



The Impact of Corporate Financialisation Motives on Industrial Investment

--Analyse the role of fintech and external regulation

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Abstract. Based on the annual panel data of A-share listed companies from 2010 to 2021, a fixed-effects model is applied to study the relationship between corporate financialization motives and industrial investment. The results show that corporate financialization is motivated by speculation and profit-seeking, and has a crowding-out effect on industrial investment, which is more significant in highly financialized enterprises and state-owned enterprises. Fintech strengthens the speculative and profit-seeking motives and crowding-out effect by increasing the return on financial investment; on the other hand, although the development of Fintech can alleviate the financing constraints of enterprises, it cannot increase the industrial investment of enterprises.

Keywords: Corporate financialization, industrial investment, fintech

1 INTRODUCTION

There are two different theories about the motivation of enterprise financialization as follows: the preventive savings theory holds that enterprises holding a certain amount of financial assets can alleviate the liquidity risk out of economic shocks [1] [2], while the investment substitution theory holds that enterprises investing in financial assets is a choice to chase the high rate of return of financial investment [3]. It is precisely because of the different motives of corporate financialization, which will have a differentiated impact on industrial investment.

This paper will empirically study the impact of corporate financialization motives on industrial investment. Compared with previous literature that directly explores the relationship between corporate financialization and industrial investment, this paper screens the motives of corporate financialization, explains the reasons for the different effects of financialization on industrial investment from the motives, and conducts an empirical test. By further empirically analyzing how fintech affects the financialization motivation of enterprises, this paper broadens the study of the factors influencing the financialization motivation of enterprises, complements the study of the micro-level economic consequences of fintech development, and provides new empirical evidence for the "de-realization to de-virtualization" problem faced by the current economy.

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1.1 Accessibility

Throughout the literature at home and abroad, the research on enterprise financialisation focuses on the analysis of the phenomenon of "enterprise financialisation" and its causes in the early stage, and in the later stage, it focuses on enterprise financialisation as an influencing factor to explore the economic effects brought about.

1.1.1 The impact of enterprise financialization on industrial investment.

Regarding the impact of enterprise financialization on industrial investment, there are two different views in the academic circle, namely, "promotion theory" and "hindrance theory".

The "hindrance theory" holds that enterprise financialization has a negative impact on industrial investment, i.e., financialization will produce a "crowding out effect". According to Orhangazi's (2008) theory of "investment substitution", when the efficiency of financial investment is higher than that of industrial investment, enterprises will choose to shift their funds to financial investment^[4].

The "promotion theory" that the financialization of enterprises has a positive impact on industrial investment, that is, financialization will produce a "reservoir effect". This view is based on Keynes's precautionary savings theory, the object of analysis is extended to the field of financial assets, that the precautionary savings theory is also applicable to the enterprise allocation of financial assets investment decision.

In summary, the net effect of enterprise financialization on industrial investment depends on the relative roles of the "crowding-out effect" and the "reservoir effect".

1.1.2 The impact of corporate financialisation motives on industrial investment

The relative rate of return on a firm's real investment is the most intuitive influence on the financialisation of a firm^[5], and in the context of declining returns on real investment, firms are more inclined to allocate their holdings to the financial market in order to chase short-term excess profits. At the same time, with the rapid development of the capital market, the business model of enterprises has shifted from long-term development orientation to short-term shareholder value orientation, and this change in business philosophy has led to greater participation in the financial market and emphasis on short-term returns.

Enterprise financial characteristics are also considered to be an influential factor that cannot be ignored in the financialisation of enterprises, and the financing constraints faced by different enterprises in the absence of effective direct financing channels are an important reason for the financialisation of real enterprises^[6]. When the enterprise expects more investment opportunities in the future or high cash flow uncertainty, in order to alleviate the possible future financing constraints, it may choose to allocate a portion of the more liquid financial assets. The financialisation of enterprises for such motives will have a "reservoir" effect on industrial investment.

