ELSEVIER

Contents lists available at ScienceDirect

Finance Research Letters

journal homepage: www.elsevier.com/locate/frl



Enterprise investment in the era of digital finance: Information transparency and investment efficiency analysis

Shengnan Xu*, Shaohua Su

College of Economics and Management, Xi'an University, Xi'an 710065, China

ARTICLE INFO

Keywords:
Digital financial transformation
Information transparency
Accounting information comparability

ABSTRACT

Using data from 3,259 listed companies spanning from 2012 to 2023 as a sample, this study explores the relationship between digital financial transformation, information transparency, and accounting information comparability. The research findings indicate that both digital financial transformation and information transparency significantly enhance accounting information comparability. Management costs play a mediating role between digital financial transformation and accounting information comparability. Furthermore, compared to loss-making enterprises, the digital financial transformation of profitable enterprises has a more pronounced effect on improving accounting information comparability.

1. Introduction

In today's era of rapid digitalization, the digital financial transformation of enterprises has become an irreversible trend (Wan et al., 2021). With the rapid development of information technology, more and more enterprises have begun integrating digital technology into all aspects of their operations and management to improve efficiency, reduce costs, and enhance market competitiveness (Rognone et al., 2020). digital financial transformation has not only changed enterprises' operation mode but also profoundly impacted the disclosure of information and the quality of accounting information. Especially in today's increasingly globalized and informalized world, the importance of accounting information comparability has become increasingly prominent as one of the critical indicators of the quality of corporate financial reporting. Therefore, an in-depth exploration of the relationship between enterprise digital financial transformation and accounting information comparability has significant theoretical value for understanding how digital financial transformation affects the quality of enterprise financial reporting and has a guiding significance for preparing and auditing enterprise financial reporting in practice.

Scholars both domestically and internationally have conducted considerable research on the relationship between enterprise digital financial transformation and the quality of information disclosure. Abroad, academic exploration of digital financial transformation has been particularly thorough, especially from the perspective of information technology application, examining how digitization becomes a key driver in enhancing corporate information transparency and comparability (Caputo et al., 2021). Numerous studies have pointed out that the application of digital technologies, such as big data, cloud computing, and artificial intelligence, can significantly enhance a company's information processing capabilities, thereby substantially improving its information transparency (Monteiro and Cepêda, 2021). This increase in transparency not only makes internal management more efficient but also greatly facilitates the access to and understanding of corporate information by external stakeholders, including investors and regulatory

E-mail addresses: XianShengnanXu@163.com (S. Xu), ShaohuaSu822@163.com (S. Su).

^{*} Corresponding author.

agencies. Furthermore, it has been proven that this enhanced information transparency can significantly improve the comparability of accounting information, providing a more reliable foundation for financial analysis and decision-making (Diller et al., 2020). Within the Chinese context, recent years have witnessed growing interest among researchers regarding the influence of digital financial transformation on accounting information quality. These scholars have underscored that digital shifts can improve accounting quality by refining corporate internal control systems. Nonetheless, while these studies contribute crucial insights, there remains a dearth of extensive empirical investigations into the precise mechanisms through which digital financial transformation impacts information transparency to boost the comparability of accounting information.

Through extensive empirical investigation, this study explores the inherent linkages among corporate digital metamorphosis, informational transparency, and accounting data comparability. Focusing on the dataset of Chinese A-share firms spanning from 2012 to 2023, it intends to investigate the effect of digitalization on accounting information comparability by devising a regression framework. Furthermore, the examination delves into the significance of transparency in information in this context. The model incorporates managerial costs as a mediator to unravel the precise mechanism through which digital financial transformation improves accounting information comparability.

This research possesses significant theoretical implications and considerable practical relevance. From a theoretical perspective, it deepens our understanding of the impact of digital financial transformation on accounting information quality, introducing fresh insights and methodologies to the academic discourse in this field. In practical terms, the findings of this study provide tangible guidance for publicly traded companies seeking to harness the power of digital financial transformation to enhance the comparability of their accounting data. This, in turn, facilitates more informed decision-making by investors and other stakeholders. Additionally, the research serves as a valuable reference for regulatory bodies in the formulation of relevant policies aimed at promoting transparency and comparability in financial reporting.

