Transactions on Economics, Business and Management Research
ISSN: 2960-1789, eISSN: 2960-2254 | Volume 9
GBMS 2024

The Impact of Capital Market on New Quality Productivity

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Abstract. The establishment of an innovation system centered on New Quality Productivity holds significant implications for China in accelerating the realization of high-level technological self-reliance and the development of high-quality capabilities. This paper empirically examines the role of capital markets in influencing the development of New Quality Productivity by using technological innovation and industrial upgrading as two core proxies and measuring the data at the provincial level in China from 2007 to 2022. The regression results show that the capital market has a significant positive impact on both technological innovation and industrial upgrading with obvious regional differences. From the perspective of technological innovation, the influence of the capital market on the development of New Quality Productivity shows the pattern of “east > central > west”, while from the perspective of industrial upgrading, the influence of the capital market on the development of New Quality Productivity shows the pattern of “central > east > west”. The above findings expand the scope of research on New Quality Productivity and provide important theoretical references for local governments in macro-control and policy formulation.

Keywords: New quality productivity; capital markets; technological innovation; industrial upgradation; equity financing.

1. Introduction

Since the outbreak of COVID-19, the persistently high interest rates, escalating conflicts, sluggish international trade, and an increasing frequency of climate-related disasters have posed significant challenges to global economic growth. At the same time, China's economic recovery is facing obstacles due to unfavorable factors such as overcapacity in some industries, weakened social demand, and tense trade situation [1]. It is necessary and urgent to seek new growth drivers to achieve high-quality development of the Chinese economy. In September 2023, Chinese President Xi Jinping first proposed the concept of New Quality Productivity, aiming to continuously stimulate and release the vitality of factors of production and provide a powerful impetus for sustainable economic and social development [2]. The connotation of New Quality Productive is complex, which refers to advanced contemporary productive forces that have emerged from technological innovation, rational allocation of production factors, and deep industrial transformation and upgrading. The improvement of total factor productivity is its core symbol [3]. As an important factor for connecting links in each of the production processes, capital plays a crucial role in promoting the development of new quality productivity. capital market has crucial economic functions such as money supply, resource allocation, and risk pricing [4], which can significantly aid in the realization of production element values, the integration of technological innovations, and the transformation and upgrading of industries, ultimately driving the comprehensive advancement of New Quality Productivity.

It should be noted that, despite New Quality Productivity becoming an important driving force for high-quality economic development, literature on new quality productive forces is still in its early stages, which mostly focuses on qualitative analysis of its definition and connotation, while the minority among them focused on "how to form new quality productive forces". Some scholars have provided empirical evidence from an economic perspective for the development of New Quality Productivity, providing strong support for its research. However, existing research has not yet reached a unified framework [2]. Although many scholars have not yet integrated the capital market and new quality productivity into a unified research framework, there is a rich body of literature investigating

the relationship between the capital market and Total Factor Productivity, which is the core element of New Quality Productivity. Based on sufficient empirical experience and theoretical support, this study attempts to make innovative contributions from the following aspects. Firstly, this article takes a quantitative perspective to explore the inherent relationship between Capital Markets and New Quality Productivity, providing constructive theoretical support and empirical evidence for the development of new quality productivity. Secondly, rooted in the concept of new quality productivity, this article selects two key indicators of New Quality Productivity to explore the transmission mechanism of capital markets promoting the development of New Quality Productivity, offering new theoretical references for local governments to promote capital markets to support the real economy.

2. Literature Review and Hypothesis Analysis

2.1. Capital Markets Promote Technological Innovation

As a representative of advanced productivity, technological breakthroughs are the fundamental support for the development of New Quality Productivity. Technological breakthroughs can effectively improve labor materials, adjust production relations, and thus enhance the total factor productivity of enterprises to promote the development of new quality productivity. At the same time, technological breakthroughs can also promote the sustainable development model of green and low carbon, and help traditional industries realize deep greenization, thereby steadily promoting the development of New Quality Productivity [5]. However, Research and Experimental Development (R&D) activities have characteristics of long duration, high investment, and high risk, which makes it difficult for the bank-dominated financing system to meet the funding needs of technology-based enterprises [6].