1.1.3 Fintech, corporate financialisation motives and industrial investment effects

The financial market largely affects the asset allocation behaviour of enterprises, and with the gradual entry of information technology into the financial field, the resulting fintech impacts the traditional financial market and affects the financial investment decisions of enterprises.

Fintech combines big data, blockchain and other technologies with traditional finance to form new financial products, create new business models, and change the traditional financial market [7]. The development of financial technology has given rise to diverse financial investment carriers such as cloud computing financial platforms and intelligent investment advisors, which have enriched the form of financial investment of enterprises and changed the traditional financial information supply pattern [8]. The financial investment professional consulting services generated based on the development of information are easier to obtain, expanding the scope of the supply of financial information, so that enterprises can obtain more comprehensive and effective information, which helps to enhance the rate of return on financial investment. Based on speculative profit-seeking motives, enterprises choose to invest resources in the financial market to obtain higher returns.

With the development of financial technology, the enterprise's "precautionary savings" motivation is obviously weakened because: on the one hand, financial technology has expanded the ability of finance to transfer resources in time and space, through a variety of low-threshold financial products to make the long-tailed groups to participate in the financial market, to a certain extent, breaking through the traditional financial industry's Service Boundary. On the other hand, thanks to the support of big data and other technologies, fintech breaks through the industry barriers of traditional financial services to a certain extent, and provides more flexible and lower-cost financial services for a large number of enterprises to obtain funds quickly. Therefore, the development of financial technology can alleviate the enterprise financing constraints, weaken the enterprise based on "preventive savings" motivation, so as to inhibit the financial behaviour of enterprises, so that more enterprises will turn the funds to real investment.

2 INSERTING CONTENT ELEMENTS

The research sample of this paper is the unbalanced panel data of Chinese A-share listed companies from 2011 to 2021, and a total of 12,021 research samples are retained after excluding ST-type companies, financial companies, and companies with missing or abnormal key indicators.

2.1 Tables

2.1.1 Explained Variables

The explanatory variable of this paper is investment in corporate industry (INV), which is measured by the natural logarithm of cash paid for the purchase of fixed assets, intangible assets and other long-term assets.

2.1.2 Core explanatory variables

The level of corporate financialisation (FAR), which is measured in this paper by the share of total assets held by the firm, drawing on Demir's (2009) narrowly defined financial assets statistics, corporate financialisation (FAR) = (trading financial assets + available-for-sale financial assets + derivative financial assets + held-to-maturity investments + long term equity investments + interest receivables and dividends receivables + investment properties) / Total Assets^[9].

Financial Technology Development Index (FINTECH), this paper adopts the text mining method, selects the keywords related to financial technology, and obtains the keyword retrieval frequency and other data in the open network "crawler" to construct the financial technology development index. Drawing on the design ideas of Wang Xiaohua (2022), Baidu search index, which has a large volume of data and is representative, is used to determine the search frequency of fintech keywords^[10], and in terms of keyword selection, not only traditional fintech keywords are included, but also new vocabulary that has emerged in recent years, such as artificial intelligence, two-dimensional code payment and so on.

Financing constraints (FC), drawing on Kaplan and Zingales (1997), the KZ index is used to measure the degree of financing constraints of firms^[11].

Return on Financial Investment (ROFI), measured by the share of financial investment returns in the total assets of the firm.

2.1.3 Control variables

Drawing on existing literature, this paper controls for Return on Assets (ROA), Fixed Asset Intensity (Capint), Equity Concentration (Topone), Board Size (BDSIDE) and Capital Intensity (Capital)^[12]. The full variable descriptions are shown in Table 1.

Table 1. Variable definitions and descriptions.