Through rigorous empirical analysis, this paper uncovers the inherent connection between corporate digitalization efforts, the transparency of financial information, and the comparability of accounting data. These findings not only contribute to the advancement of academic knowledge in the field but also have practical implications for businesses and regulators. By shedding light on these complex relationships, the study makes a notable contribution to both the scholarly and practical realms, offering a comprehensive understanding of the interplay between digital financial transformation and accounting information quality.

2. Theoretical analysis and research hypotheses

In digital financial transformation, enterprises are actively using advanced technologies to optimize their internal management processes, aiming to improve the efficiency of data processing and preparation of financial reports, which undoubtedly positively impacts the quality of accounting information. First of all, the digital financial transformation of enterprises has dramatically improved the efficiency of their internal management and the accuracy of their information processing by introducing advanced information technologies and systems, such as big data and cloud computing, digital financial transformation enables enterprises to capture, integrate, and report financial information accurately and in real time, thus enhancing the transparency and comparability of accounting information (Yang et al., 2021). Enhanced transparency means external investors and stakeholders can better understand an enterprise's financial condition and operating results. At the same time, increased comparability helps investors make side-by-side comparisons between different enterprises and make more informed investment decisions (Odonkor et al., 2024).

Second, digital financial transformation also reduces information asymmetry by optimizing enterprises' information environment. In the traditional accounting environment, there is significant information asymmetry between internal and external investors due to limitations in information processing and transmission (Faccia and Petratos, 2021). After digital financial transformation, enterprises can disclose accounting information more timely and comprehensively, reducing the space for management surplus management and making accounting information more authentic and reliable, improving the comparability of accounting information (Hameedi et al., 2021). digital financial transformation has also positively impacted management costs within the enterprise digital financial transformation can streamline management processes and improve efficiency, reducing overheads. Lower overhead costs mean fewer costs for enterprises in the financial reporting process, which helps them provide more accurate and timely accounting information, further enhancing the comparability and transparency of accounting information. Based on this logical chain, this paper proposes the following hypotheses:

H1: Enterprise digital financial transformation and information transparency can significantly enhance accounting information comparability.

The role of management costs as an important mediating variable must be addressed in exploring the relationship between digital financial transformation and the comparability of accounting information. By introducing advanced information technology and systems, digital financial transformation can significantly improve enterprises' operational efficiency and information accuracy. This transformation helps enterprises to simplify management processes and reduce manual operation links, thus reducing management costs (Dandan et al., 2024). For example, by adopting automated and intelligent management systems, enterprises can reduce human resources investment and improve efficiency, thereby reducing management costs. Lower management costs help enterprises provide more accurate and timely accounting information. When management costs are low, enterprises have more resources and energy to prepare and disclose accounting information, thus improving the quality and comparability of accounting information. On the contrary, if management costs are too high, firms may compromise on preparing and disclosing accounting information, decreasing the comparability and quality of accounting information (Xiang and Pengpeng, 2024). Incorporating both analyses yields the conclusion

that digital financial transformation enhances the comparability of financial data by minimizing managerial expenses, subsequently leading to an increase in the comparability of accounting information digital financial transformation improves management efficiency and reduces costs, providing better conditions for companies to prepare and disclose high-quality accounting information. This not only helps to enhance the transparency of accounting information but also improves the comparability of accounting information so that external investors and stakeholders can more accurately assess the financial position and operating results of enterprises. Given this, this paper makes the following assumptions:

H2: Management costs mediate between digital financial transformation and comparability of accounting information.

