The Impact of Financial Asset Allocation of Real Enterprises on Enterprise Value

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Abstract. This article examines the effects of real businesses' financial asset allocation on enterprise value using the Shanghai and Shenzhen A-share listed companies from 2012 to 2021 as the research sample. According to the study, there is an ongoing "inverted U-shaped" relationship between enterprise value and financial asset allocation. The improvement of enterprise value will be hampered by excessive financial asset allocation, whereas moderate financial asset allocation will encourage it. Second, as opposed to state-owned businesses, non-state-owned businesses have a more substantial inverted U-shaped link between financial asset allocation and enterprise value. The conclusion of this paper has certain guiding significance for better promoting the financial services to the real economy and the high-quality development of enterprises.

Keywords: Financial asset · Enterprise value · Nature of the property rights

1 Introduction

Real enterprises are confronted with the development conundrum of diminishing operating profit margins as China's economic development enters the new normal stage [7]. The banking industry's interest rate reform and rising capital costs, have all contributed to the growth of the finance sectors at the same time. In order to reduce risks and maximize returns, entity enterprises gradually start to get involved in the financial. Real businesses may expand their investment in financial assets due to the short return cycle of these assets. As a result, businesses may experience a "moving from the real to the virtual" trend. In certain ways, enterprise value shows how well an enterprise is developing. The maximization of enterprise value is seen as the ultimate goal of modern businesses, which give enterprise value management an increasing amount of attention. Studying the impact of entity firms' financial asset allocation on enterprise value is therefore of major practical importance.

The linear inhibition or promotion impact is the current focus of academic study on the relationship between enterprise financial asset allocation and enterprise value. Wei Xiaoqin et al. (2021) used actual businesses as their research subjects and discovered that these businesses' distribution of financial assets considerably decreased the value of the businesses [4]. From the perspective of the firm life cycle, Du Jinmin and Chen Jianxing (2020) discovered that the financial asset allocation of businesses during their maturation

and recessionary periods significantly contributes to their value. Yet, some academics now contend that the two do not necessarily have a single linear link. According to Cai Yanping et al. (2019), actual businesses that store financial assets for the purpose of engaging in market arbitrage can enhance their enterprise value when their holding level is low and detract from it when it is too high [8].

This paper first examines the relationship between the allocation of financial assets and the value of real enterprises on the whole, and then brings the nature of property rights into the analysis framework to explore the dynamic changes in the relationship between different property rights. This paper enriches the study on the economic consequences of enterprise financial asset allocation.

2   Theoretical Analysis and Research Hypothesis

2.1   Relationship Between Financial Asset Allocation and Enterprise Value

It is impossible to generalize about how company financial asset allocation affects enterprise value [3]. On the one hand, the distribution of corporate financial assets may have a reservoir impact on corporate value. Businesses invest their idle cash in financial assets to increase the assets' liquidity, realize capital preservation and growth, and advance the promotion of firm value. The company's financial asset allocation, however, might also crowd out the enterprise value. Too much business investment in the financial and real estate sectors, combined with a dearth of funds for equipment upgrades and product innovation, results in a decline in overall business performance. Additionally, business financial assets could come with increased risk, which is not good for the company's long-term growth or the advancement of enterprise value.

However, in reality, the crowding effect and the reservoir effect may both be present at the same time, making the relationship between the financial asset allocation of real businesses and company value more complicated. The reservoir effect will change to the crowding effect when the amount of financial assets held by businesses surpasses a certain threshold. In particular, when the enterprise has fewer financial asset configurations and financial assets that don't require excessive amounts of enterprise capital, appropriate financial asset allocation not only helps to maintain liquidity for the enterprise but also supports stable management, encourages innovation, optimizes asset structure, and supports the development of enterprise value. Businesses' investment in the firm decreases when they invest excessive financial resources, which makes their income dependent more on the financial asset investment than on their main business. Reducing long-term investments, such as those in R & D, may hinder businesses' capacity for innovation and their ability to compete in the market. Also, real businesses' excessive allocation of financial assets will raise financial risks and degrade the standard of financial information. It is not helpful for the long-term, sustainable growth of businesses, nor is it helpful for increasing enterprise value. According to the aforementioned analysis, financial assets allocated by businesses are within a fair range and more likely to increase the value of the business; hence, hypothesis 1 is suggested:

H1: The impact of enterprise financial asset allocation on enterprise value is inverted U-shaped.

