MOTIVATIONS AND ECONOMIC CONSEQUENCES OF CORPORATE FINANCIALIZATION: EVIDENCE FROM CHINESE LISTED NON-FINANCIAL COMPANIES

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ABSTRACT

The increasing trend of financialization in Chinese listed firms has drawn attention from the academic community. This paper is based on the financial data of 2,154 non-financial and non-real estate listed companies from 2008 to 2018 and aim to investigate the driving factors and economic consequences of corporate financialization in Chinese capital market. The results show that corporate financialization in China is influenced by motives such as preventive savings, investment substitution, shadow banking, and earnings management. The latter three motives are more pronounced than preventive savings, suggesting a speculative nature to the financialization trend, which separates these companies from the real economy's development. In terms of economic consequences, financialization tends to displace primary business activities, particularly in corporate research and development (R&D) investments. Over the long term, this may lead to insufficient incentives for corporate innovation and development, gradually weakening their competitive edge. Therefore, it is crucial to focus on supporting the real economy, enhancing financial supervision, and guiding companies to stay aligned with their intended objectives to prevent excessive financialization.

Keywords: Corporate financialization; Precautionary saving; Investment substitution; Shadow banking; Earnings management; R&D investment

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CHAPTER 1

INTRODUCTION

Amidst the swift expansion of the financial system and the evolution of fintech, the significance of finance in global economic growth has become increasingly evident. Since the 1990s, the phenomenon of financialization has permeated various facets of global economic activities[1]. The academic discourse on financialization has persisted, gaining momentum, particularly in the aftermath of the financial crises in 1997 and 2009. The debated topics among scholars have revolved around the value effect and crowding-out effect of financialization. This paper specifically delves into the financialization of non-financial enterprises, scrutinizing the underlying motivations and exploring the economic consequences associated with the financialization of non-financial enterprises.

Amidst the surge in China's market-driven economic growth, the diminishing returns on investment for non-financial enterprises have been attributed to escalating factor costs, overcapacity, and technological upgrades. In contrast, the financial industry and real estate

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[1] According to Rabinovich (2019), the involvement in financial activities in the United States has been dramatic: the ratio of financial assets to nonfinancial assets has gone from 40% in 1950 to 95% in 2017 (macroeconomic level). In a similar fashion, Davis (2016, p. 138) states that there has been a “shift in non-financial activities toward banking activities”.

sectors have consistently enjoyed elevated profitability. Consequently, an increasing number of non-financial enterprises have turned to investing in a spectrum of financial assets such as bank notes, stocks, and even real estate, or securing equity stakes in financial institutions.

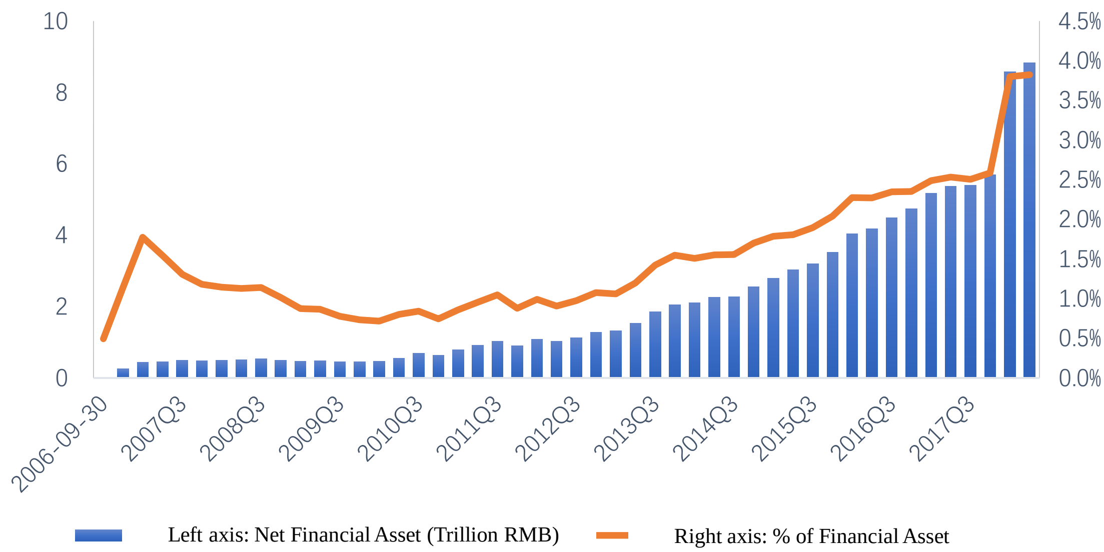

Figure 1. Financialization of Non-financial Companies in China during 2006-2018

Figure 1 above illustrates the trajectory of financial asset holdings by non-financial enterprises and the proportion of financial assets within the balance sheets of non-financial industry enterprises listed on the A-share market from 2006 to 2018. Notably, the data indicates a notable upswing in the investment in financial assets by listed non-financial companies. Following the 2008 financial crisis, the proportion of financial assets held by listed non-financial companies in their total assets surged from 0.72% in 2009 to 3.84% in 2018, with this trend of financialization significantly intensifying in 2017. Corporate financialization has thus emerged as an increasingly salient concern in the development trajectory of China's non-financial enterprises.

Financialization does present certain advantages. The concept of "Financial-Industrial Integration" can catalyze corporate expansion, industrial advancement, and enhance the profitability of the real economy. However, China's corporate financialization has concurrently revealed a myriad of issues. Initially, while finance fundamentally serves the real economy, the declining rate of return on real assets and the real economy's profitability has led to a growing disparity between the returns on pan-financial assets and real assets, resulting in their mutual deviation (Liu and Wu, 2004). This separation of the financial system from the real economy contributes to idleness, culminating in the "hollowing out" of the real economy. Secondly, propelled by the pursuit of profit and risk avoidance incentives, non-financial enterprises progressively allocate resources to financial assets to enhance overall profitability, neglecting the resource requirements of their core operations. This siphoning effect hampers the growth of primary business, eventually causing companies to deviate from their core activities, a phenomenon known as “derealization”. Thirdly, due to a lack of comprehension of the financial industry and weak risk awareness, some enterprises fail to effectively anticipate and hedge risks, thereby amplifying operational risks. Lastly, corporate financialization allows major financial institutions to absorb an excessive amount of financial capital, diminishing the efficiency of financial asset allocation and exacerbating credit discrimination. The severity of corporate financing challenges increases, and the scale of shadow banking expands rapidly.

Existing research predominantly concentrates on delineating the definition, motivation, and economic repercussions of financialization. Scholars have approached the definition of financialization from macro-, meso-, and micro-level perspectives. This paper adopts a micro-level definition and centers on scrutinizing the motivation and economic consequences of corporate financialization. Concerning the motivation for financialization, early research has posited the precautionary saving hypothesis (Keynes, 1936; Smith and Stulz, 1985; Tornell, 1990; Opler et al., 1999; Bloom et al., 2007; Demir, 2009) and the investment substitution hypothesis (Tobin, 1965; Orangazi, 2008; Demir, 2009; Zhang and Zhang, 2016; Wang et al., 2017; Song and Lu, 2015). These hypotheses delve into the driving forces and economic implications of corporate financialization. The precautionary saving hypothesis asserts that corporate financialization aims to preempt liquidity risks stemming from external uncertainty and financing constraints due to information asymmetry. Consequently, financialization contributes positively to corporate development. Conversely, the investment substitution hypothesis posits that non-financial enterprises primarily pursue financialization to maximize investment returns by allocating resources to financial assets rather than their core operations. As a result, corporate financialization exerts a crowding-out effect on the real economy, impeding long-term growth potential. In the realm of research on corporate financialization, Li and Shi (2016), Lian et al. (2010), and various other studies support the precautionary saving hypothesis, while Zhang and Zhang (2016), Du et al. (2017), Liu and Luo (2019), and other works align with the investment substitution hypothesis. Additionally, Wang et al. (2017) and Liu and Hu (2017) observe that these motivations may coexist.

