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Can the financial background of executives affect the digital transformation of enterprises?

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Abstract: The financial background of executives can provide financial consulting for enterprises and enhance effective interaction between enterprises and the financial industry, but the academic community has not yet clarified the impact of executive financial background on the digital transformation of enterprises. This article combines the macro pursuit of high-quality national development and examines the relationship between executive financial background and digital transformation of Chinese A-share listed companies from 2012 to 2022. Research has found that: The financial background of executives has a significant positive correlation with the digital transformation of enterprises. After key variable replacement, the above research results remain robust. This article reveals the impact and pathways of executive finance background on green investors under the background of high-quality economic development, enriches the research on executive characteristics and corporate financing constraints, and provides theoretical support and practical inspiration for executive recruitment decisions and structural design in enterprises.

Keywords: Executive financial background; Enterprise digital transformation; High-quality economic development

1.Introduction

In recent years, the development of the digital economy has driven the rapid improvement of enterprise production efficiency. China attaches great importance to the opportunities and challenges faced in the digital economy era, and has put forward development strategies including "Manufacturing Strong Country", "Made in China 2025", and "Intelligent Manufacturing". The period from 2012 to 2022 was a decade of vigorous development of China's digital economy, as well as the implementation of the "Broadband China" project and the construction of a new generation of information infrastructure. The China Internet Development Report 2023 shows that from 2012 to 2022, China's network infrastructure has achieved a leap forward improvement, the average download rate of broadband networks has increased nearly 40 times, mobile communication networks have evolved from 3G to 5G, and the world's largest 5G network has been built. Data elements have reached all households in China, the number of Chinese Internet users has increased from 564 million to 1.079 billion, the Internet penetration rate in rural areas is 60.5%, the rural network infrastructure has basically achieved full coverage, and new models such as live broadcast e-commerce have innovated and developed [1]. In 2023, the scale of China's digital economy will reach 56.1 trillion yuan, ranking second in the world in total. The digital economy continues to play a stabilizing and accelerating role in the economy, and has become an important engine for stabilizing growth and promoting transformation. The rapid development of the digital economy cannot be separated from the support of national policies. From the first proposal of "promoting accelerated development of the digital economy" in 2017 to "vigorously developing the digital economy" in 2023, the status of the digital economy in the Government Work

Report has been continuously elevated. In fact, China has already regarded digital transformation as an important means to transform and enhance traditional driving forces, cultivate and develop new driving forces, and is actively promoting industrial digital innovation and digital industrialization development. In the era of digital economy, enhancing sustained competitive advantage through digital transformation is crucial for enterprises. However, Chinese companies are currently facing the challenge of how to achieve digital transformation. The enterprise "wants to transform", but "won't transform". In today's era, the booming development of digital technologies such as artificial intelligence, big data, cloud computing, and blockchain has fundamentally changed consumers' expectations and behaviors, bringing huge impacts and challenges to enterprises. Faced with an increasingly complex competitive environment, digital transformation has become the main theme for the future development of the vast majority of enterprises. According to a 2019 survey by International Data Corporation (IDC), over 70% of the Fortune 1000 companies consider digital transformation as a core strategy for their business development. However, the digital transformation of most enterprises has not achieved the expected results. A study by Accenture in 2021 showed that many companies are striving for digital transformation, but most are still in the early stages of digital transformation, with only 16% of Chinese companies achieving significant results in digital transformation. The "China Industry Digitalization Report 2020" released by the National Information Center of China also indicates that there are phenomena such as "not being able to transform" and "not daring to transform" among enterprises.

In summary, introducing executives with financial backgrounds is the breakthrough point to solve the above problems. On the one hand, executives with financial backgrounds can provide direction for the digital transformation of enterprises and help them break through the "transformation bottleneck"; On the other hand, the financial background of executives can provide guidance on how companies can apply digital technology and help them overcome performance bottlenecks. Therefore, introducing executives with financial backgrounds is the top priority of digital transformation for enterprises and the key to achieving sustained competitive advantage through digital transformation. Given the crucial role of executive finance background in the digital transformation of enterprises, it is urgent to explore the driving factors of enterprise digital transformation. The digital transformation of enterprises will not start out of thin air, but requires a strong driving force within the enterprise, and the financial background of executives is the core driving factor for initiating the digital transformation of enterprises. Corporate practice has shown that digital transformation is mostly proposed and driven by executive teams. The executive team is a key decision-maker in a company and plays a decisive role in the strategic decision-making process. Therefore, it is crucial to clarify the impact of executive financial background on the digital transformation of enterprises.

