THE IMPACT OF EARNINGS MANAGEMENT ON CAPITAL STRUCTURE DECISION-MAKING FROM THE PERSPECTIVE OF ACCOUNTING INFORMATION QUALITY: A CASE STUDY OF LONGI GREEN ENERGY TECHNOLOGY CO., LTD

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This Independent Study has been Approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

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ABSTRACT

This study examined the impact of earnings management on capital structure decision-making from the perspective of accounting information quality, using LONGi Green Energy Technology Co., Ltd. as a representative case for in-depth analysis. The research aimed to comprehensively and systematically reveal whether different types of earnings management behaviors— earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—affected accounting information quality, thereby influencing corporate capital structure decision-making, as well as the intrinsic connections and underlying mechanisms among these factors.

Based on relevant financial theories and empirical research findings, the study constructed an integrated analytical model that incorporated various types of earnings management, indicators of accounting information quality, and variable related to capital structure decision-making. The research hypotheses and model were rigorously tested. Specifically, the study analyzed the distinct effects of four core independent variables—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—on capital structure decision-making.

A quantitative research approach was adopted, with data collected through questionnaire surveys. A total of 400 questionnaires were distributed, and 328 valid responses were collected, resulting in an effective response rate of 82.0%. During data processing and analysis, multiple statistical methods and analytical tools were employed to ensure the accuracy and reliability of the findings. The results indicated that earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management all had significant impacts on the capital structure decision-making of LONGi Green Energy Technology Co., Ltd.

Based on these findings, this study proposes strategic recommendations for LONGi Green Energy Technology Co., Ltd. and related enterprises from the perspective of enhancing accounting information quality to optimize capital structure decision-making: (1) Strengthen the identification and monitoring mechanisms for earnings management; (2) Optimize the design of financial management and decision-making processes; (3) Enhance external information communication and transparency management.

Keywords: earnings management, capital structure decision-making, LONGi Green Energy Technology Co., Ltd, earnings management through accounting estimates, earnings management through operating activities, income smoothing management, target-oriented earnings management.

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LIAO WUHONG

DECLARATION

I, LIAO WUHONG, hereby certify that the work embodied in this independent study entitled *"The Impact of Earnings Management on Capital Structure Decision-Making from the Perspective of Accounting Information Quality: A Case Study of LONGi Green Energy Technology Co., Ltd"* is result of original research and has not been submitted for a higher degree to any other university or institution.

(LIAO WUHONG)
December 11, 2025

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Chapter 1 Introduction

1.1 Background of the Study

Financial decision-making plays a crucial role in the survival and development of enterprises, with capital structure decision-making being one of its core components. A reasonable capital structure can effectively reduce financing costs, optimize financial leverage, and enhance enterprise value. The scientific basis of capital structure decision-making largely relies on high-quality accounting information. As a key reflection of a company's financial position, operating performance, and cash flows, accounting information provides decision-making foundations for stakeholders such as managers, investors, and creditors. The quality of accounting information directly affects the accuracy and effectiveness of capital structure decision-making (Myers & Majluf, 2021).

Earnings management refers to a common practice in corporate management where executives actively adjust earnings to achieve specific objectives by selecting accounting policies or arranging operational activities within the framework of accounting standards. The presence of earnings management can impact accounting information quality in various ways. Moderate earnings management may help smooth profit volatility and convey positive signals, thereby enhancing a company's market image and financing capacity to some extent (Dichev et al., 2023). However, excessive earnings management may lead to distorted accounting information, misguide stakeholder decisions, and negatively affect a company's capital structure decision-making.

Earnings management mainly includes earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management. Earnings management through accounting estimates influences a company's earnings level by adjusting accounting estimation methods, such as the useful life of fixed assets or the provision ratio for bad debts. Earnings management through operating activities focuses on arranging and adjusting a company's daily operational activities. Income smoothing management aims to maintain relatively stable profits across different periods to avoid significant profit fluctuations (Graham et al., 2024). Target-oriented earnings management involves comprehensive adjustments to earnings to achieve specific goals, such as meeting performance evaluation requirements or fulfilling equity incentive conditions. Different types of earnings management behaviors vary in their impact on accounting information quality and, consequently, on capital structure decision-making (Tucker & Zarowin, 2020).

As a globally renowned solar technology company, LONGi Green Energy Technology Co., Ltd. holds a significant position in the photovoltaic industry. Given its large-scale operations and complex financial activities, LONGi faces numerous challenges in capital operations and financial decision-making. Against the backdrop of increasingly fierce industry competition and constantly changing market conditions, LONGi's earnings management behaviors may significantly affect its accounting information quality, thereby influencing its capital structure decision-making. For example, to maintain a competitive edge in the market and attract investors and creditors, LONGi might adjust financial metrics through earnings management. However, if such adjustments are excessive or inappropriate, they could lead to distorted accounting information, impairing management's ability to make sound judgments regarding capital structure. This could result in deviations in financing decisions and debt arrangements, increasing the company's financial and operational risks (Ronen & Sadan, 2019).