Building on the prevailing credit market conditions in emerging markets, Shin and Zhao (2013) elucidate the corporate allocation of financial assets through the lens of "Surrogate Intermediaries." They contend that the presence of financing discrimination enables large, low-risk traditional enterprises to access excessive financing, while high-risk startups or small to medium-sized enterprises encounter challenges in obtaining credit financing. In such a scenario, large enterprises are incentivized to secure surplus financing and subsequently function as shadow banks to optimize capital gains. Subsequent studies by Wang et al. (2015), Song and Lu (2015), and Peng and Huang (2018) corroborate the existence of shadow banking in China's large enterprises, particularly in State-Owned Enterprises (SOEs). Thus, it remains a pertinent inquiry whether shadow banking will further propel corporate financialization. Moreover, grounded in the shadow banking hypothesis, empirical evidence regarding the economic consequences of corporate financialization is still insufficient.

Another hypothesis is grounded in the motivation of earnings manipulation. Financial assets often feature short transaction cycles and low transaction costs. Moreover, the accounting recognition, measurement, and reporting of financial assets are frequently discretionary due to their inherent complexity, providing companies with opportunities for earnings manipulation (Zhou and Zhao, 2014; Ye et al., 2009). When companies operate at the breakeven point, they may increasingly reserve financial assets for earnings manipulation, leading to financialization. The motivation for earnings management and its economic consequences in the context of corporate financialization receive limited attention in existing literature. However, in the practical realm of corporate operations, Youngor's mid-year report for 2013 revealed a net profit of 960 million, obscuring the actual loss of 1.5 billion from the sale of Available-for-Sale (AFS) financial assets, thereby deceiving investors. Another example pertains to the 2018 performance forecast of Liangmianzhen Co., Ltd., which demonstrated a turnaround from losses to profits through the sale of financial assets, leading to investment income. The allocation of financial assets significantly impacts the actual profit situation of enterprises, and the phenomenon of manipulating profits through financial asset sales is increasingly apparent.

In summary, based on existing literature, this paper approaches the motivation behind corporate financialization, with a particular focus on exploring the existence and strength of precautionary saving, investment substitution, shadow banking, and earnings management motivations within the current landscape of corporate financialization in China. This analysis aims to assess the value or crowding-out effects of corporate financialization. Additionally, the paper further discusses whether there are variations in the economic consequences of corporate financialization under different motivations. The contributions of this paper are twofold. Firstly, it enriches the discussion on the motivations behind corporate financialization. Existing literature primarily concentrates on the precautionary saving and investment substitution motivations for corporate financialization. Building upon the context of China's national conditions and corporate practices, this paper extends the discussion to include motivations related to shadow banking and earnings management, providing corresponding empirical evidence. Secondly, recognizing that corporate financialization has both advantages and drawbacks, the paper comprehensively examines the economic consequences of financialization under different motivations. It offers policy recommendations in light of the dual impact of financialization.

The remaining sections of this paper are outlined as follows: Chapter 2 systematically reviews existing literature, Chapter 3 introduces the research hypotheses, Chapter 4 elucidates the research design, Chapter 5 analyzes empirical results, and Chapter 6 presents research conclusions and policy implications.

CHAPTER 2

LITERATURE REVIEW

The phenomenon of financialization in non-financial enterprises, as a crucial manifestation of economic financialization, has attracted extensive attention from scholars both domestically and internationally. Currently, research on corporate financialization primarily revolves around two main aspects: firstly, the motivations and influencing factors driving corporate financialization; and secondly, the impact of financialization on operational performance and corporate value.

2.1. Connotation of Corporate Financialization

With the rapid development of the financial system, the trend of financialization has become increasingly prominent in the global economy. Starting in the 1990s, the Western academic community began to pay attention to financialization. In the face of the intense impacts of the Asian financial crisis and the subprime mortgage crisis, scholars both domestically and internationally witnessed an explosive growth in research output in the areas related to the influencing factors and economic consequences of financialization. Cai and Ren (2014) summarized the definition of financialization, stating that, at the macro level, financialization refers to the growing dominance of the financial industry and financial assets, with non-financial sectors deepening their involvement in financial markets. This shift redirects the economic focus from industrial sectors to the financial sector, with various capital operations and speculation steadily replacing real economic activities. On a micro level, financialization refers to the capital accumulation pattern where companies increasingly rely on financial (rather than trade and commodity production) avenues for profit, as well as a business model that prioritizes the creation of financial value (Krippner, 2005). Zhang (2019) outlined the financialization logic of various schools such as neoclassical economics, political economics, and modern finance. He categorized financialization into three levels: macro-level financialization involving the overall financial industry, micro-level financialization involving non-financial enterprises, and meso-level financialization involving commodity finance.

Moreover, some scholars define and interpret the impact of deepening finance on economic development through the lens of the "Fictitious Economy" or "Virtual Economy." Chen (1999), starting from Marx's concept of fictitious capital, defines the virtual economy as economic activities related to the cyclical movement primarily based on the financial system, where the direct activity of making money from money constitutes the process of economic virtualization. Su et al. (2017) argue that in the virtual economy, there is no material circulation process of the real economy. The virtual economy is based on the real economy and concurrently promotes its development. The two should have a mutually supportive and interdependent relationship, but currently, they more often exhibit an expansive and crowding-out relationship. Unlike the research perspective on "financialization," the study of "economic virtualization" divides the economy into the real economy and the virtual economy. It focuses more on the phenomenon of deviation between the real and virtual economies, meaning that the virtual economy gradually operates independently, no longer being an accessory to the real economy. It even assumes a dominant position in the economy (Liu and Wu, 2004), forming a self-circulating pattern, and potentially crowding out the real economy. In other words, economic development is shifting "from the real to the virtual."

This paper does not differentiate between "financialization" and "virtualization." It adopts a micro-level perspective to investigate the motives behind non-financial enterprises increasing their allocation of financial assets and its impact on the development of these entities.

2.2. Motivation of Corporate Financialization

Existing research indicates that non-financial corporate financialization is driven by four main motives: precautionary savings motive, investment substitution motive, shadow banking motive, and earnings management motive.

2.2.1. Precautionary Savings and Investment Substitution Motives

Early studies suggest that non-financial corporate financialization may be driven by both the "precautionary savings" (also known as the reservoir effect) motive and the "investment substitution" motive, or a combination of both.

Companies heavily rely on a stable external environment and sufficient cash flows for their operations. Financial assets, being both liquid and profitable, serve as a form of precautionary savings that can defend against external uncertainties and funding shortages, while also generating investment returns. The pressure on liquidity caused by an uncertain external environment promotes the formation of the precautionary savings motive. Keynes (1936) proposed the theory of precautionary savings, suggesting that companies hold cash-like financial assets to prevent the adverse effects of cash flow shocks and avoid cash flow pressures resulting from poor business operations. Bloom et al. (2007) argue that companies use holding liquid assets to counter the uncertainty shocks from the external environment. Financial assets have both liquidity storage and investment attributes (Peng et al., 2018), and economic and political uncertainty can affect financial asset prices and the level of corporate financialization. Smith and Stulz (1985), Tornell (1990), and Demir (2009) propose that companies facing macroeconomic uncertainty increase holdings of cash or more liquid financial assets, considering them as a reservoir for financial asset investment as an alternative to real investments. Jiang and Liu (2011) find that, compared to periods of economic prosperity, companies increase their cash holdings during economic downturns, with cash holdings of private enterprises significantly higher than those of state-owned enterprises. Li and Shi (2016) find that, when economic policy uncertainty rises, companies increase their cash holdings, and this phenomenon is more pronounced for companies with stronger financing constraints, lower equity concentration, and poorer learning abilities.

Information asymmetry intensifies financing frictions, reinforcing the precautionary savings motive. Opler et al. (1999) found that, based on a strong precautionary motive, management tends to hold cash and marketable securities. Additionally, compared to companies with good credit, larger size, and better capability for going public, companies with better growth opportunities, higher risk activities, and smaller size tend to hold more liquid assets. Wang (2009) discovered that when companies face financing constraints, they systematically rely on internal financing, leading to an increase in cash holdings. Lian et al. (2010) found that when companies face financing constraints, they, out of precautionary or speculative motives, retain more cash flows in the form of cash or cash equivalents within the company and implement more active liquidity management. Chaney et al. (2012)

argue that in the presence of financing frictions, real estate can serve as important collateral to enhance corporate financing capacity, thereby promoting corporate investment behavior.

