

Policy Effects of Accelerated Depreciation of Fixed Assets on Corporate Financial Performance and Supply Chain Spillover: Evidence from a Quasi-Natural Experiment

Jingling Wang*

International Business College, Dongbei University of Finance and Economics, Dalian, China

*2548401335@qq.com

Abstract

Based on the data of China's A-share listed companies from 2008 to 2023, this study takes the accelerated depreciation policy of fixed assets from 2014 to 2015 as a quasi-natural experiment. It adopts the difference-in-differences (DID) method to identify the direct impact of policies on the financial performance of enterprises and their spillover effects along the supply chain. The findings reveal that: (1) The policy led firms to over-invest and expand production, which reduced how efficiently resources were allocated and hurt overall financial outcomes. (2) As firms cut back on purchasing, upstream suppliers faced tighter cash flow and saw their performance decline. (3) Simultaneously, part of the pressure was pushed downstream. Companies raised prices and lowered service levels, which squeezed margins and weakened the profits of downstream partners. These results point to the importance of more carefully designed policies. They also give firms useful guidance on how to adjust investment and financial decisions when responding to fiscal incentives.

Keywords

Accelerated Depreciation of Fixed Assets, corporate financial performance, supply chain spillover effect, investment efficiency, difference-in-differences method.

1. Introduction

The Chinese government introduced the accelerated depreciation policy of fixed assets in 2014. It aims to deepen the reform of the fiscal and taxation system, optimize the tax structure and encourage investment in the real economy. The Ministry of Finance and the State Administration of Taxation issued the *Notice on Improving the Corporate Income Tax Policy for Accelerated Depreciation of Fixed Assets* (Finance and Taxation [2014] No. 75). Starting from January 1, 2014, the six major industries can shorten the depreciation period or adopt accelerated depreciation methods for newly purchased fixed assets. These industries include biomedicine, specialized equipment, transportation equipment, electronics, instrumentation, and information technology services. This policy reduces taxable income by increasing the depreciation rate and deducting upfront costs ([4] Fan & Liu, 2020). It belongs to "structural tax reduction", aiming to reduce the burden on enterprises and promote technological transformation and equipment renewal ([6] Henningsen et al., 2019). The macro background for the policy's introduction lies in the fact that at that time, some manufacturing industries were facing the real demands of overcapacity, narrowed profit margins and increased pressure for transformation and upgrading. Accelerated depreciation is regarded as a tax tool to "lighten the burden on enterprises". The policy is expected to improve total factor productivity, competitiveness, and profitability of firms ([9] Liu et al., 2022). Official sources also state that it helps companies "create more profits and enhance competitive advantages." These effects may bring better firm outcomes and a more efficient economic structure.

This study uses the accelerated depreciation policy for fixed assets launched in 2014 as a quasi-natural experiment. It examines the impact of this policy on the financial performance of A-share listed companies in China and its spillover effects in the supply chain network. The motivation for the research lies in the following: On the one hand, this policy serves as a typical structural tax reduction tool. It is expected to enhance business performance by reducing tax burden, easing financial constraints and improving cash flow ([4] Fan & Liu, 2020). On the other hand, there are differences in policy effects. Under policy stimulus, enterprises may experience investment mismatch or overinvestment, and performance improvement is not inevitable ([10] Fan & Hu, 2020; [3] Eichfelder et al., 2023). Meanwhile, the network connection of the industrial chain enables micro-shocks to spread between upstream and downstream and be amplified at the industry level, constituting the basic mechanism for the diffusion of policy effects ([1] Acemoglu, Carvalho, Ozdaglar & Tahbaz-Salehi, 2012). Accordingly, the impact of accelerated depreciation on the directly benefiting enterprise. It may be transmitted to its supply chain partners through the purchasing and sales relationship, generating positive and negative asymmetric spillovers. The existing literature still lacks evidence on the transmission of tax policies in supply chain networks. This leads to the core issue of this article: Does the accelerated depreciation policy not only change the financial performance of the beneficiary enterprises themselves? Does it also influence the performance of its upstream and downstream enterprises through supply chain links?