The capital market, as the main platform for direct financing, directly connects the providers and demanders of funds, greatly breaking down the financial constraints on businesses. On the one hand, the risk tolerance and investment autonomy of the capital market have increased the influence of enterprise prospect estimation and conceptual identification in investment decisions. Enterprises can be free from being constrained by rigid financing indicators such as business performance, which prevents them from engaging in innovative activities with far-reaching impacts but high risks [7], but obtain financial support from "like-minded people" and thus focus on technological innovation itself. On the other hand, the capital market can capitalize on technological achievements to activate intangible assets, converting the future benefits of technology-based enterprises into current income, and shortening the time for patent realization dividends [8]. This financial innovation not only alleviates the financing constraints of small and medium-sized science and technology innovation enterprises, but also reduces the risk of the innovations being harvested by others in vulnerable enterprises. Nowadays, the Shanghai Stock Exchange, Shenzhen Stock Exchange, and Beijing Stock Exchange offer different fields and initial conditions of financial support for technological research and innovation in their respective sectors, driving the development of New Quality Productivity through financial supply by creating a rich and multi-layered environment for the financing of technological innovation [9].

Based on the theoretical analysis above, this paper selects Technological Innovation as a representative indicator of New Quality Productivity, and proposes the following expected hypotheses:

H1: Capital markets have a positive promoting effect on promoting the development of n New Quality Productivity through motivating Technological Innovation.

2.2. Capital Markets Promote Industrial Upgradation

Due to the optimization and upgrading of production factors being the core feature of new quality productivity [10], the capital market can greatly promote the formation and development of new quality productivity by optimizing resource allocation. The implementation of this function stems

from the risk pricing function of the capital market and the strong liquidity of capital, where stock prices reflect the market's assessment results, and capital elements will automatically flow into enterprises and projects with outstanding profits and relatively high efficiency [11]. In contrast, businesses with low efficiency, slow growth, and high risk often face pressure from falling stock prices and capital outflows, eventually being eliminated by the market. Through this process of market selection, capital markets often effectively promote capital elements to flow into "three-high" enterprises with advanced technology, efficient energy use, and high product quality, thereby driving the upgrade and optimization of industrial structures. Furthermore, capital markets can also promote the integration and optimization of corporate resources through equity investment and mergers and acquisitions, realizing the adjustment of existing industry structures, enhancing industry concentration, and ultimately driving the overall upgradation of industry structures [4].

Based on the theoretical analysis above, this paper selects Industrial Upgradation as a representative indicator of New Quality Productivity, and proposes the following expected hypotheses:

H2: Capital markets positively promote the development of New Quality Productivity through enhancing Industrial Upgradation.

3. Research Design

3.1. Capital Markets Promote Technological Innovation

3.1.1. Model Construction.

To fully clarify the relationship between capital markets and technological innovation, the following benchmark regression model Model 1 is established for hypothesis testing.

$$TI_{i,t} = \alpha_0 + \alpha_1 CM_{i,t} + \alpha_2 Controls_{i,t} + \mu_i + \lambda_t + \varepsilon_{i.t} \quad (1)$$

Where TI represents technological innovation. The subscripts i and t represent cities and years. α_0, α_1, α_2 represents the intercept term, the coefficient of influence of explanatory variables, and the coefficient of influence of control variables in sequence. CM represents the capital market. μ_i, λ_t, $\varepsilon_{i,t}$ successively represent the regional fixed effect, the temporal fixed effect, and the random disturbance item.

3.1.2. Variable Definition.

The Dependent variable in Model 1 is Technological Innovation (TI), this study adopts the number of patent authorizations for industrial enterprises above the designated size to represent it. Table 1 shows variable indicators and explanations of Model 1.

The Independent variable in Model 1 is the Capital Market (CM). The indicators measuring the development of the capital market come from the People's Bank of China, which is represented by the financing ratio of the capital market in the increment of social financing scale, i.e. [corporate bond plus non-financial enterprise stock financing]/National GDP [12]. Since the research dimension of this article is provincial level, this study adopts [corporate bond plus non-financial enterprise stock financing]/provincial GDP as the variable indicator

The Control variables in Model 1 include:

(1) International Business (IB): The logarithm of the actual scale of foreign investment utilization is used. International trade cooperation facilitates the introduction of advanced technology and foreign capital, supporting enterprises to create technological innovation.

