

Enterprise Financialization, R&D Investment and Enterprise Value: A Mini Review

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Abstract: This paper provides a comprehensive understanding of the research status in this field through a comprehensive and systematic analysis of the literature on enterprise financialization, research and development (R&D) investment, and enterprise value, as well as a summary of the relationships between them.

Keywords: Enterprise Financialization; R&D Investment; Enterprise Value; Literature Review

1. Introduction

Enterprises drive economic growth and national independent innovation. Chinese enterprises invest little in research and development (R&D) because it is hard to see a short-term benefit and may even lower their valuation due to financial data issues. According to Global Innovation 1000 data published by Price Waterhouse Coopers, 175 Chinese companies average 3.25% R&D intensity, compared to 4.48% for the US, 4.34% for Germany, and 4.00% for Japan. Thus, Chinese companies must boost R&D and technological innovation to gain market share.

However, Chinese companies increasingly focus on financial assets. Microscopically, China's non-financial enterprises' financial assets and their share of enterprise assets have grown. R&D investment determines a company's strategic direction, so it should be prioritized. How does enterprise financialization affect R&D investment? How do these two affect enterprise value? How about Enterprise value? Studying these issues helps Chinese enterprises make investment decisions in an economic transition and gives the government a theoretical foundation for targeted macroeconomic policies.

2. Literature review

2.1 Enterprise financialization and R&D investment

The academic community has mostly focused on the impact of enterprise financialization on R&D investment, but few have examined the reverse. Current studies on enterprise financialization and R&D investment have mostly reached three conclusions.

Most studies show that enterprise financialization reduces R&D investment. Enterprise financialization increases profits, which affects investment incentives, according to scholars. Crotty (2002) believed that when the enterprise's main business's profit margin decreases, management will reduce investment in the real business and increase investment in financial assets, resulting in resource crowding out. Seo et al. (2012) found that financialization expenditure decreased R&D innovation resource input in South Korean non-financial enterprises from 1994 to 2009. Zhou and Zuo (2018) found that financialization of real enterprises crowded out private enterprise innovation investment, but high-tech industries could mitigate this effect. Xiao and Lin (2019) found that financialization of non-financial listed companies crowds out sustainable innovation.

Enterprise financialization boosts R&D, according to some studies. This view holds that enterprise financialization can ease financing constraints and support enterprise R&D. Tadesse (2002) showed that real enterprises investing in financial assets can improve their short-term operating conditions and performance, improving financing efficiency. Financial development and asset

financing supported enterprise R&D innovation and technological innovation, according to Arizala and Galindo (2013). Gu et al. (2019) examined high-tech SMEs listed on the SME Board of the Shenzhen Stock Exchange and found that financialization increases R&D investment.

Chinese research suggests a new conclusion. Liu (2017) claims enterprise financialization significantly reduces R&D innovation. Xu and Liu (2019) examined how financialization of non-financial enterprises affects technological innovation in China from the perspectives of innovation investment and performance. Enterprise financialization will crowd out innovation investment.

Overall, enterprise financialization and R&D investment research is incomplete. However, little is known about how enterprise financialization and R&D investment affect a company's value.

2.2 Enterprise financialization and enterprise value

There are few studies on the relationship between enterprise financialization and enterprise value, and there are primarily two points of view.

First, financialization linearly affects enterprise value. Early scholars believe enterprise financialization reduces risks and boosts earnings, increasing enterprise value. Risk management researcher Stulz (1996) examined how financial derivative hedging creates value for businesses. Qi and Zhang (2018) constructed econometric models under different holding motives and found that enterprise financial asset allocation reduced enterprise value overall. From the perspective of economic added value, Wu and Lv (2019) found that financialization of non-financial enterprises has a significant negative impact on enterprise value, and the relationship between the two is affected by the macroeconomic cycle and industry heterogeneity.

The second view is that enterprise financialization and value are not linear and affected by many factors. According to some scholars, enterprise financialization affects enterprise value differently depending on motivation and approach. Palley (2007) noted that excessive financialization of enterprises would consume too many internal resources, limiting the development of their real businesses, but moderate financialization could reduce financing constraints, promoting enterprises to some extent. Cui (2016) found a "inverted U-shaped" relationship between asset financialization and listed manufacturing company value. Too little or too much asset financialization reduced company value. Wu and Lv (2019) applied a panel threshold regression model to China's privately listed companies' 2008–2017 data. Financialization of private enterprises has a "two-way effect" on enterprise value. Financialization boosts private enterprise value when financial leverage is low. Financial leverage hurts.

To conclude, enterprise financialization and value literature is scarce. Few studies have examined how enterprise financialization affects enterprise value, and no consensus has been reached. Existing research has not considered the impact of enterprise value on enterprise financialization or R&D investment.

2.3 R&D investment and enterprise value

Three perspectives on R&D investment and enterprise value exist.

First, R&D investment boosts enterprise value. Scholars who hold this view believe that R&D investment can increase enterprises' intangible assets, competitive advantages, external investors' future expectations and actual profitability, and market value and financial value. Griliches (1979) found that R&D investment increased enterprise value. R&D investment intensity increases enterprise value in developed and less competitive developing countries, according to Gupta et al. (2017). Xu and Tang (2010) found that R&D investment increased enterprise value in Chinese listed companies. Liu and Teng (2020) found that enterprise R&D investment increases enterprise value.

Second, R&D investment does not increase or decrease enterprise value. Rouse and Boff (1998) studied computer companies and found that R&D investment yielded low, even unacceptable shareholder returns. Aboody and Lev (2000) found that internal transactions in R&D enterprises may lower enterprise value. Dore (2008) found that excessive financialization of real enterprises led to unreasonable allocation of capital and human resources, which encroached on production, operation, innovation, and R&D investment, inhibiting enterprise innovation investment.

Third, R&D investment affects enterprise value nonlinearly. Some scholars think R&D investment affects enterprise value in many ways. Connolly and Hirschey (2005) found that the value effect of R&D investment on small enterprises is less significant than

that of large enterprises. R&D investment negatively affected enterprise value under labor intensity and capital intensity, but it positively affected enterprise value under enterprise size and market share. Wu et al. (2020) used the panel threshold model to find that R&D investment in each period is thresholded by internationalization, which has a U-shaped relationship with enterprise value and a significant double threshold effect.

To conclude, the literature on R&D investment and enterprise value focuses on the effect of R&D investment on enterprise value, and the research results are abundant, but no consensus has been reached.

3. Conclusion

The following findings were found by collecting, collating, and analyzing domestic and foreign literature on enterprise financialization, R&D investment, and enterprise value: First, foreign scholars focused on this field earlier and made rich achievements, but domestic scholars have made many innovative conclusions in recent years. Second, existing studies have mostly focused on the one-way effects of enterprise financialization on R&D investment, enterprise value, and enterprise value on R&D investment, without discussing the impact of R&D investment on enterprise financialization or the mechanism of enterprise value on enterprise financialization and R&D investment. Third, academics disagree on the relationship between enterprise financialization, R&D investment, and enterprise value.

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