Based on the above problems, this study adopts the Difference-in-Differences (DID) method to conduct causal identification of policy impacts. In this study, enterprises that did not enjoy policy benefits were taken as the control group. We evaluated the changes in the financial performance of the pilot enterprises after implementing the accelerated depreciation policy. Then we examined whether this impact is transmitted to upstream and downstream enterprises through the supply chain. This paper finds that: Firstly, compared with enterprises that have not received policy preferences, the financial performance of enterprises affected by the accelerated depreciation policy of fixed assets is poorer. That is, the policy of accelerated depreciation of fixed assets will weaken the financial performance level of enterprises. Secondly, the policy's impact is not limited to the firms that directly benefit from it. Through supply chain linkages, its negative effects also spill over to upstream and downstream enterprises, weakening their financial performance.

This study has three contributions. It first focuses on the direct economic impact of the accelerated depreciation policy for fixed assets on how firms perform financially. It fills the gap in existing research that focuses more on investment and innovation, while relatively insufficient assessment of profitability and operational efficiency. This study provides systematic micro-empirical evidence. Secondly, it brings supply chain networks into the picture. It studies how the policy moves between upstream and downstream firms. That connects ideas from corporate finance and supply chain thinking. It helps grow the space where tax policy and business links meet. Thirdly, the study uses a quasi-natural experiment. It also uses a DID method. This helps deal with problems like endogeneity and shocks happening at the same time. The method makes the cause-and-effect part more solid. It also gives others a model they can use when studying public policy.

The structure of the paper is as follows. Section 2 develops the hypotheses. In Section 3, the data sources and empirical strategy are described. Section 4 presents the core findings based on the analysis. A series of robustness checks are provided in Section 5. Section 6 focuses on the spillover effects across the supply chain. The final section 7 summarizes the key findings and implications.

2. Hypothesis Development

Tax preferences may encourage corporate over-investment, leading to capacity expansion beyond market demand, idle resources, and efficiency losses. First, Eichfelder et al. ([3] 2023) show that tax incentives in the form of bonus depreciation significantly reduce investment quality. Accordingly, the accelerated depreciation policy for fixed assets can be expected to weaken investment effectiveness and adversely affect corporate financial performance. Second, based on a difference-in-differences analysis of China's A-share listed firms, Kong Dongmin et al. ([11] 2021) find that while the policy promotes fixed-asset investment, it simultaneously exacerbates overcapacity in pilot industries, lowers fixed-asset utilization, and thereby depresses firm performance. Third, the accelerated depreciation policy for fixed assets front-loads firms' short-term cash flows, easing funding pressure in the early stage of investment and facilitating long-term fixed-asset investment. However, because the short-term cash generated by the policy is insufficient to sustain the cash outlays required by long-horizon projects, firms may resort to "borrowing short and investing long," inducing a maturity mismatch between financing and investment ([10] Fan & Hu, 2020). Prior research further indicates that such maturity mismatches reduce corporate financial performance indicators ([13] Liu & Liu, 2019). Fourth, the front-loading of depreciation expenses may directly suppress firms' book profitability in the initial phase of policy implementation, weakening short-run performance. Under these conditions, the accelerated depreciation policy for fixed assets may, counter intuitively, have a negative impact on corporate financial performance.

H1: The accelerated depreciation policy for fixed assets fails to improve corporate financial performance.

Under the impact of the accelerated depreciation policy for fixed assets, the financial performance of key enterprises has declined. This shows that the policy has not delivered the expected gains in capital efficiency. Instead, it has increased short-term cost pressure and weakened profitability. In this situation, these firms may try to ease their financial stress by cutting procurement, delaying payments, or reducing investment in upstream sectors. Such adjustments pass the negative effects on to upstream companies in the supply chain ([2] Boissay & Gropp, 2013), causing financial risks to spread ([7] Jacobson & von Schedvin, 2015). As a result, upstream firms face fewer orders and tighter cash flow, which puts extra strain on their operations. The decline in the financial performance of focal firms after the policy shock reflects their own difficulties. Moreover, it also has a clear negative impact on their upstream suppliers, through shrinking demand and risk spillovers,

H2: Impacted by the accelerated depreciation policy for fixed assets, the focal firms will negatively affect the performance of its upstream supply chain enterprises.

The impact of the accelerated depreciation policy for fixed assets has led to a decline in the financial performance of key enterprises. This makes it face greater financial constraints and cost pressure in operation. To alleviate the predicament, focal enterprises may shift some of their costs and risks to downstream enterprises. For example, they raise product prices, reduce credit support ([5] Garcia-Appendini & Montoriol-Garriga, 2013) or lower service levels. Such strategies directly compress downstream profit margins, increase their cost burden, and diminish their market competitiveness. Consequently, the financial distress of focal firms after the policy shock is not confined to the firms themselves; through cost transfer and value-chain risk transmission mechanisms, it adversely affects the operating performance of downstream supply chain firms.

