

# Digital Transformation of Supply Chain Enterprises and Audit Fees: The Moderating Effect of Shared Auditing

## Yang Wu

School of Management, Minzu University of China, Beijing, 100081, China

21010342@muc.edu.cn

Abstract. Prior research the digital transformation of enterprises has an information spillover effect with the development of science and technology, that helps improve the efficiency of information transmission between enterprises in the supply chain and reduce information costs. Auditing as an important part of the accounting information quality supervision, has a large demand for enterprise information. This paper explores whether shared audits can enable supply chain enterprises to achieve the information exchange advantages generated by digital transformation, thereby lowering audit costs. Using a sample of China A-share market companies from 2012 to 2022, this paper tests how the digital transformation of downstream customers influences the audit fees of upstream enterprises in the supply chain, and explores the moderating role of shared auditing. The findings indicate that as downstream enterprises in the supply chain undergo greater degrees of digital transformation, the audit expenses of upstream companies increase accordingly, and shared auditing can help alleviate the increase in audit fees brought by the digital transformation of downstream enterprises to upstream companies. Further research finds that the heterogeneity of supply chain length and supplier enterprise scale also has a certain impact on the moderating effect of shared auditing.

**Keywords:** Digital Transformation; Supply Chain; Shared Audit.

#### 1 Introduction

Corporate digital transformation entails incorporating digital technologies into business management practices, utilizing technologies such as AI, big data and IoT to enhance production efficiency, optimize management activities, and reduce communication costs. As enterprises deepen their understanding of digitalization and explore digital technologies, digital transformation remains a crucial driver of global economic growth. While China began its exploration and application of internet and digital technologies later than some developed countries, rapid development has been achieved due to active policy promotion, abundant research data, and diverse application scenarios. Following years of accelerated growth, the application of digital technologies in Chinese enterprises has become widespread, leading to innovative and

<sup>©</sup> The Author(s) 2024

Q. Wu et al. (eds.), Proceedings of the 2024 3rd International Conference on Public Service, Economic Management and Sustainable Development (PESD 2024), Advances in Economics, Business and Management Research 309,

integrated development, and the overall digital transformation has entered a stable development phase.

Auditing is a key process to ensure the quality of corporate information and reflect the operational status of enterprises. Since auditing relies heavily on the communication and transmission of information, the application of digital technologies has also driven the modernization of auditing practices, promoting the integration of digital technologies with business processes. In the long run, enterprises with mature digitalization models can leverage their digital advantages to help auditors improve audit efficiency, simplify information processing workflows, and enhance information accessibility. In supply chains, enterprises share business data due to information sharing, resulting in high overlap in audit-related information. Audit firms, when auditing a company, often need to understand related supplier and customer enterprises. Thus, does the digital transformation of certain enterprises in the supply chain have spillover effects on the auditing of other enterprises within the same supply chain? How can overlapping audit information within supply chain enterprises be efficiently utilized? Audit fees, to some extent, reflect the expected profit and value compensation for potential risks and costs incurred by auditors. This study examines how customer digital transformation influences audit fees for upstream enterprises, expanding research on the impact of corporate digital transformation on supply chain firms and broadening its scope. Additionally, it investigates whether the shared audit model within the supply chain has a significant moderating effect on the aforementioned impacts, providing a reference basis for the new auditing model.

# 2 Literature Review

# 2.1 Digital Transformation and Audit Fees

Existing literature combines the keywords of digital transformation and audit, categorizing the impact of digital transformation on audit work into three main types: the influence of digital applications by audit firms or auditors on audit work and the impact of enterprises' own digital transformation on internal or external audit work. The effects on audit work encompass dimensions such as audit quality, efficiency, pricing, and risk. Such as Manita et al., exploring how digitalization enhances the role of audits as governance mechanisms, arguing that digitalization of audit firms helps improve audit quality and stimulates cultural innovation to enhance corporate governance [1]. Chinese scholars are more concerned about how the digital transformation of audited companies affects audit work. For instance, Zhai and Li found that enterprise digital transformation improves audit quality by enhancing information transparency and reducing enterprise risk exposure [2]. Ling et al. discovered that enterprise digital transformation, through channels like internal control optimization and information disclosure, helps reduce audit risks [3]. When studying the impact of digital transformation on audit fees, two opposing viewpoints exist: on one hand, some evidences suggest that digital transformation helps auditors reduce information gathering time and enhance efficiency, thereby lowering audit pricing through systematic reduction of human intervention and audit risk. On the other hand, enterprise digital transformation may increase audit pricing due to the complexity of business operations, data processing requirements, and increased demands on auditor capabilities due to diverse forms of digital management systems across different enterprises. So this study takes audit fees as the main factor affected and further explores the impact of digital transformation on audit pricing from a new perspective.