2. Research hypothesis

Corporate executives with financial backgrounds may promote digital transformation of the enterprise. According to high-order theory, the personal characteristics, cognitive foundation, and values of executives profoundly influence the strategic decisions and direction choices of enterprises, and promote the digital transformation of enterprises by driving high-quality digital development. Executives with financial backgrounds usually have strong analytical and coping abilities towards macroeconomic trends, financial market dynamics, and the uncertainty of digital economy development. They are more likely to identify opportunities and prospects for digital development of enterprises in the context of digital economy development, and adopt digital strategic decisions to bring "first mover advantage" to enterprises, enhance their competitiveness in the digital economy market, and increase the pulling force for digital transformation of enterprises. In addition, the financial institution resources and financial consulting capabilities possessed by corporate executives with financial backgrounds can help reduce the financing costs, transaction costs, and information gathering costs of the enterprise, bringing "cost advantages" to the enterprise [2-3], further increasing investment and upgrading in digital technology research and development, and laying a solid material foundation for the digital transformation and development of the enterprise. Meanwhile, behavioral finance theory suggests that the behavioral preferences of senior managers in a

company can have a differentiated impact on its (digital) innovation activities. Due to the fact that in practice, the decisions of senior managers in enterprises do not fully follow the assumption of rational people, they are often influenced by personal subjective tendencies towards the decision results. This enables executives who are well versed in the operating laws of the capital market and have a more accurate understanding of the financial background of market information needs and preferences to develop strategic plans that are more in line with market orientation and investor expectations, in order to give enterprises broader development space. This may to some extent accelerate the process of digital transformation of enterprises. The White Paper on the Development of Digital Transformation of Chinese Enterprises in 2023 points out that one of the main difficulties and challenges in enterprise digital transformation is the lack of relevant talents. When the composition of a company's executive team is complex and their professional abilities vary, it is often difficult to fully grasp the core values of digital strategy and its strategic significance for the long-term development of the enterprise. In this situation, enterprises may miss the opportunity of digital transformation, which limits their competitiveness in the digital economy era. However, executives with financial backgrounds not only have a keen grasp of market trends and industry dynamics, but also quickly capture opportunities and directions for digital transformation. With their forward-looking perspective, they can develop digital transformation strategies that are in line with market trends and the actual situation of the enterprise, providing clear direction guidance and practical strategic paths for the digital process of the enterprise, ultimately promoting the digital transformation of the enterprise. In view of this, this article proposes the following hypothesis:

H1: Senior executives with financial backgrounds can have a significant positive impact on the digital transformation of enterprises

3.Research Design

3.1 Sample selection and data sources

This article selects A-share listed companies in China's Shanghai and Shenzhen stock markets from 2012 to 2022 as the research object, and conducts the following screening: first, exclude ST and * ST companies; Secondly, exclude listed companies with missing relevant variables; Thirdly, by excluding listed companies that delisted during the sample period, a total of 32185 sample observations were obtained. In addition, this article preprocessed the data as follows: firstly, to avoid the influence of extreme values on the empirical results, this article truncated all continuous variables at the 1% and 99% percentiles. Secondly, to mitigate the potential effects of heteroscedasticity and autocorrelation, this article uses robust standard errors for correction, and the financial indicator data for controlling variables are all from the CSMAR database.

3.2 Variable Definition

3.2.1. Explained variable

Enterprise Digital Transformation (DT): This article follows the approach of Wu Fei et al. (2021) [4] and uses text mining metrics to measure the level of digital transformation in enterprises. The specific steps are as follows: first, use "enterprise digital transformation" as a seed vocabulary; Secondly, referring to the keywords related to enterprise digital transformation provided by Chen and Srinivasan (2020) [5], using the Word2Vec neural network model and deep learning techniques, a set of similar words for seed vocabulary is obtained. In order to improve the accuracy of the measurement, only the words with high similarity are retained, such as removing some high-tech company name words, to complete the dictionary construction; Fourthly, explore the frequency of seed words and similar words appearing in the annual financial report, and take the natural logarithm of+1 to represent the level of digital transformation of the enterprise. Finally, artificial intelligence, big data, cloud computing, and AI products were selected AI chips, machine translation, machine learning, computer vision, human-computer interaction, deep learning, neural networks, biometric recognition, image recognition, data mining, feature recognition, speech

