

Corporate Managerial Overconfidence and Debt Default Risk——A Case Study of Evergrande Group

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Abstract:

In recent years, China's real estate industry has faced severe debt risks under the "housing is for living, not for speculation" policy. This policy orientation, emphasizing the fundamental attribute of housing as a residence rather than an investment vehicle, has gradually tightened financing channels for real estate enterprises. The debt crisis of Evergrande Group, the world's most indebted real estate enterprise, has attracted widespread attention. Based on behavioral finance, this paper takes Evergrande as a case to explore the impact mechanism of managerial overconfidence on debt default risk. It is found that the management of Evergrande showed significant irrational characteristics in strategic decision-making: ignoring policy regulations, maintaining high-leverage operations through debt financing, and suffering governance failures due to centralized family control. The study reveals that managerial overconfidence has a stronger explanatory power for debt risks than traditional financial indicators, providing a new perspective for debt default research and practical implications for corporate governance reform, industry risk prevention, and policy optimization.

Keywords: Managerial Overconfidence, Debt Default Risk, Evergrande Group, Behavioral Corporate Finance, Case Study

1 Introduction

1.1 Research background

In recent years, debt default risks have frequently occurred in China. As a capital-intensive industry, the real estate sector inherently faces high debt risks due to its high-leverage operation model and policy

sensitivity. Especially under the "housing is for living, not for speculation" policy, intensified regulatory measures have highlighted liquidity pressures on real estate enterprises. The debt crisis of Evergrande Group, the world's most indebted real estate enterprise, stems not only from external shocks such as industry cyclical adjustments and policy regulations but also from radical strategic decisions triggered by

managerial overconfidence. The introduction of the “Three Red Lines” policy in 2020 pushed many enterprises into liquidity crises and debt defaults, with Evergrande’s enormous debt attracting public attention.

Existing literature on debt defaults mainly focuses on formal institutional perspectives, analyzing structural factors such as the macroeconomic environment, industry characteristics, and corporate governance mechanisms. However, the analytical framework based on behavioral corporate finance theory indicates that the dominant role of corporate managers in financial decision-making cannot be ignored. Their cognitive biases often lead to decision-making behaviors deviating from the rational economic man hypothesis, thereby affecting corporate resource allocation efficiency and risk-bearing levels. This paper breaks through the paradigm limitations of traditional research by incorporating managerial overconfidence, an informal institutional factor, into the analytical framework, aiming to reveal its driving mechanism on corporate financial decision-making and default risks in a dynamic environment.

1.2 Research significance

Theoretical significance

Most existing corporate governance theories are based on the rational person perspective, with limited discussion on managerial irrationality. This paper combs through behavioral finance, debt crisis theory, and upper echelon theory by taking Evergrande Group as a case. By studying governance failures caused by managerial irrational behaviors, it clarifies the debt risks triggered by managerial overconfidence, providing effective theoretical references for corporate governance theory.

Practical significance

The debt crisis of Evergrande Group has a wide range and deep impact. This paper attempts to study the debt default risks triggered by managerial overconfidence through this debt default case, which can provide enterprises with methods to identify signals of irrational decisions, such as radical expansion and blind diversification, help enterprises establish managerial behavior early-warning mechanisms, enhance risk control capabilities, and avoid repeating past mistakes.

2 Literature review

2.1 Research on managerial overconfidence

According to Heaton, overconfident managers overestimate their control over the enterprise and the correctness of their decisions, relying excessively on internal financing or debt financing in financing decisions, as they firmly believe that the enterprise is undervalued by the market and issuing stocks will damage shareholders’ interests