The profit-seeking nature of capital triggers the investment substitution motive. Tobin (1965) proposed that corporate resources are limited in scale, and occupying more resources in financial assets will reduce the resources available for tangible investment. In other words, financial investment and tangible investment exhibit a mutually substitutive relationship. Orhangazi (2008) and Demir (2009) argue that companies hold financial assets primarily from the goal of profit maximization. When the return on financial assets is significantly higher than the return on real economic investments, companies increase the allocation to financial assets while reducing the rate of industrial investment. In China, compared to the real economy, the financial and real estate industries have higher excess returns (Wang et al., 2017). Virtual ultimate controllers (Wen and Ren, 2015) or management teams (Du et al., 2017) pursue short-term profit maximization by allocating more funds through financial asset configurations for short-term arbitrage. Song and Lu (2015) demonstrated that when operational performance is poor, the high returns on financial assets attract companies to hold more financial assets. Zhang and Zhang (2016) argued that while the increase in the return on financial assets brings ample cash flow to companies, it also makes companies rely on financial channels for profit, suppressing fixed asset investment behavior. Wang et al. (2017) found that the excess returns of financial capital promote the financialization of non-financial enterprises, and non-financial enterprises increasing financial asset investments to share excess returns is a typical speculative arbitrage behavior. Du et al. (2017) found empirical evidence indicating that the financialization of state-owned enterprises damages future main business performance by suppressing innovation activities and physical investments. Specifically, as a broad financial product, real estate has achieved significant development in China in recent years. The prosperity of the real estate market has attracted numerous non-real estate enterprises to invest in real estate (Rong and Wang, 2014). However, speculative-driven real estate allocation behavior can crowd out fixed asset speculation and innovation investment (Wang and Rong, 2014; Zhang et al., 2016; Hu et al.，2019）

Simultaneously, external environmental factors and internal incentive policies influence the investment substitution motive for financialization. The uncertainty in the external environment affects the prices of financial assets. Francis et al. (2013) found that economic and political uncertainty accompanying the U.S. elections suppresses institutional investor stockholding behavior. The higher the uncertainty in election results, the more significant the decrease in institutional investor stockholding. Peng et al. (2018) argue that when economic policy uncertainty rises, the risk of financial assets increases, restraining the investment motive for corporate financialization. Liu and Luo (2019) found that external profit pressure from profit forecasts and stock price formation in the capital market further stimulates the investment substitution motive for corporate financialization. The speculative motives of management are encouraged by asymmetric compensation incentive policies. The phenomenon of Chinese listed companies heavily rewarding management for fair value changes and other financial asset investment returns (Xu and Zeng, 2010) indirectly incentivizes management to implement corporate financialization.

Moreover, some scholars argue that both the precautionary saving motive and the investment substitution motive coexist, manifesting as a nonlinear or complementary relationship. Wang et al. (2017) suggest that corporate financialization generally exhibits a long-term inhibition of innovation, but further research reveals a U-shaped correlation between corporate financialization and innovation investment. Liu (2017) found that both the precautionary saving motive and the investment substitution motive coexist in corporate financialization, with the former leading to an increase in financial asset holdings and the latter manifesting as arbitrage through financial channels. Hu et al. (2017) discovered that corporate allocation of financial assets is based on a precautionary saving motive, demonstrating a reservoir effect, while the allocation of other non-cash financial assets reflects a substitution motive, pursuing financial asset returns at the expense of real economic investment.

2.2.2. Shadow Banking Motive

In emerging market countries, where financial systems are still incomplete, credit constraints or discrimination against small and medium-sized enterprises (SMEs) are particularly pronounced. The long-term cost disparities for firms in accessing financing in the financial markets are stark. Shadow banking arises as a response to these challenges and further catalyzes corporate financialization. Scholars have begun to focus on the impact of shadow banking on corporate financialization. The "surrogate intermediaries" theory proposed by Shin and Zhao (2013) suggests that in emerging market economies, due to incomplete legal environments and insufficient risk pricing mechanisms, financial institutions such as banks often exhibit financing discrimination. They offer preferential credit prices to large, low-risk traditional enterprises, resulting in smaller financing constraints. In contrast, high-risk startups and SMEs often struggle to obtain financing support from banks, facing more significant financing constraints. When traditional enterprises receive bank funding beyond their needs, they are motivated to lend the surplus funds to high-risk enterprises, earning interest returns higher than the cost of funds. This behavior reflects financial investment in credit assets and gives rise to the phenomenon of corporate financialization.

The definition of shadow banking is broad. The Financial Stability Board (FSB) defines shadow banking as credit intermediation that occurs outside the regular banking system, posing potential systemic financial risks and regulatory arbitrage risks. Zhang (2019) proposes that the essence of shadow banking belongs to the financialization of the broader financial industry, with variations in its performance across different markets. Sun and Jia (2015) categorize shadow banking activities in China into credit-creating banking shadow businesses and traditional shadow banking businesses involved in monetary transfers. According to estimates, in 2014, when the scale peaked, the former had a size of nearly 30 trillion yuan, while the latter was about half of the former, approximately 15 trillion yuan. Wang et al. (2015) argue that the crucial role of shadow banking in China is to supplement the incomplete financial system, emphasizing the need to focus on the relending activities of non-financial enterprises in shadow banking operations.

Xu (2013) points out that unlike shadow banking in Western countries, Chinese shadow banking has distinct institutional characteristics. It lacks the securitization process, is mostly under government supervision or filing, and exhibits overlapping functions with traditional banks. Due to the imbalanced allocation of credit resources between state-owned enterprises and private enterprises, state-owned enterprises, leveraging their political status, can obtain more loans at lower costs. In contrast, private enterprises, especially small and medium-sized ones, face the dilemma of financing difficulties. In this unequal relationship, shadow banking becomes an important channel for financing small and medium-sized enterprises in China. State-owned enterprises use their credit advantages to obtain large loans from banks and then act as intermediaries, transferring these loans to small and micro-enterprises. In this process, state-owned enterprises play the role of shadow banks. Wang et al. (2015) use three methods to identify shadow banking activities in Chinese non-financial enterprises. They find that, compared to private enterprises, state-owned enterprises are more involved in shadow banking. Enterprises with higher growth and more investment opportunities have lower levels of involvement in shadow banking. Song and Lu (2015) also believe that listed companies with lower operating profit margins invest surplus funds in the financial market, becoming suppliers of funds for shadow banking. Peng and Huang (2018) argue that high-risk enterprises find it difficult to obtain financing through the financial market and must rely on shadow banking to meet their funding needs. High-risk enterprises offer higher risk compensation and bear higher financing costs to secure funding, thereby driving up the investment returns of the shadow banking system.

2.2.3. Earnings Management Motive

Financial asset recognition and measurement are complex, especially for trading financial assets and available-for-sale financial assets. There is significant manipulative space in accounting recognition and measurement. Wei et al. (2007) propose that non-recurring gains and losses are not independent accounting items or independent items on the income statement, providing opportunities for manipulation by enterprises. Zhou and Zhao (2014) argue that the fair value changes in available-for-sale financial assets are recognized in the balance sheet and income statement when held and disposed of, making them a natural tool for listed companies to engage in earnings management. Ye et al. (2009), using changes in accounting standards as a reference, find that companies with more trading financial assets and available-for-sale financial assets tend to classify financial assets as available-for-sale, providing more manipulation space for earnings management and income smoothing. Companies with poor profitability tend to engage in earnings management and smooth income by disposing of available-for-sale financial assets in subsequent periods.

Additionally, financial assets have high liquidity, free trading time, low transaction costs, and strong manipulation concealment. Therefore, financial assets become an ideal tool for enterprises to engage in earnings management. Wu et al. (2009) find that listed companies engage in earnings management by choosing the timing of selling securities to realize investment income. Xie et al. (2019) finds that companies meeting the criteria for equity incentives show a stronger positive correlation between abnormal non-recurring net profit and non-operating expenses. This indicates that companies engage in income classification manipulation by hiding regular expenses in non-operating expenses. Lu et al. (2015) argues that when listed companies engage in earnings management through non-recurring gains and losses, it constitutes implicit earnings management. Auditors tend to selectively enforce regulations and issue standard unqualified audit opinions in such cases.