H3: Following the shock of the accelerated depreciation policy for fixed assets, focal firms negatively affect the performance of their downstream supply chain partners.

3. Research Design

3.1. Data Sources and Description

This paper primarily uses two datasets: the first comprises corporate financial performance data; the second contains firms' main operating revenue and costs as well as other corporate financial variables (including indicators such as Tobin's Q and the book-to-market ratio). All data are obtained from the CSMAR (China Stock Market & Accounting Research) database. The sample consists of China's A-share listed companies from 2008 to 2023, subject to the following screens: (1) exclude non-listed customer observations in the data; (2) exclude firms in the financial industry; (3) exclude ST and *ST firms; and (4) exclude observations with missing values in key variables.

3.2. Variable Definitions

(1) Corporate Financial Performance

To measure corporate financial performance, profitability indicators such as return on assets (ROA), return on equity (ROE), and operating profit margin (OPR) are commonly used. The existing literature indicates that ROA and ROE are broadly applicable ([12] Li & Shi, 2016). Accordingly, this paper adopts ROA as the outcome variable.

(2) Accelerated Depreciation Policy of Fixed Assets

Treatment group (Treat_{*i*}): If firm *i* belongs to (A) the 2014 cohort-i.e., any of the six industries (biopharmaceuticals; special-purpose equipment; railway/ship/aerospace and other transportation equipment; computers/communications/electronics; instruments and meters; information transmission/software/IT services); or (B) the 2015 cohort-i.e., key industry codes in light industry/textiles/machinery/automobiles as listed in the annex to Finance and Taxation [2015] No. 106, and the firm meets the condition that "the share of main operating revenue ≥ 50%," then Treat_{*i*} = 1; otherwise Treat_{*i*} = 0.

Policy timing (Post_{*it*}): If firm *i* belongs to cohort (A), then Post_{*it*} = 1 starting in 2014; if it belongs to cohort (B), then Post_{*it*} = 1 starting in 2015-i.e., a staggered DID based on the firm's "first coverage year" *E_i*. Otherwise, Post_{*it*} = 0.

Accordingly, DID_{*it*} indicates whether firm *i* is affected by the accelerated depreciation policy in year *t*. If affected, DID = 1; otherwise, DID = 0. Formally:

$$DID_{it} = Treat_i * Post_{it}; \quad (1)$$

Where:

$$DID_{it} = 1 \text{ iff } Treat_i = 1 \text{ and } Post_{it} = 1 ;$$

$$DID_{it} = 0 \text{ iff } Treat_i = 1 \text{ and } Post_{it} = 0 ;$$

$$DID_{it} = 0 \text{ iff } Treat_i = 0 \text{ and } Post_{it} = 0 ;$$

$$DID_{it} = 0 \text{ iff } Treat_i = 0 \text{ and } Post_{it} = 1 .$$

(3) Control Variables

Drawing on prior related studies, we include the following governance- and finance-related control variables for upstream and downstream firms in the supply chain. Governance controls comprise Dual (CEO-chair duality) and FirmAge (firm age). Financial controls comprise Size (firm size), BM (book-to-market ratio), TobinQ (Tobin's Q), and Growth (revenue growth). The main variable definitions are reported in Table 1.

Table 1. Main Variable Definitions

Category	Symbol	Variable	Definition
Dependent variable	<i>ROA</i>	Corporate financial performance	Net profit / average total assets at the beginning and end of the period
Explanatory variable	<i>DID</i>	Policy exposure indicator	See main text
Control variables	<i>Size</i>	Firm size	Natural log of annual total assets
	<i>Growth</i>	Revenue growth	(Current-year operating revenue / prior-year operating revenue) – 1
	<i>Dual</i>	CEO–chair duality	1 if the board chair and the general manager (CEO) are the same person; 0 otherwise
	<i>FirmAge</i>	Firm age	ln(current year – year of establishment + 1)
	<i>BM</i>	Book-to-market ratio	Book value / market capitalization
	<i>TobinQ</i>	Tobin's Q	(Market value of tradable shares + number of non-tradable shares × net asset value per share + book value of liabilities) / total assets