When exploring the impact of digital financial transformation on the comparability of accounting information, the profitability of an enterprise is an important consideration. There are significant differences between profitable and loss-making firms regarding operating status, resource investment, and management focus (Guangning et al., 2022). Profitable firms typically have more financial resources and management capabilities to invest in digital financial transformation to improve operational efficiency and information quality. On the other hand, loss-making firms may need more financial resources and management pressure to bear the high investment and risk of digital financial transformation (Zhang et al., 2024). Compared with loss-making enterprises, profitable enterprises have the following advantages in digital financial transformation:

Regarding resource commitment, for-profit enterprises have more financial resources to invest in advanced digital technologies and systems to support the accurate recording and reporting of accounting information (Jing et al., 2023). In terms of management support, for-profit companies usually have more stable management and better internal control systems to support the smooth implementation of digital financial transformation and ensure the accuracy and consistency of accounting information (Pengpeng et al., 2022). Regarding risk tolerance, profitable firms have a more robust risk tolerance in the face of possible risks associated with digital financial transformation and can cope with the challenges of the transformation process more comfortably (Linjiang et al., 2023). Therefore, this paper proposes the following hypotheses:

H3: Compared with loss-making enterprises, the digital financial transformation of profitable enterprises significantly improves accounting information comparability.

The preceding theoretical examination and research propositions aim to delve into digital financial transformation's precise effects on accounting data's comparability, unraveling the intricate mechanisms and influential elements involved. This endeavor is poised to offer a comprehensive grasp of digital financial transformation's function in corporate financial disclosure and furnish insightful directives for impending scholarly inquiries and practical applications.

3. Study design

3.1. Sample selection

In order to ensure the rigor and broad applicability of the study, the data of 3259 listed manufacturing companies during 2012–2023 are carefully selected as the research sample. The data collection covers multiple years to smooth out possible annual fluctuations and thus reveal the relationship between variables more accurately. To mitigate the potential disruptions caused by missing values and outliers in the research findings, this study implemented a 1 % shrinkage procedure across all pivotal variables, encompassing explanatory, mediator, and control variables. Additionally, to ensure data uniformity and diminish the effects of heteroskedasticity, certain control variables with substantial magnitudes underwent natural logarithmic transformation. Upon completing this meticulous data preprocessing sequence, the study successfully acquired a high-quality dataset, laying a robust groundwork for the ensuing analytical endeavors.

3.2. Definition of variables

3.2.1. Dependent variable

Comparability of accounting information (*CA*): This measures the comparability of a firm's accounting information. It reflects the reliability and consistency of a firm's accounting information and is essential to investors, analysts, and stakeholders.

3.2.2. Independent variables

Digital financial transformation (*Digital*): Measured by counting the number of relevant digital financial technology uses disclosed in a company's annual report, reflecting the company's investment in digital financial technology.

Information Transparency (*Big4*): Measures the clarity and completeness of a firm's information disclosure. This paper examines whether the Big 4 accounting firms audit information as a measure of information transparency.

3.2.3. Intermediary variable

Management costs(Cost): digital financial transformation may affect management costs. By optimizing business processes and improving efficiency, digital financial transformation may reduce management costs and improve the accuracy and comparability of accounting information.

3.2.4. Control variables

The control variables in this paper include firm size (*Size*), gearing ratio (*Lev*), cash flow (*Cf*), return on equity (*ROE*), whether loss (*Loss*), equity concentration (*Owcl*), proportion of independent directors (*Indep*), and firm age (*age*) as control variables.

These variables play an essential role in the study of accounting information comparability. Through their in-depth analysis and quantitative assessment, a more comprehensive understanding of the influencing factors and enhancement strategies of accounting information comparability can be achieved. The variables are defined as shown in Table 1.