[1]. Malmendier and Tate pointed out that managerial overconfidence is manifested as blind optimism about the enterprise’s future prospects, and they tend to favor high-risk and large-scale projects in investment decisions, often underestimating potential project risks and overestimating project returns, thus triggering overinvestment behavior. This view was verified in investment decision analysis after identifying overconfidence through managers’ stock purchase behaviors in a large number of enterprise samples [2]. Hayward and Hambrick found through research on media report tones that if the media frequently describes managerial decisions and enterprise development in a positive and praising tone, it is easy to make managers develop overconfident psychology. This overconfidence formed based on external public opinion feedback will further affect their decisions in strategic formulation, resource allocation, and other aspects, prompting enterprises to adopt more radical development strategies [3]. Grinblatt and Keloharju proposed from the perspective of relative salary rankings that when managers have a high salary ranking in the same industry or within the company, they are prone to overconfident emotions. In subsequent business decisions, such managers are more likely to ignore market risks and make decisions that deviate from the enterprise’s steady development path, such as excessive aggressiveness in business expansion and involvement in unfamiliar fields [4].

In terms of measuring managerial overconfidence, scholars have used various methods, including changes in managerial shareholdings [1], media report tones [3], relative salary rankings [4], etc. Among them, Malmendier and Tate identified overconfidence through executives’ continuous rising of company stocks, a method widely used in subsequent research [2].

2.2 Research on debt default risk

Jarrow and Turnbull pointed out that the macroeconomic cycle has a systematic impact on debt default risks. During economic downturns, enterprises’ revenue declines and financing costs rise, leading to significantly higher default probabilities than during economic expansions, especially for capital-intensive industries such as real estate and infrastructure [5]. Shumway’s empirical study on U.S. listed companies found a positive correlation between industry competition intensity and debt default risk. Enterprises in highly competitive industries tend to adopt radical financing strategies to maintain market share, thereby exacerbating default risks [6]. Bhojraj and Sengupta emphasized the inhibitory effect of corporate governance structures on debt defaults, believing that enterprises with stronger board independence and higher equity concentration can reduce overinvestment and high-leverage risks through scientific decision-making, thereby reducing the possibility of debt defaults [7]. In terms of default risk measure-

ment models, Ohlson constructed a Logistic regression model, which solved the nonlinear fitting problem in default probability prediction by selecting financial indicators such as the current ratio and market value/book value of equity [8].

3 Conception and theoretical basis

3.1 Conception

3.1.1 Managerial overconfidence

In psychological research, this cognitive characteristic originates from self-attribution bias, involving overestimation of one's judgment and control abilities. With the deepening of behavioral finance research, this psychological bias of excessive self-optimism has been introduced into economic analysis. In the economic field, managerial overconfidence is defined as enterprise managers having an overly optimistic estimate of their decision-making abilities, professional judgments, and enterprise development prospects, manifested as overestimating their resource integration capabilities, underestimating decision-making risks, and firmly believing that personal judgments are superior to market consensus.

3.1.2 Debt default risk

Debt default refers to the debtor's failure to fulfill the obligation of repaying mature debts in accordance with the terms and conditions of the contract, and its essence is the failure of the debtor's credit commitment in the creditor-debtor relationship. Countries, enterprises, and individuals can all become default subjects. This paper focuses on corporate debt defaults. From a legal perspective, when a debtor fails to perform obligations under a debt contract and causes damage to the creditor's interests, it constitutes a debt default; from the perspective of economic phenomena, its essence is that an enterprise cannot repay mature debts on time due to capital chain rupture. When debt defaults occur, they may lead to investor trust crises, causing stock prices to fall and forming debt crises. If the borrower is unable to repay the debt, it may also lead to corporate bankruptcy..

3.2 Theoretical basis

3.2.1 Debt crisis theory

The debt crisis theory is a theoretical system that explains the systematic risks triggered by excessive debt burdens and loss of solvency in enterprises or economies, covering both macro-financial stability and micro-corporate financial risks. From an enterprise perspective, debt crises are manifested as the inability to repay mature debts, capital chain rupture, sudden credit rating downgrades, or even

bankruptcy liquidation. Their essence is the dynamic imbalance between debt scale/structure and enterprise cash flow/asset value. The core goal of this theory is to reveal the internal mechanisms of debt risk accumulation, transmission, and outbreak, providing theoretical support for risk early warning and crisis governance.