3.3. Model Specification

To examine the relationship between the accelerated depreciation policy for fixed assets and corporate financial performance, we estimate the following model:

$$Ro_{ait} = \text{constant} + \beta \cdot DID_{it} + CV_{sit} + Firm_FE + Year_FE + u_{it}, \quad (2)$$

where Ro_{ait} is the dependent variable, denoting firm i 's financial performance in year t under the accelerated depreciation policy; DID_{it} is the explanatory variable measuring whether firm i is affected by the accelerated depreciation policy in year t ; β captures the effect of the accelerated depreciation policy on corporate financial performance; CVs represents the set of control variables; $Firm_FE$ denotes firm fixed effects; $Year_FE$ denotes year fixed effects; u is the idiosyncratic error term; and constant is the constant term.

4. Empirical Analysis

4.1. Parallel Trends Test

$$Ro_{ait} = \text{constant} + a_1 \cdot pre_{1it} + a_2 \cdot pre_{2it} + a_3 \cdot pre_{3it} + a_4 \cdot pre_{4it} + \beta \cdot DID_{it} + CV_{sit} + u_{it}, \quad (3)$$

pre_{1it} equals 1, if in the first year prior to policy implementation, firm i belongs to the treated group affected by the policy; otherwise 0. The coefficient a_1 captures the effect of pre_{1it} on Ro_{ait} . If a_1 is insignificant, it indicates that pre_{1it} has no discernible effect on Ro_{ait} , that is, in the first year prior to policy implementation, there is no significant difference in ROA between treated and control firms. pre_{2it} equals 1, if in the second year prior to policy implementation, firm i belongs to the treated group; otherwise 0. a_2 measures the effect of pre_{2it} on Ro_{ait} . If a_2 is insignificant, it implies no discernible effect of pre_{2it} on Ro_{ait} , that is, in the second pre-policy year, treated and control firms do not differ significantly in ROA. pre_{3it} equals 1, if in the third year prior to policy implementation, firm i belongs to the treated group; otherwise 0. a_3 measures the effect of Ro_{ait} on Ro_{ait} . If a_3 is insignificant, it indicates no discernible effect of pre_{3it} on Ro_{ait} , that is, in the third pre-policy year, there is no significant ROA difference between

treated and control firms. pre_{4it} equals 1, if in the fourth year prior to policy implementation, firm i belongs to the treated group; otherwise 0. a_4 measures the effect of pre_{4it} on $Roait$. If a_4 is insignificant, it indicates no discernible effect of pre_{4it} on $Roait$, that is, in the fourth pre-policy year, there is no significant ROA difference between treated and control firms. If a_1 , a_2 , a_3 and a_4 are all insignificant, the parallel trends assumption holds.

We estimate and test model (3), and the corresponding regression results are reported in Table 2.

Table 2. Parallel Trends Test Results

	(1)	(2)
	ROA	ROA
pre_1	0.004	0.002
	(0.004)	(0.004)
pre_2	0.002	0.000
	(0.004)	(0.004)
pre_3	-0.000	-0.001
	(0.004)	(0.004)
pre_4	-0.006	-0.005
	(0.004)	(0.004)
did	-0.006**	-0.007**
	(0.003)	(0.003)
Dual		0.003**
		(0.001)
BM		-0.041***
		(0.003)
TobinQ		0.000
		(0.000)
Growth		0.000
		(0.000)
FirmAge		-0.059***
		(0.008)
Constant	0.052***	0.252***
	(0.001)	(0.024)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	39003	37765
R-squared	0.414	0.414
Standard errors are in parentheses		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

Examining Table 2, we find that a_1 , a_2 , a_3 , and a_4 are all statistically insignificant, indicating that relative to the first, second, third, and fourth pre-policy years-there are no significant differences in Roa between the treatment and control groups; thus, the parallel trends assumption holds.

4.2. Correlation Analysis

We conduct a correlation analysis of the main variables, and summarize the results in Table 3.

Table 3. Correlation Analysis

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) ROA	1.000						
(2) did	-0.011	1.000					
(3) Dual	0.009	0.079	1.000				
(4) BM	-0.094	0.016	-0.131	1.000			
(5) TobinQ	0.023	-0.031	0.048	-0.485	1.000		
(6) Growth	0.003	-0.003	-0.003	0.002	-0.001	1.000	
(7) FirmAge	-0.070	0.116	-0.101	0.120	-0.013	0.001	1.000

Observation of Table 3 indicates that multicollinearity among the control variables is not severe.