With the aim of earnings management, companies are motivated to enhance their willingness to trade and hold financial assets, thereby promoting financialization. Graham et al. (2004) proposed that loss reversal and profit smoothing are the main motives for companies to implement earnings management. Wei et al. (2007) studied the behavior of listed companies engaging in earnings management through non-recurring gains and losses, suggesting that loss-making companies primarily aim to achieve loss reversal and avoid losses, while highly profitable companies aim to smooth profits and avoid profit declines. Wang (2013) found that loss-making companies, when experiencing a decline in operating profit, are more inclined to hold a higher proportion of financial assets during the loss reversal process. They selectively sell financial assets to generate investment income, thereby achieving the goal of reversing losses into profits. Zhang and Hu (2013) discovered that when the operating conditions of listed companies are poor, the motivation to engage in financial investment increases. In recent years, cases of real enterprises selling stocks and real estate to reverse losses have been common, especially when the returns in the real economy are significantly lower than those in the financial and real estate industries (Wang et al., 2017). Peng et al. (2018) argue that companies have the incentive to invest in financial assets to enhance short-term operational performance and conceal the sluggish growth of their main business. Xu and Wu (2018) suggest that motives such as loss reversal and income smoothing are influencing factors in corporate financialization, where companies hold trading financial assets for the purpose of earnings management.

2.3. Economic Consequences of Corporate Financialization

The economic consequences of corporate financialization are intricate. Existing research has extensively explored the multifaceted impacts of corporate financialization from various dimensions, providing abundant evidence for both positive and negative effects, as well as nonlinear influences.

The adverse effects of corporate financialization have been a focal point of scholarly attention globally. At the macroeconomic level, financialization hampers the development of the real economy. Orhangazi (2008) observed a significant negative impact of corporate financialization on the investment rate of non-financial firms in the United States, termed as the "crowding out effect" on real investments. Seo et al. (2012) and Akkemik and Ozen (2014) substantiated the existence of a crowding-out effect on real investments by corporate financial assets using data from listed companies in South Korea and Turkey. Zhang et al. (2016) found that corporate financialization notably affects the real investment rate, diminishing the stimulative effects of monetary policy on the real economy. At the microeconomic level, corporate financialization displaces resources earmarked for core business development and escalates enterprise risk. Tori and Onaran's (2017) research indicated that corporate financialization induces a crowding-out effect on investments in tangible capital assets. Du et al. (2017) discovered an overall negative impact of corporate financialization on the future core business development of listed entities, emphasizing the pivotal role of tangible investments in a company's future growth. Xie et al. (2014) argued that excessive financialization in the manufacturing sector diminishes tangible investments, stifles technological innovation, and accentuates the restraining effect of government control. Wang et al. (2017) verified that corporate financialization in real entities enhances operational performance in the short term through arbitrage but exerts a long-term inhibitory effect on innovation dynamics. Hu et al. (2019) utilized financial products as a metric for financialization, indicating that the more companies invest in financial products, the higher the degree of underinvestment. Moreover, financial constraints and microeconomic uncertainty magnify the impact of financial product purchases on investment efficiency. Liu et al. (2018) found that a higher proportion of gains from financial channels in listed companies corresponds to higher financial leverage, resulting in increased operational risk. Additionally, the financialization of listed companies has repercussions on financial markets. Yan and Chen (2018) found that substantial investments in financial assets by listed companies in the industrial sector significantly impede the stock price performance of these companies. Peng et al. (2018) revealed that corporate financialization, manifested in companies investing in financial assets to conceal negative information about their core business, elevates the risk of future stock price crash.

Financialization can also have positive effects. Firstly, corporate financialization facilitates the reallocation of resources within the corporate sector, enhancing resource allocation efficiency. Financial development contributes to improved financial services for the real economy, reducing corporate financing constraints (Raohuachun, 2009). Zhang and Jin (2005) asserted that deepening financial intermediation plays a crucial role in increasing investment liquidity and enhancing productivity, serving as the "engine" of economic growth. Shin and Zhao (2013) suggested that in an environment of financing discrimination, traditional enterprises can transfer excess credit support obtained from financial institutions to small and medium enterprises unable to secure bank support, alleviating capital misallocation among different corporate sectors and boosting overall enterprise total factor productivity. Xu and Liu (2019) argued that non-state-owned enterprises, still constrained by financing issues, benefit from financialization as it provides diverse financing channels, expands internal capital markets, and mitigates innovation resource shortages, thereby exerting a stimulating effect on innovation investment and innovation performance. Secondly, financial assets are more liquid than fixed assets, enabling companies to invest surplus funds in financial assets. In times of unexpected negative shocks causing a funding shortage, companies can sell financial assets to obtain liquidity, easing financial difficulties. Gehringer (2013) contended that financialization widens financing channels for companies, enhancing their resilience and financing capabilities. Demir (2009) and Hu et al. (2017) argued that the reservoir effect of corporate financialization is beneficial for companies to guard against macro or industry adverse factors impacting business operations, and it can provide necessary funding support for core investments through the realization of financial assets when bank credit contracts. Lu et al. (2019) found that companies with good operating performance and low profit volatility can moderate the risk of stock price collapse through moderate financial asset allocation, providing empirical evidence for the value hypothesis of financialization.

Moreover, some scholars have presented empirical evidence for the nonlinear effects of financialization. Song and Lu (2015) analyzed the impact of the allocation of non-monetary financial assets on the return on assets from the perspective of enterprise heterogeneity, revealing a U-shaped curve effect: low-performance companies exhibit a substitution effect, while high-performance companies display a reservoir effect. This U-shaped relationship was particularly significant in financial instruments like trust-type financial assets, investment properties, and financial institution equity investments. Wang et al. (2017) found a U-shaped relationship between corporate financialization and innovation investment, indicating a shift from a crowding-out effect to a promoting effect when the degree of financialization exceeds 23%. Liu (2017) interpreted the impact of corporate financialization on future R&D investment from two perspectives—financial asset holding and financial channel arbitrage—revealing a reservoir effect for the former and a substitution effect for the latter. Deng et al. (2019) discovered a U-shaped correlation between corporate financialization and the risk of stock price collapse, suggesting that the current financialization of non-financial companies generally stabilizes stock prices but caution should be taken against the dominant role of continuous financialization leading to a collapse-accelerating effect.

CHAPTER 3

HYPOTHESIS DEVELOPMENT

Based on existing literature, this paper begins by examining the motivations behind corporate financialization. It analyzes how precautionary savings motives, investment substitution motives, shadow banking motives, and profit management motives influence the financial allocation behavior of listed companies in China's non-financial sectors. Furthermore, adopting the perspective of corporate development capability, the paper investigates the impact of corporate financialization on research and development (R&D) investment.

From the perspective of precautionary savings motive, companies, reliant on resource support for sustained operations, find it necessary to reserve a certain level of cash and its equivalents during the production and operational processes to meet daily operational needs. Simultaneously, due to the existence of information asymmetry, there is a difference in the cost of internal and external financing. According to the pecking order theory, the internal financing cost is lower than the external financing cost, emphasizing the importance of a moderate level of liquidity asset reserves to avoid financing constraints that could impede corporate development. Similar to cash, financial assets possess strong liquidity and the ability to be realized. Moreover, under the financial management goal of maximizing shareholder wealth, the trade-off between marginal returns and marginal costs determines the level of cash flow that a company holds. As financial assets typically yield higher returns than cash, this paper posits that, driven by a precautionary motive, non-financial corporations tend to accumulate an appropriate level of financial assets to substitute for cash. Therefore, the following hypothesis is proposed:

H1: *Non-financial corporations, driven by a precautionary motive, are inclined to reserve an appropriate amount of financial assets as a substitute for cash.*

From the perspective of investment substitution motive, the direction of corporate investment is determined by asset prices and asset profitability. When the prices of financial assets in the broad financial sector and the returns on these assets significantly exceed those in the real economy sector, the profit-seeking nature of capital will drive non-financial corporations to abandon investments in core business projects with lower returns. Instead, they will redirect corporate resources into the broad financial industry, thereby increasing the level of corporate financialization. Therefore, the growth rate and return on financial assets in the broad financial sector play a crucial role in influencing corporate financialization. Hence, the following hypothesis is proposed:

H2: *The higher the growth rate and return on financial assets in the broad financial sector, the higher the level of financialization for non-financial corporations.*

From the perspective of shadow banking motive, rooted in the characteristics of China's economic system and capital market, which entail credit discrimination and high listing thresholds, listed companies possess an absolute advantage in financing capability compared to small and micro-sized enterprises. They have larger financing scales and lower financing costs, while small and micro-sized enterprises face difficulties in accessing financing. Given this unequal lending relationship, listed companies are inclined to excessively leverage their advantages in credit and equity financing. Subsequently, they act as financial intermediaries, transferring surplus liquidity assets to small and micro-sized enterprises facing higher financing constraints, thereby earning capital gains. Therefore, this study posits that enterprises with financing advantages are more motivated to implement corporate financialization to earn additional capital returns. Thus, the following hypothesis is proposed:

H3: T*he stronger the motivation for enterprises to act as shadow banks and earn additional capital returns, the higher the level of corporate financialization.*

From the perspective of earnings management motivation, when a company is at the threshold of profit and loss, it exhibits a strong motivation for earnings management. At this point, ex-ante earnings management is ineffective, and only ex-post earnings management can achieve a turnaround. Utilizing financial assets for profit manipulation offers advantages such as timeliness, low transaction costs, and strong concealment. Therefore, when the motivation for profit adjustment is enhanced, the level of corporate financialization will increase. Moreover, the manipulation of trading financial assets and available-for-sale financial assets will become more active. Thus, the following hypothesis is proposed:

H4: *The stronger the motivation for earnings management, the higher the level of corporate financialization.*

Motivations determine economic consequences. Based on the four financialization motivations mentioned above, the economic consequences of corporate financialization may validate the value hypothesis or the crowding-out effect. For non-financial industries, solidifying core business is a crucial factor in enhancing a company's competitive strength. Innovative activities represent the vitality and potential of the core business of non-financial entities, and the utilization of funds by companies directly impacts research and development (R&D) investment. Under the precautionary savings motive, non-financial enterprises implementing financialization can enhance their financing capabilities, thereby meeting the capital needs for innovative activities and expanding the development space of the core business. Conversely, under the investment substitution, shadow banking, or earnings management motives, corporate financialization is not aimed at safeguarding the development of the core business. It may even prioritize short-term profits over long-term development, leading to a reduction in innovation investment. Thus, the following contradictory hypotheses are proposed:

H5a: The relationship between *financialization and R&D expenditure is U-shaped.*

H5b: *higher level of financialization leads to more R&D expenditure.*

H5c: *higher level of financialization leads to less R&D expenditure.*

CHAPTER 4

EMPIRICAL DESIGN

4.1. Sample

As corporate financialization gradually deepens, the increasing degree of broad financial asset allocation among non-financial, non-real estate enterprises highlights the growing research significance of the issue. This study selects the period from 2008 to 2018 as the sample period and obtains annual data for 2154 non-financial, non-real estate listed companies. Simultaneously, all continuous variables are winsorized at the 1% level on an annual basis. The financial data of the listed companies used in this study are sourced from the CSMAR and Wind databases.

4.2. Variables

Before defining the variables, it is essential to clarify the concepts of several core terms in this study.

First, financial assets and corporate financialization. Referring to the research of Demir (2009), Xie et al. (2014), Song and Lu (2014), and Chen and Gan (2018), corporate financial assets, as a pan-financial concepts, includes held-for-trading (HFT) assets, net loans and advances, net Available-For-Sale (AFS) assets, net Held-To-Maturity (HTM) assets and investment real estate. In this paper, the proportion of financial assets in total assets is used as a proxy for the strength of financial assets holding, that is, the degree of corporate financialization.

Second, shadow banking and its measurement. Following Wang et al. (2015), the study focuses on non-financial industry listed companies utilizing credit and equity financing advantages to obtain substantial funds from the financial market. These companies then engage in shadow banking activities by lending these funds again. In such situations, financial assets obtained from external financing are transformed into financial liabilities, resulting in a significant positive correlation between financial assets and financial liabilities. Therefore, by examining the correlation between financial liabilities and financial assets, the degree to which companies lend externally is assessed, providing insights into the impact of shadow banking motives on corporate financialization.

Third, earnings management motive. Referring to the work of Xu and Wu (2018) and Hui et al. (2018), when a company is at the profit or loss threshold, it exhibits a strong motive for earnings management. Therefore, observations where the total profit is positive but turns negative after deducting investment income are defined as having an earnings management motive.

Table 1. Variable definitions

Variable	Definition	Measurement
Finratio	The degree of corporate financialization	The proportion of financial assets in total assets, accounting for changes in market value.
lnFin	Financial assets	The natural logarithm of financial assets, accounting for changes in market value.
CF	Operating cash flow	The ratio of net cash flow from operating activities to total assets.
HPgr	The growth rate of home price	The growth rate of housing price in the city where the company is registered.
REpr	Profit margin of real estate industry	The average profit margin of real estate industry.
Finlia	Financial liability	The ratio of financial liability to total assets.
IncenEM	Earnings management motivation	An indicator variable that takes 1 if the realized total profit is positive, but it is negative after deducting the investment income, and 0 otherwise.
DACC	Accrual earnings management	According to the calculation of the modified Jones Model.
RDratio	R&D investment	The ratio of R&D expenditure to total assets
Size	Firm size	The natural logarithm of total assets.
Lev	Asset-liability ratio	The ratio of total liabilities to total assets
Age	Firm age	One plus the years since the firm is listed.
ROA	Return on asset	The ratio of net profit to total assets.
Growth	Growth	The growth rate of operating revenue.
Top1	The largest shareholder	The proportion of shares held by the largest shareholder.
IBratio	The proportion of independent directors	The proportion of the number of independent directors in the total number of directors in the board.
State	State ownership	An indicator variable that takes 1 if the firm is state-owned, and 0 otherwise.

The variable definitions and measurement methods used in this paper are detailed in Table 1. The core dependent variables are corporate financialization ratio (*Finratio*) and financial asset scale (*lnFin*).

Operating cash flow (*CF*) is used to verify the substitutive effect of financial assets and cash flow under the preventive savings motive of corporate financialization (**H1**).

Variables such as house price growth rate (*HPgr*) and the average profit margin of the real estate industry (*REpr*) are used to test the impact of the growth rate of financial asset prices and investment profit rates under the investment substitution motive of corporate financialization (**H2**).

Financial liability (*Finlia*) is used to verify the impact of shadow banking on corporate financialization (**H3**).

Earnings management motive (*IncenEM*) and discretionary accruals for earnings management (*DACC*) are used to test the impact of earnings management motives on corporate financialization (**H4**).

Research and development investment ratio (*RDratio*) serves as a proxy for the development capability of the main business and is used to verify the economic consequences of corporate financialization (**H5**).

Additionally, control variables include company size (*Size*), leverage ratio (Lev*),* company age (*Age*), return on assets (*ROA*), growth rate (*Growth*), the proportion of shares held by the largest shareholder (*Top1*), independent director ratio (*IBratio*), and property rights nature (*State*), which are closely related to corporate investment and financing activities in this study.

4.3. Descriptive Statistics

Table 2 reports the results of descriptive statistics. From the descriptive statistics, it is evident that, on average, the degree of corporate financialization for non-financial, non-real estate listed companies in China is 6.809%, with a maximum value of 89.105%. This indicates that the phenomenon of corporate financialization is widespread among real businesses, and some companies exhibit an exceptionally high level of financialization.

Table 2. Descriptive statistics

VARIABLES	Mean	Std. Dev.	Min	Max
Finratio	6.809	10.567	0.000	89.105
lnFin	18.515	2.278	3.689	26.108
ΔFinratio	2.089	3.830	0.000	68.284
ΔlnFin	0.525	0.900	0.000	14.335
ΔlnTFA	0.952	1.383	0.000	12.983
ΔlnASFA	0.576	1.034	0.000	15.425
CF	0.049	0.070	-0.428	0.652
HPgr	0.101	0.109	-0.459	0.781
REpr	13.663	2.724	9.571	16.954
Finlia	0.329	0.587	0.000	13.616

Table 2. (continued)

VARIABLES	Mean	Std. Dev.	Min	Max
IncenEM	0.052	0.223	0.000	1.000
DACC	0.005	0.081	-0.938	1.297
RDratio	4.677	5.235	0.000	98.390
Size	22.086	1.260	19.859	26.054
Lev	0.411	0.202	0.008	2.302
Age	10.594	6.585	1.000	29.000
ROA	4.539	5.481	-106.503	48.194
Growth	13.479	29.527	-299.343	553.027
Top1	35.603	15.263	3.390	99.000
IBratio	0.372	0.055	0.091	0.800
State	0.399	0.490	0.000	1.000

4.4. Empirical Model

To test **H1**, empirical model (1) is designed as:

$$Finratio_{i,t} = \alpha + \beta_1 CF_{i,t} + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \qquad (1)$$

In order to verify the motivation and consequences of corporate financialization, this paper adopts the panel model at the firm-year level and each regression are run with firm fixed effects and year fixed effect, and standard errors are clustered at the firm level. The independent variable in Model (1) is operating cash flow (CF), and the dependent variable is corporate financialization ($Finratio$). Control variables (*Controls*) include firm size (*Size*), leverage (Lev), age (*Age*), return on assets (*ROA*), growth rate (*Growth*), shareholding proportion of the largest shareholder (*Top1*), ratio of independent directors (*IBratio*) and property right (*State*).