3.2.2 Upper echelons theory

The upper echelons theory was proposed by Hambrick & Mason, which argues that enterprise strategic choices and performance are not entirely based on rational decisions but are deeply influenced by managers' cognitive structures values, and personal characteristics [9].

Due to executives' inability to fully understand information at every level of the company, managers' knowledge structures and past experiences constitute their decision-making "cognitive schema", and inherent thinking awareness may lead to decision-making biases. Due to differences in personal characteristics and cognitions, managers will show significant differences in decision-making. According to the upper echelons theory, managers' demographic characteristics are key factors affecting managerial decisions. According to Jiang Fuxiu's research results, managers' professional background characteristics can explain overinvestment behavior [10, 11]. Peng and Wei found that male managers have a higher average level of overconfidence than female managers, and the phenomenon of overconfident psychology is more common [12].

4 Case description

4.1 Basic information

Founded by Xu Jiayin in Guangzhou in 1996 and listed in Hong Kong in 2009, Evergrande Group initially focused on real estate development. It later expanded into finance, internet, culture, sports, tourism, and other industries. Renamed "China Evergrande Group" in 2016, it launched a diversified strategy, forming five business segments: "real estate + new energy vehicles + cultural tourism + health + finance". In the same year, it ranked 122nd in the Fortune Global 500, won 16 national honors and the first place in the comprehensive strength of Chinese real estate enterprises, with a brand value of 39.262 billion yuan. From 2012 to 2018, Evergrande maintained the dual crown of sales volume and area for seven consecutive years, becoming the largest real estate developer in China and globally.

4.2 Development history of the enterprise

The development of Evergrande Group began in 1996 when Xu Jiayin founded Evergrande Real Estate in Guangzhou. During the Asian financial crisis, he obtained a bank loan through negotiation skills to acquire the first

piece of land and entered the Guangzhou property market with a low-price strategy. In 1998, the State Council abolished the welfare housing system, and Evergrande rose rapidly by leveraging the housing reform. It ranked among the top 10 real estate enterprises in Guangzhou within three years of its establishment, then continued to expand through financing, massive land acquisitions, and low-price sales. In 2004, Evergrande adjusted its strategy to focus on brand image and high-quality residential development, paving the way for national expansion; since 2006, it entered first- and second-tier cities, obtained over \$1 billion in financing, and ranked among the top 20 Chinese real estate enterprises.

In 2009, Evergrande was listed in Hong Kong, accelerating its national layout with over 400 billion yuan in financing. It also initiated diversification during this period: acquiring Guangzhou Football Club in 2010, establishing Evergrande Health and launching Evergrande Spring in 2013, with sales exceeding 100 billion yuan that year. Evergrande Wealth was established in 2015, and it was renamed China Evergrande Group in 2016. In 2017, Xu Jiayin topped China's rich list with a wealth of 290 billion yuan. The same year, Evergrande proposed shifting from the "three highs and one low" model ("high debt, high leverage, high turnover, low cost") to the "three lows and one high" model ("low debt, low leverage, low cost, high turnover"). However, due to misjudgments about the industry cycle, it still aggressively acquired land with over 100 billion yuan in 2016-2017 under the "housing is for living, not for speculation" policy, maintaining the leading land reserve scale in the industry.

In 2018, Evergrande announced plans to enter the new energy vehicle sector by establishing Evergrande Auto, investing over 40 billion yuan in 2019 to layout the entire industry chain and further expanding its diversified territory. However, the high debt accumulated from previous radical expansions posed hidden risks: interest-bearing liabilities reached 133.8 billion yuan in 2013, new land reserves of 130 million square meters in 2017 hit a record high, with cultural tourism projects accounting for nearly 40%, intensifying capital chain pressures. When the "Three Red Lines" policy was introduced in 2020, Evergrande failed to meet all three indicators; since June 2021, frequent bill defaults and bank lawsuits occurred, with S&P and Moody's continuously downgrading its ratings, leading to the full outbreak of the debt crisis.