Style Tag	Definition	Style Tag	Definition
INV	Level of corporate real estate investment	FAR	Level of financialisation of enterprises
FINTECH	Level of financial technology development	FC	Proxy variables for financing constraints
Return	Return on financial investment	ROA	return on assets
Capint	Fixed-asset intensity	Topone	Equity concentration
Bdside	Board size	Capital	capital-intensity

2.2 Equations

There are two types of math equations: the *numbered display math equation* and the *un-numbered display math equation*. Below are examples of both.

2.2.1 Display Formula

This paper constructs the following benchmark regression model to test the impact of the degree of financialisation of firms on firms' industrial investment.

$$INV_{i,t} = \beta_0 + \alpha_0 INV_{i,t-1} + \beta_1 FAR_{i,t} + \beta_c CON_{i,t-1} + u_i + \theta_t + \varepsilon_{it} \quad (1)$$

Where i represents listed companies; t represents the year; $INV_{i,t}$ represents the level of industrial investment of listed company i in year t ; since there is generally a continuous type of industrial investment in time series, the first-order lagged term $INV_{i,t-1}$ of INV is added into the regression model to represent the level of industrial investment of listed company i in year $t-1$; and $FAR_{i,t}$ represents the degree of financialisation of listed company i in year t ; $CON_{i,t}$ represents the control variables. In equation (1), u_i represents firm fixed effects to capture individual heterogeneity characteristics that do not change over time, θ_t represents year fixed effects, and $\varepsilon_{i,t}$ represents unobserved residuals.

2.3 Benchmark regression results

The individual year double fixed effects model was used for estimation and the regression results are shown in Table 2

Table 2. Benchmark regression results for financialisation of firms and industrial investment.

variant	(1) INV	(2) INV	(3) INV	(4) INV	(5) INV	(6) INV
$INV_{i,t-1}$	0.411*** (37.87)	0.417*** (38.68)	0.431*** (39.91)	0.430*** (39.86)	0.430*** (39.85)	0.430*** (39.79)
FAR	-0.845*** (-5.53)	-0.774***(- 5.09)	-0.843*** (-5.58)	-0.867*** (-5.72)	-0.864*** (-5.70)	-0.861*** (-5.69)
ROA		2.118*** (10.16)	1.784*** (8.50)	1.873*** (8.73)	1.864*** (8.69)	1.854*** (8.63)
Capint			-1.362***(- 10.05)	-1.334*** (-9.79)	-1.335*** (-9.80)	-1.335*** (-9.80)
Capital				0.021** (1.98)	0.021** (1.97)	0.021** (1.99)
TOPONE					0.002 (1.05)	0.002 (1.06)
BDSIDE						0.011 (1.15)
R2	0.769	0.769	0.713	0.715	0.716	0.718

2.4 A Motivational Test of the Impact of Corporate Financialisation on Firms' Industrial Investment

We conduct a subgroup test for financial return on investment to explore whether firms financialise to obtain financial returns or financing support. The 1/2 quartile is used to distinguish the high and low sample groups, and the regression results are shown in Table 3.

Table 3. A Motivational Test of the Impact of Corporate Financialisation on Firms' Industrial Investment.

variant	Financial return on investment		Financing constraints	
	High return (1)	Low return (2)	High index (3)	Low index (4)
	INV	INV	INV	INV
INV _{i,t-1}	0.331*** (13.25)	0.418*** (32.11)	0.454 *** (28.96)	0.354*** (19.61)
FAR	-0.527* (-1.88)	0.002 (0.01)	0.042 (0.17)	-0.532 *** (-2.34)
observed value	2 117	6 424	4 547	3 994
R2	0.566	0.726	0.754	0.637

2.5 A test of fintech and the role of external regulation

The above study found that the financialisation of enterprises is not motivated by precautionary savings, but by speculative profit-seeking motives and has a "crowding-out effect" on industrial investment. In order to explore the intrinsic link between financial technology development and speculative profit-seeking motives, the mediation effect model is used to test the mediation effect, with financial investment return as the mediating variable, and the specific mediation effect model is shown below.