This study delved into the impact of earnings management on capital structure decision-making from the perspective of accounting information quality. By analyzing LONGi as a specific case, this research aimed to reveal the intrinsic connections and mechanisms between the company's earnings management and capital structure decision-making. The findings were expected to provide theoretical support and practical guidance for LONGi to optimize its financial decision-making and enhance corporate value. Additionally, this study offered insights for other similar enterprises and contributes to enriching and expanding the research on earnings management and capital structure decision-making, carrying significant theoretical and practical implications.

1.2 Research Questions

In the complex system of corporate financial management, the relationship between earnings management and capital structure decision-making has long been a focal point for both academia and the industry. Different types of earnings management behaviors, due to their distinct operational methods and objectives, may have varying degrees of impact on the presentation of a company's financial condition and the arrangement of its capital structure. As a representative enterprise in the industry, LONGi's financial decision-making holds significant typicality and research value. The following research questions explored in depth whether four specific types of earnings management—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—substantially affected LONGi's capital structure decision-making.

(1) Does earnings management through accounting estimates influence LONGi's capital structure decision-making?

(2) Does earnings management through operating activities influence LONGi's capital structure decision-making?

(3) Does income smoothing management influence LONGi's capital structure decision-making?

(4) Does target-oriented earnings management influence LONGi's capital structure decision-making?

1.3 Research Objectives

Earnings management, as a means for enterprises to adjust financial information for specific purposes, exhibits significant differences in operational methods, mechanisms, and effects across its various forms. As a leading enterprise in the industry, LONGi's financial decision-making models and capital structure arrangements possess considerable representativeness and exemplary value. An in-depth analysis of the specific impacts of four different forms of earnings management—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—on LONGi's capital structure decision-making not only helps reveal the internal logic and patterns of the company's financial operations but also provides valuable references and insights for other enterprises in the same industry to optimize their capital structures and enhance financial management practices. The research objectives are as follows:

(1) To explore the impact of earnings management through accounting estimates on LONGi's capital structure decision-making.

(2) To explore the impact of earnings management through operating activities on LONGi's capital structure decision-making.

(3) To explore the impact of income smoothing management on LONGi's capital structure decision-making.

(4) To explore the impact of target-oriented earnings management on LONGi's capital structure decision-making.

1.4 Scope of the Study

This study focused on LONGi Green Energy Technology Co., Ltd. as the core research subject. As a global leader in solar technology, LONGi holds a significant position in the photovoltaic industry chain, with operations spanning monocrystalline silicon wafers, solar cell modules, distributed photovoltaic solutions, and other sectors. The company's influence and representativeness in the industry made it an ideal case for this research.

The study identified four types of earnings management as independent variables: earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management. The dependent variable was capital structure decision-making. By analyzing how different types of earnings management behaviors affected LONGi's capital structure decision-making, this research aimed to provide meaningful insights.

The study employed a quantitative method. The literature review was used to synthesize existing research in related fields, providing theoretical support for the study. The quantitative analysis method involved using statistical software to process and analyze collected data, constructing regression models, and testing research hypotheses to ensure the scientific validity and accuracy of the findings.

1.5 Significance of the Study

1.5.1 Theoretical Significance

This study contributes to enriching the theoretical framework related to earnings management and capital structure decision-making. While academia has extensively examined earnings management and capital structure decision-making separately, research exploring the relationship between the two from the perspective of accounting information quality remains insufficient. Focusing on LONGi Green Energy Technology Co., Ltd., this study meticulously analyzes how four types of earnings management behaviors—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—affect capital structure decision-making by influencing accounting information quality. This research helps fill the theoretical gap in specific industry and enterprise contexts, further enriching and expanding the theoretical system in the field of earnings management and capital structure decision-making.

Additionally, this study provides theoretical reference for research in specific industries. The photovoltaic industry in which LONGi operates is characterized by rapid technological advancements, intense market competition, and significant policy influences, giving its financial decision-making and earnings management behaviors certain unique features. By using LONGi as a case study to explore the impact of earnings management on capital structure decision-making, this research offers theoretical insights for studies in the photovoltaic industry and other similar sectors, promoting the development and application of financial theories under industry-specific contexts.