4.3. Baseline Regression Analysis

We first verify the effect of the accelerated depreciation policy for fixed assets on corporate financial performance. To this end, we estimate model (2) above and report the results in Table 4.

Table 4. Baseline Regression Results

	(1)	(2)
	ROA	ROA
did	-0.006***	-0.006***
	(0.002)	(0.002)
Dual		0.003**
		(0.001)
BM		-0.041***
		(0.003)
TobinQ		0.000
		(0.000)
Growth		0.000
		(0.000)
FirmAge		-0.059***
		(0.008)
Constant	0.052***	0.252***
	(0.001)	(0.024)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	39003	37765
R-squared	0.414	0.414
Standard errors are in parenthesis		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

From Table 4, we observe that after the implementation of the accelerated depreciation policy for fixed assets, the policy lowers the financial performance of affected firms. This result supports Hypothesis H1.

5. Robustness Tests

5.1. Placebo Test

In model (2), we replace the core explanatory variable DIDit with a randomly generated simulated core explanatory variable DID_simulation_{it} and re-estimate the model. We conduct 1,000 such simulations and plot the coefficient of DID_simulation_{it} from each simulation, as shown in Figure 1.

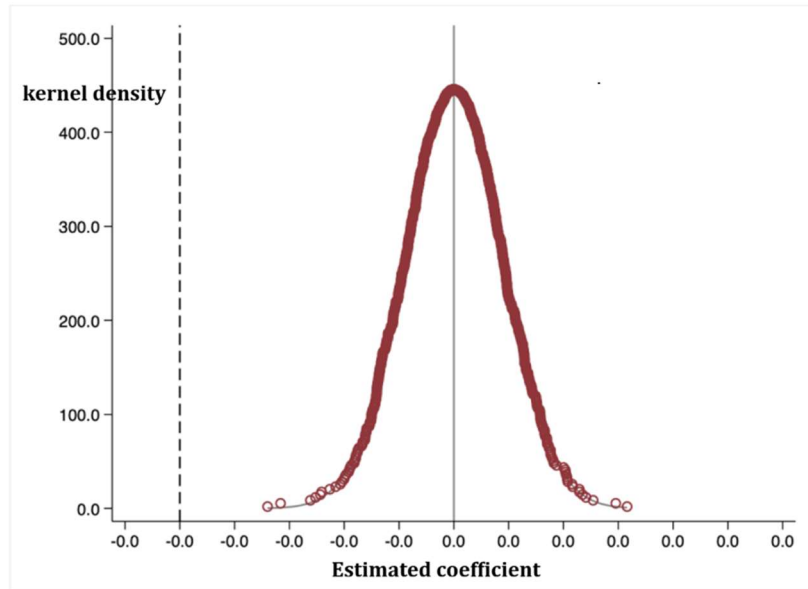


Figure 1. Placebo Test

Observing Figure 1, most estimated coefficients cluster around 0, which indirectly indicates that the accelerated depreciation policy affects corporate financial performance and that the findings are robust.

5.2. Adding Control Variables

Table 5. Robustness Check with Additional Control Variables

	(1)	(2)
	ROA	ROA
did	-0.006***	-0.007***
	(0.002)	(0.002)
Dual		0.003**
		(0.001)
BM		-0.042***
		(0.003)
TobinQ		0.000
		(0.000)
Growth		0.000
		(0.000)
FirmAge		-0.058***
		(0.008)
Boardsize		0.002***
		(0.000)
Intangible		-0.125***
		(0.012)
Constant	0.052***	0.240***
	(0.001)	(0.024)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	39003	37583
R-squared	0.414	0.418
Standard errors are in parentheses		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

Considering the potential effects of Boardsize and the proportion of intangible assets Intangible on corporate financial performance, we augment model (2) by including these two controls and re-estimate the updated model. The estimation results are reported in Table 5.

Observing Table 5, we note that after accounting for board size and the intangible asset ratio, the main conclusions of this study remain unchanged.

5.3. Excluding Extreme-Period Observations

To further demonstrate the robustness of the baseline findings-and considering that 2008 featured multiple confounding policy shocks (e.g., the global financial crisis)-we exclude observations from 2008 and re-estimate model (2). The results are summarized in Table 6.