(2) Digital Infrastructure Construction (DIC): Fiber optic mileage is used. The increase in fiber optic mileage is conducive to the sharing and exchange of digital technology and production factors within the region, thereby promoting technological innovation.

(3) Human Capital (HC): Number of people with a bachelor's degree or above per capita is used. Workforce with higher education have more research abilities, which can promote technological innovation.

(4) Economic Agglomeration (EA): The economic output per unit area is used. Regions with higher economic development are conducive to the concentration of capital and talent elements, driving technological innovation.

(5) Fundamentals of High-Tech Enterprises (FT): The logarithm of the number of high-tech enterprises is used. High-tech enterprises are the main producers of technological innovations in the market [5].

Table 1. Variable indicators and explanations of Model 1

Category	Item	Variable explanations	Data sources
Dependent variable	Technological Innovation (TI)	the number of patent authorizations for industrial enterprises above designated size at the provincial level	CSMAR database
Independent variable	Capital Market (CM)	[corporate bond plus non-financial enterprise stock financing]/Provincial GDP	The People's Bank of China
Control variables	International Business (IB)	The logarithm of the actual scale of foreign investment utilization at the provincial level	The Chinese National Bureau of Statistics
	Digital Infrastructure Construction (DIC)	Fiber optic mileage	The Chinese National Bureau of Statistics
	Human Capital (HC)	Number of people with a bachelor's degree or above/Population in the province	The Chinese National Bureau of Statistics
	Economic Agglomeration (EA)	Province GDP/Province Area	The Chinese National Bureau of Statistics
	Fundamentals of High-Tech Enterprises (FT)	The logarithm of the number of high-tech enterprises at the provincial level	CSMAR database

3.2. Capital Markets promote Industrial Upgradation

3.2.1. Model Construction.

To fully clarify the relationship between capital markets and industrial upgradation, the following benchmark regression model Model 2 is established for hypothesis testing.

$$IU_{i,t} = \alpha_0 + \alpha_1 CM_{i,t} + \alpha_2 Controls_{i,t} + \mu_i + \lambda_t + \varepsilon_{i.t} \quad (2)$$

Where IU represents industrial upgradation. The subscripts i and t represent cities and years. α_0, α_1, α_2 represents the intercept term, the coefficient of influence of explanatory variables, and the coefficient of influence of control variables in sequence. CM represents the capital market. μ_i, λ_t, $\varepsilon_{i,t}$ successively represent the regional fixed effect, the temporal fixed effect, and the random disturbance item.

3.2.2. Variable definition.

The Dependent variable in Model 2 is Industrial Upgradation (IU), represented by the Value added of the tertiary industry / GDP at the provincial level. Table 2 shows the variable indicators and explanations of Model 2.

The Independent variable in Model 2 is the Capital Market (CM). This study still adopts [corporate bond plus non-financial enterprise stock financing] / provincial GDP as the variable indicator.

The Control variables in Model 2 include:

(1) Energy Consumption (EC): Electricity generation (billion kilowatt hours) per capita is used. An important indicator of industrial upgrading is energy consumption. Industry upgrading can lead to less, and more green energy use.

(2) Government Intervention Level (GOV): Government fiscal expenditure / GDP at the provincial level is used. The fiscal expenditure of government departments is beneficial to addressing market information issues such as incomplete and asymmetric information, and externalities, which may lead to overproduction and blind investment, thereby facilitating industry upgrades by promoting the optimal allocation of resources across various industries [13].

(3) Human Capital (HC): Number of people with a bachelor's degree or above per capita is used. The enhancement of comprehensive population quality enables workers to competently employ advanced tools to enhance production efficiency and alter manufacturing techniques to foster industrial optimization and upgrade.

(4) Urbanization Rate (URA): Resident urban population per capita is used. The advancement of urbanization levels has promoted the transfer of surplus rural labor to cities, objectively enhancing the optimization of industrial structures [14].

(5) Fundamentals of High-Tech Enterprises (FT): The logarithm of the number of high-tech enterprises is used. High-tech enterprises are the source of motivation for industry optimization and upgrades, which can speed up the circulation of production elements, increase the production efficiency of businesses, and change the ecological structure of industries.