2.2 The Influence of Property Rights on the Financial Asset Allocation and Enterprise Value Relationship of Real Enterprises

State-owned and non-state-owned businesses have different business goals and corporate governance due to differences in property rights, which also affect how financial asset allocation affects enterprise value. State-owned enterprises are less constrained by financing requirements because they are more likely to receive financial support from the government and enjoy preferential tax policies in China. Non-state-owned businesses, on the other hand, have more flexible financing requirements, making them more susceptible to changes in the financial investment market. On the basis of this, put forth hypothesis 2:

H2: Compared with state-owned enterprises, the inverted U-shaped relationship between enterprise financial asset allocation and enterprise value is more obvious in non-state-owned enterprises.

3 Research Design

3.1 Sample Selection and Data Sources

This study uses Shanghai and Shenzhen's two A-share listed firms as its sample for the period of 2012 to 2021. The sampled data were processed as follows: 1) Eliminate businesses in the finance and real estate sectors. 2) Exclude them from the sample ST and *ST companies. 3) Eliminate missing data from sample observations to prevent being impacted by extreme values. 4) Keep 1% and 99% tail processing on all sample data. All of the information in this study came from CSMAR.

3.2 Definition of Variables

Explained variable.

In this study, TobinQ is used to calculate enterprise value [8], depending on studies by Cai Yanping et al. (2019). Specifically, the proportion of market value to total assets.

Explanatory variables.

This study examines the percentage of financial assets in total assets to gauge the size of financial assets allocated by firms [5], in line with research by Zhuang Xudong (2021). Owing to the 2017 amendment of the Financial Instruments Guidelines and taking into consideration when the new standards will be implemented by listed firms, it has been decided to categorize financial assets separately by 2018 using the method advocated by Wei Xiaoqin et al. (2021). Trading financial assets, derivative financial assets, net loans and advances, net financial assets available for sale, net hold-to-maturity investments, net investment real estate, and net long-term equity investments are examples of financial assets in 2018 and earlier. Trading financial assets, derivative financial assets, net loans and advances, net real estate investment, debt investment, other creditor's rights investment, other equity instruments, and net long-term equity investment are all examples of financial assets after 2018 [4].

Control variables.

With reference to previous research, this article uses the asset-liability ratio (Lev), enterprise size, enterprise age, equity concentration, return on assets, and operational revenue growth rate as its control variables [7, 9].

3.3 Model Building

The paper develops the following model to examine the non-linear relationship be-tween financial asset allocation and enterprise value, drawing on the research of Cai Yanping (2019).

$$TobinQ_{i,t} = \alpha_0 + \alpha_1 Fin_{i,t} + \alpha_2 Fin_{i,t}^2$$
$$+ \beta \sum Control_{i,t} + \sum Year + \mu_i + \varepsilon_{it}$$

In this scenario, TobinQ stands for the enterprise value indicator, Fin for an index of the financial asset allocation of actual enterprises, Control for the control variable, and ε for the random disturbance term. i denotes business, while t represents for year.

4 Empirical Test and Result Analysis

4.1 Descriptive Statistical Analysis

According to the Table 1, the value ranges from nearly 0 to 89.4%, showing that there are significant differences in businesses' proportions of financial assets. The enterprise values of the various businesses range widely, with the smallest being 0.641 and the highest being 31.40. The control variable's descriptive statistics mostly agreed with previous research.