3.3. Model construction

Based on the aforementioned theoretical analysis and research hypotheses, this paper constructs a panel data model to test the relationship between the variables empirically. Specifically, the panel data model is as follows:

$$CA_{i,t} = \alpha_0 + \alpha_1 Digital_{i,t} + \sum_{k=1}^{n} \alpha_k control_{i,t} + \psi_i + \zeta_t + \varepsilon_{i,t}$$
(1)

$$CA_{i,t} = \beta_0 + \beta_1 Big 4_{i,t} + \sum_{k=1}^{n} \beta_k control_{i,t} + \psi_i + \zeta_t + \varepsilon_{i,t}$$
(2)

$$Cost_{i,t} = \eta_0 + \eta_1 Digital_{i,t} + \sum_{k=1}^{n} \eta_k control_{i,t} + \psi_i + \zeta_t + \varepsilon_{i,t}$$
(3)

$$CA_{i,t} = \mu_0 + \mu_1 Cost_{i,t} + \mu_2 Digital_{i,t} + \sum_{k=1}^{n} \mu_k control_{i,t} + \psi_i + \zeta_t + \varepsilon_{i,t}$$

$$\tag{4}$$

Through the construction of the above model, this paper can systematically analyze the direct impact of enterprise digital financial transformation, information transparency, accounting information comparability, as well as the mechanism of the role of management costs in it. This will provide necessary empirical support for this paper to deeply understand accounting information comparability's influencing factors and enhancement strategies. Meanwhile, the model also takes into account the influence of factors such as enterprise size (Size), gearing ratio (Lev), cash flow (Cf), return on equity (ROE), whether it is loss-making (Loss), equity concentration (Owcl), proportion of independent directors (Indep), and age of the enterprise (age), which makes the results of the study more comprehensive and accurate.

4. Empirical analysis

4.1. Descriptive statistical analysis

In order to have a comprehensive understanding of the study sample, this paper first analyzed the main variables with descriptive statistics. The results are shown in Table 2.

As depicted in Table 2, the average measure for accounting information comparability registers at -0.4063, with a standard deviation of 0.3226, suggesting a variation in comparability across distinct firms. The range extends from a highest point of -0.0548 to a lowest of -2.5441, implying that certain companies exhibit notably lower levels of accounting information comparability.

The average digital financial transformation score stands at 9.4633, accompanied by a standard deviation of 11.2641, which suggests substantial disparities in corporate digital conversion initiatives. As for information transparency, the mean value is 0.0497, implying that a significant number of the sampled companies have opted for the Big 4 auditors, contributing to enhanced transparency. Nevertheless, the standard deviation of 0.2122, along with a range from 0 to 1, reveals a considerable diversity among firms regarding

Table 1Definition of variables.

Variable type	Variable name	Variable symbol	Variable definition
Dependent variable	Comparability of accounting information	CA	Overall average comparability of accounting information between enterprises and other enterprises in the industry
Independent variables	Digital financial transformation	Digital	Take the sub-metrics of Artificial Intelligence (AI), Blockchain (BD), Cloud Computing (CC), Big Data (DT), and Digital financial Technology Adoption (Apply) from the annual report and sum them up to take a logarithmic value.
	Information transparency	Big4	One if the company is audited by the Big 4 (PricewaterhouseCoopers et al.), 0 otherwise.
intermediary variable	Management costs	Cost	Logarithm of total operating costs
Control variables	Firm size	Size	Ln (total business assets) (two decimal places)
	Gearing	Lev	Total liabilities/total assets (decimal)
	Cash flow	Cf	Cash holdings at year-end/total assets at year-end (rounded to the nearest decimal)
	Return on equity	ROE	Net profit/total assets (decimal)
	Whether loss	Loss	Net profit for the year is <0, take one; otherwise, take 0
	Equity concentration	Owcl	The proportion of shares held by the largest shareholder (decimal)
	Proportion of independent directors	Indep	Independent directors divided by the number of directors
	Firm age	age	Logarithmic age of listing

Table 2 Descriptive statistical analysis.