Table 2. Variable indicators and explanations of Model 2

Category	Item	Variable explanations	Data sources
Dependent variable	Industrial Upgradation (IU)	Value added of the tertiary industry / GDP at the provincial level	The Chinese National Bureau of Statistics
Independent variable	Capital Market (CM)	[corporate bond plus non-financial enterprise stock financing] / Provincial GDP	The People's Bank of China
Control variables	Energy Consumption (EC)	Electricity generation (billion kilowatt hours) / Population in the province	CSMAR database
	Government Intervention Level (GOV)	Government fiscal expenditure / GDP at the provincial level	The Chinese National Bureau of Statistics
	Human Capital (HC)	Number of people with a bachelor's degree or above / Population in the province	The Chinese National Bureau of Statistics
	Urbanization Rate (URA)	Resident urban population / Population in the province	The Chinese National Bureau of Statistics
	Fundamentals of High-Tech Enterprises (FT)	The logarithm of the number of high-tech enterprises at the provincial level	CSMAR database

4. Descriptive Statistics

Based on data availability and sample comparability, this study selected 34 provinces in China as regional samples, with a period set from 2007 to 2022. The sample data comes from the Chinese National Bureau of Statistics, the CSMAR database, and the People's Bank of China. For some cities with missing data in certain years, use the data from the previous year to make up for it.

The descriptive statistics of the main variables in the study are shown in Table 3. The difference between the maximum and minimum values of Technological Innovation and Industrial Upgrading is significant, indicating great potential for improvement for New Quality Productivity with evident geographical differences. Furthermore, the negative minimum value of capital market financing is evidence of the negative impact of finance on the real economy in some regions. The significant difference between the mean and the maximum value of the capital market may be attributed to the relatively high level of financing in the regions where the stock exchanges, such as the Shanghai Stock Exchange, Shenzhen Stock Exchange, and Beijing Stock Exchange, are located.

Table 3. Descriptive statistics

Variable	N	Mean	S.D	Min	P50	Max
TI	488	7.797	1.776	1.386	7.891	11.653
IU	488	0.461	0.100	0.286	0.453	0.839
CM	488	0.021	0.037	-0.064	0.009	0.364
IB	488	6.508	1.637	1.627	6.510	10.946
DIC	488	10.069	0.864	6.688	10.352	11.739
HC	488	25.948	11.401	6.684	24.239	66.302
EA	488	0.389	0.837	0.001	0.145	7.042
FT	488	4.249	1.672	0	4.234	7.922
EC	488	0.499	0.438	0.053	0.378	3.070
GOV	488	0.265	0.195	0.087	0.217	1.379
URA	488	0.563	0.141	0.226	0.553	0.896
ID_T	488	1.184	0.681	0.500	1.001	5.297

5. Empirical study

5.1. Model Validation and Relevance Analysis

Table 4. Regression model validation

Type	Purpose	Value	Conclusion
F-test	FE model VS POOL model	$F(30,451)=28.59$, $p=0.000$	FE model
BP-test	RE model VS POOL model	$\chi^2(1)=1082.75$, $p=0.0000$	RE model
Hausman-test	FE model VS RE model	$\chi^2(6)=21.07$, $p=0.0018$	FE model

As shown in table 4, F-tests and Hausman-tests suggest that the estimates from fixed-effects models are more reliable than those from random-effects and mixed models. Therefore, Therefore, this study conducted two empirical tests with a fixed effects model.

According to the relevance analysis, the correlation coefficients between capital market with technological innovation and industrial upgrading range from 0.3 to 0.5 (which are 0.3602* and 0.4899* respectively), indicating that there is a moderate positive correlation between capital market and both technological innovation and industrial upgrading.

5.2. Multicollinearity Test

To avoid the problem of multicollinearity, the variance inflation factor (VIF) of each explanatory variable was calculated in this paper before conducting the benchmark regression. It is usually considered that there is no significant multicollinearity between variables when the tolerance in the results is <0.1 or the variance inflation factor (VIF) is below 10. When the VIF value is between 10 and 100, the problem of model variable selection needs to be considered because there is significant multicollinearity between variables. When the VIF value is above 100, the model fails affected by serious multicollinearity. Table 5 shows that the VIF value of each variable is less than 10, and the mean value of VIF is 2.36 and 2.08, respectively. Therefore, it is believed that there is no significant collinearity effect in both models.