# 2.2 Supply Chain and Audit Fees

In studies concerning supply chain and audit pricing, some scholars explore the role of supply chain concentration on enterprise audit fees, considering concentration as an indicator to evaluate supply chain enterprises as a whole. For instance, Chen et al. found that higher concentration of government customers in the United States leads to greater audit risks and workload, resulting in higher audit fees [4]. Wang et al., studying Chinese manufacturing listed companies, found that higher concentration of supply chain customers leads to lower audit fees [5]. Some scholars focus on supply chain transmission effects, like Dou Chao et al. investigated the impact pathways of government background customer groups at the supply chain level on audits, discovering that the presence of government background major customers has a transmission effect that reduces enterprise audit fees and risks [6]. Whether positively or negatively correlated with audit pricing, these studies indicate that business relationships among supply chain enterprises influence audit services and mutually affect each other. To further explore the mechanism of mutual influence on audit work among enterprises within the supply chain, this study combines digital transformation, focusing on supply chain customers as the digitalization subject, to investigate the impact of supply chain customer digital transformation on upstream enterprise audit fees and proposes the following Hypothesis 1:

H1: The digital transformation of supply chain customers is positively correlated with upstream enterprise audit fees, meaning that higher levels of customer digital transformation led to higher audit fees for upstream enterprises.

#### 2.3 Shared Audits

Currently, research on shared audits is limited, most studies concentrate on shared audits as a new audit mode affecting audit efficiency, quality, and risk related to audit units, audited enterprises' operations, and merger activities. In addition, many scholars focus purely on the field of "audit knowledge sharing" rather than the shared audit model itself. For instance, Rong-Ruey Duh et al. investigated how knowledge sharing among audit firms affects audit quality and efficiency, revealing that internal knowledge sharing enhances audit efficiency and reduces audit delays [7]. Given the business relationships existing among enterprises within the same supply chain, which facilitate the implementation of shared audits, so this study regards shared audits as a moderating factor to explore their role in supply chains and proposes the following Hypothesis 2:

H2: Shared audits have a negative moderating effect on the positive relationship between supply chain customer digital transformation and upstream enterprise audit fees.

### 3 Method

#### 3.1 Data

Selecting A-share market companies in China from 2012 to 2022 as the sample. Using the CSMAR collect the top five customers and suppliers of each enterprise and manually matched to obtain complete supply chains. The data was processed as follows: (1) Enterprises with unclear supplier or customer information were removed, specifically those that did not disclose supplier and customer information or disclosed it in general terms such as "Supplier One" or "Supplier Two". (2) To more accurately assess the impact of digital transformation on upstream enterprise audit fees, supply chains in industries inherently highly digitalized, such as computing and electronic services, were excluded. (3) Enterprises that do not have a digital transformation score in the CSMAR were excluded. (4) Missing data was manually collected or treated using interpolation methods, resulting in a final sample of 1501 complete records. 5.To eliminate the influence of outliers, all continuous variables were winsorized at the 1% and 99% percentiles.

# 3.2 Model Design and Variable Definition

To validate Hypotheses 1 and 2, the paper constructs the following two models:

AUDITFEE = 
$$\alpha + \beta_1 DT + \sum Control + \sum Ind + \sum Year + \varepsilon$$
 (1)

AUDITFEE=
$$\alpha + \beta_1 DT + \beta_2 SHARE + \beta_3 (DT \times SHARE) + \sum Control + \sum Ind + \sum Year + \varepsilon$$
 (2)

- (1) The dependent variable AUDITFEE In models (1) and (2) represents the audit fees of upstream supply chain enterprises. The audit fees were collected from the financial statements of upstream supply chain enterprises in the CSMAR and then logarithm.
- (2) The independent variable DT represents the digital transformation degree of supply chain customers. It is measured by the logarithm of the digital transformation index from the CSMAR, which is constructed based on multiple dimensions of digital transformation, including strategic leadership, technological drive, organizational empowerment, digital achievements and applications, and macro-level digital evaluations.
- (3) In model (2), SHARE is the moderating variable representing shared audit. Following the method of Li Lu et al., it takes the value of 1 if the supply chain customer and the upstream enterprise employed the same audit firm in the given year, and 0 otherwise [8].