4.3 The full process of Evergrande's debt default incident

Evergrande's debt crisis originated from its A-share listing plan in 2016. To return to the domestic capital market, the group introduced 130 billion yuan in strategic investments, agreeing to complete restructuring and listing by

2021. However, due to real estate policy adjustments, the listing failed, triggering the investment repurchase clause. Eventually, 86.3 billion yuan of strategic investment was converted into shares, 39.4 billion yuan was taken over by state-owned institutions, and the remaining 4.3 billion yuan in cash repurchase became the starting point of the actual controller's personal debt. During this period, Evergrande had shown radical expansion: land reserves reached 130 million square meters in 2017, with 40% used for cultural tourism projects; it crossed into new energy vehicles in 2018, investing over 40 billion yuan, but only delivered thousands of vehicles by 2022, with related businesses gradually becoming financing tools.

In August 2020, the Ministry of Housing and Urban-Rural Development and the People's Bank of China introduced the "Three Red Lines" financing policy, marking a turning point in the crisis. As the only leading real estate enterprise failing all three indicators, Evergrande's interest-bearing liabilities were capped at 835.5 billion yuan, with overseas financing costs soaring to over 10%—far higher than the industry average of 5%.

In mid-2021, liquidity crises emerged: in June, 200 billion yuan in commercial acceptance bills defaulted, causing supplier disruptions; in July, \$131 million in overseas bond interest defaulted. Despite the actual controller cashing out 2.68 billion Hong Kong dollars by reducing shareholdings, the pressure remained unrelieved. Subsequent discounted property sales triggered market panic, with sales in July and August dropping by 46% and 47% year-on-year, over 2,000 projects nationwide halting construction, 1.12 million apartments remaining unfinished, affecting 3 million families.

In December 2021, Evergrande announced a \$260 million bond default, uncovering its debt black hole: audited total liabilities reached 2.4 trillion yuan, equivalent to six times Taiyuan's GDP in 2021. It was also revealed that it had inflated revenue by 560 billion yuan and profits by 92 billion yuan from 2019-2020, while the audit firm failed to detect issues for 14 consecutive years. More seriously, the actual controller's family transferred 47.8 billion yuan through dividends, trusts, etc., and his spouse hid \$60 billion in overseas assets (including villas and Bitcoin) through divorce, increasing debt recovery difficulties.

In September 2023, the actual controller was subject to measures for suspected violations, initiating judicial accountability. In January 2024, the Hong Kong court issued a liquidation order, and 42 executives were prosecuted for illegal fundraising, financial fraud, etc. Evergrande Wealth's high-interest financial products caused 100,000 investors to lose money, while management cashed out early—investors only recovered 17% of their principal. As of March 2025, debt restructuring has progressed slowly: the overseas plan was partially approved, with 208.4 billion yuan in domestic liabilities and 326.3 billion

yuan in overdue commercial bills remaining, and the asset liquidation rate is expected to be less than 30%. Some high-quality assets, such as Zimbabwean lithium mines, have been transferred to family trusts, further hindering debt resolution.

5 Case analysis

5.1 Measurement of managerial overconfidence

5.1.1 Managerial personal characteristics method

As the founder of Evergrande, Xu Jiayin led the company to the industry's leading position in an extremely short

time. With a shareholding ratio of 65.77%, he enjoyed absolute control within the group, which easily fostered managerial overconfidence.

5.1.2 Managerial shareholding ratio method

Proposed by Malmendier and Tate [2], the executive shareholding ratio method analyzes whether executives exhibit overconfidence by studying their shareholding ratios under different operational conditions. This is one of the commonly used research methods by domestic and foreign scholars. Typically, executives' stock purchases indicate strong confidence in the company's future. If managers continue to hold or even increase their shares during poor performance or when a crisis looms, there is a high probability of overconfidence.

Table 1. The shareholding of managers and the year-on-year growth rate of net profit.

