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Diversification strategies and corporate financial distress: the impact of monetary tightening and IPO timing

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I hereby declare that this dissertation is my original work and it has been written by me in its entirety. I have duly acknowledged all of the sources of information which have been used in this dissertation.

This dissertation has also not been submitted for any degree in any university previously.

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ABSTRACT

Diversification as a strategic objective has become increasingly pursued by many enterprises. However, whether diversification truly brings robust business operations and risk dispersion effects remains a focal point of attention in both academic and practical realms. This study, grounded in Chinese practice, empirically examines the relationship between corporate diversification and financial distress and further discusses the interactive impact of monetary policy tightening and diversification on corporate financial distress.

Empirical analysis results indicate a positive correlation between corporate diversification and financial distress in China. This finding suggests that diversification may not always confer the advantage of risk dispersion to enterprises; it could increase financial distress instead. Additionally, empirical results demonstrate that tightening monetary policy has a significant positive effect on corporate financial distress. This outcome remains robust even after changing variables and models. Mediation effect tests indicate that diversification leads to financial distress by reducing corporate cash holdings. This study further focuses on other potential internal and external factors that may influence the relationship between diversification and financial distress. The results show that internal controls, financing constraints, and the quality of external auditing significantly influence the relationship between diversification and financial distress. Specifically, diversification and monetary policy

tightening impact on financial distress is particularly pronounced in companies with higher internal control quality, more significant financing constraints, and poorer external audit quality.

This study further analyzes the moderating effect of a company's Initial Public Offering (IPO) timing on the relationship between diversification and financial distress. The analysis finds that newly listed companies in the initial period after IPO, due to positive market responses, lower financing costs, and new investment opportunities, may face higher financial distress from diversification activities. Conversely, companies listed longer and in a more stable maturity phase can significantly reduce their financial distress through diversification strategies. This result indicates that the effects of diversification strategies vary for companies at different developmental stages.

This research reveals that diversification strategies may not always be the best choice for enterprises in specific macroeconomic and internal environments. When considering expanding their business scope, enterprises need to assess national monetary policies, internal control systems, financing status, and other relevant factors to ensure that their strategic decisions bring long-term value to the organization. This study provides new insights into the relationship between corporate diversification strategies and financial distress for the academic community. It offers valuable strategic decision-making references for the practical realm, aiding enterprises in making wiser decisions in a complex and dynamic market environment.

Keywords: diversification strategies, monetary tightening, financial distress, China, listed companies

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Chapter 1 Introduction

In the complex and ever-changing economic environment, the question of how enterprises formulate effective diversification strategies and respond to fluctuations in monetary policy has become an urgent issue for in-depth study. This chapter introduces the entire paper, outlining the background and significance of the research and briefly presenting the core content and the overall analytical framework.

1.1 Background

Under the backdrop of globalization and the rapid development of financial markets, diversification has become a core strategy pursued by many enterprises (Goold & Campbell, 2019; Rumelt, 1982; Shayne Gary, 2005). Diversification strategy offers broader market opportunities, a wider customer base, and more sources of revenue, thereby enhancing corporate profitability and competitiveness (H.-E. Lin et al., 2020; Very, 1993). Diversification allows companies to enjoy numerous benefits: firstly, risk dispersion - diversification enables enterprises to enter different industries and markets, providing a risk hedging mechanism even if one part of the business faces challenges or market decline (Chan Kim et al., 1989; Norton & Tenenbaum, 1993; Oladimeji & Udosen, 2019). Secondly, resource utilization and sharing - diversification allows enterprises to share and transfer resources among their different business units, including brand, technology, or managerial expertise, which may be more economical than acquiring them on the open market (Chang & Hong, 2000; H.-E. Lin et al., 2020; Markides & Williamson, 1996; Shayne Gary, 2005). Thirdly, enhancing market power - entering new markets or industries, especially those

related to the original business, can help companies gain larger market shares, strengthening their bargaining power and influence (Gomez-Mejia, 1992). Fourthly, pursuing growth and innovation - for companies that have already achieved leadership in their primary markets, diversification may be a means of seeking new growth opportunities and innovation, especially in the face of market saturation or growth slowdown (Dhir & Dhir, 2015; Ferris et al., 2002). Finally, responding to external uncertainty - in an environment where global competition intensifies, technological advances are rapid, and consumer demands constantly change, diversification can provide greater flexibility for companies to respond to external uncertainties and changes (Bergh & Lawless, 1998).

While diversification provides new growth opportunities for enterprises, it also brings strategic and management challenges. Studies have shown that diversification increases operational and management complexity (Hitt et al., 1994; Khanchel El Mehdi & Seboui, 2011). As enterprises enter more markets and industries, their organizational structure, management processes, and decision-making mechanisms may become more complex. Each market and industry has its specific operational environment and competition rules, requiring management to have higher sensitivity and flexibility in strategy formulation, resource allocation, and personnel management. Research also indicates that diversification leads to resource dispersion and neglect of core business (Petrick et al., 1999). Diversification may cause the dispersion of enterprise resources across multiple business units and projects, possibly leading to underinvestment in certain key areas. More critically, enterprises may lose focus and investment in their original core businesses, leading to a decline

in competitiveness in these areas.

Moreover, diversification challenges coordinating and integrating new businesses (Y. M. Zhou, 2011). When enterprises venture into new markets or industries vastly different from their main business, ensuring effective coordination and integration among other business units becomes a significant challenge. This involves integrating culture, processes, and technology within the enterprise and potentially with newly acquired or merged companies. This shows that diversification is not without risks. If enterprises fail to address these challenges properly, diversification can bring fatal risks to the enterprise, ultimately leading to financial distress.

The government's macroeconomic policies may amplify the financial distress caused by diversification. As an essential tool of central banks, implementing monetary tightening policies impacts the entire economic system (Bach & Huizenga, 1961; Bhattacharya & Kudoh, 2002). For enterprises employing diversification strategies, this policy environment poses specific challenges. Monetary tightening reduces credit resources in the market, meaning enterprises face more pressure when seeking external financing (Y. Li et al., 2022; Paligorova & Santos, 2017). This financing environment is even more severe for enterprises already highly leveraged or perceived as high-risk. Monetary tightening often accompanies an increase in loan interest rates, increasing the financial costs for enterprises. For diversified enterprises, especially those operating across multiple industries or regions, their operational costs in various areas may be affected.

Moreover, monetary tightening policies may suppress consumption and investment, reducing market demand (Koivu, 2012). For diversified enterprises,

their sales in certain specific markets or industries are under pressure. For these reasons, in a monetary tightening environment, some vulnerable, highly leveraged, or strategically inappropriate enterprises may face operational difficulties (Amit & Livnat, 1988) and even financial distress.

Due to the particularities of the Chinese market, newly listed companies often exhibit financial health and lower financial distress. However, with the euphoria following the IPO and lower financing costs, management tends to invest in higher-risk projects. Empirical research shows that the financial distress of enterprises gradually increases for some time after the IPO. This risk varies among enterprises at different IPO stages. It is influenced by factors such as enterprise maturity, resource allocation, and management experience, which may lead to spurious correlations when studying the impact of diversification strategies on financial distress (Ding et al., 2018; T. Guo, 2017).

Aside from the impact of diversification, existing research has already discussed the factors influencing corporate financial distress dilemmas from both macroeconomic and microenterprise perspectives. At the macroeconomic level, factors such as economic prosperity (Guo et al., 2019), the uncertainty of economic policies (Iqbal et al., 2020), and trade credit (He et al., 2022) have been examined. On the microenterprise level, issues such as principal-agent problems (Alam & Shah, 2013; Chen, 2017), corporate governance (Fich & Slezak, 2008; Darrat et al., 2016), the financialization of real enterprises (Gao et al., 2021), and the application of technology (Zhu, 2018; Ma et al., 2021; Peng et al., 2018) have been explored. However, these studies have not considered the "double-edged sword" effect of diversification, nor have they considered the impacts brought about by monetary policy tightening and the

timing of IPO. In this context, our study utilizes data from Chinese-listed companies to empirically test the following core questions:

1. How does diversification impact a company's financial distress? While diversification can provide companies with more market opportunities, it may also bring higher operational and management complexity. Therefore, the effect of diversification on a company's financial distress might be a 'double-edged sword.' From an empirical perspective, what is the relationship between diversification and corporate financial distress?

2. How does a monetary tightening policy affect the financial distress of diversified companies? In a monetary tightening policy environment, companies face difficulties in financing and increased borrowing costs. Does this lead to higher financial distress for enterprises? Additionally, are the impacts of diversification and monetary tightening policy independent or interactive? Both diversification strategies and monetary tightening policies can increase a company's financial distress, but is there a moderating effect between these two factors?

3. Since the maturity of the enterprise influences the relationship between diversification and corporate financial distress, does the timing of a company's Initial Public Offering (IPO) moderate the relationship between diversification and financial distress?

1.2 Significance

1.2.1 Theoretical Significance

This study further supplements the literature on diversification strategies. Existing research on the relationship between diversification strategies and

corporate financial distress remains contentious. While some studies suggest that a diversification strategy provides risk hedging by enabling enterprises to compete in multiple areas, others point to increased management complexity, resource dispersion, and neglect of core business due to diversification, ultimately leading to increased financial distress. The reasons for these divergent empirical results, even contradictory, may be due to the influence of situational factors. Clarifying the impact of these situational factors represents an opportunity for theoretical innovation. Introducing the time effect of going public as a situational variable helps us understand the reasons behind different or opposite conclusions in previous literature.

1.2.2 Practical Significance

Firstly, it provides decision-making references for enterprises. The insights provided by this study help enterprises consider the external environment when formulating diversification strategies and emphasize the importance of risk management in the decision-making process. Especially for diversified enterprises, understanding the impact of monetary policy is crucial for formulating effective financial and operational risk management strategies. Additionally, the findings help enterprise leaders deepen their understanding of the effects of diversification strategies in different macroeconomic scenarios, promoting long-term and sustainable development.

Secondly, it provides feedback for macroeconomic policy. For governments and central banks, understanding the impact of monetary policy on diversified enterprises helps better balance policy objectives with potential economic consequences for more effective macroeconomic control. The results of this study also provide valuable feedback to governments and central banks,

aiding their understanding of the impact of macroeconomic policies on microeconomic entities.

Thirdly, it offers unique insights for investors. The findings of this study can help investors make more informed investment decisions by understanding the performance potential of diversified enterprises under different monetary policy environments. The insights on the effect of IPO timing also help investors better assess the risk and potential returns of a diversified enterprise at different stages of development, predicting its future performance level based on the enterprise's development stage.

1.2.3 Methodological Significance

Event history analysis, a stochastic model utilizing discrete states and continuous time, is highly suitable for studying factors influencing the occurrence and manner of events. This study employs event history analysis, providing a unique perspective that focuses on whether a company will go into financial distress and the timing of such financial distress. This deepens our understanding of the dynamic process of corporate financial distress. Event history analysis allows for a deeper understanding of the entire evolution process of corporate financial distress, thereby providing stronger support for risk warning. Unlike traditional statistical methods, event history analysis offers insights into time sensitivity, emphasizing the importance of time. Through this method, we can better understand which factors significantly impact financial distress at specific times, thereby providing more accurate strategic recommendations for corporate risk management.

1.3 Arrangement

Chapter 1 serves as the introduction. This chapter introduces the research background, significance, and content arrangement and provides a foundational understanding of the study.

Chapter 2 is dedicated to a literature review. This chapter thoroughly reviews the academic literature on corporate financial distress, diversification strategy, and monetary policy. It focuses on the progress of theoretical and empirical research in these areas. Through the analysis of existing literature, this chapter aims to identify gaps in the research, providing theoretical support and direction for this study.

Chapter 3 presents case analysis and theoretical hypotheses. This chapter uses specific case studies, particularly the case of the Evergrande Group, to demonstrate how diversification strategy and monetary policy can lead to corporate financial distress. This chapter formulates the core hypotheses, Combining theory with the existing literature of this study.

Chapter 4 details the research design. This chapter describes the methodology involved in this study, including data sources, sample selection, definitions, and measurement methods of variables, as well as the statistical models and techniques used for data analysis. Special emphasis is placed on event history analysis techniques.

Chapter 5 presents the empirical research results. This chapter will showcase the empirical analysis results of this study, assess the validity of the theoretical hypotheses proposed in Chapter 4, and provide insights into theory and practice.

Chapter 6 concludes with research conclusions, implications, and

limitations. The final chapter summarizes the study's main findings, discussing their significance for academia and practice. Additionally, this chapter will discuss the limitations of the research and possible directions for future research, inspiring subsequent studies.

Chapter 2 Literature Review

This chapter primarily synthesizes literature about corporate financial distress, business diversification, and the influence of monetary policy on corporate financial distress. Initially, the chapter delineates research on corporate financial distress, introducing the definition of corporate financial distress, its identification, and various internal and external factors leading to financial distress. Subsequently, the chapter summarizes research on business diversification, focusing particularly on the motivations behind diversification strategies and their potential risks. Finally, we synthesize literature on the impact of monetary policy on corporate financial distress, detailing the roles of money supply, interest rates, and reserve requirements on corporate financial distress. Through the literature review of these three segments, this chapter lays a solid foundation of literature for subsequent theoretical and empirical research, ensuring the depth and breadth of this study.

2.1 Research on Corporate Financial Distress

2.1.1 Definition of Corporate Financial Distress

Haynes was among the first to delineate corporate Financial distress from an economic perspective and categorise its characteristics, noting that corporate financial distress includes the likelihood of damage or loss (Haynes, 1895). financial distress is a condition where a company's cash flow is insufficient to meet debt repayment and interest obligations, with the probability of financial distress depending not only on the extent of debt financing but also on the cash flow distribution (Rhee & McCarthy, 1982). As a company's leverage increases, so does its incremental financial distress (Baxter, 1967).

Studies suggest that the value of a leveraged company equals the value of a comparable unleveraged company plus tax benefits minus expected financial distress costs, where financial distress costs are a product of the unit financial distress cost rate, determined by the probability of financial distress and debt level, multiplied by the total amount of debt (Kraus & Litzenberger, 1973). The lifecycle theory describes how a company's value changes over time, starting from zero, gradually rising, and descending from its peak until it dissipates. Lifecycle theory investigates how a company's value changes over time due to external factors like scale, financing constraints, and productivity at different stages of development, with financial distress significantly influencing the company's value, which also varies over time. Corporate financial distress has a certain latency; negative events in a company can adversely affect production and operations, reflecting in financial performance, thereby leading to corporate financial distress. Chinese scholars' definitions of financial distress align largely with international perspectives, viewing corporate financial distress as the likelihood of financial institutions going into financial distress and closing down due to operational errors and poor management (Yu, 2019).

In summary, corporate financial distress is the risk faced by a company as an economic entity when its assets are insufficient to cover its liabilities. Specifically, it can be categorized into risks of liquidity shortage due to excessive investment activities, capital movement delays caused by uncertainties in various aspects of production and operation, and risks of insolvency due to debt financing and inability to repay principal and interest within stipulated periods. The financial distress may arise from a company's investment, financing, and operational activities.