If precautionary saving is the key motivation of corporate financialization, financial assets and cash assets should be mutually substitutive, that is, as more cash a firm holds, the less resources are allocated in financial investment. Thus, we expect to see that regression coefficient β_1 of $Finratio$ is significantly positive.

To verify **H2**, the following empirical model (2) is designed:

$$Finratio_{i,t} = \alpha + \beta_1 HPgr_{i,t}(REpr_{i,t}) + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \quad (2)$$

The dependent variable in Model (2) is the degree of corporate financialization, $Finratio$, the core independent variable is the growth rate of housing price (*HPgr*) and the profit margin of real estate industry (*REpr*), control variables (*Controls*) include firm size (*Size*), leverage (Lev), age (*Age*), return on assets (*ROA*), growth rate (*Growth*), shareholding proportion of the largest shareholder (*Top1*), ratio of independent directors (*IBratio*), property right (*State*) and cash flow (*CF*). Model (2) aims to test Hypothesis 2. Under Hypothesis 2, corporate financialization is motivated by the higher return on pan-financial assets or higher profit margin of pan-financial industry, thus the regression coefficient corresponding to the housing price growth rate or the average profit margin of the real estate industry in the location of the company, β_1, should be significantly positive.

To verify **H3**, empirical model (3) is designed as follows:

$$Finratio_{i,t} = \alpha + \beta_1 Finlia_{i,t} + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \quad (3)$$

In model (3), dependent variable is the degree of corporate financialization ($Finratio$), core independent variable is financial liability ($Finlia$), while control variables are the same as in model (2). If coefficient β_1 is significantly positive, capital obtained through external financing are at least partly used for re-lending. In other words, shadow banking motivation is the cause of corporate financialization.

To test **H4**, the following empirical model (4-1) is designed:

$$Finratio_{i,t}(lnFin_{i,t}) = \alpha + \beta_1 IncenEM + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \quad (4\text{-}1)$$

In model (4-1), the dependent variable is the degree of corporate financialization ($Finratio$) or financial asset ($lnFin$), the core independent variables is earnings management motivation $IncenEM$, and control variables are the same as in model (2). In order to test Hypothesis 4, we need to examine β_1, the regression coefficient of $IncenEM$, earnings management motivation. As discussed earlier, companies have strong earnings management motivation if it is operating at breakeven.

In addition, if manipulation of financial asset profit recognition is used as an effective post-earnings management method, corporate financialization and accrual earnings management will show a mutually substitutive relationship. In order to further verify the earnings management motivation of corporate financialization, this paper constructs the empirical model (4-3) as follows.

$$Finratio_{i,t} = \alpha + \beta_1 DACC_{i,t} + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \text{ (4-2)}$$

In model (4-2), the independent variable is accrual earnings management $DACC$, which is calculated using the modified Jones Model. The dependent variable is the degree of corporate financialization ($Finratio$), and the control variable is the same as Model (4-1). If financial asset allocation is an effective earnings management tool, it will substitute accrual earnings management. That's to say, the regression coefficient β_1 will be significantly negative, indicating that higher degree of accrual earnings management is correlated with lower level of corporate financialization.

To verify **H5**, the following empirical model (5) is designed:

$$RDratio_{i,t} = \alpha + \beta_1 Finratio\_square_{i,t} + \beta_2 Finratio_{i,t} + \beta_3 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \text{(5-1)}$$

$$RDratio_{i,t} = \alpha + \beta_1 Finratio_{i,t} + \beta_2 Controls_{i,t} + FirmFE + YearFE + \varepsilon_{i,t} \text{(5-2)}$$

In model (5-1), the dependent variable is the R&D investment $RDratio$, the core independent variables are $Finratio$ and *Finratio_square*, while the control variables are the same as in model (2). Model (5-1) is designed to verify Hypothesis **H5a**. If both positive and negative influences of financialization on R&D expenditure exist, then the regression coefficient β_1 of $Finratio\_square$ is expected to be significant, either positive or negative, then **H5a** is verified.

In model (5-2), the dependent variable is the R&D investment $RDratio$, the core independent variable is $Finratio$, Model (5-2) is designed to verify Hypothesis **H5b** and **H5c**. If the precautionary saving motivation is stronger, financialization has a value effect and R&D investment should have been promoted. Then the regression coefficient β_2 of $Finratio$ should be significantly positive and the regression coefficient β_1 of $Finratio\_square$ should be insignificant, and **H5b** is verified. On the contrary, if the investment substitution motivation, shadow banking motivation or earnings management motivation is stronger, the fundamental purpose of financialization is not to prevent the liquidity risk or alleviate the financing constraints. Thus, corporate financialization won't contribute to but crowd out the resources needed for corporate development. In this scenario, β_1 , regression coefficient of $Finratio$ should be significantly negative, and the regression coefficient β_1 of $Finratio\_square$ should be insignificant, then **H5c** is verified.

CHAPTER 5

EMPIRICAL RESULTS

5.1. Preventive Saving Motive

Empirical results of **H1** are shown in Table 3. The coefficients of free cash flow, in both columns (1) and (2) are significantly negative at significance level of 1% and 5%, indicating that there is a significant negative correlation between the degree of corporate financialization and cash flow from operating activities. Financial asset holding will replace cash holding, verifying **H1** that corporate financialization has precautionary saving motivation. In the economic significance, for one unit of increase in free cash holding, the financialization ratio of enterprises only decreases by 1.6844 unit, indicating that real enterprises have precautionary saving motive in allocating financial assets, and the substitution effect is rather strong.

Table 3. Substitution effect of financial assets and cash holding

VARIABLES	(1) *Finratio*	(2) *Finratio*
CF	-2.2753*** (-3.261)	-1.6844** (-2.220)
Size		-0.6545*** (-6.210)

Table 3. (continued)

VARIABLES	(1) *Finratio*	(2) *Finratio*
Lev		-1.7198*** (-3.717)
Age		0.5544*** (19.295)
ROA		-0.0341*** (-3.141)
Top1		-0.0118* (-1.742)
State		-0.9203*** (-2.946)
IBratio		1.9171* (1.662)
Growth		-0.0108*** (-6.968)
Constant	4.9909*** (19.782)	17.3258*** (7.501)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	18868	16654
Number of firms	2155	2152
R-sq:within	0.065	0.071

Notes: Table 3 presents the result of preventive saving motive for **H1**. The independent variables are free cash flow of the firm (*CF*) in both columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

5.2. Investment Substitution Motive

Table 4 below shows the empirical test results of **H2**. Housing price in China has been soaring in the recent few years. In contrary to other financial assets, real estate has its physical side, thus difference between real estate and other physical business is less significant thus more acceptable for entity entrepreneurs. In light of this, this paper takes real estate as a typical proxy to investigate the investment substitution motivation of corporate financialization.

As shown in column (1) of Table 4, the regression coefficients of housing price growth rate, $HPgr$, in the city where the corporate resides are significantly positive at a significance level of 5%, indicating that faster housing price growth in the city where the company is located is correlated with higher degree of corporate financialization. **H2** is thus verified, indicating that corporate financialization has investment substitution motivation. In terms of economic significance, financialization level of local entity enterprises increases by 1.302 units for per unit increase in the growth rate of local housing price.

As a robustness test, in column (2) of Table 4, the core explanatory variable is replaced by average profit margin of the real estate industry, $REpr$. Under the background of the continuous decline of the real economic return rate, some enterprises allocate financial assets in order to pursue a higher return rate of the non-financial industry. Therefore, this paper takes the real estate industry as the representative to verify whether the average profit margin of the industry can promote the financialization of entity enterprises. The results in column (2) show that regression coefficients of the real estate industry average profit rate, $REpr$, are significantly positive at a significance level of 1%. As real estate industry average profit margin increases by one unit, enterprise financialization would increase by 0.0805 unit, thus again verifying Hypothesis 2 that entity corporate financialization has significant investment substitution motivation.