$$FAR_{i,t} = \gamma_0 + \gamma_1 FINTECH_{p,t} + \gamma_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{2}$$

$$Return_{i,t} = \varphi_0 + \varphi_1 FINTECH_{p,t} + \varphi_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{3}$$

$$FAR_{i,t} = \delta_0 + \delta_1 FINTECH_{p,t} + \delta_2 Return_{i,t} + \delta_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{4}$$

FAR_{i,t} represents the degree of financialisation of listed firm i in year t; FINTECH_{p,t} represents the FinTech development index of listed firm's province p in year t; Return_{i,t} represents the financial return on investment of firm i in year t; CON_{i,t} represents the control variables, u_i denotes the firm fixed effects to capture individual heterogeneity characteristics that do not change over time, θ_t denotes the year fixed effects. ε_{i,t} denotes unobserved residuals. The empirical results are shown in Table 4.

Table 4. Financial investment return rate mechanism test.

	(1) FAR	(2) Return	(3) FAR
FINTECH	0.013 *** (3.60)	0.005 (0.43)	0.013 *** (3.57)
Return			0.029 *** (9.62)
controlled variable	Yes	Yes	Yes
N	12 019	12 019	12 019
R2	0.052	0.147	0.072

The development of FinTech breaks through the barriers of traditional financial services and helps to alleviate the financing constraints of enterprises, and the motivation of enterprises to "preventive saving" will be significantly weakened. In order to verify this mechanism, we use the mediation effect model to test whether the development of fintech can inhibit the financialisation of enterprises by alleviating their financing constraints, and the specific mediation effect model is shown in equations (2) to (6). The empirical results are shown in Table 5.

$$FAR_{i,t} = \gamma_0 + \gamma_1 FINTECH_{p,t} + \gamma_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{5}$$

$$FC_{i,t} = \eta_0 + \eta_1 FINTECH_{p,t} + \eta_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{6}$$

$$FAR_{i,t} = \omega_0 + \omega_1 FINTECH_{p,t} + \omega_2 FC_{i,t} + \omega_c CON_{i,t} + u_i + \theta_t + \varepsilon_{it} \tag{7}$$

Table 5. Financing constraint mechanism test.

	(1) FAR	(2) FC	(3) FAR
FINTECH	0.094 *** (3.13)	-0.017 ** (-2.28)	0.009*** (2.89)
FC			-0.044*** (-10.17)
controlled variable	Yes	Yes	Yes
N	10 736	10 736	10 736
R2	0.104	0.497	0.107

3 CONCLUSION

This paper selects the data of China's A-share listed enterprises from 2010 to 2021 to empirically test the impact of corporate financialisation on industrial investment. The study finds that: (1) the impact of corporate financialisation on industrial investment is dominated by the "crowding out effect", and overall corporate financialisation has a negative impact on corporate industrial investment; (2) in terms of the motivation of corporate financialisation, the study proves the speculative profit-seeking motivation of corporate financialisation and its "crowding out effect" on industrial investment; however, it does not find that there is a significant preventive preventive effect of corporate financialisation; and the study also finds that there is no significant preventive preventive effect of corporate financialisation. "crowding out effect"; however, it has not been found that there is an obvious preventive saving motive of enterprise financialisation. (3) Fintech reinforces the speculative motive of corporate financialisation by increasing the return on financial investment.

In this regard, we put forward the following policy recommendations: first, encourage corporate innovation, reduce corporate operating costs through tax cuts and fee reductions, policy support, etc., and enhance the relative rate of return of corporate entity investment. Second, promote the market-oriented reform of financial factors, change the status quo of high profits in the financial industry, and curb the speculative profit-seeking motives of enterprises. Third, correctly guide the development of fintech,

and pay attention to the possible negative impact of fintech on the real economy while playing the role of fintech in easing the financing constraints of enterprises.

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