2.1.2 Identification of Corporate Financial Distress

Swedish actuary Filip Lundberg conducted specific estimations of financial distress using insurance companies as his research subject. Subsequently, scholars, including Beaver and Altman, studied corporate financial distress and defined its concept from various perspectives. After an in-depth comparison of 29 financial indicators, Beaver found that a company's cash flow, return on assets, and debt-to-asset ratio were the three most accurate predictors of financial distress. This is because a company's cash flow situation, profitability, and debt structure all have a degree of continuity and are not easily subject to significant changes in the short term. These core indicators affect a company's ability to repay debts, determining its financial distress. In brief, debt default, insolvency, or inadequate cash flow may indicate a company is facing severe financial distress (Beaver, 1966).

Additionally, Altman selected five indicators and assigned coefficients to them to establish the Z-score model (Altman, 1968). Other researchers have identified corporate financial distress based on their understanding, such as defining it from the outcome perspective, mainly manifested in three aspects: inability to repay principal and interest, negative equity, and inability to repay creditors even after financial distress and liquidation of assets (Ross & Kami, 1973). Some researchers have selected nine variables from company size, financial level, operational performance, and asset liquidity, establishing three multivariate Logit models to predict financial distress within one year, within two years, and between one to two years. The results showed that all three models had a prediction accuracy of over 90% (Ohlson, 1980). Some studies propose using multivariate Probit models to predict corporate financial distress,

assuming that the probability of corporate financial distress is a p-value of more than 0.5, indicating poor financial health. In contrast, a value less than 0.5 indicates lower financial distress (Zmijewski, 1984).

2.1.3 Factors Influencing Corporate Financial Distress

Early studies on corporate financial distress were limited to theoretical levels, and later, they gradually transitioned from qualitative to quantitative analysis, among which the series of models measuring corporate financial distress was particularly representative (Altman, 1968).

Regarding research on corporate financial distress, existing studies mainly focus on macroeconomic and microenterprise aspects. In macroeconomic terms, Guo et al. believe corporate financial distress is lower during economic upturns when the economy is prosperous and the macroeconomic environment is healthy. In contrast, when the external economic environment fluctuates more in economic downturns, there is an increase in corporate financial distress (Q. Guo et al., 2019). Some researchers focus on the impact of increased economic policy uncertainty on corporate financial distress. Iqbal et al. It increases financial distress by lowering asset returns and profit margins (Iqbal et al., 2020). He et al. indicate that trade credit plays a significant role in transmitting and preventing corporate financial distress. On the one hand, trade credit has a significant risk-inducing effect on the asset side, significantly increasing financial distress for companies with low external financing dependency; on the other hand, it has a significant risk resolution effect on the liability side, significantly lowering financial distress for companies highly dependent on external financing. Moreover, economic policy certainty moderates the impact of trade credit on corporate financial distress (He et al., 2022).

In terms of microenterprise aspects, studies suggest that the separation of ownership and control in management and shareholder agency phenomena can help companies manage risks more effectively (Alam & Shah, 2013). Implementing equity incentives for company management aligns their interests with shareholders, reducing the occurrence of high-risk projects. Existing research also finds a negative correlation between equity concentration and corporate financial distress, meaning that higher equity concentration and greater control by major shareholders correspond with lower financial distress (Y. Chen, 2017). Corporate governance can also increase corporate information transparency to reduce financial distress (Fich & Slezak, 2008). The size of the board of directors and the proportion of independent directors also affect corporate financial distress, with a negative correlation between the size of the board and the proportion of independent directors and corporate financial distress (Darrat et al., 2016). Using A-share listed companies from 2002-2015 as a sample and employing a "quasi-natural experiment" of difference-in-differences and matching estimation methods, it was found that the expansion of the list of collateral due to movable property mortgage legal reforms by widening financing channels for movable fixed asset-intensive industries, led to an increase in leverage ratio and credit enhancement, causing a decline in preventive motivations, a decrease in cash retention in capital structure, thereby significantly increasing corporate financial distress (X. Zhang & Sun, 2017). Based on data from Shanghai and Shenzhen A-share listed companies from 2008 to 2018, research has revealed the impact of the financialization of real enterprises on corporate financial distress. The results indicate that the financialization of real enterprises has increased their financial distress, with

agency costs mediating between the financialization of real enterprises and their financial distress (Gao et al., 2021).

Some scholars have studied the factors affecting corporate financial distress based on financial indicators. Empirical research found that return on total assets, current payment rate, and financial leverage significantly affect financial distress, accounting for 86.78% of the variance in corporate financial distress using secondary data of listed companies from 2008 to 2019. Specifically, increased financial leverage raises the financial distress for listed companies while return on total assets and current ratio reduce it (Truong & Nguyen, 2022). Research utilizing data from 46 unlisted small and medium-sized enterprises also indicates that economic profitability, company size, revenue growth, and the relationship between sales and capital investment are essential and meaningful predictors of financial distress (Dao et al., 2020).

In recent years, with the development of digital technologies such as artificial intelligence, big data, blockchain, and the internet, the role of digital finance in corporate risk prevention has become increasingly prominent. Digital finance effectively alleviates the information asymmetry between enterprises and financial institutions (Kong et al., 2022). It can process vast amounts of data at low cost and high efficiency (Gomber et al., 2018). This enables tech companies to collect real-time, detailed fundamental indicators, thereby better monitoring opportunistic behaviours in enterprises, enhancing management's motivation for effective investment and divestment (C. Zhu, 2018), and reducing corporate financial distress. Ma et al. compared digital finance with traditional credit and studied its impact on corporate financial distress from the perspective of corporate leverage. They explored the microeconomic effects of

digital finance on enterprises, with empirical results showing that the development of digital finance significantly reduces corporate financial distress by alleviating financial distress, increasing financial accessibility, and reducing resource misallocation, thereby significantly lowering corporate leverage (W. Ma et al., 2021). Tang et al. found that digital finance improves corporate performance, accelerating capital turnover and efficiency, thus reducing corporate financial distress (S. Tang et al., 2020). However, Peng et al. argue that companies with higher levels of financial investment have more significant information asymmetry with the external world. Listed companies holding financial assets to hide negative information can increase the probability of stock price collapse, concluding that the motivation for companies to hold financial assets due to hidden negative information can lead to an increased risk of stock price collapse (Peng et al., 2018).

2.2 Research on Corporate Diversification

2.2.1 Motivations for Diversification Strategy

Existing studies indicate that numerous potential benefits are compelling reasons companies adopt diversification strategies, such as gaining competitive market advantages, exploiting financial synergies, creating internal capital markets, optimizing resource allocation, and achieving economies of scale or scope. Diversification has always been an important research topic in strategic management, and scholars have summarized various motivations for implementing diversification strategies. Ansoff posits that companies pursue diversification for four main reasons: first, the current macro environment is unfavourable for continued growth in their original industry; second, the

company's original single line of business is insufficient for sustainable development; third, the company has accumulated substantial capital from past operations, which can be used to explore new markets; fourth, after research and analysis, implementing diversification is likely to bring super-normal returns to the company (Ansoff, 2007). In reality, motivations are divided into internal and external factors, with internal factors mainly stemming from utilizing all surplus resources of the company, diversifying business risks, and managerial decisions. At the same time, policies, economics, and market changes predominantly influence external factors.

2.2.1.1 Enterprise Resources and Capabilities

Diversification, spanning multiple industries, departments, and markets, whether in terms of capital investment, technology research and development, or talent reserves, is more challenging than specialized production. As companies grow, the gradual accumulation of resources and capabilities creates the necessary conditions for diversified operations (Teece, 1982), and high market transaction costs make it impractical to sell or lease these resources through contractual means in the market. In practice, resources such as brands, technology, or management expertise are often more economically and efficiently internally than acquired in the open market (Chang & Hong, 2000; H.-E. Lin et al., 2020; Markides & Williamson, 1996; Shayne Gary, 2005). Through diversification strategy, companies internalize these specialized assets, enabling smooth organisational transfer and utilisation (Montgomery, 1994; Williamson, 1973; J. Wu et al., 2008).

2.2.1.2 Diversifying Business Risks

The essence of a diversification strategy is to achieve risk dispersion and optimal allocation of corporate resources (Castanias & Helfat, 2001; Norton & Tenenbaum, 1993; Q. Yang et al., 2008). Due to macro-environmental uncertainties and market demand, the market risk of a single product is substantial. Diversification disperses corporate resources into different market areas, reducing dependency on a single market and enhancing the ability to withstand risks, thus gaining more development opportunities (Cao et al., 2019). Diversification can adapt to market demand through internal resource utilization, withstand market, technological, and external environmental uncertainties, and achieve stable returns and lower risks. Especially in the face of market saturation or growth slowdown in the original market, diversification has significant value in controlling overall corporate risks (Dhir & Dhir, 2015; Ferris et al., 2002). Thus, diversification also serves as a risk-hedging mechanism (Chan Kim et al., 1989; Norton & Tenenbaum, 1993; Oladimeji & Udosen, 2019).

2.2.1.3 Managerial Decisions

As essential drivers of corporate management strategies, the personal characteristics of corporate managers also influence the choice of corporate diversification strategy. For example, Chen and Sun, focusing on manufacturing companies among Chinese listed companies, found a positive correlation between the entrepreneur's education level and the degree of diversification. Entrepreneurs with technical backgrounds diversify more, whereas those with financial backgrounds diversify less. They also tested a model where the

relationship between the age of entrepreneurs and diversification strategy is inversely U-shaped, and male entrepreneurs lead businesses with higher degrees of diversification (C. Chen & Sun, 2008). Further analysis suggests that entrepreneurs' social capital is also an essential source of organizational competitive advantage. Social capital helps entrepreneurs expand channels for resource acquisition, enhance corporate competitiveness, and thereby positively drive the diversification of enterprises (Adler & Kwon, 2002; Inkpen & Tsang, 2005).

2.2.1.4 Institutional Environment

Based on China's unique institutional context, the diversification strategy is influenced significantly by corporate resources and institutional environments such as government intervention. In this regard, diversification can provide enterprises with greater flexibility to cope with uncertainties and changes in the external environment (Bergh & Lawless, 1998). A study using A-share listed companies in Shanghai and Shenzhen from 2004-2006 as samples, while considering both the type of corporate resources and government interference, found that financial resources obtained from capital markets and intangible resources acquired through market promotion positively affect the choice of diversification strategy. Additionally, companies that are less inclined towards long-term investments in research and development marketing capabilities and more influenced by the government and those that find it easier to obtain bank loans are more likely to choose diversification (Z. Ma & Liu, 2010).

2.2.1.5 Gaining Market Power

Entering new markets or industries, especially those closely related or

complementary to existing businesses, provides excellent opportunities for enterprises to expand their business scope (Gomez-Mejia, 1992). Diversification allows companies to gain larger market shares, achieving dominance in respective market segments (Gyan et al., 2017). This increases brand recognition and customer loyalty and enhances overall sales and profits (Y. Lin et al., 2021). Furthermore, companies operating in multiple markets or industries have greater bargaining power in negotiations with suppliers, distributors, and other partners (Dhir & Dhir, 2015).

2.2.2 Risks of Diversification Strategy

While diversification strategy is a development strategy for companies to disperse business risks and fully utilize surplus resources, many companies have fallen into crisis or even financial distress due to this strategy. The academic world has positive and negative views on whether diversification improves or reduces corporate performance. Scholars supporting diversification argue that it can bring economies of scope and scale advantages and improve resource utilization efficiency and product competitiveness by leveraging the resource allocation function of capital markets (Campa & Kedia, 2002). However, since the Asian financial crisis in 1997, people have become sceptical about the effectiveness of diversification, as many large diversified enterprises have failed. Diversification can reduce resource allocation efficiency due to internal cross-subsidization and rent-seeking activities, increase financing costs (Amihud & Lev, 1981; Rajan et al., 2000), disrupt cash flow, and increase operational risks, leading to difficulties. Nevertheless, this does not entirely negate the effectiveness of diversification strategies, as we still see many companies succeeding in diversification. Not all companies are suited for diversification,

which is conditional due to the combined effect of internal development requirements and external market opportunities. The main risks in diversification strategy include institutional, environmental, and financial risks.

Existing studies have found that implementing a diversification strategy is influenced by the economic and institutional environment factors of the country in which a company operates (Chakrabarti et al., 2007; Wan & Hoskisson, 2003). Diversified enterprises involved in multiple industry sectors are affected by even minor changes in the economic environment and policies. Diversification strategies significantly improve corporate performance when the economic environment is favourable; however, companies face multi-channel, multi-faceted, and deep-seated risks when the economic environment is poor. The institutional environment occupies a vital position in diversification risk. In emerging market countries with relatively underdeveloped institutional environments, where product markets, factor markets, contract enforcement, and legal systems are still imperfect, market transaction costs rise, prompting companies to adopt diversification strategies to internalize these costs and reduce risks and uncertainties through establishing internal capital markets, thus benefiting corporate performance (Ghemawat & Khanna, 1998). In contrast, companies in developed countries with mature institutions face multiple regulations and financing constraints, negatively impacting diversification with corporate performance. Strategic management decisions depend on external environmental changes (A. Wang & Tang, 2017), and environmental uncertainty, due to information asymmetry, increases the difficulty for companies to cope with complex external environmental shocks.

Financial risk is an important and caution-worthy risk in diversifying

strategies. Financial risks brought by diversification investments mainly refer to enterprises excessively increasing investments in other industries, leading to insufficient capital flow to meet expanding investment needs, thereby having to obtain capital through external financing. This results in high debt levels, increased repayment risks, decreased profit quality, increased operational risks, and reduced financial outcomes (Lun, 2018; C. Yang, 2019; J. Yang et al., 2020). When companies become excessively diversified, leading to tightened capital, the overall financial risk of the enterprise rises. Yang et al., using A-share manufacturing companies from 2007 to 2017 as research samples, analyzed the impact of diversification strategies on financial risk. They discovered a U-shaped relationship between diversification strategies and financial risk in Chinese manufacturing companies, meaning that financial risk first decreases and then increases as diversification increases. They further calculated specific cross-industry threshold values, finding that when a company operates in five different industries, its financial risk is at its lowest (J. Yang et al., 2020). Yang further subdivided the financial risks present in diversified operations into five types: liquidity risk, financing risk, investment risk, credit risk, and merger and acquisition risk (C. Yang, 2019).

2.3 Research on the Impact of Monetary Policy on Corporate Financial Distress

Monetary policy refers to the central bank's use of tools such as reserve requirement ratios, rediscount rates, and open market operations to regulate the money supply, ultimately affecting the economic behaviour of enterprises and residents, ensuring currency stability and smooth macroeconomic operation. Generally, monetary policy indicators include interest rates, money supply,

exchange rates, and total loan amounts. Monetary policy is a primary tool government use to regulate the macro economy, and its fluctuations significantly impact microenterprise behaviour. In recent years, many scholars have dedicated their efforts to studying the impact of monetary policy on corporate operational performance (Bae et al., 2002; F. Li & Yang, 2015; Rao & Jiang, 2013; Y. Wang & Song, 2014).

However, the effects of monetary policy are not static (Dreger & Wolters, 2009), especially during different periods where the transmission of monetary policy exhibits asymmetry. The impact of monetary expansion and tightening of the same magnitude on economic acceleration and deceleration differs (Apergis et al., 2020; Borrallo Egea & Hierro, 2019). An increase in money supply does not significantly impact output, while a decrease in money supply leads to a significant reduction in output. Under the same degree of monetary policy, contractionary monetary policy has a more significant impact than expansionary monetary policy (Cover, 1992). Under a loose monetary policy, there is an abundant money supply in the market, low financing costs for enterprises, low refinancing risks, relatively weak supervision and constraints by contracting parties, and high market demand with low risks and less competitive pressure in the industry.