	Obs	Mean	SD	Min	Median	Max
CA	35,849	-0.4063	0.3226	-2.5441	-0.4063	-0.0548
Digital	35,849	9.4633	11.2641	0.0000	3.0000	27.6411
Big4	35,849	0.0497	0.2122	0.0000	0.0000	1.0000
Cost	35,849	20.8922	1.6240	17.1440	20.8030	25.3537
Size	35,849	21.9339	1.4240	18.9746	21.8341	26.1053
Lev	35,849	0.4317	0.2062	0.0555	0.4271	0.9372
Cf	35,849	0.1839	0.1308	0.0150	0.1497	0.6592
ROE	35,849	0.0844	0.1534	-0.7148	0.0844	0.5003
Loss	35,849	0.9002	0.2979	0.0000	1.0000	1.0000
Owc	35,849	0.3482	0.1457	0.0845	0.3482	0.7665
Indep	35,849	0.3738	0.0511	0.2857	0.3636	0.5714
age	35,849	11.0862	6.9832	0.2603	11.0862	27.6411

information transparency levels.

The mean value of the mediator variable management cost is 20.8922, with a standard deviation of 1.6240. This reflects that different firms differ in their ability to control costs in the management process. The maximum value is 25.3537, and the minimum is 17.1440, further illustrating the differences in management costs among firms. The descriptive statistics of other variables are shown in Table 2.

4.2. Main test regression results

Two comprehensive panel regression analyses are executed to investigate the effects of digital financial transformation and information transparency on accounting information comparability.

As displayed in Table 3, under Column 1, the digital financial transformation variable (*Digital*) carries a coefficient of 0.0324, which is statistically significant at the 1 % level, thus demonstrating a considerable positive impact of digital financial transformation on the comparability of accounting data. In Column 2 of the same table, the coefficient for information transparency (*Big4*) amounts to 0.0434, also significantly notable at the 1 % level, suggesting a substantial positive association between information transparency and accounting information comparability. This finding supports Hypothesis 1.

Table 3Results of the main regression test.

	(1)	(2)
	CA	CA
Digital	0.0324***	
	(3.7458)	
Big4		0.0434***
· ·		(4.2703)
Size	0.0534***	0.0545***
	(8.9942)	(9.1455)
Lev	-0.2682***	-0.2683***
	(-9.4323)	(-9.4348)
Cf	-0.1954***	-0.1952***
	(-8.3461)	(-8.3424)
ROE	0.2734***	0.2743***
	(8.7444)	(8.7678)
Loss	0.1268***	0.1265***
	(11.784)	(11.7499)
Owc	-0.019	-0.0199
	(-0.5715)	(-0.5971)
Indep	-0.0076	-0.0078
	(-0.1249)	(-0.1283)
age	-0.0044***	-0.0039***
	(-5.1267)	(-6.7701)
Constant	-1.4997***	-1.5239***
	(-11.9102)	(-12.0610)
Observations	35,849	35,849
R-squared	0.3182	0.3524
Number of id	3259	3259
ID FE	YES	YES
Year FE	YES	YES

4.3. Analysis of mediating effects

Delving into the impact of digital financial transformation and data transparency on accounting information comparability, this study introduces managerial expenses (*Cost*) as a moderating factor to unravel the underlying dynamics. As displayed in Table 4's column (1), the regression outcomes position management costs (*Cost*) as the dependent variable and digital conversion (*Digital*) as the independent variable. The coefficient for digital financial transformation (*Digital*) is positively significant at the 1 % level, suggesting a substantial increase in management costs due to digital financial transformation. Shifting to column (2) of Table 4, management costs (*Cost*) exhibit a positive coefficient, statistically significant at the 5 % level, while digital financial transformation (*Digital*) also exhibits a positive coefficient, statistically significant at the 1 % level, revealing that Cost mediates the connection between accounting information comparability (*CA*) and Digital. By escalating managerial costs, Digital exerts a significantly positive influence on *CA*, confirming that management costs play a pivotal mediating role in the digital conversion's effect on accounting information comparability, substantiating Hypothesis 2.