Year	2015	2016	2017	2018	2019	2020	2021	2022
Xu Jiayin's shareholding (100 million shares)	101.62	101.62	101.62	101.62	101.62	101.62	78.93	78.93
Year-on-year growth rate of net profit(%)	-4.42	-26.74	221.49	63.05	-50.07	-6.81	-2312.45	81.74

As shown in Table 1, during the years of declining year-on-year net profit growth from 2018 to 2020, Xu Jiayin still held the same number of shares, demonstrating the management's confidence in the enterprise and indicating the presence of overconfident psychology.

5.2 Causes of managerial overconfidence

5.2.1 Managerial personal characteristics

Evergrande's success has brought enormous confidence to the management, leading them to attribute success to personal capabilities such as strategic vision and execution, rather than industry trends, policy dividends, or chance factors.

Managerial gender also influences risk levels, as suggested by Khan and Vieito's research [13]. They argue that en-

terprises with female CEOs exhibit lower risk levels than those with male CEOs.

Additionally, according to Wang Weixing and Zhang Jijia's study [14], there is a positive correlation between an enterprise's credit risk level and the age and education background of its managers.

5.2.2 High degree of corporate centralization

According to Evergrande's 2022 annual report, the largest shareholder is Xinxin (BVI) Co., Ltd., with Xu Jiayin as the actual controller holding 59.78% of the shares. Adding his wife Ding Yumei's 5.99% stake, Xu Jiayin's total shareholding reaches 65.77%, demonstrating his absolute control over Evergrande, as can be seen in table 2. Combined with Evergrande's successful history, this has made managers more prone to overconfidence.

Table 2. The number of shares held by shareholders and the shareholding ratio.

Ranking	Shareholder	Number of shares held (100 million shares)	Shareholding ratio(%)
1	Xinxin (BVI) Limited	78.93	59.78
2	Yaohua Limited	7.912	5.99
3	Ding Yumei	7.912	5.99
4	Junrong Holdings Limited	7.912	5.99
	Total	102.666	77.75

5.3 The impact of overconfidence on Evergrande's debt crisis

5.3.1 Impact on investment decisions

As shown in Fig. 1, Evergrande Group's ROI approached zero from 2015 to 2020 and turned negative in 2021 and 2022, indicating low investment efficiency. China Resources Land's ROI consistently exceeded that of Evergrande, which is related to the strategic direction of the enterprises and the overconfident behavior of managers. Evergrande's management tended to adopt radical investment strategies, while China Resources Land preferred rational and risk-averse decision-making.

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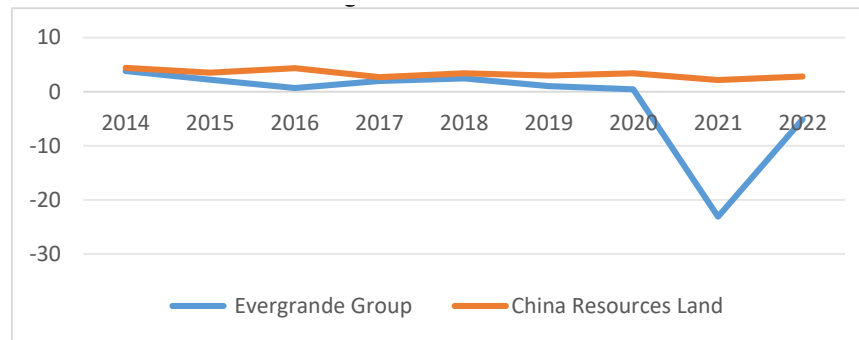


Fig. 1. Return on Investment (ROI).

5.3.2 Impact of overconfidence on financing behavior

(1) Analysis of cash flows from financing activities: From 2015 to 2022, the net cash flow from financing activities showed significant fluctuations. It peaked in 2016, with subsequent ups and downs, but overall hit lows in 2018, 2021, etc., reflecting continuous adjustments in financing scale and pace according to development stages and market conditions. For example, financing might increase during the rapid expansion period, while debt pressures

and changes in the financing environment in later stages affected the balance between financing inflows and outflows.

(2) Comparison of cash flows from financing and operating activities: As shown in the Fig.2., from 2015 to 2022, the net cash flow generated by Evergrande's operating activities was mostly negative, with positive cash flow achieved in only 3 years, indicating that funds could not cover daily needs.