Conversely, a contractionary monetary policy leads to a deterioration in the financing environment, increased financing costs, heightened credit constraints, and reduced total credit allocation resources (J. Zhu & Lu, 2009). A company's investment opportunities and financing capabilities significantly affect its operational performance (Zhao, 2016). Monetary policy experience shows that it mainly affects company operations by changing financing costs, restricting

financing scale, and increasing economic uncertainty (Breitenlechner et al., 2016). Generally, when monetary policy tightens, the likelihood of enterprises obtaining credit resources decreases, increasing the operational risk for enterprises.

2.3.1 Analysis of the Impact of Money Supply on Corporate Financial Distress

The impact of money supply on enterprises can be explained from two aspects: the liquidity of money supply and banking credit channels (Jiang et al., 2005; Y. Zhou & Jiang, 2002). When the central bank lowers the reserve requirement ratio and rediscount rate or purchases securities through open market operations, the money supply increases, leading to a rise in bank loans to enterprises and a potential increase in the funds flowing into businesses, increasing corporate capital. Additionally, due to the imperfect market economy and lack of investment channels in China, an increase in money supply leads to a large amount of capital flowing into the market, reducing operating costs for enterprises and impacting their operational performance. Conversely, the money supply decreases when the central bank raises the reserve requirement ratio and rediscount rate or sells securities through open market operations. When the overall money supply declines, bank loans to enterprises decrease, potentially reducing the funds flowing into businesses, thus affecting corporate investment behaviour (Kashyap et al., 1992). Existing research indicates that money supply significantly impacts the probability of corporate financial distress (W. Zhang, 2017). Wen et al., using a Structural Vector Autoregression (SVAR) model, analyzed the impact of monetary policy on corporate operational performance. Their research found that changes in China's money supply have a certain

impact on the overall level of corporate operations, and the degree of effect of money supply varies among industries such as industry, real estate, information technology, and computer software (Wen et al., 2011). Xiao and Xie, using Vector Autoregression, Structural Vector Autoregression models, impulse response functions, and variance decomposition for empirical testing, showed that money supply is negatively correlated with the degree of financial distress (Xiao & Xie, 2012). Using grey relational analysis, he explored the correlation between the fluctuation of profitability of enterprises of the same size in different industries and enterprises of different sizes in the same industry and changes in monetary policy (such as money supply M2). Further, the study indicates that different monetary policies impact enterprises of different sizes in various industries (He, 2012). Monetary policy credit transmission is more effective in environments with high financing constraints, investment opportunities, asset mortgageability, and non-state-owned enterprises (Pan & Deng, 2020).

2.3.2 Analysis of the Impact of Interest Rates on Corporate Financial Distress

Adjustments in loan interest rates will affect corporate financing costs, and changes in costs will, in turn, impact corporate cash flows and operational capabilities (Fernald et al., 2014; Kamber & Mohanty, 2018). Additionally, adjustments in interest rates directly affect the financial expenses of listed companies. Enterprises may change their financing structures to reduce the impact of policy changes, thereby affecting their debt repayment abilities. Empirical tests based on the Merton credit risk model, examining the relationship between macroeconomic variables and corporate financial distress,

reveal a close connection between interest rates and a company's financial condition (Pesaran et al., 2003). An empirical study discussing the relationship between macroeconomic factors and the operational risk of Japanese companies found that capital-intensive companies are particularly sensitive to interest rate changes (Nguyen, 2007). Research using multi-factor systemic risk models with Swedish data has shown that interest rate spreads impact corporate defaults (Qu, 2006). Studies based on Chinese data indicate that the macroeconomic environment significantly influences companies falling into financial distress: companies more sensitive to changes in industrial value-added and actual interest rates are more likely to encounter financial difficulties (K. Wang et al., 2006). Using random effects, Logit panel data models to explore the impact of macroeconomic factors on enterprises falling into financial distress, empirical results also indicate that real loan interest rates in the current and lagged one and two years have different impacts on the probability of companies entering financial crises (Lü & Li, 2008).

2.3.3 Analysis of the Impact of Reserve Requirement Ratio on Corporate Financial Distress

The reserve requirement ratio and benchmark interest rate are common monetary policy tools, and the People's Bank of China strongly prefers to use the reserve requirement ratio to convey monetary policy information (*The Handbook of China's Financial System,* 2020). When the central bank raises the reserve requirement ratio, it reduces lending funds for commercial banks. Commercial banks will impose stricter requirements and monitoring on the conditions and usage of loans to mitigate risks, making it more difficult for enterprises to obtain loans. Simultaneously, adjustments by the central bank to

the reserve requirement ratio may lead to consumers adopting a wait-and-see attitude towards the uncertain prospects of enterprises, indirectly reducing sources of funds for businesses. The statutory reserve requirement ratio level directly affects commercial banks' lending scale (Z. Yang & Pang, 2009). Implementing tight monetary policies, which involve raising the reserve requirement ratio and reducing credit scale, makes obtaining loans more difficult for enterprises. This situation is particularly challenging for companies with a single financing channel, high debt-to-asset ratios, and poor operational performance, increasing their operational difficulties and potentially leading to losses and market exit.

2.4 Summary

Existing literature has examined the impact of corporate financial distress from both macroeconomic environment and microenterprise perspectives. The research findings suggest that adjustments in monetary policy can increase business operating distress. Specifically, monetary policy influences money supply, interest rates, and reserve requirement ratios through credit and monetary channels, determining the lending scale of commercial banks. This, in turn, increases or decreases the scale and cost of corporate financing, leading to changes in business risks. The impact of diversification strategy on corporate performance has not yet reached a consensus in the academic community. One of the motivations for diversification strategy is for companies to diversify business risks and fully utilize surplus resources for diversified operations. However, many companies have fallen into operational crises or financial distress due to their diversification strategies, prompting a reevaluation of such strategies in academia. In reality, the impact of the macroeconomic environment

and diversification strategy on business risk is not isolated. On the contrary, both "diversification" and "specialization" are choices in business strategy, and developing a diversification strategy requires the combined action of internal resource capabilities and external market opportunities. However, despite significant work in these fields, there remain unresolved issues and gaps in knowledge. Most existing research focuses on the impact of either the macroeconomic environment or diversification strategy on business risk, lacking a systematic study of the interrelations among the three. Furthermore, research has not delved deeply into the transmission mechanisms between diversification strategy and corporate financial distress.

This study focuses on the impact of diversification strategy on corporate financial distress, considering the influence of contractionary monetary policy on corporate financial distress and exploring the potential transmission mechanisms therein. To this end, we will employ quantitative research methods combined with empirical data analysis to assess the relationship between diversification strategy, contractionary monetary policy, and corporate financial distress. Specifically, we will collect and process relevant financial and macroeconomic data, construct models for scientific data analysis, explore the correlations and causal relationships between these variables, and attempt to investigate potential transmission mechanisms. This will reveal how diversification strategy and monetary policy impact a company's financial condition and distress.

3 Case Analysis and Theoretical Hypotheses

This chapter delves into a detailed analysis of the Evergrande Group case to explore how its diversification strategy led to financial distress, providing specific real-world context and case support. The chapter further proposes five core theoretical hypotheses based on literature and theoretical analysis. First, we offer a competitive hypothesis on the relationship between diversification strategy and corporate financial distress. Second, we examine whether monetary policy, especially contractionary policy, leads to higher financial distress. Third, we explore whether contractionary monetary policy moderates between diversification strategy and financial distress. Finally, this chapter introduces the time effect of IPO, proposing a moderating effect of IPO timing on the relationship between diversification and financial distress. These five hypotheses provide a clear direction and framework for subsequent analysis and discussion and ensure a close integration of this study with real-world contexts, embodying both practical significance and theoretical value.

3.1 Case Selection

This chapter uses case study methodology to explore the reasons behind corporate financial distress. The rationale behind this approach is that case studies can distil concepts from cases and articulate relationships between them, thus discovering theories in new domains (Eisenhardt & Graebner, 2007), helping us understand how and why corporate diversification strategies and monetary tightening lead to financial distress. Based on the principle of theoretical sampling (Isabella, 1990), the case of China Evergrande Group is selected for analysis. The reasons are as follows: First, the match between the

research object and the research question is fully considered. This study discusses diversification's impact on financial distress, so the selected case should have implemented a diversification strategy and encountered significant financial distress, which Evergrande Group meets. Second, the typicality of the case is fully considered. Evergrande Group is a well-known enterprise in China, but it is controversial for its diversification. It has encountered financial distress, having filed for financial distress protection in the United States in August 2023.

Existing literature suggests that case study data and materials can be obtained through historical archives and news materials, among other means (Eisenhardt & Graebner, 2007). In some classic studies, such as Chandler (1962, 1977, 1994), secondary materials were used extensively for effective case studies due to constraints (Chandler, 1962). Following predecessors' methods, this chapter mainly uses listed company annual reports, consulting firm reports, and online materials for case analysis data.

China Evergrande Group (China Evergrande Group) is a Fortune Global 500 company listed on the main board of the Hong Kong Stock Exchange (stock code: HK03333). In 2006, Evergrande Group introduced strategic investment capital from Deutsche Bank, Temasek, etc., obtaining financing of 3 billion yuan and signing an earn-out agreement. After obtaining financing, Evergrande Group purchased many land reserves, growing from less than 6 million square meters in 2006 to 45.8 million square meters in 2007. Although the 2008 financial crisis postponed Evergrande Group's listing plans, under China's 4 trillion yuan economic stimulus plan, Evergrande Group was the first to emerge from difficulties and grow rapidly, eventually listing in November 2009.

After listing, Evergrande Group gradually explored diversified

development paths, starting to try diversification - establishing a football club in 2009 and expanding into dairy, grain and oil, culture, internet, and other businesses from 2013 to 2016. In 2018, Evergrande Group formally entered the new energy vehicle sector. From 2018 to 2019, Evergrande Group successively acquired 45% of the shares of FF, bought the electric motor drive company Tietie Electric, cooperated with Germany's Hofer to develop power systems, and expensively acquired Swedish NEVS, Guanghui Group, and Kainai New Energy, forming a complete industrial chain of new energy vehicle motors, batteries, electronic controls, complete vehicles, charging piles, etc., with a total investment of over 50 billion yuan. In July 2020, Evergrande Health was renamed Evergrande Auto, and the company's market value reached 600 billion Hong Kong dollars, surpassing its parent company China Evergrande.

As one of China's largest real estate developers, Evergrande Group is also the real estate developer with the most debt globally. Since 2020, influenced by the COVID-19 pandemic and the macroeconomic situation, China's real estate market has experienced some cooling. Concurrently, the Chinese government implemented regulatory measures to prevent real estate bubbles and financial distress. These included the "Three Red Lines" (a policy jointly launched by the Ministry of Finance and the Ministry of Housing and Urban-Rural Development to restrict developers' financing: the first red line stipulates that the asset-liability ratio excluding advance receipts should not exceed 70%. The second red line mandates that the net debt ratio should not exceed 100%. The third red line requires that the cash-to-short-term debt ratio should not be less than 1) and "Three Same Comparisons," which restricted the borrowing space and sales scale of real estate enterprises, putting significant pressure on Evergrande Group.

Since 2021, Evergrande Group's debt crisis has intensified, and the company experienced debt default for the first time. Multiple defaults or delays in paying interest and principal led to protests and lawsuits from creditors, suppliers, investors, homebuyers, etc. As a result, the stock price and bond prices of Evergrande Group plummeted significantly, with nearly 90% of its market value evaporating, leading to the suspension of its Hong Kong-listed shares in late March 2022. Evergrande's balance sheet shows that as of December 31, 2022, the group's total liabilities exceeded 2.43 trillion yuan. Ultimately, China Evergrande filed for financial distress protection in New York, USA, on August 17, 2023.

3.2 The Diversification Motives of Evergrande Group

Evergrande Group has been diversifying its industrial layout since its listing in 2009, but significant external investments began after 2013. From 2013 to 2015, Evergrande Group entered into fast-moving consumer goods, dairy, and grain and oil businesses, expanding into Evergrande Spring, Evergrande Agriculture and Husbandry, and Evergrande Grain and Oil. From 2015 to 2017, Evergrande entered the insurance, health, and internet industries, establishing Hengteng Network, Evergrande Health, and Evergrande Life Insurance. By this time, Evergrande Group had formed a layout with a real estate business at its core, simultaneously developing industries such as sports, culture, insurance, internet, health, agriculture and farming, and fast-moving consumer goods. After 2017, Evergrande accelerated its industrial expansion, investing over 50 billion yuan in the entire industrial chain of new energy vehicles. This study summarizes the following points to outline the reasons behind Evergrande Group's choice of diversification strategy:

3.2.1 Diversifying Operational Risks

High real estate prices in China led to public dissatisfaction and increased attacks on real estate enterprises. Therefore, while making profits, real estate companies also had to bear the pressure of public opinion. In this context, the government began to regulate the real estate industry to stabilize public sentiment and maintain a stable and harmonious social environment, allowing house prices to fluctuate within a reasonable range. However, frequently changing regulatory policies put considerable pressure on real estate companies. Especially during periods of stringent real estate control policies, Evergrande Group faced increased pressure from shrinking bank loans, threatening its capital chain. To hedge against risks brought about by policies to the real estate industry, Evergrande Group sought new profit growth points through a diversification strategy, achieving risk hedging and enhancing its ability to withstand risks.

3.2.2 Gaining Market Competitive Advantage

Diversified operations can affect the market structure to a certain extent, significantly raising barriers to market entry, reducing the number of competitors, and thereby obtaining excess profits, enabling enterprises to gain "group strength." As China's largest real estate enterprise in terms of sales area, Evergrande Group also hoped to use diversified operations as a breakthrough to find suitable industries to expand its scale, enhancing its core competitiveness and gaining competitive advantages.

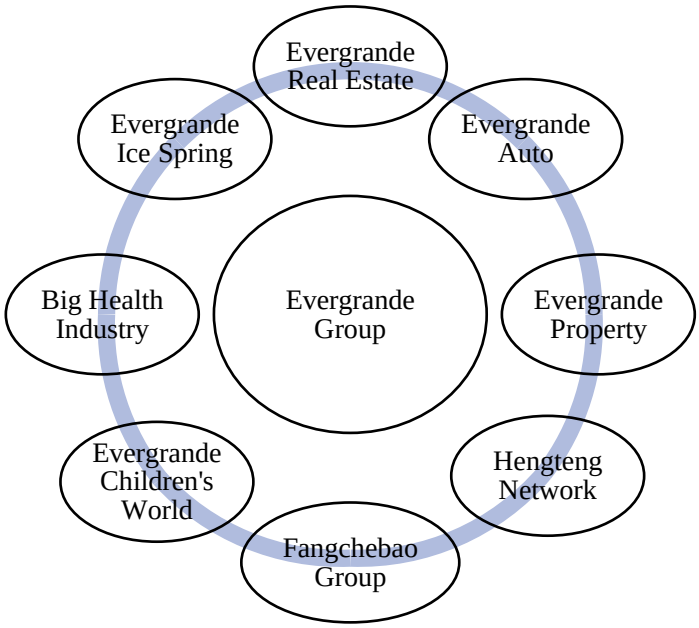
3.2.3 Fully Utilizing Surplus Corporate Resources

In day-to-day operations, enterprises inevitably have surplus resources.