1.5.2 Practical Significance

This study provides guidance for LONGi Green Energy Technology Co., Ltd. to optimize its financial decision-making. The findings enable LONGi's management to better understand the impact of different types of earnings management behaviors on capital structure decision-making. This awareness encourages greater caution in applying earnings management when formulating financial strategies, thereby avoiding distorted accounting information due to excessive earnings management, which could otherwise affect the rationality of the capital structure and financing costs. The study also helps enterprises select appropriate types and levels of earnings management based on their specific circumstances, optimizing capital structure, enhancing financial robustness, and improving market competitiveness.

This study offers decision-making references for investors and creditors. For investors and creditors of LONGi, understanding the impact of the company's earnings management behaviors on capital structure decision-making enables them to more accurately assess the company's financial condition and operational risks. Based on the research findings, investors can evaluate the quality of earnings and growth potential of the company, making more informed investment decisions. Creditors, on the other hand, can better assess the company's debt-servicing capacity and credit risks, thereby determining loan amounts and interest rates more rationally to safeguard their capital.

Furthermore, this study provides insights for regulatory bodies in policy formulation. When developing relevant policies and regulations, regulators must consider the impact of corporate earnings management behaviors on capital markets. This research reveals the characteristics and effects of different types of earnings management, offering valuable references for regulatory bodies to develop more scientific and reasonable regulatory policies, standardize corporate financial behaviors, improve accounting information quality, and maintain the stability and healthy development of capital markets.

Lastly, this study contributes to the healthy development of the industry. By examining LONGi, an industry leader, this research sets a benchmark for the photovoltaic industry, guiding other enterprises to adopt sound financial perspectives, appropriately utilize earnings management methods, and optimize capital structure decision-making. This approach enhances financial transparency and standardization across the industry, promoting the healthy and sustainable development of the photovoltaic sector.

1.6 Definition of Key Terms

Accounting information quality refers to the overall characteristics of accounting information that meet both explicit and implicit needs.

Earnings management is the behavior of corporate management to actively adjust earnings to achieve specific objectives by selecting accounting policies or arranging operational activities within the framework of accounting standards.

Capital structure decision-making refers to the process through which enterprises rationally arrange and adjust the proportional relationship between debt and equity capital based on their operational objectives, financial conditions, and market environment.

Earnings management through accounting estimates refers to the behavior where corporate management adjusts the company's earnings level by selecting or changing accounting estimation methods within the framework of accounting standards to achieve specific earnings objectives.

Earnings management through operating activities refers to the behavior where corporate management influences the company's earnings level by arranging and adjusting daily operational activities, such as sales strategies, production plans, and procurement policies.

Income smoothing management is a specific type of earnings management aimed at maintaining relatively stable profits across different accounting periods to avoid significant profit fluctuations.

Target-oriented earnings management refers to the earnings management behavior undertaken by corporate management to achieve specific objectives, such as meeting performance evaluation requirements, fulfilling equity incentive conditions, avoiding losses, or achieving earnings expectations.

Chapter 2 Literature Review

2.1 Introduction

This study focused on LONGi Green Energy Technology Co., Ltd., examining from the perspective of accounting information quality the impact of four types of earnings management behaviors—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—on its capital structure decision-making. Through a systematic review of relevant literature, key factors influencing LONGi's capital structure decision-making were identified, laying the theoretical foundation for analyzing variable relationships and constructing research hypotheses. This provided support for subsequent empirical research.

2.2 Literature Review

2.2.1 Capital Structure Theory

Capital structure primarily refers to the composition ratio of debt capital and equity capital within a company. As distinct financing approaches, both debt and equity financing have their respective advantages and disadvantages. The existence of an optimal capital structure provides a new perspective for understanding and measuring excessive debt. Since 1958, academic research has sought to explain and identify the most rational capital structure for enterprises, giving rise to numerous theories on capital structure. Currently, four mainstream theories dominate the discourse:

First, the MM Theory. The original MM Theory, known today as the Tax-Free MM Theory, was proposed by Modigliani and Miller in 1958. They argued that under a series of strict assumptions, corporate value is independent of capital structure, meaning no optimal capital structure exists. These strict assumptions constructed a nearly perfect capital market, including the absence of transaction costs, risk-free debt, and no taxes. Due to the divergence of these assumptions from real-world conditions, scholars gradually relaxed the premises of the Tax-Free MM Theory by incorporating real-world constraints to examine whether an optimal capital structure exists. In 1963, Modigliani and Miller introduced the Tax MM Theory, which considered the tax-deductibility of interest on debt after relaxing the tax assumption. According to this theory, debt financing provides tax shield benefits due to the tax-deductible nature of interest expenses, making it more advantageous than equity financing. Consequently, corporate value is positively correlated with the debt ratio, reaching its maximum when all financing is derived from debt.