Table 5. The result of the Multicollinearity test

Model 1			Model 2		
Variable	VIF	1/VIF	Variable	VIF	1/VIF
FT	3.95	0.253445	URA	3.88	0.257554
IB	3.08	0.324689	HC	2.66	0.376575
DIC	2.08	0.480293	FT	1.99	0.503221
HC	1.9	0.525476	GOV	1.39	0.721372
EA	1.83	0.545639	IU	1.29	0.77399
CM	1.32	0.756448	EC	1.26	0.791009
Mean VIF	2.36		Mean VIF	2.08	

5.3. Regression Analysis

5.3.1. Capital Markets Promote Technological Innovation.

From the regressions presented in Table 6, the regression coefficient between the capital market and technological innovation is 1.913, which is highly significant at the 1% level, indicating that the capital market has a significant positive impact on technological innovation. Therefore, it can be seen that the capital markets have a significant positive promoting effect on the development of New Quality Productivity, and hypothesis H1 has been preliminarily verified. It proves that the capital markets can effectively alleviate the financing constraints of small and medium-sized high-tech enterprises, accelerate the transformation of technological innovation achievements, and thus provide the impetus for the development of New Quality Productivity.

5.3.2. Capital Markets Promote Industrial Upgradation.

From the regressions presented in Table 6, the regression coefficient between the capital market and industrial upgrading is 0.134, which is highly significant at the 5% level, indicating that the capital market has a significant positive impact on industrial upgrading. Therefore, it can be inferred that the capital market has a certain positive promoting effect on the development of new productive forces, and hypothesis H2 has been preliminarily verified. It proves that the capital markets can improve industrial concentration by optimizing resource allocation, ultimately promoting overall industrial upgrading, and thus supporting the development of new quality productivity.

Table 6. Regression results of Model 1 & Model 2

Model 1		Model 2	
Variable	TI	Variable	IU
CM	1.913***	CM	0.134**
	-2.78		-2.11
IB	0.251***	EC	0.00047
	-3.47		-0.03
DIC	0.448**	GOV	0.08
	-2.48		-0.63
HC	0.0617***	FT	0.0124**
	-5.31		-2.11
EA	0.161*	URA	0.331**
	-1.98		-2.41
FT	0.335***	HC	0.00347***
	-7.57		-3.11
Province FE	Yes	Province FE	Yes
Year FE	Yes	Year FE	Yes
Constant	-1.473	Constant	0.108*
	(-0.80)		-1.84
N	488	N	488
R2	0.877	R2	0.648

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

5.4. Robust Test

Table 7. Robust Test of Model 1 & Model 2 (Winsorized)

Model 1		Model 2	
Variable	(TI)	Variable	(IU)
CM	2.119***	CM	0.152**
	-2.86		-1.97
IB	0.237***	EC	0.00555
	-3.34		-0.32
DIC	0.427	GOV	0.0923
	-1.59		-0.71
HC	0.0674***	FT	0.0116**
	-6.09		-2.07
EA	0.254**	URA	0.319**
	-2.29		-2.3
FT	0.303***	HC	0.00353***
	-6.89		-3.05
Province FE	Yes	Province FE	Yes
Year FE	Yes	Year FE	Yes
Constant	-1.217	Constant	0.110*
	(-0.47)		-1.89
N	488	N	488
R2	0.881	R2	0.651

t statistics in parentheses
* p < 0.1, ** p < 0.05, *** p < 0.01

To reduce the effect of extreme values, all sample data were winsorized at the 5% level by 1% in this study, and the regressions were recalculated. The results, as shown in Table 7, indicate that the correlation coefficient between capital markets and technological innovation is 2.119, which remains significant at the 1% level. The correlation coefficient between capital markets and industrial upgrading is 0.152, which is also significant at the 5% level, confirming that the conclusions are robust even after excluding outliers.

Table 8. Robust Test of Model 2 (Replace calculation)

Variable	IU_T
CM	1.644***
	-2.35
EC	0.052
	-0.53
GOV	-0.0288
	(-0.03)
FT	0.0874
	-1.51
URA	0.429
	-0.56
HC	0.0176**
	-2.28
Province FE	Yes
Year FE	Yes
Constant	0.0611
	-0.16
N	488
R2	0.427

t statistics in parentheses
* p < 0.1, ** p < 0.05, *** p < 0.01

Since the positive effect of the capital market on industrial upgrading lacks significance compared with that on scientific and technological innovation, to further enhance the accuracy of the research conclusions, the index of industrial upgrading measured in the previous paper is replaced by the Value added of the tertiary industry / Value added of the secondary industry. As shown in table 8, the impact coefficient is significantly enhanced after replacing the index, which is significantly positive at the 1% level, indicating that the capital market has a considerable positive effect on industrial upgrading, and it is most obvious for promoting the optimization and upgrading of the secondary industry, and the hypothesis H2 is valid.