(4) Based on the studies of Zhang et al., Li et al., and Zeng et al., this paper sets sixteen control variables [9-11]. Company total assets (SIZE) and listing years (FA) are used to control for differences in firm size and age, respectively. Board size (BS) and ownership concentration (OC) control for differences in organizational management; Debt ratio (LEV) and current ratio (CR) control for differences in solvency; Loss status (LOSS), return on assets (ROA), days sales outstanding (DSO), and total asset turnover (TAT) control for differences in operating conditions. The inventory and receivables to total assets ratio (IRA) measure business complexity. Finally, industry and year fixed effects are controlled. ε represents the random disturbance term (shown in Table 1).

Table 1. Main variables.

Variable type	Variable name	Variable symbol	Explanation
Dependent Variable	Audit Fees	AUDITFE E	Logarithm of the audit fees for upstream enterprises
Independent Variable	Digital Trans- formation Index	DT	Logarithm of the enterprise digital transformation index
Moderating Variable	Shared Audit	SHARE	Takes 1 if the enterprise shares the same auditor with upstream supply chain enterprises for the year; otherwise, 0
	Leverage Ratio	LEV	The ratio of a company's assets to its liabilities
Control Variable	Enterprise Size	SIZE	Logarithm of the enterprise's total assets
	Return on Assets	ROA	Indicator of efficiency and profitability of a company's asset investments. Net profit divided by total assets
	Loss	LOSS	Takes 0 if net profit is negative; 1 if not
	Days Sales Out- standing	DSO	Logarithm of the average number of days a company takes to convert its receivables into cash
	Current Ratio	CR	Ratio of current assets to current liabilities, indicating short-term debt-paying ability
	Inventory + Accounts Receivable Ratio	IRA	Proportion of inventory and accounts receivable to total assets
	Total Asset Turnover	TAT	The effectiveness with which a company uses its total assets to generate sales revenue
	Total Asset Growth Rate	TAGR	Annual growth rate of total assets
	Big 4 or Top 10 Audit Firms	BIG4TOP1	Takes 1 if the auditing firm is one of the Big 4 (PwC, Deloitte, EY, KPMG) or a top 10 domestic firm; otherwise, 0
	Ownership Concentration	OC	Proportion of shares held by the largest or several major shareholders

E	Board Size	BS	Number of board members
]	Firm Age	FA	Number of years since the company was listed
Sh	nareholding	SHRCR	Proportion of shares held by the largest share-
Co	ncentration	SHKCK	holder
Inte	ernal Control	ICO	Takes 1 if the enterprise had internal control
	Quality	ICQ	deficiencies during the year; otherwise, 0
Α.,.	Audit Opinion AO		Takes 1 if the audit opinion issued during the
Au	an Opinion	AU	year was non-standard; otherwise, 0
St	ate-Owned	SOE	Takes 1 if the enterprise is state-controlled;
I	Enterprise	SOE	otherwise, 0
	T., J.,	т 1	Excludes computer and software service in-
	Industry	Ind	dustries
	Year	Year	From 2012 to 2022

# 4 Findings

# 4.1 Descriptive Statistics

Descriptive statistics were conducted on the main variables in Table 2. The mean value of audit fees is 13.79, which is generally consistent with existing research findings. The mean value of the shared audit variable is 0.0746, indicating that only about 7% of supply chains have upstream and downstream enterprises employing the same audit firm. This value is significantly less than 0.5, suggesting that the shared audit model is not widely used among supply chain enterprises and has yet to be popularized. The mean value of the digital transformation index is 3.59, with a standard deviation of 0.265, indicating that there is some variation in the degree of digital transformation among enterprises.

Table 2. Descriptive statistical results.					
Variable	N	Mean	S.D.	Min	Max
SHARE	1,501	0.0746	0.263	0	1
<b>AUDITFEE</b>	1,501	13.79	0.781	12.43	16.67