4.4. Heterogeneity analysis

In order to explore whether there are differences in the comparability of accounting information in the context of different types of digital financial transformation, this paper conducts a heterogeneity analysis by subdividing the sample into two sub-samples of 1704 loss-making firms and 1555 profit-making firms and adopting the same measurement variables to explore the impact of digital financialization of different types of firms on the changes in the level of comparability of accounting information. The specific results are shown in Table 5.

Table 5's findings reveal that the coefficients for digital financial transformation's effect on the comparability of accounting data are both positive and statistically significant at the 1 % level for both unprofitable and profitable firms. The analysis reveals that profitable companies demonstrate a more pronounced effect, with a coefficient of 0.0324, which notably exceeds the coefficient of 0.0125 observed for non-profit entities. This finding lends credence to the hypothesis of heterogeneity analysis, suggesting that the impact of digital financial transformation on the comparability of accounting information varies across different types of enterprises. Specifically, profitable enterprises appear to reap greater benefits from this transformation, thereby validating the conclusions drawn in hypothesis 3. This nuanced understanding highlights the differential effects of digital financial transformation on various organizational types and underscores the importance of considering such disparities in future research and policy formulation.

4.5. Endogeneity test

In order to control for the endogeneity problem, this paper employs the lag one period for the test. The lagged 1-period variable method is a commonly used treatment to reduce or eliminate the possible endogeneity problem between the dependent and

Table 4
Mediation effect results.

	(1)	(0)
	(1)	(2)
	Cost	CA
Digital	0.0261***	0.0332***
	(3.4884)	(2.6958)
Cost		0.0074**
		(2.056)
Size	0.7943***	0.0476***
	(15.7053)	(5.8939)
Lev	0.5713***	-0.2724***
	(10.8023)	(-9.5169)
Cf	-0.2500***	-0.1935***
	(-4.7453)	(-8.2937)
ROE	0.2638***	0.2715***
	(6.9812)	(8.6722)
Loss	0.0515***	0.1264***
	(3.4237)	(11.7643)
Owc	0.0772	-0.0196
	(1.2456)	(-0.5881)
Indep	-0.0095	-0.0076
	(-0.0804)	(-0.1239)
age	0.0032*	-0.0045***
	(1.8437)	(-5.1520)
Constant	3.1573***	-1.5231***
	(8.8508)	(-11.9173)
Observations	35,849	35,849
R-squared	0.3766	0.3118
Number of id	3259	3259
ID FE	YES	YES
Year FE	YES	YES

Table 5Results of heterogeneity test.

	loss-making enterprises	profit-making enterprises
	CA	CA
Digital	0.0125***	0.0324***
	(3.0611)	(5.2680)
Size	0.0450***	0.0528**
	(6.3576)	(2.0798)
Lev	-0.0997***	-0.5839***
	(-3.9599)	(-5.8995)
Cf	-0.1430***	0.1826
	(-7.2632)	(1.2722)
ROE	-0.2737***	0.3895***
	(-8.3961)	(6.0421)
Owc	-0.0430*	0.4509*
	(-1.6671)	(1.8919)
Indep	-0.0321	-0.0627
	(-0.6229)	(-0.2286)
age	0.0010	-0.0110
	(1.3250)	(-0.9193)
Constant	-1.2076***	-1.5074***
	(-8.0940)	(-2.6674)
Observations	31,867	3534
R-squared	0.3342	0.3853
Number of id	1704	1555
ID FE	YES	YES
Year FE	YES	YES

explanatory variables by adding the previous period in time of the explanatory variables into the model as a new explanatory variable. The lagged 1-period variable method can be realized by adding the lagged one values (i.e., *L. Digital, L.Big4*) of digital financial transformation (*Digital*) and information transparency (*Big4*) to the regression model, respectively, and the test results are shown in Table 6.

The findings presented in Table 6 indicate that the regression coefficient for the lagged variable of digital financial transformation (*L. Digital*) is 0.0153, while the coefficient for the lagged variable of information transparency (*L. Big4*) stands at 0.0382. Both coefficients are notably positive and statistically significant at the 1 % level. This outcome successfully passes the endogeneity test, thereby bolstering the robustness and credibility of the conclusions drawn from the panel regression model employed in this paper. The significance of these results underscores the reliable relationship between digital financial transformation, information transparency, and the dependent variables under investigation.