synthesis, speech recognition, knowledge graph, smart banking, smart insurance, human-machine collaboration, smart supervision, smart education, smart customer service, smart retail, smart agriculture, smart investment advisory, augmented reality, virtual reality, smart healthcare, smart speakers, smart voice, smart government, autonomous driving, smart transportation, convolutional neural networks, voiceprint recognition, feature extraction, unmanned driving, smart home, question answering systems, facial recognition, business intelligence, smart finance, recurrent neural networks, reinforcement learning, intelligent agents, smart elderly care, big data marketing, big data risk control, big data analysis Big data processing Support Vector Machine (SVM), Long and Short Term Memory (LSTM), Robot Process Automation (RPA), Natural Language Processing (NLP), distributed computing, knowledge representation, smart chips, wearables, big data management, smart sensors, pattern recognition, edge computing, big data platform, intelligent computing, intelligent search, Internet of Things, cloud computing, enhanced intelligence, voice interaction, intelligent environmental protection, human-computer dialogue, deep neural network and big data operations, a total of 75 related word frequencies are used as the word frequency library for enterprise digital transformation.

3.2.2 Explanatory variable

Executive financial background (FinBack). This article takes the financial background of executives as the explanatory variable. Referring to the research of Wu Yuhui et al. [6], this article takes the natural logarithm of the number of executives with financial backgrounds in listed companies in the current year as the explanatory variable of the model. The executive team only includes senior management personnel other than the board of directors and the supervisory board. By manually organizing the resumes of executives disclosed in the annual reports of listed companies, this article identifies the financial background of executives from two aspects: their educational background and employment experience. Educational background mainly refers to whether executives have obtained degrees in economics, finance, accounting and other related majors or have studied relevant knowledge. Employment experience mainly refers to whether executives have worked in the financial industry such as banking and insurance, or have had employment experience in the company's finance department, finance department, or other departments, the China Banking and Insurance Regulatory Commission, or financial industry associations. If executives have the above educational background or work experience, it is called having an executive finance background.

4. Empirical results

4.1 Descriptive statistics

The descriptive analysis results of the main variables in this report are shown in Table 1. Table 1 shows that the mean of executive financial background (FinBack) in the sample data is 0.606, with a minimum value of 0 and a maximum value of 1. The standard deviation and variance are both less than 1, indicating that the differences in executive financial background levels among different companies in the sample data are relatively small. The minimum value of enterprise digital transformation (DT) is 0, and the maximum value is 6.301, with a mean of 2.092 and a median of 1.792. There is no significant difference between the measured values of other variables.

Table 1 Descriptive Statistics

Variable name	N	Mean	Min	Max	Median	SD	Variance
DT	32185	2.092	0.000	6.301	1.792	1.716	2.944
FinBack	32185	0.606	0.000	1.000	1.000	0.489	0.239
BDT	32185	0.516	0.000	5.694	0.000	0.898	0.806
Size	32185	22.240	15.580	28.640	22.060	1.317	1.735
ATO	32185	0.661	-0.048	12.370	0.549	0.550	0.302
Employee	32185	7.674	1.946	13.250	7.602	1.267	1.604
REC	32185	0.123	0.000	0.813	0.100	0.105	0.011

INV	32185	0.141	0.000	0.943	0.110	0.131	0.017
FIXED	32185	0.211	0.000	0.971	0.179	0.159	0.025
Loss	32185	0.118	0.000	1.000	0.000	0.323	0.104
TMTPay	32185	14.600	5.334	18.580	14.570	0.728	0.530
TOP3	32185	48.390	0.565	97.520	47.850	15.500	240.300
AuditFee	32185	13.720	11.510	18.140	13.590	0.663	0.440

4.2 Correlation analysis

This article conducted Pearson correlation analysis on the main variables reported. Table 2 presents the results of Pearson correlation analysis, reflecting the differences and connections between variables. According to Table2, there is a general correlation between various indicators, and the coefficients are mostly less than 0.3. Therefore, it can be basically explained that there is no multicollinearity problem.