Table 6. Robustness Check after Excluding Extreme-Period Observations

	(1)	(2)
	ROA	ROA
did	-0.006***	-0.006***
	(0.002)	(0.002)
Dual		0.003**
		(0.001)
BM		-0.041***
		(0.003)
TobinQ		0.000
		(0.000)
Growth		0.000
		(0.000)
FirmAge		-0.059***
		(0.008)
Constant	0.052***	0.252***
	(0.001)	(0.024)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	39003	37765
R-squared	0.414	0.414
Standard errors are in parentheses		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

Observing Table 6, we find that after excluding the 2008 sample, the main conclusions of this study remain unchanged.

6. Analysis of Supply Chain Spillover Effects

6.1. Impact of the Accelerated Depreciation Policy for Fixed Assets on Upstream Suppliers' Financial Performance

(1) Model Specification

To examine the effect of the accelerated depreciation policy for fixed assets on the financial performance of upstream supplier firms, we estimate the following model:

$$\text{ROA_supplier_it} = B * \text{DID it}, \quad (4)$$

where ROA_supplier_it denotes, in year t under the accelerated depreciation policy, the corporate financial performance of the top ten upstream suppliers of focal firm i; DID it measures whether focal firm i is affected by the accelerated depreciation policy for fixed assets; and B captures the policy's effect on upstream suppliers' financial performance.

(2)Empirical Results

We estimate model (4) to test the impact of the accelerated depreciation policy for fixed assets on upstream suppliers' financial performance. The results are reported in Table 7.

Table 7. Effect of the Accelerated Depreciation Policy on Upstream Firms' Financial Performance

	(1)	(2)
	ROA ₂	ROA ₂
did	-0.022**	-0.019**
	(0.010)	(0.009)
Dual		-0.006
		(0.005)
BM		-0.029**
		(0.012)
TobinQ		0.005**
		(0.002)
Growth		0.063***
		(0.005)
FirmAge		-0.007
		(0.010)
Constant	0.065***	0.095***
	(0.002)	(0.032)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	1869	1837
R-squared	0.502	0.560
Standard errors are in parentheses		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

From Table 7, we observe that following the implementation of the accelerated depreciation policy for fixed assets, the policy reduces the financial performance of upstream suppliers of beneficiary firms. This result supports Hypothesis H2.

6.2. Impact of the Accelerated Depreciation Policy for Fixed Assets on Downstream Customers' Financial Performance

(1) Model Specification

To examine the effect of the accelerated depreciation policy for fixed assets on the financial performance of downstream customer firms, we estimate the following model:

$$ROA_customer_it = B * DID\ it, \quad (5)$$

where ROA_customer_it denotes, in year t under the accelerated depreciation policy, the corporate financial performance of the top ten downstream customers of focal firm i; DID it

measures whether focal firm i is affected by the accelerated depreciation policy for fixed assets; and B captures the policy's effect on downstream customers' financial performance.

(2) Empirical Results

We estimate model (5) to test the impact of the accelerated depreciation policy for fixed assets on downstream customers' financial performance. The results are reported in Table 8.

Table 8. Effect of the Accelerated Depreciation Policy on Downstream Firms' Financial Performance

	(1)	(2)
	ROA ₂	ROA ₂
did	-0.018***	-0.014**
	(0.007)	(0.007)
Dual		-0.001
		(0.003)
BM		-0.064***
		(0.007)
TobinQ		0.001
		(0.002)
Growth		0.040***
		(0.003)
FirmAge		-0.010*
		(0.005)
Constant	0.062***	0.138***
	(0.001)	(0.017)
Firm fixed effects	YES	YES
Year fixed effects	YES	YES
Number	2295	2273
R-squared	0.537	0.614
Standard errors are in parentheses		
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$		

From Table 8, we observe that, following the implementation of the accelerated depreciation policy for fixed assets, the policy lowers the financial performance of downstream customers of beneficiary firms. This result supports Hypothesis H3.