0.265

3.097

4.280

3.590

# 4.2 Regression Results

1,501

DT

(1) Main Regression Results Analysis. Using a fixed-effects model in Stata 17, the regression analysis results are shown in Table 3. In the regression results of Model (1), the estimated coefficient of the DT is positive and significant at the 1% level. This indicates a significant positive correlation between the digital transformation of downstream supply chain enterprises and the audit fees of upstream enterprises. That is, as the degree of digital transformation of supply chain customers deepens, the audit fees of upstream enterprises increase accordingly. This empirical result supports Hypothesis 1, suggesting that the digital transformation of downstream enterprises in-

deed increases the audit costs of upstream enterprises. This phenomenon can be attributed to several factors. Firstly, the digital transformation of Chinese enterprises has not yet established a comprehensive system across companies. The digital technology application systems built by enterprises based on their operating environments are different, resulting in increased learning costs for upstream enterprise auditors when obtaining and reviewing customer information. Auditors need to spend more time and effort understanding and adapting to the digital systems and processes of different enterprises. Secondly, the complexity of business operations in some enterprises increases with digital transformation, further exacerbating audit risk, which requires auditors to invest more resources in detailed checks and evaluations to reduce audit inspection risks, thereby increasing audit fees.

(2) Moderation Effect Regression Results Analysis. In the regression results of Model (2) in Table 3, the estimated coefficient of DT is also positive and significant at the 1% level, consistent with the conclusion of Model (1). Additionally, the variable SHARE, as an independent explanatory variable, is significantly positive at the 1% level with a coefficient of 2.239. This indicates that the shared audit model increases audit costs for upstream supply chain enterprises. Despite the efficiency in information sharing brought by shared audits, which can reduce the cost of obtaining information, the integration and processing of information still require significant time and resources. Auditors need to ensure the consistency and accuracy of data, inadvertently increasing the scale and requirements of data processing. In some cases, shared audits may even necessitate additional audit procedures, such as dual auditing, to ensure consistency in the audit results of upstream and downstream enterprises. Conducting linked audits across multiple enterprises also demands higher professional expertise and auditing skills from auditors, necessitating greater resource investment in auditor training, indirectly increasing audit costs.

Further analysis reveals that the interaction term between SHARE and DT is significantly negative at the 1% level, indicating that shared audits somewhat weaken the positive relationship between digital transformation and audit fees, playing a moderating role. This empirical result supports Hypothesis 2.

The moderating effect of shared audits can be explained through the following mechanisms: The initial coordination, increased complexity, and specialization requirements associated with shared audits and enterprise digital transformation lead to significant increases in audit costs. Although shared audits may inherently incur high costs, they can provide synergistic effects and information-sharing mechanisms that help reduce some of the additional costs brought by digital transformation when considering the digital transformation of downstream supply chain enterprises. Shared auditors have a deeper understanding of the digital systems and processes of downstream enterprises, and this knowledge and experience can be reused in the auditing of upstream enterprises, reducing the time and effort needed to obtain information. Furthermore, shared auditors can efficiently apply relevant information to the audit processes of upstream enterprises through internal communication and information sharing, significantly enhancing audit efficiency and reducing audit costs. More importantly, shared audits can achieve dual checks, further reducing audit risks, which overall leads to a decrease in audit fees.

Table 3. Regression results.

	(1)	(2)	
Variable —	AUDITFEE	AUDITFEE	
DE	0.140***	0.196***	
DT	(-2.86)	(-4)	
SHARE		2.239***	
SHAKE		(-3.22)	
SHARE*DT		-0.632***	
SHALL DI		(-3.17)	
SIZE	0.397***	0.398***	
SILL	(-36.77)	-36.45	
ROA	-0.172	-0.17	
1011	(-0.72)	(-0.71)	
BIG4 TOP10	0.176***	0.177***	
	(-7.72)	(-7.86)	
LEV	-0.290***	-0.292***	
	(-4.45)	(-4.46)	
DSO	0.065***	0.067***	
	(-5)	-5.14	
LOSS	-0.027	-0.010**	
	(-0.51)	(-2.03)	
CR	-0.010** (-2.10)	-0.026 (-0.48)	
	-0.148	-0.178	
OC	(-1.08)	(-1.29)	
	0.038***	0.042***	
BS	(-4.37)	(-4.82)	
	-0.402***	-0.389***	
IRA	(-4.53)	(-4.39)	
	-0.089**	-0.016	
TAGR	(-1.98)	(-0.13)	
	-0.046	-0.091**	
AO	(-0.38)	(-2.03)	
COL	0.022	0.038	
SOE	(-0.45)	(-0.79)	
T A T	-0.214***	-0.221***	
TAT	(-2.85)	(-2.96)	
FA	0.075**	0.080**	
ГA	(-2.3)	(-2.45)	
ICQ	0.037	0.04	
icq	(-1.31)	(-1.43)	
SHRCR	-0.260*	-0.246*	
SHICK	(-1.81)	(-1.70)	
Constant	4.288***	4.023***	
	(-13.31)	(-12.43)	
Year-to-year fixed effect	Yes	Yes	
Industry fixation	Yes	Yes	
Observations	1,499	1,499	
R-squared	0.711	0.715	