Table 1. Descriptive statistics table

VARIABLES	N	mean	sd	min	max
TobinQ	20081	2.048	1.490	0.641	31.40
Fin	20081	0.0932	0.117	$2.62e^{-10}$	0.894
Top1	20081	34.61	14.89	2.197	89.99
Lev	20081	0.409	0.194	0.00797	1.687
ROA	20080	0.0471	0.0709	-0.965	0.969
Size	20081	22.35	1.296	19.14	28.64
Age	20081	2.926	0.316	1.099	4.159
Growth	20073	0.303	7.406	-1.309	944.1

Table 2. Regression results

	(1)	(2)	(3)	(4)	(5)
Fin	1.497***	1.828***	2.110***	0.405	2.705***
	(3.53)	(4.21)	(5.04)	(0.60)	(5.15)
Fin^2	-2.955***	-3.331***	-3.694***	-1.260	-4.619***
	(-3.92)	(-4.40)	(-5.05)	(-1.21)	(-4.90)
control variable	No	Yes	Yes	Yes	Yes
year/ individual	No	No	Yes	Yes	Yes
Observations	20,081	20,072	20,072	7,069	13003
r2_a	0.00206	0.0380	0.183	0.165	0.206

4.2 Correlation Result Analysis

The distribution of financial assets has a considerable impact on the value of the enterprise at the 1% level. Initial correlations between the asset yield rate and other factors include size, age, asset liability rate, equity concentration, and operational income growth rate. Multiple linearities are not a concern because the associated coefficients in the table are less than 0.7.

4.3 Analysis of Multiple Linear Regression Results

1. **The influence of enterprise financial asset allocation on enterprise value**.

   We decided to employ fixed-effects model regression after the F-test and Hausman test. All three regression results showed that Fin's regression coefficient was significantly positive and Fin2 was markedly negative. A considerable inverted U-shaped association between enterprise financial asset allocation and enterprise value can be seen, according to this study.

2. **The influence of property right nature on the allocation of financial assets and enterprise value of real enterprises.**

   According to Table 2, since the state-owned enterprise sample coefficient is not significant and the Fin2 coefficient of non-state enterprises is noticeably negative, it suggests that the sample's reverse U-type relationship is more pronounced than that of state enterprises.

5 Robustness Test

According to Zhong Huaming's study from 2021, fin is used to represent the percentage of financial assets in total assets after excluding the net long-term equity investment [6]. The reverse U-type relationship between the financial asset allocation and the enterprise value is once again confirmed at the level of 1%, where the fin item coefficient is significantly

positive and the fin2 item factor is noticeably negative. The financialization variable's lag (L. Fin) was used in a regression analysis to explain Liu Shuwen (2022). Fin term coefficient is significantly positive in regression results, whereas Fin2's coefficient is strongly negative, further supporting Hypothesis 1.

6   Conclusions and Suggestions

This article uses the A-share listed firms in Shanghai and Shenzhen from 2011 to 2021 as a study sample to evaluate the non-linear relationship between financial asset allocation by entity firms and enterprise value. The ones that follow are the key conclusions of the analysis: First, enterprise value and the financial asset allocation of actual enterprises have a significant inverted U-shaped link. Second, this inverted U-shaped link is still evident in non-state-owned enterprises, in contrast to state-owned firms.

The following suggestions are given in light of the research findings in this article: first, real businesses should accurately assess the behavior of investors in financial assets [10], in conjunction with their own resources and strategic goals, moderately control the size of financial assets [2] and more effectively utilize the pool effect of financial asset allocation to promote the development of enterprise value. Second, the government should continuously promote and deepen the reform of the financial system, strengthen the supervision of the financial market, regulate financial investment behavior [1], and stifle financial asset speculation in order to prevent real businesses from overallocating financial assets in order to maximize their short-term interests and contributing to the accumulation of economic bubbles. We will fully utilize the financial sector's contribution to the real economy and help it flourish in a high-quality manner.

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