These surplus resources are mainly divided into tangible and intangible resources. Tangible resources primarily include surplus products, talent reserves, corporate capital, etc., while intangible resources cover management experience, patent rights, social relationships, technological innovation capabilities, and more. Large-scale enterprises with abundant surplus resources generally adopt diversification to maximize internal resource utilization. During its rapid development, Evergrande Group accumulated a large amount of idle resources, thus possessing sufficient capacity to invest these capital accumulations into new markets and forming Evergrande's "eight-wheel drive" diversified development pattern.

Figure 3.1

China Evergrande Group's "Eight-Wheel Drive" Diversification Model



Note. The data is from the annual report of China Evergrande Group.

3.3 The Impact of Diversification on Evergrande's Financial Distress

The attempt to diversify requires substantial capital investment and often

necessitates raising these funds through borrowing. In reality, Evergrande Group's subsidiary businesses needed significant financial support, and its diversification was mainly achieved through financing, including debt financing and other financial instruments. Diversification is expanding the business scope and entering new markets or business areas. It typically requires significant capital expenditure, especially when a company attempts to enter a new field different from its primary business. Consequently, Evergrande Group had to increase its debt to obtain the necessary funds, leading to a rise in the debt-to-asset ratio. Without an improvement in profitability, the company's value continuously declined, ultimately leading to financial distress.

3.3.1 Diversification and Rising Debt-to-Asset Ratio

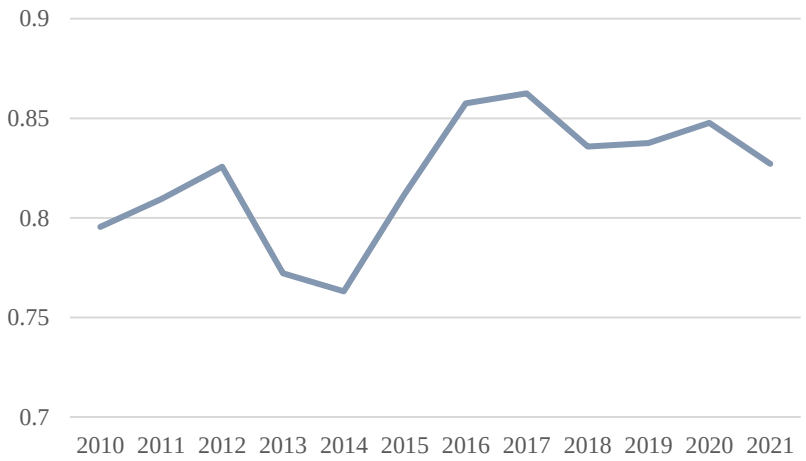
Debt repayment capacity reflects whether a company can repay its debts and is an essential criterion for evaluating corporate performance. Implementing diversification to any degree, especially entering a new market, will inevitably impact a company's debt repayment capacity. Therefore, how diversification affects a company's debt repayment capacity is one of the key considerations. A more complex capital structure typically accompanies diversification investments. For Evergrande Group, supporting its diversification plan through debt financing increased its debt-to-asset ratio. A more complex capital structure could lead to increased managerial complexity, further intensifying operational pressures for the company.

If different business areas have distinct economic cycles, a company may maintain stability in other areas when encountering problems in one area. However, in Evergrande's case, diversification did not noticeably improve its debt repayment capacity. On the contrary, due to entering multiple capital-

intensive areas, Evergrande's debt pressure increased. Figure 3.2 shows the trend of Evergrande Group's debt-to-asset ratio from 2010 to 2021, indicating that the ratio has always been high. A high debt-to-asset ratio is a significant characteristic of the real estate industry. Typically, the debt-to-asset ratio for real estate companies is around 60%. However, from 2010 to 2021, Evergrande's ratio consistently remained above 75%, far exceeding the industry average. This is closely related to Evergrande's diversification: the company financed its diversification investments through borrowing, thereby raising Evergrande's capital costs, putting significant pressure on capital turnover, and ultimately leading to a high debt ratio and distress.

Figure 3.2

Trend Chart of Asset-Liability Ratio of China Evergrande Group from 2010 to 2021



Note. The data is from the annual report of China Evergrande Group.

It should be noted that although Evergrande Group's overall debt-to-asset ratio was high, it remained relatively small and stable at the beginning of its diversification layout. From 2014 to 2016, Evergrande Group expanded into new areas in multiple fields, tying up a significant amount of capital, and its

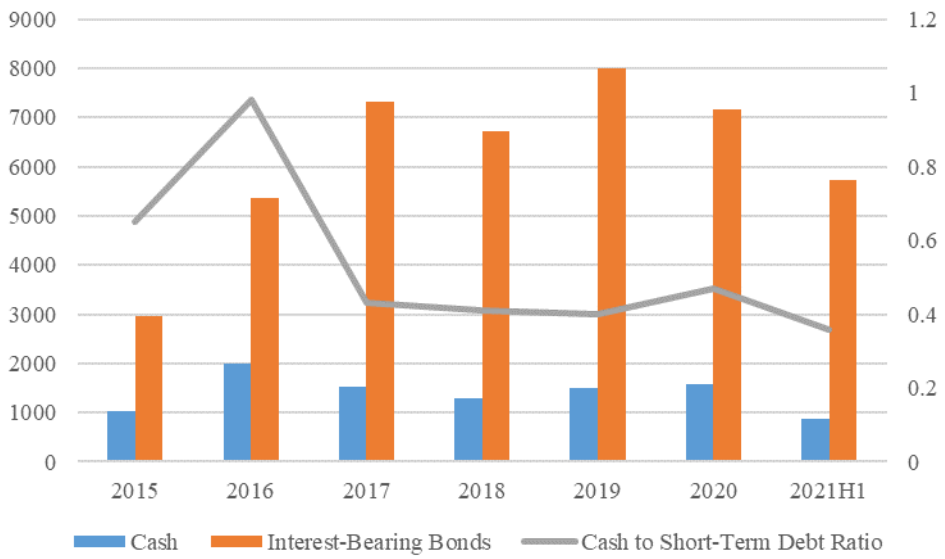
debt-to-asset ratio rapidly increased. After 2016, as Evergrande's diversification layout was largely completed, its debt-to-asset ratio stabilized but remained above 82%. Capital expenditures on Evergrande's subsidiary businesses continued to increase, surpassing the combined spending of its two main businesses, Evergrande Real Estate and Property, from 2017. Evergrande consistently had a net cash outflow from operating activities and could not sustainably fund its diversified businesses. Therefore, Evergrande had to rely on high financing to support the development of its diversification strategy.

Evergrande Group’s diversification also led to a significant drop in the cash-to-short-term debt ratio. The short-term debt ratio measures a company’s ability to cover its short-term liabilities with its cash flow from operations, reflecting the cash flow pressure and safety at a certain time. The cash to short-term debt ratio is calculated as (annual net cash flow from operations / year-end short-term debt) × 100%. A higher ratio indicates better short-term debt repayment ability and greater safety. As shown in Figure 3.3, after leveraging for expansion, Evergrande Group’s cash-to-short-term debt ratio quickly dropped from a relatively healthy 0.98 in 2016-2017 to 0.43. Continuously stayed below 0.5, indicating that Evergrande Group’s cash (and equivalents) could not pay its short-term debts, implying significant short-term debt repayment pressure. From 2015 to 2017, the company’s interest-bearing debts grew by 2.5 times from 296.9 billion yuan to 732.6 billion yuan, maintaining an enormous level after that, with interest-bearing debts still at 571.8 billion yuan in H1 2021 and total liabilities reaching 1,966.5 billion yuan. This was a significant leap, especially considering such growth was achieved in just two years. Rapid debt growth is unsustainable when the company’s cash-to-short-

term debt ratio has fallen significantly. These factors indicate that diversified operations failed to positively impact Evergrande Group's debt repayment ability and increased Evergrande's financial burden.

Figure 3.3

Chart of Cash to Short-Term Debt Ratio Changes of China Evergrande Group from 2015 to 2021 (in Billion Yuan)



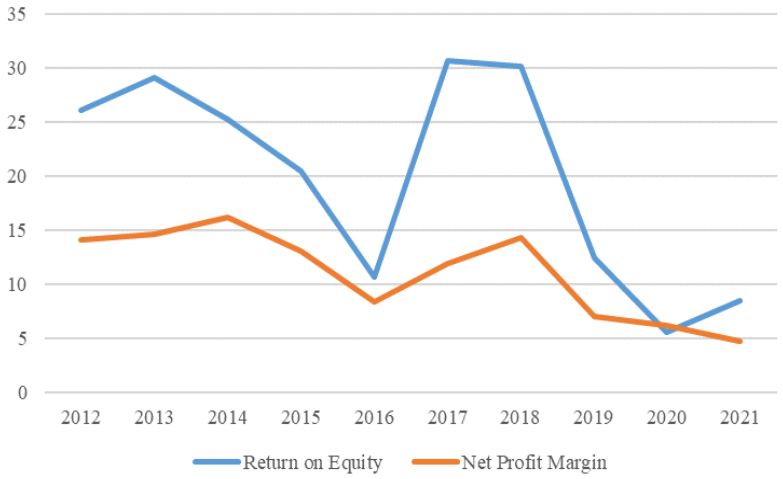
Note. The data is from the annual report of China Evergrande Group.

3.3.2 Diversification and the Decline in Profitability and Corporate Value

As shown in Figure 3.4, Evergrande Group's profitability has fluctuated significantly over the past decade, and a downward trend has been shown. This decline was particularly pronounced during the rapid implementation of its diversification strategy in 2014-2015. Although there was a brief rebound in profitability after 2017, it has declined since 2018, plummeting rapidly.

Figure 3.4

Profitability Indicator Trend Chart of China Evergrande Group from 2010 to 2021 (%)



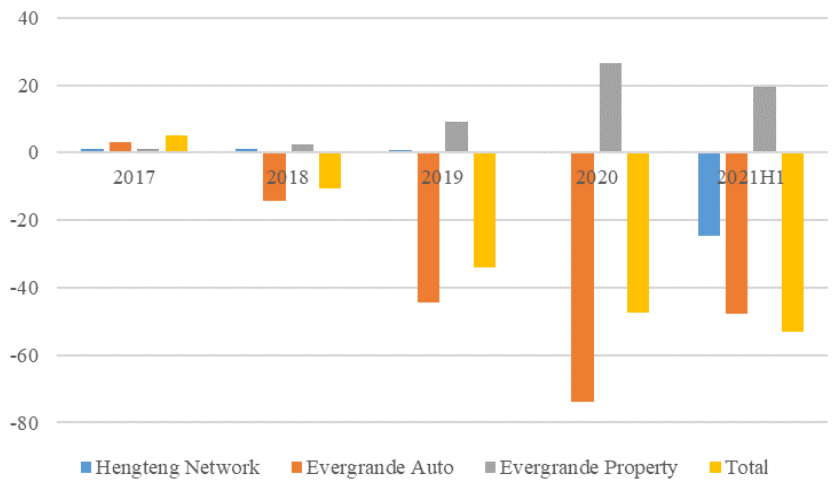
Note. The data is from the annual report of China Evergrande Group.

Diversification is partly the reason for the substantial decrease in Evergrande Group's profitability. Evergrande made significant investments in its subsidiary businesses, which operated at a loss. In the first phase of diversification, ventures such as Evergrande Football and Evergrande Spring accumulated nearly ten billion yuan in losses. After 2015, Evergrande gradually sold off businesses like Evergrande Spring and Agriculture and Husbandry, achieving break-even in 2017. After 2017, Evergrande ventured heavily into new industries like new energy vehicles and the internet. From 2016 to the present, the operating and investing cash flows of Evergrande Auto have been consistently negative, with business operations entirely supported by financing, undoubtedly increasing Evergrande's overall debt and financial pressure. Its lack of research and development capability and distance from mass production and profitability are evident. Evergrande Auto also lacks independent R&D capabilities, is far from mass production and profitability, and has limited sustainable development capability. Data shows that the losses incurred by

Evergrande Auto exceed the total losses of other businesses, with a loss of 7 billion yuan in 2020. Another significant loss-making venture is the Evergrande Cultural and Tourism project. Evergrande Group has laid out more than ten cultural and tourism projects across the country, each with substantial investment, but none have officially opened, and their profitability prospects are unclear. Other projects like Hengteng Network and Evergrande Spring have invested considerable funds with their high initial investments. These projects failed to turn a profit and increased financial pressure on Evergrande Group due to losses, as seen with Hengteng Network's 2.45 billion yuan loss in H1 2021. Additionally, Evergrande's investments and layouts in multiple fields may have led to management and resource dispersion, affecting the efficiency of its primary business and further weakening its profitability. Figure 3.5 shows the profit situation of Evergrande Group's diversified listed platforms, indicating substantial losses for Hengteng Network and Evergrande Auto.

Figure 3.5

Profit/Loss Situations of China Evergrande Group's Diversified Listed Platforms (in Billion Yuan)

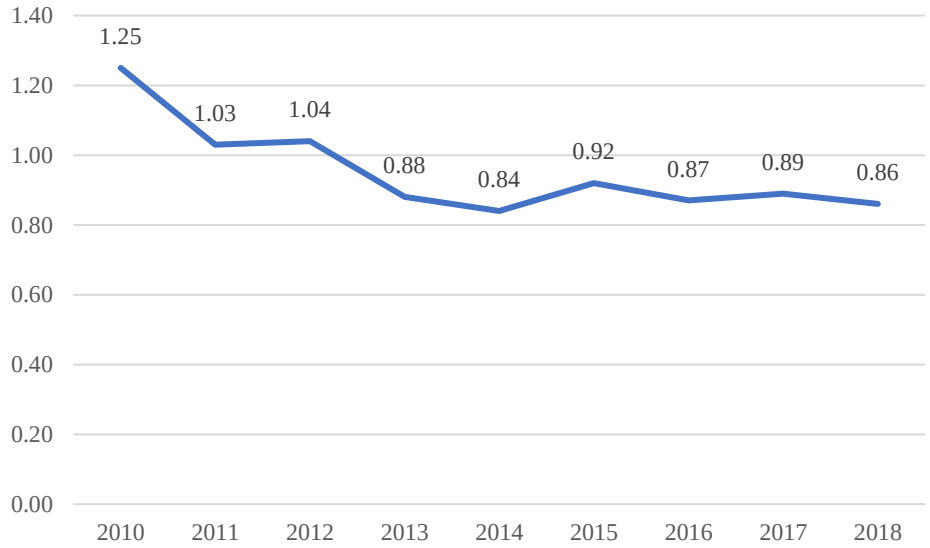


Note. The data is from the annual report of China Evergrande Group.

From the perspective of corporate value, Evergrande Group's decline in value was remarkably rapid. As shown in Figure 3.6, from 2010 to 2018, Evergrande Group's Tobin's Q value showed a downward trend. A decline in corporate value often increases financial distress: a decrease in value can lead to a loss of confidence among investors and creditors, making it difficult for Evergrande Group to raise funds through issuing new stocks or debts. With already high levels of debt, such financial pressure could force the company to seek financial distress protection.

Figure 3.6

Tobin's Q Value Statistics Chart of China Evergrande Group from 2010 to 2018



Note. The data is from the annual report of China Evergrande Group.

Overall, Evergrande Group's diversification strategy did not yield the anticipated stability or profits. Instead, it increased operational complexity and debt burden. If diversification does not effectively disperse risk for the company, it may instead act as a catalyst for accelerating financial distress.