#### 4.3 Robustness Test

- (1) Replacement of explanatory variable. The explanatory variable DT was replaced. Based on the structured feature word graph of corporate digital transformation constructed in Wu et al., this study used Python to scrape annual reports of supply chain customer companies and counted the frequency of digital transformation-related terms [12]. The logarithm of the sum of frequencies for each company and year was calculated and used to replace the original explanatory variable DT. The results remained significant at the 1% and 5% levels, indicating robustness of the original regression results.
- (2) Sample range reduction. Due to the significant impact of the pandemic on the Chinese economy from 2019 to 2021, data from these years, which may exhibit abnormal conditions, were excluded for regression analysis. The final sample consisted of 1137 observations, and the regression results remained significant at the 1% and 5% levels, demonstrating the robustness of the original regression results.
- (3) PSM propensity score matching. To address endogeneity concerns, this study employed the PSM propensity score matching method, following the approach of Zhang et al. Median-splitting the digital transformation degree indicator, if the sample indicator value exceeded the median, it was coded as 1; otherwise, it was coded as 0. Control variables were used as covariates for calculating propensity scores, and 1:1 nearest neighbor matching was applied. The results indicate that under the nearest neighbor matching method, the regression coefficient of digital transformation degree on audit fees was significantly negative with a P-value of 0.017, supporting the original hypothesis.

# 5 Further Research

# 5.1 Upstream Enterprise Size

The variation in the scale of audited upstream units themselves results in differences in audit scale and difficulty. Larger upstream enterprises typically possess more mature information systems and standardized business processes that can be utilized by shared audit institutions, reducing redundant labor and information collection time, thereby lowering audit fees. Therefore, this study predicts that for larger enterprises, the negative moderating effect of shared audits is more significant. The measure of enterprise size was taken as the average value, with enterprises above this average considered large-scale and those below considered small-scale. The sample was divided accordingly for separate regressions. The regression results are shown in the Panel A. Comparing the coefficients from these regressions reveals that the negative moderating effect of shared audits is significantly weaker for smaller upstream enterprises compared to larger ones, and the regression results are significant.

# 5.2 Supply Chain Length

The supply chain's length impacts information transmission efficiency and audit information complexity. With an increase in the number of enterprises in the supply chain, information needs to pass through more nodes, potentially leading to issues such as information distortion and delays, exacerbating asymmetry in audit information. Furthermore, a longer supply chain signifies more participants and more complex business relationships. Therefore, the longer the supply chain, the broader the scope and content of the audit, requiring auditors to review more business activities and assess more risks. This study predicts that shared audits can more effectively integrate information and coordinate audit work in shorter supply chains, while their applicability decreases in longer supply chains, thereby weakening their negative moderating effect on audit fees. The sample was divided based on the number of links in the supply chain, with chains containing intermediate enterprises defined as longer supply chains and those containing only suppliers and customers defined as shorter supply chains, and separate regressions were conducted accordingly. The regression results are shown in the Panel B. Comparing the coefficients from these regressions reveals that when there are other enterprises between upstream and downstream enterprises, the moderating effect of shared audits is not significant.

In summary, shared audits combined with customer enterprise digital transformation have a more pronounced moderating effect in cases where supplier enterprises are larger and the supply chain is shorter, making this audit mode more applicable (shown in Table 4).

Table 4. The size of the company and the length of the supply chain.

	(1)	(2)		
	AUDITFEE	AUDITFEE		
Panel A: The size of the supplier's enterprise				
	Larger scale	Smaller scale		
SHARE*DT	-0.762*	-0.620*		
SHAKE DI	(-2.00)	(-2.47)		
Control	Yes	Yes		
Year-to-year fixed effect	Yes	Yes		
Industry fixation	Yes	Yes		
	12.52***	12.79***		
_cons	(24.31)	(46.00)		
N	670	826		
Panel B: Supply chain length				
	Longer supply chains	Shorter supply chains		
SHARE*DT	-0.0648	-0.867***		
SHARE DI	(-0.23)	(-3.98)		
Control	Yes	Yes		
Year-to-year fixed effect	Yes	Yes		
Industry fixation	Yes	Yes		
aans	3.331***	4.822***		
_cons	(4.14)	(11.27)		
N	299	1199		