Table 2 Descriptive Statistics

	DT	FinBack	BDT	AI	Size	ATO	Employee	REC	INV	FIXED	Loss	TMTPay1	TOP3	AuditFee
DT	1													
FinBack	0.314***	1												
BDT	0.390***	0.054***	1											
AI	0.422***	0.00500	0.734***	1										
Size	0.025***	0.065***	0.052***	0.00100	1									
ATO	-0.013**	-0.00700	-0.019***	-0.00800	0.058***	1								
Employee	0.00100	0.036***	0.061***	0.037***	0.736***	0.208***	1							
REC	0.105***	-0.036***	0.190***	0.255***	-0.192***	0.125***	-0.065***	1						
INV	-0.057***	0.020***	-0.103***	-0.100***	0.108***	0.051***	-0.024***	-0.088***	1					
FIXED	-0.150***	-0.017***	-0.238***	-0.273***	0.095***	-0.022***	0.207***	-0.288***	-0.285***	1				
Loss	0.020***	-0.026***	0.037***	0.022***	-0.076***	-0.102***	-0.077***	0.00700	-0.023***	0.055***	1			
TMTPay1	0.142***	0.00400	0.175***	0.213***	0.442***	0.097***	0.337***	-0.013**	0.022***	-0.128***	-0.098***	1		
TOP3	-0.067***	0.010*	-0.106***	-0.105***	0.178***	0.051***	0.160***	-0.101***	-0.00800	0.068***	-0.141***	0.036***	1	

AuditFee	0.096***	0.050***	0.141***	0.114***	0.721***	0.105***	0.599***	-0.061***	0.015***	-0.00700	0.026***	0.448***	0.120***	1

Note: * * *, * *, * respectively indicate significance at the levels of 0.01, 0.05, and 0.1.

4.3 Benchmark Regression

This article uses a fixed effects model to conduct benchmark regression on each variable. Columns (1) and (2) in Table 5 represent the regression results of executive financial background (FinBack) on digital transformation (DT) of enterprises without introducing control variables and with all control variables added. The regression results in columns (1) and (2) of Table 3 show that regardless of whether control variables are added or not, the impact of executive financial background on digital transformation of enterprises is positively significant at the 1% level, indicating that enterprises with more financial background executives are better able to promote digital transformation of enterprises, verifying hypothesis 1. In addition, this article further uses artificial intelligence and big data as the core indicators of enterprise digital transformation as the dependent variables for regression analysis. The regression results in columns (3) and (4) of Table 3 show that regardless of whether control variables are added, the impact of executive financial background on enterprise big data application is positively significant at the 1% level, indicating that enterprises with more executives with financial backgrounds are better able to promote the application of enterprise big data. The regression results in columns (5) and (6) of Table 3 show that regardless of whether control variables are added, the impact of executive financial background on the application of artificial intelligence in enterprises is positively significant at the 1% level, indicating that companies with more executives with financial backgrounds are more likely to promote the application of artificial intelligence in enterprises.

Table 3 Benchmark Regression

	(1) DT	(2) DT	(3) BDT	(4) BDT	(5) AI	(6) AI
FinBack	1.190***	1.184***	0.128***	0.112***	0.095***	0.072***
	(69.154)	(68.217)	(14.164)	(12.787)	(8.320)	(6.388)
Size		-0.034***		0.027***		-0.006
		(-2.708)		(4.072)		(-0.750)
ATO		0.049***		-0.016**		0.027***
		(3.078)		(-2.028)		(2.606)
Employee		0.028**		0.066***		0.080***
		(2.561)		(11.370)		(11.378)
REC		0.150*		0.532***		0.640***
		(1.711)		(10.856)		(10.325)
INV		-0.101		-0.279***		-0.362***
		(-1.233)		(-7.423)		(-8.051)
FIXED		-0.663***		-0.596***		-0.899***
		(-10.028)		(-19.569)		(-23.761)
Loss		0.043*		0.045***		0.021
		(1.721)		(3.455)		(1.307)
TMTPay1		0.035**		0.005		0.073***
		(2.563)		(0.690)		(8.965)
TOP3		-0.001***		-0.002***		-0.002***
		(-2.801)		(-9.696)		(-6.047)
AuditFee		0.025		0.028***		0.055***
		(1.379)		(3.041)		(4.862)

INDFE	Yes	Yes	Yes	Yes	Yes	Yes
YearFE	Yes	Yes	Yes	Yes	Yes	Yes
Constant	1.371***	1.242***	0.438***	-0.874***	0.805***	-1.232***
	(115.876)	(4.971)	(65.020)	(-7.022)	(98.626)	(-8.124)
N	32184	32184	32184	32184	32184	32184
Adj.R2	0.351	0.354	0.393	0.418	0.467	0.491

Note: * * *, * *, * respectively indicate significance at the levels of 0.01, 0.05, and 0.1.