5. Conclusions

In this paper, the study selects the data of 3259 listed companies from 2012 to 2023, and through the construction of a panel model, panel data, and the comprehensive use of a variety of statistical methods, such as regression analysis, mediation effect test, heterogeneity test, and endogeneity test, it profoundly explores the impact of digital financial transformation of enterprises and transparency of information on the comparability of accounting information, and further examines the role of management costs in it. Through careful analysis of these critical variables, this paper draws the following conclusions:

First, through the panel data regression analysis, this paper finds that enterprise digital financial transformation and improved information transparency can significantly improve accounting information's comparability. This finding supports Hypothesis 1, indicating that with the deepening of enterprise digital financial transformation, the efficiency of information processing and financial report preparation is significantly improved, enhancing the clarity and reliability of accounting information and making accounting information more comparable among different enterprises.

Second, the mediation effect test results show that management costs mediate between digital financial transformation and the comparability of accounting information. digital financial transformation optimizes internal management processes and improves operational efficiency by reducing firms' management costs and improving the quality of accounting information, including its comparability. This finding validates Hypothesis 2 and reveals the specific paths and mechanisms through which digital financial transformation affects the comparability of accounting information.

Finally, through the heterogeneity test, this paper finds a difference between profitable firms and loss-making firms in terms of the impact of digital financial transformation on the comparability of accounting information. Specifically, compared to loss-making firms, the digital financial transformation of profitable firms has a more significant effect on the comparability of accounting information. This finding is consistent with Hypothesis 3 and reflects the positive impact of profit-making firms' motivation in providing financial information and the positive impact of digital financial transformation on their disclosure quality.

In addition, through the endogeneity tests, this paper further confirms the reliability of the above findings and excludes the influence of possible endogeneity problems and other potential disturbing factors.

Based on the above research conclusions, the following recommendations are made:

Table 6
Endogeneity test results.

	(1)	(2)
	CA	CA
L.Digital	0.0153***	
, and the second	(4.6019)	
L.Big4		0.0382***
· ·		(3.2593)
Size	0.0721***	0.0711***
	(8.9942)	(8.8862)
Lev	-0.2884***	-0.2852***
	(-9.0907)	(-8.9914)
Cf	-0.1817***	-0.1852***
•	(-7.0032)	(-7.1311)
ROE	0.2766***	0.2771***
	(8.3184)	(8.3323)
Loss	0.1135***	0.1146***
	(10.3301)	(10.3730)
Owc	-0.0331	-0.0289
	(-0.8983)	(-0.7805)
Indep	-0.0076	-0.0042
•	(-0.1180)	(-0.0650)
age	-0.0014*	-0.0037***
·	(-1.6856)	(-5.7932)
Constant	-1.8675***	-1.8443***
	(-10.9847)	(-10.8616)
Observations	32,590	32,590
R-squared	0.3233	0.3225
Number of id	3259	3259
ID FE	YES	YES
Year FE	YES	YES

Listed companies should actively promote digital financial transformation by introducing advanced digital technologies and tools to optimize internal management processes and improve the efficiency of financial report preparation, as well as the clarity and reliability of accounting information. At the same time, companies should prioritize improving information transparency by establishing a sound information disclosure system to ensure the timely, accurate, and complete disclosure of all relevant financial information, thereby enhancing investor and market trust in the company. Furthermore, considering the mediating role of management costs between digital financial transformation and accounting information comparability, companies should pay attention to the cost reduction effects brought by digital transformation and further reduce management costs by rationally allocating resources and optimizing organizational structures, thereby improving the comparability of accounting information. For regulators, it is important to encourage and support listed companies in their digital financial transformation efforts and provide necessary policy guidance and support. At the same time, regulators should strengthen the supervision of information disclosure by listed companies to ensure the authenticity and comparability of accounting information and maintain market fairness and transparency. Regulators could also consider formulating relevant accounting standards and regulations to guide listed companies in following unified standards and norms during the digital transformation process, thereby promoting the comparability and consistency of accounting information.