3.4 The "Double-Edged Sword" Effect of Diversification on Corporate Financial Distress

The previous discussion, using the case of Evergrande Group, illustrates how diversification can lead to increased corporate financial distress. When a company lacks sufficient internal resources and capabilities, especially diversifying into non-core businesses, it significantly increases its financial distress.

Firstly, a diversification strategy involves a company operating in multiple industries, potentially leading to an over-dispersion of limited human, financial, and material resources. This can neither guarantee success in new business areas nor hinder the robust operation of existing businesses, thereby increasing operational instability (Petrick et al., 1999). For example, Evergrande Group's investment in multiple fields led to an excessive dispersion of corporate resources. This situation resulted in insufficient investment in key business areas, weakening its core competitiveness. Furthermore, over-expansion led to continuously rising debt levels, thereby increasing financial distress.

Secondly, diversification typically introduces more business units or management levels, increasing management and coordination complexity (Hitt et al., 1994; Khanchel El Mehdi & Seboui, 2011) and possibly reducing resource allocation efficiency, further intensifying operational distress. In practice, as mentioned earlier, operating in multiple industries and fields led to a more complex management structure and processes for Evergrande. The company had to deal with coordination and management issues between different business departments, leading to reduced operational efficiency and increased management costs.

Lastly, diversification requires enterprises to enter new markets or industries, demanding stronger capabilities to integrate resources and adapt to new external environments. Some companies often enter new business areas through mergers and acquisitions, whose integration process might face issues like uncoordinated business processes or incompatible technology platforms, bringing additional costs and risks to the company (Y. M. Zhou, 2011). If a company lacks this kind of "dynamic capability," it may face more uncertainties, thereby increasing operational risks (Barton, 1988; Olibe et al., 2008). New business areas might confront market competition and technological challenges. For instance, when Evergrande entered the new energy vehicle market, it had to compete with other automobile manufacturers while facing technological R&D and market promotion challenges. The risks in these new business areas could impact the company's overall performance.

Additionally, existing research indicates that Chinese enterprises' business models and entrepreneurial management concepts are still in their developmental stages, and management lacks experience in implementing diversification strategies. Therefore, a diversification strategy may not reduce a company's operational risks (G. Wu & Zhang, 2015). Thus, unthinkingly implementing a diversification strategy might fail to disperse operational distress and heighten it.

From a corporate governance perspective, agency issues often become one of the improper driving factors for corporate managers to implement diversification strategies (Aron, 1988). In contemporary corporate governance structures, separating ownership and management leads to misaligned interests between owners and managers. In this situation, managers might make choices

that are not in the best interest of the owners for personal gain. Under this agency mechanism, unlike investors, managers cannot diversify their occupational risks through investments. Therefore, they might use various means to maximize their benefits without violating laws or contractual agreements (Grossman & Hart, 1992). One common approach is to expand the size of the enterprise through diversification strategies, thereby enhancing its reputation, solidifying its position, and reducing the likelihood of being dismissed (Shleifer & Vishny, 1997).

Additionally, conflicts of interest between managers and shareholders also turn diversification into a means for managers to erode the core competitiveness of a company and extract corporate wealth (Grossman & Hart, 1992). Diversification strategies driven by managers for personal interests increase a company's operational distress. Based on the above analysis, the following hypothesis is proposed:

H1a: Diversification strategy leads to an increase in corporate financial distress.

However, in many cases, diversification strategies are considered tools for enterprises to disperse risks (Castanias & Helfat, 2001; Norton & Tenenbaum, 1993; Q. Yang et al., 2008). Generally, different markets and products often have distinct economic cycles. Therefore, through diversification, a company can ensure that even if one business or market performs poorly, the revenues from other businesses or markets can compensate for the losses, thereby maintaining overall income and profit stability (Amit & Livnat, 1988; Dhir & Dhir, 2015; Ferris et al., 2002). For example, when a company relies solely on a single market or product, it is highly sensitive to specific market risks. However, a

diversification strategy allows a company to operate in multiple markets, thus reducing dependence on any single market fluctuation (Cao et al., 2019). If a particular industry or region experiences an economic slowdown, the company can still rely on its business in other industries or regions to maintain revenue flow. Diversification can also enhance a company's competitiveness in new markets. By entering new fields, a company can reach new customer groups, open new revenue channels, and thus improve overall profitability (Sanya & Wolfe, 2011). Companies operating in multiple markets are often quicker to identify and capitalize on new market opportunities and innovate products or services. This can bring new sources of income for the company, increasing profit stability, thus coping with drastic changes in the external environment (Bergh & Lawless, 1998).

By entering new markets or expanding product lines in existing markets, companies can increase their market coverage, attract more customer groups, improve market share, and enhance their bargaining power and influence (Gomez-Mejia, 1992). A larger market share is often associated with stronger market influence and brand recognition. Diversification strategies help companies establish broader brand recognition by offering different products and services to meet more diverse customer needs, achieving brand differentiation.

Diversification also helps companies utilize their resources and capabilities more effectively, allowing them to allocate capital among their different business units, optimize their investment portfolio, and achieve synergies between businesses (Q. Yang et al., 2008). This diversified investment strategy helps companies maintain overall capital efficiency while reducing the risk of

relying on a single market or product line. Companies can share resources, knowledge, and technology between their different business units, thereby reducing costs, improving efficiency, and creating new competitive advantages (Chang & Hong, 2000; H.-E. Lin et al., 2020; Markides & Williamson, 1996; Shayne Gary, 2005). For example, a technology developed by a company in one area may have application value in another area, thereby improving the company's overall technological efficiency and innovative capability. Therefore, by distributing these resources across multiple areas, a company can maximize earnings in multiple markets and reduce the impact of a downturn in any single market.

In summary, by diversifying investments across different industries and markets, companies can balance the risks and returns of other businesses, achieving overall risk management and maximizing returns. Diversification significantly controls corporate risks (Dhir & Dhir, 2015; Ferris et al., 2002). For companies, diversification can serve as a means to reduce risks (Chan Kim et al., 1989; Norton & Tenenbaum, 1993; Oladimeji & Udosen, 2019; Sanya & Wolfe, 2011). Based on the above analysis, the following hypothesis is proposed:

H1b: Diversification strategy helps reduce corporate financial distress.

3.5 The Impact of Monetary Tightening Policy on Corporate Financial Distress

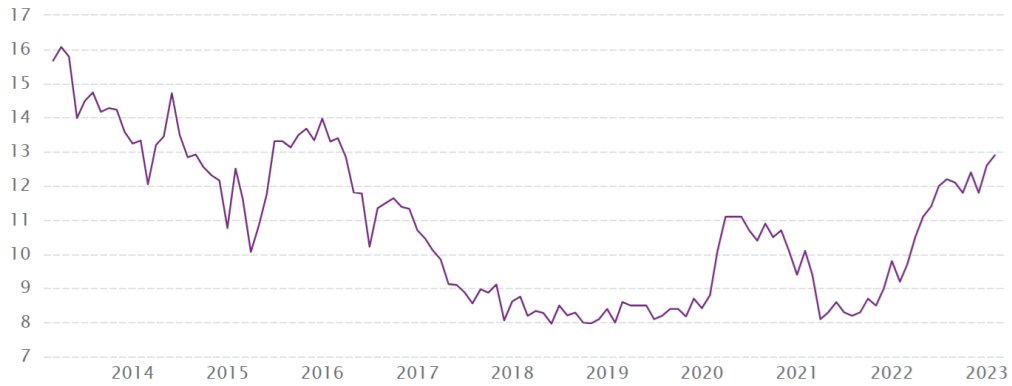
According to statistical data, the Chinese real estate industry primarily has four funding sources: domestic loans, other funds, foreign capital, and self-raised funds. Domestic loans and other funds constitute most funding sources, whereas additional funds include prepayments and deposits from homebuyers, all categorized under debt financing. Public data indicates that since 2000, debt

financing has consistently accounted for about 60% to 70% of real estate companies' funding sources. Considering debt financing, like advances from construction units, the actual proportion of debt financing would be even higher.

In 2017, China's broad money supply M2 saw the end of its three-decade-long double-digit growth, entering an era of single-digit growth. From the perspective of monetary price, namely interest rate levels, 2017 witnessed varying degrees of increase in interest rates, resulting in a corresponding rise in the cost of corporate bonds. By 2018, China began deleveraging and reducing debt to prevent systemic financial risks, leading to tightened liquidity, exposed credit risks, and increased financing costs for enterprises. In 2020, there was a brief uptick in China's M2 growth rate, but it entered a downward trend again in the second half of the year.

Figure 3.7

Annual M2 Growth Rate in China (2014-2023) (%)



Note. The data is from the People's Bank of China.

Tight monetary policy has led to a liquidity crisis for enterprises, as reflected in the real estate industry. In August 2020, the People's Bank of China and the Ministry of Housing and Urban-Rural Development introduced new regulations for real estate financing, imposing restrictions on the asset-to-

liability ratio (excluding prepayments), net debt ratio, and the cash-to-short-term debt ratio: 1) the asset-to-liability ratio (excluding prepayments) must not exceed 70%, 2) the net debt ratio must not exceed 100%, and 3) the cash to short-term debt ratio must be less than 1. Real estate enterprises violating these rules cannot increase interest-bearing debt, with each reduction tier allowing a maximum annual increase of 15% in interest-bearing debt. Subsequently, to prevent financial risks in banks, in December of the same year, the People's Bank of China further clarified the proportion limits of residential credit and personal housing loans, including limits for the six major state-owned banks. These regulations effectively restricted the cash flow of real estate enterprises, allowing comprehensive control over the enterprises' debt levels and repayment capacity from an overall, long-term, and short-term perspective. Hence, companies that do not meet the three new rules have high short-term liquidity risk and financing costs and are prone to liquidity crises. As the top-ranked real estate enterprise, Evergrande Group failed to meet the "three red lines" financial indicators in 2019 and 2020. Due to not meeting the "three red lines financing requirements," Evergrande's external financing was restricted that year, leading to a reliance on new housing sales for debt repayment. However, the market's double restriction policies limited the fluctuations in the housing market, making Evergrande's low land cost and low selling price model unsustainable. Moreover, most of its on-sale projects were in third and fourth-tier cities, where the housing market was sluggish, making collections challenging.

By June 2021, the Sansheng Tree Company reported that Evergrande Group's commercial paper was overdue in the first quarter, followed by a stock and bond sell-off for Evergrande Group. In the same month, Evergrande Group

announced it had arranged funds to repay matured dollar bonds, reducing its net debt ratio to below 100%, turning one red line green. In July, Guangfa Bank requested to freeze 132 million RMB of Evergrande Real Estate's assets; Huaibei Mining sued an Evergrande subsidiary for refusing to pay 400 million RMB in construction fees, demanding Evergrande Group assume joint liability. In August, officials from the People's Bank of China and the Banking and Insurance Regulatory Commission held talks with senior executives of Evergrande Group. On September 8, Evergrande Wealth suddenly suspended all financial product payments. Eventually, as previously mentioned, Evergrande Group applied for financial distress protection in the United States.

As seen above, China's monetary tightening is a significant cause of financial distress for the Evergrande Group. From a demand perspective, market demand shrinks in a macroeconomic environment of monetary tightening (Egle, 1965). Additionally, the pandemic exacerbated external uncertainties, further reducing residents' willingness to purchase homes and increasing the presale pressure on Evergrande Group. The leverage accumulated through land acquisition in the early stages could not be transferred to residents in time, leading to intensified contradictions in the cash flow structure of real estate enterprises and triggering a debt crisis.

Furthermore, existing literature has pointed out that tight monetary policy leads to a worsening financing environment, increased financing costs, and enhanced financing constraints (J. Zhu & Lu, 2009). However, financing ability is directly related to corporate performance, and in situations where adequate credit support is challenging to obtain, corporate performance tends to be poorer (Zhao, 2016). Moreover, during periods of tight monetary policy, frictions in

the credit market intensify, further increasing external credit costs (Bernanke & Gertler, 1995). Studies have shown that many companies go into financial distress under the impact of tight monetary policy (D. Wang & Feng, 2013). Based on the above analysis, the following hypothesis is proposed:

H2: Tight monetary policy leads to an increase in corporate financial distress.

In periods of ample liquidity due to low financing costs, the risks brought about by corporate diversification are controllable. However, when national monetary policy becomes more restrictive, enterprises may amplify the financial distress brought on by diversification due to difficulties in securing sufficient financing. Tight monetary policy implies stricter monetary control, with banks and other financial institutions becoming more cautious about lending to enterprises (Greenspan, 2004). For Evergrande Group, the difficulty of financing diversification initiatives increases during periods of tight monetary policy. Concurrently, tight monetary policy is accompanied by rising interest rates (Ellingsen & Soderstrom, 2001; Greenspan, 2004; Roley & Sellon, 1995), increasing the financial costs for businesses. The rise in interest rates is also a significant factor contributing to the increase in Evergrande Group's debt, impacting its overall financial status. Against the backdrop of tight monetary policy, the overall economic environment is affected, consumer confidence declines, and market demand weakens (Caballero & Simsek, 2019). Consequently, the return on Evergrande Group's investments in new markets and business areas will significantly decrease. Finally, under tight monetary policy, Evergrande Group faces greater economic volatility risk, leading to higher uncertainty and risk. Based on the above, the following hypothesis is

proposed:

H3: Monetary tightening policies exacerbate the adverse impact of diversification on financial distress.

3.6 The Impact of IPO Timing

Diversification strategies, which involve entering different industries and markets, provide risk hedging for enterprises (Chan Kim et al., 1989; Norton & Tenenbaum, 1993; Oladimeji & Udosen, 2019) and are considered to help disperse risks (Cao et al., 2019; Castanias & Helfat, 2001; Norton & Tenenbaum, 1993; Q. Yang et al., 2008). However, as proposed in h1a, corporate diversification may increase financial distress. The influence of specific situational and external environmental factors on corporate strategic choices may explain this paradox. Particularly in the Chinese market, due to various constraints and related policies for listing, enterprises often enjoy financial health and relatively low financial distress in the initial stages of going public. Post-IPO, driven by the exciting effect of listing and attracted by lower financing costs and more investment opportunities, management often actively seeks investment opportunities, including many projects previously discarded due to high risks (Ding et al., 2018). Empirical research based on data from Chinese listed companies also indicates that in a certain period after the IPO, the financial distress of enterprises gradually increases (T. Guo, 2017).

This trend implies that enterprises with a shorter period since IPO and rapid business expansion may bear greater financial distress when implementing diversification strategies. More importantly, this risk is not uniformly distributed. Due to differences in maturity, resource allocation, and management team experience, enterprises with different IPO timings face different risks and

challenges in executing diversification strategies. This heterogeneity may lead to spurious correlations in the overall sample, meaning the real impact of diversification strategies on financial distress is masked or distorted by differentiating factors among enterprises with varied IPO timings. Based on the above, the following hypothesis is proposed:

H4: IPO timing enhances the positive influence of diversification on financial distress.