7. Conclusion and Recommendations

The accelerated depreciation policy for fixed assets promulgated by the Ministry of Finance and the State Administration of Taxation in 2014 is a tax incentive that reduces firms' tax burdens through "structural tax reduction," encourages *accelerated* technological upgrading and equipment renewal, and enhances competitive advantage. However, the literature to date has paid relatively little attention to its true impact on corporate financial performance, and evidence on the transmission of tax policies within supply chains remains limited. Accordingly, drawing on the neoclassical investment theory ([8] Jorgenson, 1963) and the principle of the tax shield effect, and in conjunction with existing studies, this paper evaluates the policy effects of the 2014 and 2015 accelerated depreciation policies on corporate financial performance and their spillover effects along supply chains. This paper selects the data of A-share listed companies in China from 2008 to 2023, and takes the accelerated depreciation policy of fixed assets from 2014 to 2015 as the standard natural experiment. It adopts the difference-in-

differences method to conduct empirical studies such as parallel trend tests and benchmark regression analysis, and finds that the accelerated depreciation policy of fixed assets will significantly reduce the financial performance of enterprises. The research conclusion of this article provides suggestions, inspirations and decision-making references for three dimensions. From the perspective of policy-making, when formulating policies for accelerated depreciation of fixed assets, policymakers should comprehensively assess the potential impact of the policies on the financial performance of enterprises. They need to consider the positive effects that this policy will bring to enterprises. It is also necessary to objectively understand the negative impact and hidden costs it has on the financial performance of the beneficiary enterprises of the center and the upstream and downstream enterprises. From the company's own strategy and financial planning point of view, central enterprises should stay realistic about the tax benefits. Their upstream and downstream partners also need to think carefully about the cash flow improvements from the accelerated depreciation policy. Firms should avoid overinvesting. They also need to stay away from using short-term loans for long-term projects. Managers should make financial plans early. It helps them adjust the structure of their capital. They need to keep debt and equity in a good balance. At the same time, they should look for more long-term financing. Reducing the use of short-term loans is also important. From the investor's point of view, it's important to consider how this policy affects financial results. This includes the target company and also its supply chain partners, both upstream and downstream. The financial health of these firms should be taken into account as well. Investors are advised to pay closer attention to key indicators. These include recent investments, the structure of financing, the stability of cash flow, and how well the firm's debt timeline matches its ability to pay. At the same time, they need to look at the industry the company operates in. By doing so, they can better judge how much real profit it can make and whether it can meet its debt obligations. That helps in understanding both the risks and possible returns of the whole investment. Based on that, they can make rational and cautious investment decisions.

References

- [1] Acemoglu, D., Carvalho, V. M., Ozdaglar, A., & Tahbaz-Salehi, A. (2012). The network origins of aggregate fluctuations. *Econometrica*, 80(5), 1977–2016.
- [2] Boissay, F., & Gropp, R. (2013). Payment defaults and interfirm liquidity provision. *Review of Finance*, 17(6), 1853–1894.
- [3] Eichfelder, S., Jacob, M., & Schneider, K. (2023). Do tax incentives reduce investment quality?. *Social Science Electronic Publishing*.
- [4] Fan, Z., & Liu, Y. (2020). Tax compliance and investment incentives: Firm responses to accelerated depreciation in China. *Journal of Economic Behavior & Organization*, 176, 1–17.
- [5] Garcia-Appendini, E., & Montoriol-Garriga, J. (2013). Firms as liquidity providers: Evidence from the 2007–2008 financial crisis. *Journal of Financial Economics*, 109(1), 272–291.
- [6] Henningsen, A. , Henningsen, G. , & Edwin, V. D. W. (2019). Capital-labour-energy substitution in a nested ces framework: a replication and update of kemfert (1998). *Energy Economics*, 16–25.
- [7] Jacobson, T., & von Schedvin, E. (2015). Trade credit and the propagation of corporate failure: An empirical analysis. *Econometrica*, 83(4), 1315–1371.
- [8] Jorgenson, D. W. (1963). “Capital theory and investment behaviour”. *American Economic Review*.
- [9] Liu, X., Liu, J., Wu, H., & Hao, Y. (2022). Do tax reductions stimulate firm productivity? A quasi-natural experiment from China. *Economic Systems*, 46(4), 101024.
- [10] Fan, W., & Hu, M. (2020). Accelerated depreciation of fixed assets and “borrowing short, investing long.” *Economic Management*, 42(10), 174–191.
- [11] Kong, D., Ji, M., & Zhou, Y. (2021). Accelerated depreciation of fixed assets and corporate overcapacity. *Finance & Trade Economics*, 42(09), 50–65.

- [12] Li, X., & Shi, Y. (2016). Green development, carbon information disclosure quality, and financial performance. *Economic Management* (7), 14.
- [13] Liu, X., & Liu, Y. (2019). Leverage, short-term debt used for long-term investment, and firm performance. *Economic Research Journal*, 54(07), 127–141.