Funding

The Strategic Cooperation Project of Xi 'an Academy of Social Sciences and Xi 'an University,: "Empirical Research on the Stickiness of Costs of Xi 'an Listed Companies" No.24ZL12.

CRediT authorship contribution statement

Shengnan Xu: Writing – review & editing, Writing – original draft, Supervision, Formal analysis. **Shaohua Su:** Writing – review & editing, Writing – original draft, Data curation, Conceptualization.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

References

- Caputo, F., Pizzi, S., Ligorio, L., Leopizzi, R., 2021. Enhancing environmental information transparency through corporate social responsibility reporting regulation. Bus. Strat. Environ. 30 (8), 3470–3484.
- Dandan, X., Dongli, G., Pengpeng, Y., Mengshi, L., 2024. Household green consumption: does digital inclusion matter? Int. Rev. Financ. Anal.
- Diller, M., Asen, M., Späth, T., 2020. The effects of personality traits on digital financial transformation: evidence from German tax consulting. Int. J. Acc. Inform. Syst. 37, 100455.
- Faccia, A., Petratos, P., 2021. Blockchain, enterprise resource planning (ERP) and accounting information systems (AIS): research on e-procurement and system integration. Appl. Sci. 11 (15), 6792.
- Guangning, T., Bo, L., Yue, C., 2022. Does digital transformation matter for corporate risk-taking? Financ. Res. Lett.
- Hameedi, K.S., Al-Fatlawi, Q.A., Ali, M.N., Almagtome, A.H., 2021. Financial performance reporting, IFRS implementation, and accounting information: evidence from Iraqi banking sector. J. Asian Fin. Econ. Bus. 8 (3), 1083–1094.
- Jing, H., Mengzu, P., Wenjia, H., 2023. Digital finance development and bank liquidity creation. Int. Rev. Financ. Anal.
- Linjiang, Z., Xiaochuan, S., Yaxiong, B., Lihua, G., Chao, M., 2023. Explainable artificial intelligence for digital finance and consumption upgrading. Fin. Res. Lett. (PC).
- Monteiro, A., Cepêda, C., 2021. Accounting information systems: scientific production and trends in research. Systems (Basel) 9 (3), 67.
- Odonkor, B., Kaggwa, S., Uwaoma, P.U., Hassan, A.O., Farayola, O.A., 2024. The impact of AI on accounting practices: a review: exploring how artificial intelligence is transforming traditional accounting methods and financial reporting. World J. Adv. Res. Rev. 21 (1), 172–188.
- Pengpeng, Y., Gizem, K.A., Zhichao, Y., Haigang, Z., 2022. The rise of digital finance: financial inclusion or debt trap? Fin. Res. Lett. (PA).
- Rognone, L., Hyde, S., Zhang, S.S., 2020. News sentiment in the cryptocurrency market: an empirical comparison with Forex. Int. Rev. Financ. Anal. 69, 101462. Wan, D., Xue, R., Linnenluecke, M., Tian, J., Shan, Y., 2021. The impact of investor attention during COVID-19 on investment in clean energy versus fossil fuel firms. Financ. Res. Lett. 43, 101955.
- Xiang, Y., Pengpeng, Y., 2024. What matters to reshaping consumption patterns in China? Digital inclusion and supply chain. Financ. Res. Lett., 104804-
- Yang, Z., Lu, Y., Tan, W., 2021. Monetary policy tightening, accounting information comparability, and underinvestment: evidence from China. Econ. Anal. Policy 70, 123–147.
- Zhang, D., Bai, D., Wang, C., He, Y., 2024. Distribution dynamics and quantile dynamic convergence of the digital economy: prefecture-level evidence in China. *Int. Rev. Financ. Anal.* (PA), 103345–.