3.7 Summary

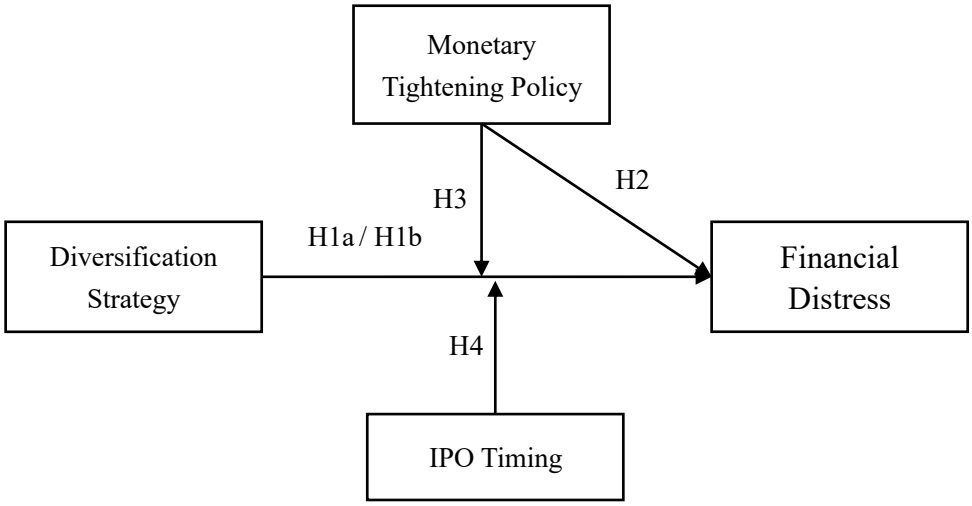
This chapter proposes five theoretical hypotheses based on a case study of the Evergrande Group and theoretical analysis from existing literature. Firstly, regarding the relationship between diversification strategy and corporate financial distress, the study puts forward two opposing hypotheses: h1a, which posits that diversification strategy increases corporate financial distress, and h1b, suggesting that diversification strategy helps to reduce corporate financial distress. Further, the study introduces a hypothesis regarding the relationship between tight monetary policy and corporate financial distress, namely H2: Tight monetary policy increases corporate financial distress. This study proposes two hypotheses related to moderating effects: H3, which states that monetary tightening policies exacerbate the adverse impact of diversification on financial distress, and H4, suggesting that the IPO timing enhances the positive influence of diversification on financial distress.

Based on these theoretical hypotheses, a theoretical framework can be summarized, where diversification strategy and monetary policy tightening act upon corporate financial distress (Figure 3.8). In the theoretical framework of this study, diversification strategy and tight monetary policy directly impact

corporate financial distress. As contextual variables, tight monetary policy and IPO timing also moderate the relationship between corporate diversification and financial distress.

Figure 3.8

Theoretical Framework



4 Research Design

This chapter presents the research design framework of the study, aiming to clearly and methodically outline the steps of empirical research, ensuring its logical and scientific coherence. It guarantees the rigour and reliability of the research process. First, this chapter discusses the chosen method, explaining why event history analysis (EHA) is suitable for the aims and questions of this study and its advantages compared to other potential methods. Next, the chapter provides detailed information about the data sources and explains why these data are appropriate for the study. In the variable measurement section, the chapter details how variables are defined and the rationale and accuracy of their measurement. Finally, the chapter establishes the corresponding empirical model, providing a framework for subsequent analysis and interpretation.

4.1 Method Selection

This study employs event history analysis (EHA) to empirically test the three research hypotheses proposed in Chapter 3. Event history analysis is a statistical analysis method that uses discrete-state, continuous-time stochastic models to study the factors affecting how an event occurs (Yamaguchi, 1991). Put, event history analysis is an empirical method for analyzing whether, why, and why not an event of interest to the researcher occurs. Event history analysis typically uses survival and hazard functions to represent the "survival" and "death" states of the sample over the survival time. The applicability of event history analysis first manifests theoretically. The most direct judgment on whether to conduct event history analysis for a problem is "whether and when to test"; when the research interest is in whether and when an event occurs, event

history analysis may be required, and it can be used in many studies on the duration of event occurrence.

In this study, we consider the ST status of a listed company as a significant indicator of financial distress. Thus, whether a listed company is ST corresponds to a timed censored experiment, with the sample data mainly consisting of complete and right-censored data - whether ST corresponds to the "survival" and "death" states in event history analysis, and when ST is related to survival time in event history. Suppose companies have not been ST by the end of the study. In that case, the "death time" of these samples in the event history analysis is unknown, i.e., some companies may not have gone financial distress during the study period. Event history analysis provides tools for handling data on "events that have not yet occurred," making the research results more robust and comprehensive. Event history analysis breaks through the limitations of traditional binary dependent variable models in dealing with censored samples by incorporating all company samples into statistical analysis, thus more accurately reflecting the overall situation.

4.2 Data source

This study uses data from Chinese A-share listed companies for empirical research. We collected data through the Wind database, including whether companies are ST, ST timing, and some control variables. Additionally, the diversification data of enterprises are manually organized by reading annual reports. The data for national monetary policy are obtained from the People's Bank of China website. Since China promulgated a new set of enterprise accounting standards in 2006, consisting of one basic standard and 38 specific standards, and stipulated that listed companies in China should officially

implement these new accounting standards starting January 1, 2007, this study only collects data from 2007 to 2021. After excluding samples with severe missing data on major relevant variables, a non-balanced panel dataset of 2,937 listed companies from 2007 to 2021 was finally obtained, totalling 24,862 samples.

4.3 Variable Measurement

4.3.1 Dependent Variable

The Special Treatment system was implemented in China's Shanghai and Shenzhen Stock Exchanges in April 1998. It is a risk warning for listed companies with poor operating performance and financial anomalies. The initial intention of this system was to protect investors' interests, improve the efficiency of capital market supervision, optimize resource allocation, and form a governance mechanism of "entry and exit" combined with the delisting system. In this study, if a company is listed on the ST list by the Shanghai and Shenzhen Stock Exchanges in a particular year, it is assigned a value of 1; otherwise, it is assigned a value of 0.

4.3.2 Independent Variable

The degree of diversification reflects the heterogeneity of the business sector attributes formed by the business layout of listed companies. This study measures the degree of diversification in two ways: firstly, by using the natural logarithm of the number of industry groups within the company. Secondly, by using the Herfindahl-Hirschman Index (HHI). The calculation formula for the Herfindahl-Hirschman Index is as follows:

$$HHI = \sum_{j=1}^{n} (P_i)^2$$

P_i is the proportion of the i-th business in total revenue; the number of industries is determined based on the industry classification guidelines revised by the CSRC in 2012 for the company's secondary industries.

4.3.3 Moderating Variables

Tightening monetary policy refers to tightening monetary policy, namely, the central bank controlling the money supply and interest rates, thereby reducing market liquidity. The degree of tightening can be measured through several main indicators:

Short-term interest rates: Short-term interest rates (such as policy rates, interbank lending rates, etc.) are commonly used indicators to measure the degree of tightening. When the central bank raises short-term interest rates, the market's capital cost increases, thereby reducing liquidity. Thus, an increase in short-term interest rates usually represents the implementation of tightening monetary policy.

Money supply growth rate: The growth rate of the money supply (such as M1, M2, etc.) is also an important indicator to measure the degree of tightening. When the central bank reduces the money supply through monetary policy tools, the growth rate of the money supply slows down, and market liquidity decreases. Therefore, a decrease in the growth rate of the money supply usually means the implementation of tightening monetary policy.

Reserve requirement ratio: The reserve requirement ratio is the proportion of funds commercial banks must deposit with the central bank. When the central bank raises the reserve requirement ratio, the funds available for commercial

banks to lend decrease, and market liquidity falls. Therefore, an increase in the reserve requirement ratio usually represents implementing a tightening monetary policy.

Since 2000, the growth rate of broad money supply (M2 growth) has been the intermediate target of China's monetary policy (K. Chen et al., 2018). In light of this, this paper uses the growth rate of broad money (M2) as a measure of monetary policy tightening, referring to existing research (H. Tang et al., 2022; S. Wang et al., 2020). To accurately reflect the degree of monetary tightening, we multiply M2 by -1. The larger the adjusted M2 value, the tighter the monetary policy. This data is sourced from the National Bureau of Statistics of China.

In addition, to further explore the interactive effect of financial distress between the timing of a company's IPO and its diversification strategy, this study specifically adopts a grouped strategy to reveal the subtle relationship between these two variables. Specifically, we obtain this by subtracting the year of the IPO from the year of the data in question.

4.3.4 Control Variables

The following company-level control variables are added to the model: company size (SIZE), debt level (LEV), profitability (ROA), cash assets (CASH), board size (BOARD), independent director ratio (INDB), ownership nature of the company (GOVCON), actual controller's ownership ratio (OWNER), separation of two rights (WEDGE), largest shareholder's shareholding ratio (TOP1), book-to-market ratio (MBRATIO), etc., as factors that may influence the choice of diversification strategy and special treatment of listed companies.

For a detailed explanation of the variables and their descriptive statistics, see Table 4.1.

4.4 Model

This study employs a discrete-time cloglog survival model to examine the impact of diversification strategies and monetary policy tightening on corporate financial distress. Drawing from existing research (Hess & Persson, 2012), the advantages of using this model include (1) the ability of discrete-time survival models to effectively handle nodal issues and easily control for unobservable heterogeneity while also accommodating time-varying covariates; (2) unlike the continuous-time Cox survival model, the cloglog survival model does not require the assumption of proportional hazards. Similar to the research by Xu and Mao (J. Xu & Mao, 2016), the cloglog survival model is formulated as in Equation (1):

$$cloglog(1 - h_{it}) = \beta_0 + \beta X + \tau_T + \nu_R + \nu_T + \varepsilon_{Irt} \quad (1)$$

Here, h_{it} represents the conditional probability of a firm i being subjected to Special Treatment (ST) at time t, given it was not ST at $t-1$. The higher the value of $cloglog(1-h_{it})$, the higher the distress rate or the lower the survival probability of the firm. X includes various distress factors affecting the ST status, primarily focusing on diversification strategy and monetary policy tightening. T_t represents the baseline hazard rate, independent of each company and solely influenced by time factors. N_r and ν_t indicate fixed effects for industry and year, respectively. E_{irt} is the residual term. B reflects the degree of influence of each distress factor on the likelihood of a firm being ST, with a positive coefficient indicating an increased probability of ST.

Table 4.1

Variable Definitions and Descriptive Statistics

Variables	Abbreviation	Variable Definitions	N	Mean	SD.
Special Treatment System	ST	If a company is listed on the ST list by the Shanghai and Shenzhen Stock Exchanges in a given year, it is assigned a value of 1; otherwise, it is assigned a value of 0.	24862	0.0942	0.2921
Degree of Diversification	HHI	Calculated using the Herfindahl-Hirschman Index.	24862	0.1967	0.2367
Monetary Policy Tightening Degree	M2	Measured using the growth rate of broad money supply	24862	-12.8376	4.8730
IPO Timing	IPOTIME	Subtracting the year of the IPO from the year of the data in question	24862	11.2703	7.0164
Firm Size	SIZE	Equal to the natural logarithm of the company's total assets.	24862	22.3367	1.4105
Debt Level	LEV	Calculated as the ratio of the company's total liabilities to total assets.	24862	0.4551	0.2000
Profitability	ROA	Calculated as the company’s net profit ratio to average total assets.	24862	0.0496	0.0452
Board Size	BOARD	Equal to the total seats on the company's board of directors.	24862	8.8215	1.8198
Proportion of Independent Directors	INDB	Calculated as the number of independent directors divided by the total number of board members.	24862	0.3722	0.0561
Enterprise Ownership	GOVCON	If the enterprise is state-controlled, it is set to 1; otherwise, it is set to 0.	24862	0.1919	0.3938
Separation of Ownership and Control	WEDGE	The ratio of the controlling rights owned by the company's actual controller to the ownership.	24862	1.3300	0.6214
Book-to-Market Ratio	MBRATIO	The ratio of the company’s book value to its market value.	24862	0.6373	0.2534

5 Results

Chapter 5 of the study presents the empirical analysis results, providing robust evidence for the hypotheses proposed earlier. This chapter first details the baseline regression results, showing the effects of diversification and monetary policy tightening on financial distress. The results from regression models that incorporate moderating effects further reveal how monetary tightening moderates the relationship between diversification strategies and corporate financial distress. A series of robustness checks are conducted to ensure the reliability of the empirical findings. Additionally, mediation mechanism analysis delves deeper into the internal logic of how diversification strategies impact corporate financial distress. The chapter also uncovers differential outcomes for different types of firms facing diversification strategies and monetary tightening through heterogeneity analysis. Further analyses are presented for additional insights into the contextual influences of diversification on corporate financial distress. Overall, the chapter aims to ensure the credibility of conclusions through meticulous empirical testing.

5.1 Baseline Regression Results

Table 5.1 provides a detailed view of how corporate diversification affects financial distress. Specifically, the results in column (1) reflect only the impact of the key explanatory variables without any other control variables. However, the relationship remains consistent when other potential control variables are included in column (2). It is noted that the HHI coefficient for corporate diversification is statistically significant and positive, indicating that diversification strategies might lead to higher financial distress. This empirical

finding supports H1a but not Hypothesis h1b.

Similarly, columns (3) and (4) of Table 5.1 explore how monetary policy tightening impacts corporate financial distress. In column (3), the primary impact of monetary tightening is assessed without considering any other control variables. Further, in column (4), a series of potential control variables are introduced to ensure the robustness of the results. The empirical findings demonstrate that the M2 coefficient for monetary tightening is statistically significant and positive, indicating increased financial distress for firms under tighter monetary conditions. This finding robustly supports H2.

Significant differences in their impact on corporate financial distress are observed when examining various control variables. Core corporate financial and governance characteristics, such as firm size, board size, and book-to-market ratio, significantly negatively impact financial distress. Specifically, this implies that increases in these characteristics can effectively reduce financial distress. For instance, larger firm sizes suggest a higher likelihood of coping with contingencies, reducing the probability of financial distress.

However, it's notable that several variables have a significant positive effect on corporate financial distress, including the level of debt, the nature of corporate ownership, and the degree of separation between ownership and control. In particular, an increase in a firm's debt level elevates financial pressure, thus heightening the financial distress. The ownership structure of a firm, especially state-owned control, can also influence its financial distress to some extent. Moreover, the separation between ownership and control, where a controlling person or group holds a relatively small equity stake but dominates decision-making, is a critical factor affecting financial distress. Significant

agency issues may arise when this separation is pronounced, leading to conflicts between management and shareholders.

Table 5.1

Baseline Test Results

Variables	ST			
	（1）	（2）	（3）	（4）
HHI	0.271***	0.244***		
	(0.082)	(0.089)		
M2			0.068***	0.319***
			(0.006)	(0.024)
SIZE		-0.464***		-0.459***
		(0.025)		(0.025)
LEV		3.497***		3.492***
		(0.148)		(0.149)
ROA		0.980		0.895
		(0.605)		(0.608)
BOARD		-0.093***		-0.094***
		(0.016)		(0.016)
INDB		0.424		0.397
		(0.428)		(0.430)
GOVCON		0.672***		0.680***
		(0.058)		(0.058)
WEDGE		0.153***		0.154***
		(0.032)		(0.032)
MBRATIO		-0.577***		-0.582***
		(0.129)		(0.129)
Constant	-2.369***	5.457***	-1.484***	10.790***
	(0.027)	(0.527)	(0.069)	(0.610)
Year	NO	YES	NO	YES
Industry	NO	YES	NO	YES
Log Likelihood	-7753.3854	-6811.3386	-7665.7168	-6814.9861
N	24862	24862	24862	24862

Note. *, **, *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

5.2 Moderating Effect Regression Results

5.2.1 The Moderating Effect of Monetary Policy Tightening

Table 5.2 details how monetary policy tightening moderates the relationship between corporate diversification and financial distress. The most noteworthy result is the interaction term of corporate diversification and monetary tightening, HHI*M2, which has a significant and positive regression coefficient. This indicates that under the backdrop of monetary policy tightening, an increase in corporate diversification exacerbates the financial distress for firms.