# 6 Conclusion

Examining how the digital transformation of supply chain customers affects audit fees of upstream enterprises in the A-share market, this paper reveals a positive correlation. The result also proves the moderating effect of the shared audit in this relationship. Moreover, the study examines heterogeneity, different scales of upstream enterprises and varying supply chain lengths make the strength of this moderating effect different. This finding suggests that large-scale enterprises with simpler supply chains benefit more from the negative moderating effect of shared audits. In summary, this paper explores the spillover effects and the mechanism of shared audit when companies are in the middle of the digital transformation from multiple dimensions, focusing on audit pricing as the affected factor. The key insights are as follows.

Corporate digital transformation entails more than just the enhancement of digital technology usage; it requires the integration of digital technologies with daily operations and other activities that promote sustainable corporate growth to maximize the value of digitalization. As an essential component of monitoring corporate financial information and operational activities, auditing needs to innovate and adapt to better manage the increased audit fees and risks associated with the complexity of information resulting from personalized digital transformation. Given the negative moderating effect of shared audits, audit firms can consider leveraging the digital technologies of audited entities to establish information linkage and sharing systems with upstream and downstream business partners during the audit process, thereby helping audited entities reduce audit costs and improve audit efficiency, ultimately facilitating better digital transformation.

The development of both digital transformation and the shared audit model is still in its infancy. Companies undergoing digital transformation should carefully weigh the initial setup costs against the negative moderating effects brought by shared audits. According to the study's findings, in the short term, if an enterprise is small in scale with a complex supply chain predominantly composed of small suppliers, shared audits may not integrate well with digital technologies, potentially leading to unnecessary cost increases. In the long term, as digital technology applications mature and the data processing capabilities of audit firms and the skills of auditors improve, both shared audits and digital transformation will support the execution of audit tasks. The combination of the two can effectively achieve cost reduction and efficiency enhancement in audit activities.

In conclusion, this paper enriches the research on corporate digital transformation by integrating it with supply chain and audit considerations and exploring the value of the shared audit model. However, this study is constrained by the relatively limited sample size of shared audits and the overall supply chain data. Future research should aim to obtain more extensive data and expand the analysis across different dimensions.

### References

- Manita, R., Elommal, N., Baudier, P., et al.: The digital transformation of external audit and its impact on corporate governance. Technological Forecasting & Social Change 150(C), 119751-119751 (2020).
- Zhai, H.Y., Li, Q.R.: Does corporate digital transformation improve audit quality? Empirical examination based on a multi-period double difference model. Auditing and Economic Research 37(02), 69-80 (2022).
- 3. Ling, H., Xu, H., Li, P., et al.: Can corporate digital transformation mitigate audit risk? Science Decision (10), 33-47 (2022).
- 4. Chen, H., Jia, W., Li, S., et al.: Governmental customer concentration and audit pricing. Managerial Auditing Journal 36(2), 334-362 (2021).
- 5. Wang, X.Y., Wang, P., Zhang, J.P.: Customer concentration and audit fees: customer risk or supply chain integration. Auditing Research (06), 72-82 (2014).
- 6. Dou, C., Yuan, M., Chen, X.: Government background major customers and audit fees Based on the perspective of supply chain risk transmission. Accounting Research (03), 164-178 (2020).
- 7. Rong-Ruey D., Robert, K., Lin, C.: The effects of audit firms' knowledge sharing on audit quality and efficiency. Auditing: A Journal of Practice & Theory 39(2), 51-79 (2020).
- 8. Li, L., Yao, H.X.: Can shared audits curb M&A goodwill bubbles? Empirical evidence from Chinese listed companies. Auditing and Economic Research 34(05), 32-42 (2019).
- 9. Zhang, Y.S., Li, X.B., Xing, M.Q.: Corporate digital transformation and audit pricing. Auditing Research (03), 62-71 (2021).
- 10. Li, Min., Qi, X.Y.: Research on the relationship between corporate digital transformation, internal control and audit pricing. China Market (14), 123-126 (2024).
- 11. Zeng, Y.M., Song, Y.Q, Yang, H.S.: Individual auditor team centrality and audit pricing. Accounting and Economic Research (01), 1-16 (2024).
- 12. Wu, F., Hu, H.Z., Lin, H.Y, et al. Corporate digital transformation and capital market performance Empirical evidence from stock liquidity. Management World 37(07), 130-144+10 (2021).

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