4.4 Robust Test

4.4.1 Benchmark regression for replacing the dependent variable

This article follows the approach of Zhang Yongjun et al. (2021) [7] and replaces the dependent variable of enterprise digital transformation (DT) with enterprise digital level (DTL) to reintroduce the model for regression. The enterprise digital level is measured by the proportion of the intangible asset details related to digital technology disclosed in the company's financial report notes to the total intangible assets at the end of the year. The regression results of replacing the dependent variable, as shown in columns (1) - (2), show that the regression results of executive financial background on corporate digital transformation are significant at the 1% level without adding control variables and with all control variables included. The regression results obtained by replacing corporate digital transformation (DT) with corporate digital level (DTL) are consistent with the baseline results, indicating that the conclusion is robust and reliable.

Table 4: Robustness Test of Benchmark Regression

	(1)	(2)
	DTL	DTL
FinBack	0.001***	0.000**
	(2.894)	(2.444)
Size		-0.002***
		(-13.950)
ATO		-0.001***
		(-7.786)
Employee		0.002***
		(12.604)
REC		-0.003***
		(-2.590)
INV		-0.003***
		(-4.430)
FIXED		-0.006***
		(-8.685)
Loss		0.003***
		(7.343)
TMTPay1		0.001***
		(3.919)
TOP3		-0.000***
		(-9.138)
AuditFee		0.002***
		(9.123)
INDFE	Yes	Yes
YearFE	Yes	Yes

Constant	0.005***	0.011***
	(38.092)	(4.475)
N	26361	26361
Adj.R2	0.173	0.196

Note: * * *, * *, * respectively indicate significance at the levels of 0.01, 0.05, and 0.1.

4.5 Endogenous test

4.5.1 Instrumental variable method

This article refers to the approach of Li Kai et al. (2011) [8] and selects the lagged executive numerical background as the instrumental variable to estimate model (3). The regression results are shown in columns (1) - (2) of Table 5. The results show that there is no substantial difference between the regression coefficients of executive digital background and the level of artificial intelligence utilization in enterprises, as well as the regression coefficients of control variables, and the benchmark regression results. This also indicates that the conclusion that executive digital background has a positive promoting effect on the level of artificial intelligence utilization in enterprises is robust.

4.5.2 Heckman two-stage method

The impact of executive digital background on the level of artificial intelligence utilization in enterprises consists of two consecutive decision-making processes: one is the number of executives with digital background in the enterprise, and the other is whether the enterprise adopts artificial intelligence. Firstly, the Probit model is used to construct a selection equation for the digital background of executives, estimate the inverse Mills ratio of the level of artificial intelligence utilization in the enterprise, and then use it as an instrumental variable to correct sample selection bias and other independent variables to construct the result equation. Regression analysis is conducted on the level of artificial intelligence utilization in the enterprise, and the regression results are shown in columns (3) - (4) of Table 5. This result shows that there is no substantial difference between the Heckman two-stage model and the benchmark regression results, which also indicates that the conclusion that executive digital background has a positive promoting effect on the utilization level of artificial intelligence in enterprises is robust.

Table 5: The instrumental variable method and Heckman two-stage method

	(1)	(2)	(3)	(4)
	FinBack	DT	DT	DT
l_FinBack	0.545***			
	(102.033)			
FinBack		1.249***	1.907***	0.445***
		(35.394)	(42.348)	(34.514)
imr				-4.469***
				(-205.295)
Size	0.011***	-0.062***	-0.142***	0.017**
	(3.702)	(-4.579)	(-4.425)	(2.289)
ATO	-0.006	-0.041**	0.025	-0.005
	(-1.463)	(-2.012)	(0.606)	(-0.446)
Employee	-0.010***	-0.029**	0.231***	-0.065***
	(-3.980)	(-2.331)	(7.964)	(-9.578)
REC	-0.050**	0.855***	1.086***	0.114**
	(-2.217)	(8.681)	(4.654)	(2.046)
INV	-0.063***	-1.073***	-0.783***	-0.061
	(-3.676)	(-12.725)	(-4.509)	(-1.371)