To further verify the robustness of this result and visually present this effect, the study employed a simple slope test method and plotted a diagram to illustrate the moderating effect. Figure 5.1 depicts that the more stringent the monetary policy is, the greater the contribution of corporate diversification to financial distress. This finding has profound theoretical and practical implications. It reveals that under a tightening monetary policy environment, corporate diversification strategy might not always be a tool for reducing risk; instead, it could magnify certain underlying risks. This is particularly evident in a constrictive financial environment, as firms' difficulty securing financing increases, potentially exacerbating financial pressures due to diversification strategies.

Overall, it can be ascertained that monetary policy tightening positively moderates corporate diversification and financial distress. In other words, the more stringent the monetary policy, the more significant the impact of corporate diversification strategies in increasing financial distress, thereby providing strong empirical support for H3.

Table 5.2

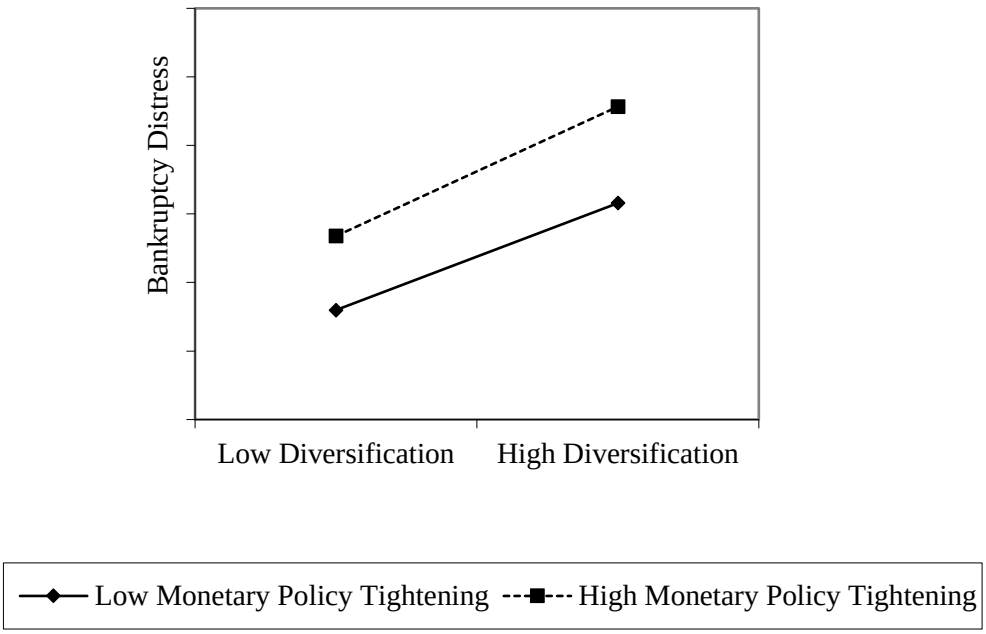
Results of the Moderating Effect of Monetary Policy Tightening

Variables	ST
HHI	0.717***
	(0.273)
M2	0.311***
	(0.024)
HHI*M2	0.041*
	(0.023)
SIZE	-0.463***
	(0.025)
LEV	3.497***
	(0.148)
ROA	0.985
	(0.604)
BOARD	-0.094***
	(0.016)
INDB	0.415
	(0.428)
GOVCON	0.671***
	(0.058)
WEDGE	0.153***
	(0.032)
MBRATIO	-0.584***
	(0.129)
Constant	10.694***
	(0.610)
Year	YES
Industry	YES
Log Likelihood	-6809.7218
N	24862

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

Figure 5.1

Illustration of the Moderating Effect of Monetary Policy Tightening



5.2.2 IPO Timing Moderating Effect Results

Table 5.3 demonstrates how the timing of the IPO modulates the relationship between corporate diversification and financial distress. Specifically, the regression coefficient for the interaction term HHI*IPOTIME, representing the interaction between corporate diversification and IPO timing, is negative and significant at the 0.01 level. This empirical finding is consistent with Hypothesis 4, suggesting that the timing of an IPO renders the impact of diversification on financial distress more positive. The rationale is that publicly listed companies have accumulated richer management experience and market resources, enabling them to implement diversification strategies effectively. This ensures robust performance across multiple markets and business sectors, reducing the likelihood of financial distress. This result implies that the effect of diversification strategy on financial distress is moderated by the time since

listing. Therefore, Chinese enterprises should pursue a diversification strategy only when the enterprise is sufficiently robust.

Table 5.3

The Impact of IPO Timing

Variables	ST
HHI	0.836***
	(0.197)
IPOTIME	0.128***
	(0.004)
HHI*IPOTIME	-0.062***
	(0.011)
SIZE	-0.502***
	(0.029)
LEV	2.680***
	(0.153)
ROA	1.541***
	(0.535)
BOARD	-0.112***
	(0.016)
INDB	0.411
	(0.426)
GOVCON	0.446***
	(0.057)
WEDGE	0.020
	(0.033)
MBRATIO	-0.133
	(0.130)
Constant	5.913***
	(0.584)
Year	YES
Industry	YES
N	24862

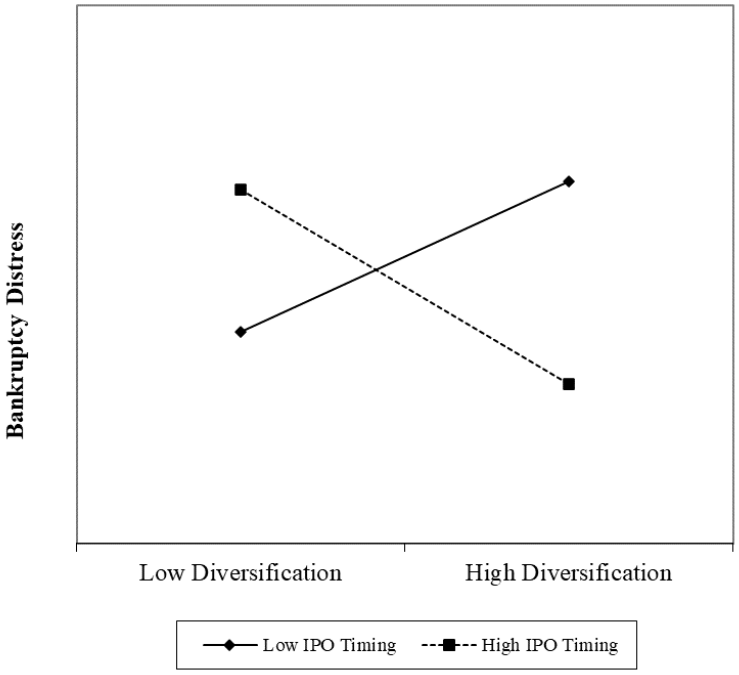
Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

Similarly, this study also presents a moderating effect diagram of IPO timing. Figure 5.2 depicts that when the IPO timing is relatively short, a positive relationship exists between corporate diversification and financial distress,

significantly increasing the firm's susceptibility to financial distress. However, as the IPO timing extends, this relationship shifts to a negative one, where diversification significantly reduces the firm's financial distress.

Figure 5.2

Illustration of the Moderating Effect of IPO Timing



5.3 Robustness Tests

To further validate the robustness of the conclusions drawn in this study, robustness tests were conducted by substituting variables and changing models.

5.3.1 Substituting Variables

To ensure the robustness of the study results, we adjusted the definition of corporate diversification. In the baseline regression, corporate diversification was measured using the Herfindahl-Hirschman Index (HHI), a commonly used indicator to measure the degree of corporate diversification. However, to verify whether our conclusions change with different diversification measures, we

chose another common method: the number of industries in which a company operates.

Table 5.4

Robustness Test 1: Alternative Variables

Variables	ST
Number of industries	0.032**
	(0.013)
SIZE	-0.467***
	(0.025)
LEV	3.489***
	(0.148)
ROA	0.941
	(0.605)
BOARD	-0.093***
	(0.016)
INDB	0.434
	(0.428)
GOVCON	0.675***
	(0.058)
WEDGE	0.154***
	(0.032)
MBRATIO	-0.586***
	(0.129)
Constant	5.499***
	(0.528)
Year	YES
Industry	YES
Log Likelihood	-6812.2007
N	24862

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

Table 5.4 shows the regression results using the number of industries as the diversification indicator. Column (1) results indicate a significant positive correlation between the number of industries a company operates in and its financial distress. This implies that the more industries a company is involved in, the greater its financial distress. The results show that this robustness test is

consistent with the previous analysis. This means the conclusions are robust regardless of which method measures corporate diversification.

5.3.2 Changing the Model

This section decided to use the Linear Probability Model (LPM) as another method for estimation to ensure the robustness and universality of our research conclusions. This approach was chosen to explore whether it would affect the results of our study.

Table 5.5

Robustness Test 2: Alternative Models

Variables	ST
HHI	0.020**
	(0.008)
SIZE	-0.042***
	(0.002)
LEV	0.336***
	(0.015)
ROA	0.146**
	(0.060)
BOARD	-0.006***
	(0.001)
INDB	0.081**
	(0.035)
GOVCON	0.058***
	(0.006)
WEDGE	0.015***
	(0.003)
MBRATIO	-0.068***
	(0.011)
Constant	0.780***
	(0.038)
Year	YES
Industry	YES
R^2	0.0751
N	24862

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

The related regression estimation results are detailed in Table 5.5. In these results, the coefficient between this and the company's financial distress is significantly positive when considering only the effect of corporate diversification. This implies that the more diversified a company's business operations, the higher its financial distress. Overall, when using the Linear Probability Model for estimation, our conclusions are highly consistent with the previous study's findings. This further demonstrates that the earlier results are robust and do not exhibit significant deviations due to the choice of model.

5.4 Analysis of Mediating Mechanism

The empirical studies above have shown that corporate diversification increases financial distress. The primary reason for this outcome is that diversification consumes a company's resources, making it challenging to sustain operations (Amihud & Lev, 1981; Rajan et al., 2000), thereby increasing financial distress. This study introduces the level of cash holdings (i.e., the ratio of cash holdings to total assets, denoted as CASH) as a mediating variable to analyze the mediating mechanism through which diversification affects corporate financial distress. It empirically tests whether diversification leads to financial distress by reducing a company's cash resources.

Table 5.6 presents the results of the mediation effect test based on the level of cash holdings. Column (1) shows the regression results of the relationship between corporate diversification and the level of cash holdings, while column (2) adds the level of cash holdings based on column (1). The results show that in column (1), the coefficient for corporate diversification is negative and significant, indicating that diversification reduces the level of cash holdings in

a company. In column (2), the coefficient for the level of cash holdings is significantly negative, suggesting that a decrease in cash holdings increases financial distress. These results indicate that the level of cash holdings is mediating: corporate diversification reduces cash holdings, leading to financial distress.

Table 5.6

Mediating Effect Test Results

Variables	CASH	ST
	（1）	（2）
HHI	-0.014***	0.227**
	(0.001)	(0.089)
CASH		-1.391***
		(0.455)
SIZE	0.002***	-0.460***
	(0.001)	(0.025)
LEV	0.012***	3.486***
	(0.003)	(0.148)
ROA	0.619***	1.710***
	(0.021)	(0.642)
BOARD	0.001**	-0.094***
	(0.000)	(0.016)
INDB	0.006	0.412
	(0.007)	(0.429)
GOVCON	0.000	0.672***
	(0.001)	(0.058)
WEDGE	0.001	0.154***
	(0.001)	(0.032)
MBRATIO	-0.012***	-0.597***
	(0.002)	(0.129)
Constant	-0.013	5.461***
	(0.010)	(0.530)
Year	YES	YES
Industry	YES	YES
N	24862	24862

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

5.5 Heterogeneity Analysis

5.5.1 Heterogeneity Analysis of Internal Control

To further understand how the quality of internal control affects the impact of diversification on corporate financial distress, we refer to existing research and use the internal control index provided by Shenzhen Dibo Enterprise Risk Management Technology Co., Ltd. to measure the quality of internal control in listed companies. Based on the annual median of the internal control index, we divided the samples into groups with higher and lower quality internal control and conducted regression analyses (H. Chen & Na, 2018; Song et al., 2023). After classifying the samples, we conducted detailed regression analyses on both groups to identify their differences. The detailed results of the analysis are presented in Table 5.7. These results show that diversification significantly increases financial distress in companies with higher-quality internal controls. This may imply that despite these companies excelling in internal controls, diversification still brings them greater risks. For companies with higher-quality internal controls, the impact of monetary policy tightening on their financial distress appears to be greater than that of companies with lower-quality internal controls. This may also reflect that companies with high-quality internal control are more sensitive to changes in macroeconomic policies.

The above results indicate that diversification and monetary policy tightening impacts on increasing financial distress are more significant in listed companies with higher-quality internal controls. This provides a new perspective, suggesting that the quality of internal control is an essential factor affecting the relationship between diversification and financial distress.

Table 5.7

Results of Heterogeneity Analysis Based on Internal Control

Variables	ST			
	Higher-quality internal controls		Lower-quality internal controls	
	（1）	（2）	（3）	（4）
HHI	0.491***		0.086	
	(0.152)		(0.109)	
M2		0.491***		0.294***
		(0.095)		(0.027)
SIZE	-0.313***	-0.303***	-0.409***	-0.407***
	(0.043)	(0.043)	(0.034)	(0.034)
LEV	3.264***	3.212***	3.351***	3.354***
	(0.315)	(0.316)	(0.162)	(0.162)
ROA	0.645	0.436	2.623***	2.600***
	(1.330)	(1.337)	(0.598)	(0.597)
BOARD	-0.166***	-0.167***	-0.066***	-0.066***
	(0.028)	(0.028)	(0.019)	(0.019)
INDB	-0.682	-0.700	0.870*	0.856*
	(0.748)	(0.750)	(0.507)	(0.508)
GOVCON	0.704***	0.718***	0.691***	0.694***
	(0.103)	(0.104)	(0.069)	(0.069)
WEDGE	0.268***	0.269***	0.091**	0.090**
	(0.057)	(0.057)	(0.038)	(0.038)
MBRATIO	-0.376	-0.389	-0.815***	-0.817***
	(0.240)	(0.240)	(0.163)	(0.163)
Constant	0.862	9.047***	4.578***	9.491***
	(1.130)	(1.350)	(0.692)	(0.800)
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES
Log Likelihood	-2427.6954	-2432.2719	-4184.4272	-4184.7336
N	12423	12423	12424	12424

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

5.5.2 Heterogeneity Analysis of Financing Constraints

We followed existing academic frameworks and methods to understand better how financing constraints affect the relationship between diversification

and corporate financial distress. Based on previous research, we chose the dividend payout ratio to assess the degree of financing constraints companies face. This indicator effectively reflects companies' difficulties and limitations in financing activities (Lian et al., 2010).

For an in-depth analysis, we used the annual median of the dividend payout ratio to divide all sample companies into two groups: one with higher financing constraints and the other with lower financing constraints. This classification aims to provide a clear contrast, helping us understand more accurately the impact of financing constraints on the relationship between diversification and corporate financial distress. The results of further regression analysis are detailed in Table 5.8, from which we can observe:

When a company's financing constraints are relatively high, its decision to engage in diversification activities is more likely to increase financial distress. This implies that diversification may not be the best strategic choice under limited funding conditions.