Table 4. Investment substitution motive on financialization

VARIABLES	(1) *Finratio*	(2) *Finratio*
HPgr	1.3016**	
	(2.352)	
REpr		0.0805***
		(4.587)
Size	-0.8381***	-0.6545***
	(-6.398)	(-6.210)
Lev	-1.7306***	-1.7198***
	(-2.923)	(-3.717)
Age	0.5755***	0.5544***
	(16.821)	(19.295)
CF	-0.9170	-1.6844**
	(-0.931)	(-2.220)
ROA	-0.0427***	-0.0341***
	(-2.992)	(-3.141)
Top1	-0.0126	-0.0118*
	(-1.417)	(-1.742)
State	-1.1013***	-0.9203***
	(-2.785)	(-2.946)
IBratio	2.4008*	1.9171*
	(1.646)	(1.662)
Growth	-0.0123***	-0.0108***
	(-6.163)	(-6.968)
Constant	21.5185***	16.9046***
	(7.510)	(7.215)
Firm FE	Yes	Yes

Table 4. (continued)

VARIABLES	(1) *Finratio*	(2) *Finratio*
Year FE	Yes	Yes
Observations	10613	16654
Number of firms	1416	2152
R-sq:within	0.083	0.071

Notes: Table 4 presents the result of investment substitution motive for **H2**. The dependent variables are financialization ratio (*Finratio*) across all columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

5.3. Shadow Banking Motive

According to Pecking Order Theory, firms would first use low-cost internal funding in daily operation. Only when internal funding is insufficient to support operational and investment activities would they resort to external financing. Thus, the amount of financial assets and financial liabilities within a business organization should exhibit a negative correlation. On the contrary, if firms are serving as shadow bank, in order to gain additional capital return, external funding, which are reported in the balance sheet as financial liabilities, would be re-lend a second time to external parties, forming a financial asset in the balance sheet. In this scenario, the amount of financial assets and financial liabilities should have a significant positive correlation.

From the empirical test results of **H3** shown in Table 5, regression coefficients of the degree of corporate financialization, $Finratio$, are significantly positive at 1% significance level, indicating that the amount of financial assets and that of financial liabilities show significant positive correlation, thus supporting **H3**, corporate financialization are motivated by shadow banking. In the economic sense, for one unit of financial liabilities increase, the financial assets increase 0.5560 unit, indicating a strong influence of shadow banking on the financialization level.

Table 5. Shadow banking motive on financialization

VARIABLES	(1) *Finratio*	(2) *Finratio*
Finlia	0.6026***	0.5560***
	(4.865)	(3.947)
Size		-0.8276***
		(-5.957)
Lev		-0.4195
		(-0.756)
Age		0.4274***
		(15.484)
CF		-0.2357
		(-0.295)
ROA		-0.0040
		(-0.310)
Top1		-0.0442***
		(-5.201)
State		-1.2789***
		(-2.909)
IBratio		1.6781
		(1.318)
Growth		-0.0079***
		(-4.874)
Constant	6.3973***	22.5041***
	(106.267)	(7.734)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	16034	13941

Table 5. (continued)

VARIABLES	(1) *Finratio*	(2) *Finratio*
Number of firms	2078	2007
R-sq:within	0.002	0.045

Notes: Table 5 presents the result of shadow banking motive for **H3**. The dependent variables are financialization ratio (*Finratio*) across all columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

5.4. Earnings Management Motive

Table 6 shows the empirical results of **H4**. This paper holds that if a company is reporting positive net income, but the main source of profitability is from investment return and its business side is making a loss, it would have a strong motivation for earnings management. As financial assets are characterized by flexible trading and low transaction cost, if management intent to conduct accounting manipulation, transaction and holding of financial assets would increase.

As shown in column (1) and (2) of table 6, regression coefficients of the earnings management motivation, $IncenEM$, are significantly positive at significance level of 1%, indicating that when a company is at breakeven, corporate financialization level will rise, supporting H4. In economic significance, compared with other enterprises, the gap of degree of financialization between firms with earnings management motivation and those without is 11.02%.

As a robustness test, columns (3) and (4) of table 6 provide statistical test results of the influence of earnings management motivation on the scale of financial asset holdings. The regression coefficients of earnings management motivation, $IncenEM$, are significantly positive at 1% significance level, indicating that earnings management motivation is correlated with higher level of financial asset holding. This figure is significant in economic sense and supports H4 that the earnings management is a motivation for corporate financialization.

Table 6. Earnings management motive on financialization

VARIABLES	(1) *Finratio*	(2) *Finratio*	(3) *lnFin*	(4) *lnFin*
IncenEM	0.1585***	0.1102***	4.4632***	2.9721***
	(16.547)	(11.487)	(6.276)	(4.535)
Size		-0.8962***		1.3473***
		(-7.037)		(25.813)
Lev		-0.1862		2.6096***
		(-0.380)		(9.482)
Age		0.4918***		0.1114***
		(20.109)		(10.595)
CF		-0.6410		2.1428***
		(-0.844)		(4.160)
ROA		-0.0379***		-0.0153**
		(-3.450)		(-2.092)
Top1		-0.0345***		-0.0286***
		(-4.320)		(-8.267)
State		-1.3476***		0.6672***
		(-3.215)		(4.826)
IBratio		1.4702		1.2948*
		(1.221)		(1.813)
Growth		-0.0075***		-0.0016
		(-4.841)		(-1.471)

Table 6. (continued)

VARIABLES	(1) *Finratio*	(2) *Finratio*	(3) *lnFin*	(4) *lnFin*
Constant	6.6489***	23.3906***	14.5870***	-13.6893***
	(163.609)	(8.719)	(96.405)	(-12.193)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	18868	16654	18896	16683
Number of firms	2155	2152	2155	2152
R-sq:within	0.016	0.067	0.226	0.237

Notes: Table 6 presents the result of earnings management motive for **H4**. The dependent variables are financialization ratio (*Finratio*) across all columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

The above empirical test has proven that when the enterprise has profit manipulation motivation, it will increasingly involve in financial asset transaction, leading to higher level of financialization. If financial assets with higher yield can help companies turn around losses, it is worth noting whether there is substitutive relationship between financial asset manipulation and conventional accrual earnings manipulation.

Table 7 shows the empirical test results of the above issue. The regression coefficients of accrual earnings management are significantly negative at significance level of 1%, indicating that there is indeed a substitutive relationship between corporate financialization and accrual earnings management. In the economic sense, as the degree of earnings management increase by one unit, the level of financialization ratio will drop by 3.557 unit, indicating its economic significance is strong.

Table 7. The relationship between financialization and earnings management.

	(1)
VARIABLES	*Finratio*
DACC	-3.5571***
	(-3.279)
Size	-0.9509***
	(-7.400)
Lev	-0.2644
	(-0.538)
Age	0.4819***
	(3.031)
CF	-5.1987***
	(-3.742)
ROA	0.0024
	(0.160)
Top1	-0.0223***
	(-2.767)
State	-1.7612***
	(-4.187)
IBratio	1.9114
	(1.583)
Growth	-0.0100***
	(-6.370)
Constant	25.0765***
	(7.130)
Firm FE	Yes
Year FE	Yes
Observations	16608
Number of firms	2152
R-sq:within	0.073

Notes: Table 7 presents the result on the relationship between corporate financialization and accrual earnings management. The independent variables are accrual earnings management *DACC* in both columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

5.5. Combined Four Motives of Corporate Financialization

Based on the preceding analysis, all four financialization motives are present simultaneously among Chinese listed companies when examined individually. To further investigate whether any single motive dominates the others, we included all four motives in a single regression model to test whether their coefficients remain statistically significant. The results in Table 8 indicate that these motives are not interchangeable; they coexist within Chinese listed companies. Since each motive points toward different directions for corporate development, a comprehensive evaluation of how financialization affects the long-term growth of Chinese listed companies, such as investment in R&D, requires further investigation.

Table 8. The relationship between financialization and four motives.