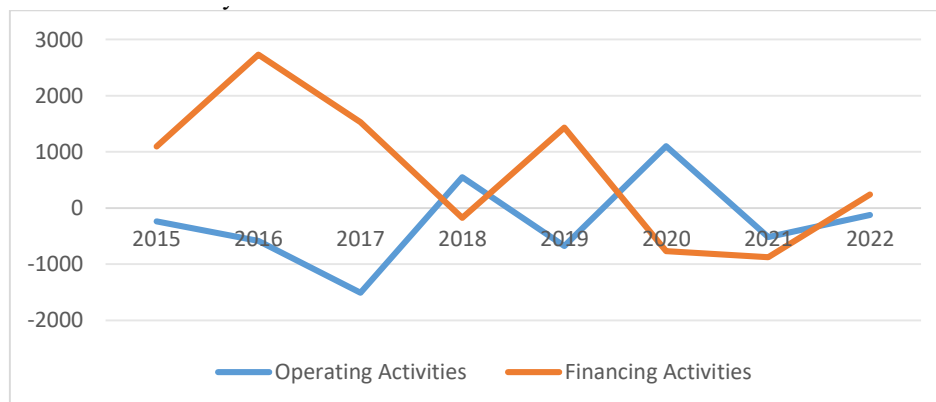


Fig. 2. Comparison of cash flows from financing activities and operating activities

(3) Analysis of financing structure: As shown in Fig.3, the equity-to-asset ratio was far lower than the debt-to-asset ratio, indicating the enterprise's reliance on debt financing.

From 2014 to 2022, Evergrande's debt-to-asset ratio was mostly above 80%, and the unbalanced financing structure increased the enterprise's debt repayment pressure.