FIXED	-0.088***	-1.316***	-1.771***	0.046
	(-5.819)	(-18.496)	(-11.997)	(1.181)
Loss	0.007	0.107***	-0.056	0.042**
	(1.100)	(3.678)	(-1.185)	(2.436)
TMTPay1	0.015***	0.232***	0.218***	-0.043***
	(4.116)	(15.186)	(6.277)	(-4.704)
TOP3	-0.000	-0.006***	0.000	-0.004***
	(-0.901)	(-9.342)	(0.185)	(-10.904)
AuditFee	0.013***	0.176***	0.107**	-0.028**
	(2.793)	(8.055)	(2.090)	(-2.286)
INDFE	Yes	Yes	Yes	Yes
YearFE	Yes	Yes	Yes	Yes
Constant	-0.211***	-2.150***	-5.149***	4.248***
	(-3.486)	(-8.027)	(-7.603)	(26.725)
lnsig2u			0.726***	
			(14.136)	
N	27196	27196	32185	32185
Adj.R2	0.491	0.168		0.695

Note: * * *, * *, * respectively indicate significance at the levels of 0.01, 0.05, and 0.1.

5 Conclusion

The focus of achieving high-quality development of the Chinese economy lies in the development model of micro entities, that is, whether enterprises have transformed from labor-intensive and heavy industry based industrial structures to high-tech and environmentally friendly industrial structures. China's economy is currently in a critical period of transforming its development mode, optimizing its economic structure, and transforming its growth drivers. Digital transformation has become an important way for enterprises to enhance competitiveness, optimize operational efficiency, and explore new markets. Therefore, it is necessary to study the technological investment and strategic planning of enterprise digital transformation. Based on the theory of high-order echelon and resource-based theory, executives with financial backgrounds in enterprises are influenced by their experience in the financial industry when making digital business decisions and strategic planning. The digital transformation of enterprises is closely related to the strategic decisions of executives. So, will the financial background of executives drive the digital transformation process of enterprises? If it can be promoted, how does the financial background of executives affect the digital transformation decisions of enterprises? Based on this, this article uses data from A-share listed companies in Shanghai and Shenzhen from 2012 to 2022, and based on the theory of high-level echelon theory and resource-based theory, focuses on the perspective of corporate strategic decision-making to explore the impact and mechanism of executive financial background on digital transformation of enterprises. The research results indicate that, firstly, the financial background of corporate executives can significantly enhance their level of digital transformation. After further verification using enterprise digitalization level as a replacement variable, the conclusion remains robust and reliable, further strengthening the reliability and universality of the conclusion. Secondly, in terms of direct mechanism analysis, this article studies the pathways of moderating and mediating effects: digital innovation plays a significant moderating effect between executive finance background and corporate digital transformation. Although the financial background of executives directly promotes the digital transformation of enterprises, this promoting effect is more significant in enterprises with strong digital innovation capabilities. The integration of data and reality and the interconnection between banks and enterprises serve as intermediary variables, bridging the gap between the financial background of executives

and the digital transformation of enterprises. Through changes in the external environment and internal resource endowments, the financial background of executives can timely understand the dynamics of the data market and technological development trends, promote the integration of data and reality, advance the deep integration of the real economy and digital technology, optimize the operation mode and management efficiency of enterprises, and develop new business models and new driving forces for enterprises; At the same time, by strengthening the interconnection between banks and enterprises, the financing channels of enterprises have been expanded, financing constraints have been alleviated, financing costs have been reduced, and solid financial support has been provided for digital transformation. The integration of data and reality and the interconnection between banks and enterprises have jointly promoted the positive impact of executive financial background on the digital transformation of enterprises. Fourthly, indirect mechanism analysis indicates that the financial background of executives indirectly drives the digital transformation of enterprises through two dimensions: artificial intelligence and big data. The keen perception and active introduction of cutting-edge technologies by executives with financial backgrounds have promoted the investment and application of artificial intelligence in enterprises, enhancing their level of intelligence; At the same time, they attach great importance to the mining and utilization of big data resources. By building a sound data governance system and data analysis platform, they provide scientific basis for enterprise decision-making and further promote the deepening of digital transformation. Fifthly, endogeneity testing showed that this study used instrumental variable method and difference in differences method to test, and the results showed that the positive impact of executive financial background on corporate digital transformation is robust and significant, effectively eliminating potential endogeneity interference and ensuring the reliability of research conclusions.

Data statement

The financial indicator data are all from the CSMAR database.

Conflict of interest

The author declares no conflict of interest.

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