scope. Differences in information needs of external entities such as regulatory agencies, investors, and creditors may have interactive effects on enterprise accounting policy choices. Subsequent research can attempt to construct multi-agent game models and explore the establishment of dynamic coordination mechanisms to achieve balanced satisfaction of information needs of various stakeholders, providing a new perspective with greater ecological validity for accounting comparability research.

REFERENCES

- [1] Li, Q., & Chen, L. (2023). Customer concentration and accounting information comparability: An explanation based on inverted U-shaped relationship. *Collected Essays on Finance and Economics*, (10), 81-91.
- [2] Wang, H. F., Wang, M. T., Wang, X. Y., et al. (2021). A review of supply chain concentration research: Based on bibliometric and knowledge graph analysis. *Friends of Accounting*, (19), 115-122.
- [3] Sun, D. Z., & Xu, L. E. (2024). Research on the impact of enterprise digital transformation on accounting information comparability. *Friends of Accounting*, (05), 38-45.
- [4] Fang, H. X., Zhang, Y., & Wang, P. (2017). Legal environment, supply chain concentration, and corporate accounting information comparability. *Accounting Research*, (07), 33-40+96.
- [5] Lanier, D., Wempe, W. F., & Zacharia, Z. G. (2010). Concentrated supply chain membership and financial performance: Chain-and firm-level perspectives. *Journal of Operations Management*, 28(1), 1-16.
- [6] Zhuang, B. C., Yu, S. Q., & Zhang, H. (2015). Supply chain concentration, capital operation, and operating performance. *Soft Science*, 29(3), 9-14.
- [7] Ding, J., Wang, S., & Chen, M. (2021). The configuration of supply chain concentration and staff structure in intelligent manufacturing. *Discrete Dynamics in Nature and Society*, 2021.
- [8] Zhao, S., & Li, G. H. (2023). Decentralization or concentration: Customer concentration and corporate performance. *Management Review*, 35(02), 294-305.
- [9] Li, Y. H., Xiao, X. T., & Zhao, L. J. (2024). The double-edged sword effect of supplier concentration on corporate financial performance. *China Business and Market*, 38(11), 97-111.
- [10] Shi, J. Y., Yu, C. H., & Li, Y. X. (2024). Vertical and horizontal alliances: Customer concentration, coupling coordination degree, and corporate performance. *Management Review*, 36(06), 229-242.
- [11] Su, Y. M., Yu, R. C., & Zhou, M. Y. (2024). Research on the impact of customer concentration on enterprise value in cross-border e-commerce enterprises. *Friends of Accounting*, (13), 39-47.
- [12] Wang, X. H., & Luo, C. H. (2024). The impact of supply chain concentration on the operational efficiency of retail enterprises. *Journal of Commercial Economics*, (24), 29-32.
- [13] Li, X. M., & Huang, W. (2024). Research on the impact of supply chain concentration on innovation efficiency of specialized and new enterprises. *Forum on Science and Technology in China*, (06), 67-76+110.
- [14] Wang, X., & Guo, Y. T. (2020). Nature of property rights, supply chain concentration, and enterprise innovation. *Friends of Accounting*, (02), 35-40.
- [15] Ren, L. L., & Zhang, R. J. (2019). Supplier concentration, financial flexibility, and enterprise R&D investment. *R&D Management*, 31(02), 67-77.
- [16] Zhang, J. R. (2017). Research on the impact of CEO changes on accounting information comparability. *Accounting Research*, (11), 52-57+96.
- [17] DeFranco, G., Kothari, S., & Verdi, R. (2011). The benefits of financial statement comparability. *Journal of Accounting Research*, 49(4), 895-931.
- [18] Lyu, J. C., & Zhang, W. X. (2023). Accounting information comparability, tax avoidance, and corporate earnings value relevance. *Communication of Finance and Accounting*, (07), 28-33.
- [19] Kang, Y. X. (2024). Test of the relationship between accounting information comparability and corporate long-term and short-term investment preferences. *Finance and Accounting Monthly*, 45(14), 39-45.
- [20] Zhang, Y. J., & Pan, L. (2018). Customer concentration, corporate governance level, and accounting information comparability. *Journal of Shanxi University of Finance and Economics*, 40(11), 110-124.
- [21] Yu, B., Mao, X. X., & Wu, H. H. (2019). Customer concentration, financing constraints, and stock price crash risk. *Journal of Guangdong University of Finance and Economics*, 34(05), 62-75.

- [22] Liu, B., Luo, Y. N., & Sun, G. P. (2024). The impact effect of customer concentration on corporate debt default risk. *Journal of Zhongzhou University*, 41(06), 16-25.
- [23] Fang, Z., & Zhao, X. X. (2021). Monetary policy, supply chain concentration, and commercial credit matching. *Communication of Finance and Accounting*, (08), 91-94.
- [24] Wang, J. Q., & Bi, J. W. (2016). Customer concentration, cash holdings, and corporate competitive advantage. *Audit & Economy Research*, 31(04), 62-70.
- [25] Fan, D. H. (2018). Information asymmetry, accounting information comparability, and corporate risk-taking. *Friends of Accounting*, (17), 56-60.
- [26] Zhang, J. L. (2024). Research on the impact of corporate risk-taking on accounting information comparability. *Commercial Accounting*, (15), 71-78.
- [27] Hutton, A. P., Marcus, A. J., & Tehranian, H. (2009). Opaque financial reports, R2, and crash risk. *Journal of Financial Economics*, 94(1), 67-86.
- [28] Zhai, S. B., Zhang, S., Xie, L., et al. (2014). Bank connections and corporate risk: Based on empirical evidence from Chinese listed companies. *Management World*, (04), 53-59.
- [29] Jiang, T. (2022). Mediating effects and moderating effects in causal inference empirical research. *China Industrial Economics*, (05), 100-120.