	(1)	(2)
VARIABLES	*Finratio*	*Finratio*
CF	-5.0348***	-4.1983**
	(-3.467)	(-2.229)
HPgr	1.4118**	1.5047***
	(2.465)	(2.635)
Finlia	0.3021**	0.4926***
	(2.091)	(3.216)
DACC	-3.9965***	-2.7923*
	(-3.739)	(-1.934)
Size		-0.7911***
		(-5.601)
Lev		-1.7062***
		(-2.607)

Table 8. (continued)

VARIABLES	(1) Finratio	(2) Finratio
Age		0.5907***
		(16.424)
ROA		0.0074
		(0.329)
Top1		-0.0182**
		(-1.961)
State		-0.6487
		(-1.593)
IBratio		2.7121*
		(1.800)
Growth		-0.0101***
		(-4.772)
Constant	8.5479***	19.3826***
	(26.246)	(6.250)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	8924	8903
Number of firms	1318	1318
R-sq:within	0.050	0.062

Notes: Table 8 presents the result on the relationship between corporate financialization and the combined four motives. The key independent variables are free cash flow *CF*, housing price growth rate in the city where the firm is located *HPgr*, financial liabilities *Finlia*, and accrual earnings management *DACC* in both columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

5.6. Economic Consequences of Corporate Financialization

How the corporate financialization affects corporate business growth in the real economy has been a widely concerned topic. If financialization helps to mitigate liquidity risk and alleviates financing constraint, known as the reservoir effect, higher degree of financialization would promote corporate growth prospects. On the contrary, if financialization crowd out innovation activities, a.k.a. crowding out effect, higher level of financialization would limit corporate growth.

Our discussion of the motivation of corporate financialization has shown that non-financial enterprises in China have all four motives of financialization, i.e. precautionary saving, investment substitution, shadow banking and earnings management, simultaneously. Building on that, we intend to examine the economic consequences of corporate financialization. For non-financial enterprises, competitiveness should be based on a solid business rather than financial investment, and investment in R&D activities is crucial to building competitive edge. Therefore, this paper takes amount of R&D investment as a proxy variable to estimate the economic consequences of corporate financialization.

Table 9 and 10 shows the empirical results of linear and U-shaped relationship between financialization and R&D, respectively. In table 9, the regression coefficients of squared financialization level are insignificantly in columns (1) and (2), indicating that there is no U-shaped relationship between financial asset investment and R&D investment, excluding **H5a**.

In table 10, the regression coefficients of financialization level are significantly negative at 1% significance level in columns (1) and (2), indicating that financial asset investment significantly inhibits R&D investment, supporting the crowding out effect hypothesis **H5c**. High level of financialization will inhibit the long-term growth momentum and damage enterprise value. In the economic significance, for one unit increase in the degree of corporate financialization, the R&D investment would drop by 0.0061unit. Building on that, we believe that investment in assets such as real estate, which has relatively lower liquidity, would more significantly inhibit R&D investment and inhibit growth prospect.

Table 9. The impact of corporate financialization on R&D investment: U-shaped

	(1)	(2)
VARIABLES	*RDratio*	*RDratio*
Finratio	-0.0091***	-0.0066**
	(-2.725)	(-2.025)
Finratio_square	0.0000	-0.0000
	(0.188)	(-0.474)
Size		-0.4939***
		(-22.161)
Lev		0.1779*
		(1.823)
Age		-0.0113*
		(-1.784)
CF		0.5709***
		(3.580)
ROA		0.0257***
		(10.017)
Top1		-0.0008
		(-0.581)
State		0.0571
		(0.808)
IBratio		-0.4650**
		(-1.975)

Table 9. (continued)

VARIABLES	(1) RDratio	(2) RDratio
Growth		0.0002
		(0.616)
Constant	2.1266***	13.3694***
	(29.953)	(27.523)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	11552	10391
Number of firms	1937	1933
R-sq:within	0.012	0.077

Notes: Table 9 presents the economic consequence of corporate financialization on R&D investment. The dependent variables are R&D investments in both columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

Table 10. The impact of corporate financialization on R&D investment: Linear

VARIABLES	(1) RDratio	(2) RDratio
Finratio	-0.0077***	-0.0061***
	(-3.528)	(-2.841)
Size		-0.5122***
		(-19.436)
Lev		0.1768
		(1.516)
Age		-0.0098
		(-1.347)
CF		0.5650***
		(2.950)
ROA		0.0271***
		(8.810)
Top1		-0.0019
		(-1.110)
State		0.0298
		(0.360)
IBratio		-0.4151
		(-1.472)
Growth		0.0001
		(0.199)

Table 10. (continued)

VARIABLES	(1) *RDratio*	(2) *RDratio*
Constant	2.1476***	13.8142***
	(25.908)	(24.091)
Firm FE	Yes	Yes
Year FE	Yes	Yes
Observations	11552	10391
Number of firms	1937	1933
R-sq:within	0.010	0.059

Notes: Table 10 presents the economic consequence of corporate financialization on R&D investment. The dependent variables are R&D investments in both columns. Standard errors are clustered at the firm level. ***, **, and * indicate significance at the 1%, 5% and 10% levels, respectively.

CHAPTER 6

CONCLUSION

The phenomenon of financialization in the real economy sector is commonly seen, while its economic consequence on corporate business development is still controversial. Starting from discussion of the motivation of corporate financialization, this paper further examines the economic consequences of corporate financialization. The empirical findings of this study indicate that non-financial, non-real estate enterprises in China engage in financialization with simultaneous presence of precautionary savings motive, investment substitution motive, shadow banking motive, and earnings management motive.

Specifically, the precautionary saving motive drives entity enterprises to invest in high-liquidity financial assets, which has substitutive effect on cash holding behavior. Financial assets allow companies to mitigate liquidity risk and alleviate financing constraints, while providing financial return simultaneously. The investment substitution motive of financialization, based on our empirical test results, is the main driving force for corporate financialization. As return of financial and real estate sector rise, degree of financialization also rise. Shadow banking motive drives listed companies to take advantage of its financing privilege, obtain excessive financial resources, and re-lend to external parties for additional capital. Companies operating at breakeven point are believed to have strong motivation for earnings management. These companies are thus urged to allocation more resources in financial investment. Moreover, the trading volume of financial assets, leading to higher trading volume of held-for-trading and available-for-sale assets. Such accounting manipulation are negatively correlated with accrual earnings management activities.

Based on the above four types of corporate financialization motives, this paper further tests the economic consequence of financialization on corporate growth and development momentum. Taking R&D investment as a proxy of corporate growth momentum, the empirical results show that financialization greatly inhibit R&D investment, confirming the crowding out effect hypothesis of financialization. It also aligns with our conclusion that investment substitution, shadow banking and earnings management motivations are the main driving force of the development of financialization in China.

Based on our conclusion, this paper proposes the following policy implications.

Firstly, the government should focus on fostering tangible economic growth and corporate innovation. The persistent decline in returns from physical investments is a fundamental driver of financialization, as non-financial enterprises deviate from their economic roles and invest in pan-financial assets. Local governments at all levels should enhance the implementation of economic policies, further reduce tax rates in key economic sectors facing low-profit margins, increase subsidies for corporate research and development activities in pivotal industries, encourage investments in the physical sector, and provide guidance for enterprises to prioritize innovation.

Secondly, regulatory bodies should bolster financial supervision to support the development of the physical economy and prevent resources from circulating predominantly within the financial system. As a supportive element of the overall economic structure, the financial industry should commit to providing capital to the real economy and facilitating economic growth.

Thirdly, given the rapid appreciation of non-financial assets, regulatory authorities should be vigilant about the increasing systemic risk triggered by potential asset bubble bursts and identify speculative arbitrage activities for further preventive regulation.

Fourthly, the banking and overall financial system should work towards establishing a transparent financial environment where credit discrimination is eliminated, and all types of enterprises can access financing based on the cost determined by credit market players. Government authorities should also expand financing channels for State-Owned Enterprises (SOEs) through supportive policies for Venture Capital (VC) and Private Equity (PE) investment funds, while avoiding the expansion of shadow banking activities.

Fifthly, relevant government agencies should refine the accounting recognition, measurement, and reporting standards for financial assets. They should promote investor awareness and enhance professional market pricing capabilities to address earnings manipulation behaviors of listed companies. Moreover, there should be an emphasis on recognizing the robustness of business development in the compensation mechanism of listed companies, thereby avoiding the trap of "high reward for profit-making while minimum penalty for loss-making."

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