In the group of companies with higher financing constraints, the tightening effect of monetary policy on increasing financial distress is stronger than in the group with lower financing constraints. This indicates that changes in macroeconomic policies may bring greater risks for companies with financing difficulties.

In summary, for companies with higher financing constraints, diversification and the tightening of monetary policy may have a greater impact on their financial distress. These findings provide valuable insights, helping to understand how financing constraints play a role in the relationship between diversification and corporate financial distress.

Table 5.8

Results of Heterogeneity Analysis Based on Financing Constraints

Variables	Higher financing constraints		Lower financing constraints	
	（1）	（2）	（3）	（4）
HHI	0.469**		0.054	
	(0.208)		(0.098)	
M2		0.580***		0.269***
		(0.133)		(0.026)
SIZE	-0.124**	-0.116**	-0.448***	-0.447***
	(0.055)	(0.054)	(0.027)	(0.027)
LEV	1.941***	1.897***	2.641***	2.640***
	(0.441)	(0.442)	(0.149)	(0.149)
ROA	1.562	1.326	1.482***	1.471***
	(1.543)	(1.556)	(0.490)	(0.489)
BOARD	-0.121***	-0.126***	-0.061***	-0.061***
	(0.034)	(0.034)	(0.017)	(0.017)
INDB	-1.787	-1.853*	0.761*	0.759*
	(1.123)	(1.126)	(0.456)	(0.456)
GOVCON	0.582***	0.596***	0.628***	0.630***
	(0.145)	(0.146)	(0.062)	(0.062)
WEDGE	0.080	0.083	0.134***	0.134***
	(0.090)	(0.090)	(0.033)	(0.033)
MBRATIO	0.036	0.054	-0.460***	-0.460***
	(0.321)	(0.320)	(0.139)	(0.139)
Constant	-2.518*	7.186***	5.646***	10.149***
	(1.420)	(1.743)	(0.595)	(0.691)
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES
Log Likelihood	-1528.1214	-1530.3956	-4798.4624	-4798.6086
N	12368	12368	12434	12434

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

5.5.3 Heterogeneity Analysis of Audit Quality

In our analysis, considering the potential impact of external audit quality on business operations, we referred to existing academic research and chose a widely recognized measurement indicator. We used whether the accounting firm issuing the audit opinion is one of the so-called "Big Four" accounting firms

(generally viewed as institutions providing the highest quality audit services) as the criterion to assess the quality of external audits (Y. Xu et al., 2020).

To understand more precisely how external audit quality affects the relationship between corporate diversification and financial distress, we divided all sample companies into two groups based on the standard of audit quality: those with higher external audit quality (audited by Big Four accounting firms) and those with lower external audit quality (audited by non-Big Four accounting firms).

Our regression analysis results are detailed in Table 5.9: When non-Big Four accounting firms conduct the audit, the relationship between corporate diversification, monetary policy tightening, and financial distress appears more pronounced. This suggests that external audit quality may affect the strength of the relationship between business decisions and distress.

Overall, our research findings indicate that for companies with relatively poorer external audit quality, their diversification strategies and macroeconomic monetary policy changes, especially monetary policy tightening, are more likely to lead to higher financial distress. These findings are crucial for understanding how external audits bridge corporate diversification strategies and financial distress.

Table 5.9

Results of Heterogeneity Analysis Based on Audit Quality

Variables	Audited by Big Four accounting firms		Audited by non-Big Four accounting firms	
	（1）	（2）	（3）	（4）
HHI	-0.229		0.259***	
	(0.448)		(0.090)	
M2		0.224		0.326***
		(0.141)		(0.025)
SIZE	-0.143	-0.148	-0.465***	-0.460***
	(0.148)	(0.145)	(0.026)	(0.026)
LEV	3.159*	3.230*	3.485***	3.480***
	(1.798)	(1.766)	(0.150)	(0.150)
ROA	2.704	2.829	0.871	0.780
	(5.648)	(5.602)	(0.614)	(0.617)
BOARD	-0.068	-0.066	-0.091***	-0.092***
	(0.051)	(0.051)	(0.016)	(0.016)
INDB	-1.794	-1.739	0.548	0.517
	(1.896)	(1.865)	(0.444)	(0.447)
GOVCON	-0.155	-0.162	0.697***	0.706***
	(0.373)	(0.368)	(0.059)	(0.059)
WEDGE	0.374**	0.376**	0.145***	0.145***
	(0.147)	(0.147)	(0.032)	(0.032)
MBRATIO	0.395	0.357	-0.604***	-0.611***
	(0.771)	(0.768)	(0.133)	(0.133)
Constant	-1.246	2.503	5.426***	10.865***
	(2.731)	(3.276)	(0.564)	(0.646)
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES
Log Likelihood	-262.2851	-262.4029	-6483.2137	-6487.1619
N	1220	1220	23039	23039

Note. *, **, and *** indicate significance at the 10%, 5%, and 1% significance levels, respectively. Robust standard errors are in parentheses.

5.6 Summary

Based on detailed empirical analysis, this chapter finds that corporate diversification and monetary policy tightening positively correlate with corporate financial distress, indicating that both factors increase financial

distress to a certain extent. Additionally, monetary policy tightening positively moderates the relationship between corporate diversification and financial distress. To further ensure the reliability of the study, robustness tests using alternative variables and models were conducted, and the results support the conclusions mentioned above: corporate diversification and monetary policy tightening significantly increase financial distress, and monetary policy tightening has a significant positive moderating effect.

At the same time, we note that the timing of the IPO impacts these conclusions. Specifically, companies in the early stages of their IPO face significantly increased financial distress when diversifying. In contrast, more mature companies show a trend of reduced financial distress associated with diversification strategies. These findings emphasize the importance of considering the stage of a company's public listing in understanding the relationship between diversification strategy and financial distress.

The analysis of mediation mechanisms suggests that diversification strategies increase the likelihood of financial distress by reducing corporate cash holdings. The chapter also conducted extensive heterogeneity analysis: after exploring the heterogeneity of internal control, financing constraints, and external audit quality, it was found that for companies with higher internal control quality, greater financing constraints, and lower external audit quality, the impact of diversification and monetary policy tightening on financial distress is more pronounced.

6 Conclusions, Implications and Limitations

This chapter summarizes the key findings of the entire study, their profound implications for academia and practice, and highlights some limitations encountered during the research process.

6.1 Conclusions

Understanding the relationship between corporate strategies and financial distress in a complex and dynamic environment is crucial for businesses and policymakers. Based on this, our study explores the interactions between corporate diversification, monetary policy tightening, and corporate financial distress. After thorough theoretical analysis and empirical validation, the study concludes:

Corporate diversification leads to increased financial distress. As a strategy, corporate diversification aims to diversify risks, expand market share, and obtain diversified sources of income. However, our study finds a positive correlation between diversification and corporate financial distress. This suggests that while diversification can help companies spread certain risks, excessive diversification might lead to increased management complexity, resource dispersion, and weakening core competencies, thereby increasing the likelihood of financial distress.

Tight monetary policy elevates financial distress and positively moderates the relationship between diversification and financial distress. Monetary tightening generally signifies higher capital costs and a tightening credit environment. Our study confirms that tight monetary policy also increases corporate financial distress and amplifies the positive correlation between

diversification and financial distress. This is mainly because, in a tightening environment, it becomes more difficult for companies, especially those involved in multiple business areas requiring substantial funding, to obtain external financing. This exacerbates the financing pressure on diversified companies in a tight environment, thus increasing their financial distress.

Companies in the initial stages of an IPO often closely associate their diversification efforts with higher financial distress. Conversely, diversification strategies seem to reduce the possibility of financial distress for companies with a longer IPO history and established capital market presence. This finding highlights the importance of recognizing and understanding the role of a company's IPO stage in the relationship between diversification and financial distress.

Financing constraints and external audit quality have heterogeneous impacts. Companies with higher financing constraints typically face stricter financing limitations, making them more prone to funding shortages when diversifying. Therefore, diversification may further increase the financial distress for companies with higher financing constraints. Meanwhile, when non-Big Four firms audit companies, the positive correlation between diversification and financial distress becomes more significant. This might be because lower external audit quality may not fully reveal a company's risk status, leading to inadequate risk assessment during diversification.

From a theoretical perspective, existing research has extensively studied the risks associated with diversification, but controversy remains regarding the relationship between diversification strategies and corporate financial distress. On the one hand, our study introduces the macroeconomic indicator of monetary

tightening, exploring the interactive mechanisms between macroeconomic policy and corporate micro-decisions, thus expanding new theoretical perspectives. At the same time, by introducing the situational variable of IPO timing, our study offers a fresh perspective in understanding this complex relationship, helping to bridge gaps in existing research. Our findings support the view that diversification increases risk (Hitt et al., 1994; Khanchel El Mehdi & Seboui, 2011; Petrick et al., 1999; Y. M. Zhou, 2011), without refuting the perspective that diversification diversifies risks (Cao et al., 2019; Castanias & Helfat, 2001; Norton & Tenenbaum, 1993; Q. Yang et al., 2008). This study makes significant theoretical contributions while enriching the literature on diversification strategies.

6.2 Practical Implications

This study delves into the relationship between corporate diversification, monetary policy tightening, and financial distress, offering vital practical insights for business management, financial policy formulation, and investor decision-making.

Careful Assessment of Corporate Diversification Strategies: Diversification involves more than just seeking new markets and product lines to spread risks; it also involves reallocating corporate resources and testing management capabilities. Companies must move beyond the traditional view of diversification as merely risk spreading and deeply analyze the complexities that diversification strategies might bring. The Evergrande Group case vividly illustrates this point. Originating in real estate, Evergrande entered multiple industries through diversification, including finance, health, sports, and automobiles. While initially leading to rapid expansion, this strategy eventually

exposed Evergrande to significant debt issues. Diversification led to overdispersion of resources and diluted management focus, reducing investment and attention in its core real estate business and ultimately triggering a severe financial crisis. This underscores that diversification is not just a market strategy but also a matter of resource allocation and management. Excessive diversification might dilute management resources and reduce core competitiveness.

Sensitivity to Monetary Policy: Businesses must remain sensitive to monetary policy adjustments, promptly adapting their financing and operating strategies. During periods of monetary tightening, central banks often raise interest rates and reduce market liquidity to control inflation. Such policy direction can increase corporate financing costs, especially for companies heavily reliant on external financing, significantly burdening their debt. Evergrande Group's rapid expansion, leveraging high debt and leverage during China's real estate boom, made it heavily dependent on continuous capital market financing and real estate market prosperity. However, in 2018, the Chinese government implemented stricter monetary policies and regulatory measures targeting the real estate sector, leading to market cooling and tighter financing channels. This directly impacted Evergrande's cash flow, culminating in serious financial distress. This highlights that during periods of monetary tightening, especially for diversified businesses, financial pressure can increase, necessitating a focus on effective internal resource utilization and avoiding unnecessary expansion.

Attention to the Impact of IPO Timing: businesses should adopt different management strategies and operating methods to ensure healthy and robust

development depending on the post-IPO stage. Companies in the early stages of an IPO often have high growth potential but face resource constraints and market uncertainties. At this stage, companies should be more cautious about diversification. While it can increase market share and spread risks, it may also lead to resource dispersion and management complexity. Start-ups should thoroughly assess their resource capabilities and management levels to ensure that expansion doesn't detract from their core business focus.

Moreover, they should prioritize internal capacity building to lay a solid foundation for future diversification. More mature post-IPO companies might consider diversifying into new markets or industries as they typically have more stable financial resources. However, even at this stage, a cautious approach is advisable, with comprehensive assessments of the potential risks of diversification. Regardless of the stage, sensitivity to monetary policy changes is an indispensable capability for any company. Therefore, corporate diversification decisions should be based on a detailed analysis of both internal and external environments.

Proper Management of Financing Constraints and Audit Quality: Diversification strategies can increase risk for companies with high financing constraints. Therefore, companies must thoroughly consider their financing capabilities and market conditions before deciding on diversification, ensuring sufficient resources to support their strategies. Additionally, choosing high-quality external audit services can provide more accurate and transparent financial information to shareholders and investors and help companies better identify and manage potential risks from diversification. Companies should value collaborations with renowned, experienced accounting firms to enhance

audit quality, thereby improving their risk management level.

Policy Makers Should Pay More Attention to the Impact of Macro Policies on Micro Market Entities: In formulating macroeconomic policies, policymakers often aim to achieve overall economic stability, control inflation, and promote employment. However, adjustments in monetary policy, such as changes in interest rates and the money supply, affect not only the operation of the entire economic system but also directly impact micro market entities – businesses, influencing their operating behaviours and risk conditions. Policymakers need a clear understanding of this macro-micro interaction and incorporate it as an indispensable part of policy-making. To this end, policymakers should establish and refine a framework for macro-micro linkage analysis, strengthen communication and information exchange with businesses, and understand the impact of policy changes on business operations to make more scientific and rational decisions. Additionally, they can design flexible policy tools to strengthen businesses' support, helping them stabilize operations amid monetary policy changes, thereby achieving both macroeconomic stability and healthy development of micro entities.

In summary, although a diversification strategy might increase the overall financial distress for businesses, particularly in the context of monetary policy tightening, where such risk seems to be further amplified, it reduces financial distress for more mature enterprises. For instance, the business empire of Li Ka-Shing was established through meticulous planning and execution of diversification strategies across various domains such as real estate, retail, telecommunications, port operations, and energy. To mitigate the adverse effects of monetary policy tightening, Li Ka-Shing ensured stable business growth even

with rising capital costs by maintaining a healthy balance sheet and ample liquidity. Furthermore, by diversifying investments across different industries and regions, Li Ka-shing's enterprises could spread the risks that might arise from any single market or industry, a strategy particularly crucial during periods of monetary tightening as it could alleviate the impact on specific areas. Moreover, Li Ka-Shing demonstrated the capability to flexibly adjust investment strategies in varying market conditions, promptly adapting the business direction and investment focuses in response to economic environments and policy changes, thereby discovering new growth avenues amid changes. Thus, the practice of diversification investments by Li Ka-Shing highlights the importance of precise market selection, robust financial management, effective risk dispersion, and flexible strategic adjustments when implementing a diversification strategy. Diversification can lower financial distress and yield considerable growth and profit for mature enterprises, even against monetary policy tightening. Therefore, efficient diversification investments are not only feasible but also a strategically advisable choice in today's complex and changing economic landscape.

6.3 Limitations

Despite providing in-depth insights and significant practical implications, this study has limitations. First is the issue of the time. The limited time frame of this study might restrict the observation of some long-term effects or trends. Longer-term research could reveal different relationship patterns or more complex interactions.

Although we have incorporated variables such as diversification strategy and monetary policy tightening, other variables not considered in our model

could significantly impact corporate financial distress difficulties. These variables span both macroeconomic aspects, such as the state of the economy, uncertainty of economic policies, and trade credit, and micro-level corporate issues, including principal-agent problems, corporate governance, the financialisation of real enterprises, and the application of technology.

Furthermore, concerning the mechanisms through which diversification influences financial distress difficulties, our study only considered the level of cash holdings as a mediating variable. However, the underlying mechanisms are complex, encompassing the impact of diversification on indicators such as Return on Assets (ROA) and Return on Equity (ROE), which also merit further exploration. Lastly, there are issues regarding the rigour of case studies. Limited by the availability of data and other factors, the study's case analysis of Evergrande Group is not as in-depth as possible. All these points offer directions for further research in the future.

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