5.5. Heterogeneity Testing

Considering the regional differences in economic development across China, this study divides the 34 provincial datasets into eastern, central, and western regional data for heterogeneity analysis, and then constructs fixed-effects models for parameter estimation. The results are shown in table 9 and table 10. For the impact of capital markets on technological innovation, the eastern and central regions still maintain significant effects on technological innovation, while the effect in the western region is not significant, exhibiting obvious regional differences. For the impact of capital markets on industrial upgrading, the central region keeps significant effects on industrial upgrading, but the impacts in the eastern and western regions are not significant. The reasons could be that as economically developed areas, the eastern region has mostly finished its industrial transformation and upgrading, so the enhancing role of capital markets is less evident; the western region has too few financial resources to be affected by capital markets.

Table 9. Heterogeneity testing of Model 1

	East	Central	West
Variable	TI	TI	TI
CM	1.765**	3.844*	1.055
	-2.23	-2.35	-0.61
IB	0.209**	0.237	0.214
	-2.35	-1.45	-1.52
DIC	0.413***	1.006*	0.439
	-3.15	-2.09	-1.34
HC	0.0476**	0.0397*	0.0730**
	-2.92	-2.27	-2.96
EA	0.161*	3.672	0.969*
	-2.03	-1.81	-1.89
FT	0.376***	0.255***	0.311***
	-7.2	-5.5	-3.59
Province FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Constant	-0.518	-6.647	-1.556
	(-0.32)	(-1.47)	(-0.48)
N	207	94	187
R2	0.891	0.943	0.851

t statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 10. Heterogeneity testing of Model 2

	East	Central	West
Variable	IU	IU	IU
CM	0.124	0.762***	-0.228
	-1.41	-5.86	(-1.74)
EC	0.0603	-0.223*	0.0163
	-0.45	(-2.54)	-0.7
GOV	0.484***	-0.405	0.0276
	-3.78	(-0.88)	-0.26
FT	0.0173*	-0.00057	0.00544
	-1.79	(-0.05)	-0.74
URA	0.212	0.467	0.397
	-0.91	-1.67	-1.74
HC	0.00225	0.00721*	0.00214
	-1.63	-2.46	-0.9
Province FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Constant	0.0843	0.155	0.170*
	-0.89	-1.92	-1.99
N	207	94	187
R2	0.745	0.762	0.596

t statistics in parentheses
* p < 0.1, ** p < 0.05, *** p < 0.01

6. Conclusion

This study is based on panel data from 34 Chinese provinces from 2007 to 2022, using technological innovation and industrial upgrading as core proxy indicators, to empirically test the impact of capital markets on the development of new quality productivity. The empirical results show: (1) Capital markets have a significant positive impact on technological innovation and industrial upgrading, and this conclusion holds after robustness testing. (2) Looking at technological innovation, the impact of capital markets on the development of new quality productivity follows a pattern of "east > central > west". As for industrial upgrading, the impact of capital markets on the development of new quality productivity follows a pattern of "central > east > west".

This study not only innovatively integrates capital markets and new-quality productivity into a unified research framework, broadening the scope of inquiry into new-quality productivity, but also provides a theoretical basis for promoting new-quality productivity through an in-depth exploration of its definition and the selection of representative key indicators. Furthermore, based on empirical panel data, it offers a novel theoretical reference for local governments to standardize their fiscal support for the real economy. Certainly, this study acknowledges certain limitations. For instance, due to the overly rich connotation of new-quality productivity, a comprehensive index definition has not been identified, and instead, only key indicators have been selected to represent it. Consequently, this study was unable to explore the mediating transmission mechanism of capital markets on new-quality productivity. At the same time, due to the provincial data accessibility and feasibility, the control variables selected in this paper do not fully and deeply reflect the impact of the capital market on new quality productivity. Therefore, subsequent research can start from these aspects to complement the findings of capital market and new quality productivity.

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