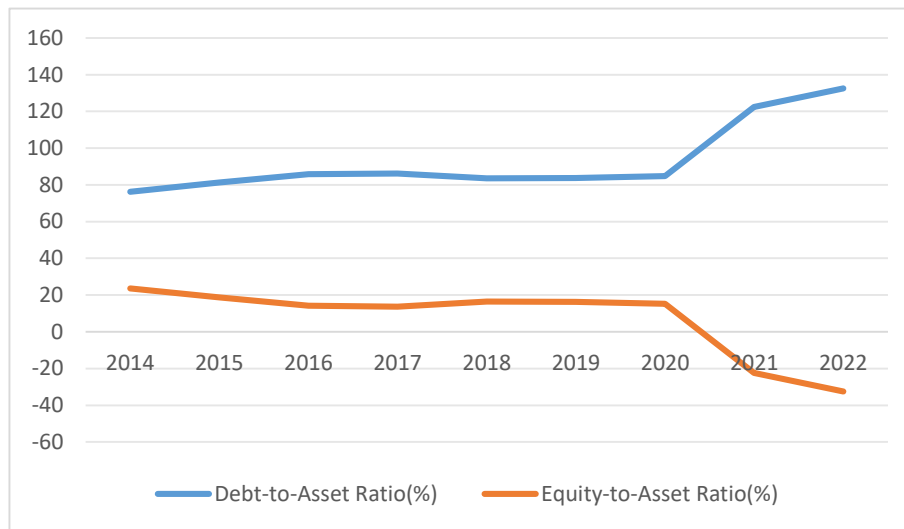


Fig. 3. Analysis of financing structure

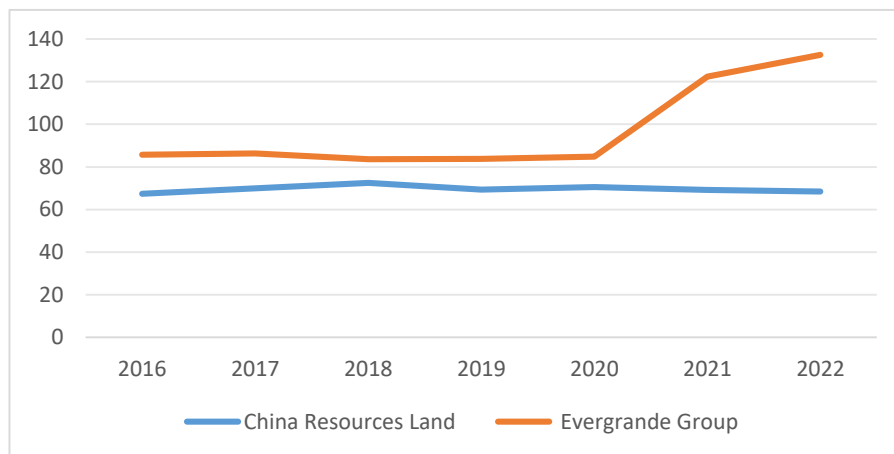


Fig. 4. Debt-to-Asset ratio comparison

As known from Fig. 4, Evergrande Group's debt-to-asset ratio changed little from 2016 to 2020, but it rose sharply from 2020 to 2021, even exceeding 100% in the later period, indicating that the company's assets could no longer cover its liabilities, and the financial risk was extremely high. The debt-to-asset ratio of China Resources Land performed smoothly, maintaining a healthy asset-liability level, in line with the steady operation strategy. Evergrande managers' overconfident psychology led to excessive expansion and financing policies. Compared with Evergrande Group's high-leverage model, China Resources Land managers reasonably controlled the scale of liabilities and leverage levels.

6 Conclusion

This study takes Evergrande Group as a case to deeply analyze the impact mechanism of managerial overconfidence on debt default risk. The research finds that the overcon-

fidence tendency of Evergrande's managers runs through the entire process of corporate strategic decision-making, financial behavior, and governance structure. This is manifested in ignoring industry policy regulations, continuous radical land acquisitions and high-premium mergers leading to deteriorating asset quality; relying on debt financing to maintain high-leverage operations with a debt-to-asset ratio consistently above 80% and negative operating cash flow for three consecutive years; and a "monopolistic" decision-making mechanism formed by over 65% family ownership, resulting in the failure of independent director and creditor supervision. These irrational behaviors eventually pushed up corporate risks. When the debt crisis broke out in 2021, Evergrande's stock price plummeted by 90%, and its credit rating was downgraded to "junk," becoming a typical case of systematic risks triggered by managerial psychological biases.

Theoretically, this paper validates the applicability of behavioral corporate finance theory in real estate enterprises,

revealing the driving path of managerial overconfidence on debt risks—through the transmission chain of “strategic recklessness → inefficient investment → cash flow disruption → financing constraints,” pushing enterprises into the abyss of default. Compared with traditional financial indicators (such as debt-to-asset ratio), managerial psychological traits have a more significant explanatory power for debt risks, providing a micro-psychological motivation perspective for debt default research.

Practically, the study offers important insights for corporate governance: enterprises need to establish behavioral early-warning mechanisms to monitor overconfidence through indicators such as changes in executive shareholding ratios and earnings forecast deviations; optimize governance structures by introducing independent directors and creditor committees to balance the power of the “top leader.” For the real estate industry, policy adaptive adjustments are imminent. Real estate enterprises should abandon the extensive “high-leverage-high-turnover” model, focus on core business development, and avoid blind diversification; financial institutions should incorporate managerial psychological traits into credit evaluation systems and be alert to irrational signals such as high-premium mergers and frequent guarantees. In policy formulation, penetrative supervision should be strengthened, off-balance-sheet liabilities of real estate enterprises should be strictly investigated, the proportion of non-core business investments should be restricted, and the bankruptcy reorganization mechanism should be improved to prevent systemic risk contagion.

Although this study reveals the internal relationship between managerial overconfidence and debt default, it still has certain limitations. The case study data mainly come from public information, and field research is difficult, which may lead to incomplete data. The case study method has limitations, and the lack of an empirical process may cause the conclusions to be only applicable to specific companies. Therefore, the conclusions of this paper need to be verified again using empirical methods to enhance the universality of the research findings.

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