Second, the Trade-Off Theory. Since the Tax MM Theory did not account for financial risks such as bankruptcy risk arising from debt, the Trade-Off Theory further incorporates financial distress costs into the Tax MM Theory (Robichek and Myers, 1966). Increasing debt leads to both marginal tax shield benefits and marginal financial distress costs, which offset each other. Therefore, the optimal capital structure occurs when the tax shield benefits from debt equal the financial distress costs.

Third, the Agency Cost Theory. This theory builds on the MM Theory by relaxing its assumptions to consider both agency costs and benefits of debt. Jensen and Meckling (2021) pioneered the introduction of principal-agent theory into capital structure theory. Debt agency costs refer to the increasing costs for creditors to monitor debtors as debt levels rise, which are transferred to debtors through restrictive covenants in contracts or higher interest rates. Debt agency benefits, on the other hand, refer to debt acting as a disciplinary mechanism to mitigate agency costs between shareholders and managers. By reducing managers' discretionary cash flow and curbing self-serving behaviors, debt alleviates agency conflicts. Under agency cost theory, the optimal capital structure is achieved when debt agency costs equal debt agency benefits, minimizing the combined costs of equity and debt agency.

Fourth, the Pecking Order Theory. This theory relaxes the assumptions of perfect information symmetry and the absence of transaction costs in the MM Theory. It posits that when a company needs financing, it prefers internal funds first, as they entail minimal costs and restrictions. The second preference is debt financing, which is generally less costly than equity financing. Due to information asymmetry, investors perceive equity issuance as a signal that management believes the stock is overvalued, allowing existing shareholders to profit. As a result, equity issuance often leads to a decline in stock prices, leading management to resort to equity financing only as a last resort (Myers and Majluf, 2021).

Given the existence of transaction costs, agency costs, taxes, and other real-world conditions in capital markets, the pursuit of an optimal capital structure holds practical significance. The existence of an optimal capital structure and the risks associated with deviating from it provide a theoretical foundation for China's "deleveraging" policy, especially in the context of generally high corporate debt-to-asset ratios. This theory also explains why companies with excessive debt have the incentive to adjust their capital structure back to an optimal level. Capital structure theory serves as the theoretical premise for the existence of excessive debt and leverage manipulation motives in this study and provides theoretical guidance for calculating indicators of excessive debt.

2.2.2 Accounting Information Quality

The concept of accounting information quality has been extensively examined in academic literature, with scholars offering varying yet interrelated definitions that emphasize its critical role in financial decision-making and capital market efficiency. Early foundational work by the Financial Accounting Standards Board framed accounting information quality in terms of “relevance” and “reliability”, arguing that high-quality financial reporting must provide timely and verifiable data capable of influencing users' economic decisions. This dual emphasis was later expanded by the International Accounting Standards Board, which integrated additional qualitative characteristics such as comparability, verifiability, and understandability into its Conceptual Framework, thereby broadening the scope of what constitutes "quality" in accounting information.

Subsequent research has further refined these definitions by incorporating contextual and user-centric dimensions. For instance, Barth et al. (2018) conceptualized accounting information quality as the extent to which financial statements faithfully represent economic reality, a notion aligned with the faithful representation criterion emphasized in contemporary frameworks. Similarly, Dechow et al. (2010) highlighted the role of “transparency” and “accuracy” in mitigating information asymmetry between firms and stakeholders, suggesting that quality is inherently tied to the reduction of uncertainty in financial markets. Critically, these definitions often intersect with the literature on earnings management, where low-quality accounting information is associated with intentional distortions, such as earnings smoothing or aggressive revenue recognition (Healy & Wahlen, 2019).

However, the evolving nature of accounting standards and technological advancements has prompted debates about the sufficiency of traditional definitions. For example, the rise of big data and non-financial disclosures has led scholars like Gaa (2016) to argue for a more holistic view of accounting information quality—one that incorporates predictive value and sustainability reporting as key components. This perspective challenges the conventional focus on historical data and calls for a dynamic definition that adapts to emerging information needs. Despite these advancements, a persistent critique in the literature is the lack of consensus on measurable proxies for accounting information quality, with some studies relying on indirect indicators like restatements or audit opinions (Defond & Zhang, 2021).

In summary, the definition of accounting information quality has evolved from a narrow focus on relevance and reliability to a multidimensional construct encompassing faithfulness, transparency, and adaptability to modern reporting demands. While foundational frameworks provide a useful starting point, ongoing scholarly discourse underscores the need for definitions that reflect both theoretical rigor and practical applicability in diverse economic contexts.

2.2.3 Earnings Management

The concept of earnings management has been extensively examined in the accounting and finance literature, with scholars offering varying definitions that reflect its multifaceted nature. Healy and Wahlen (2019) defined earnings management as the use of managerial discretion in financial reporting to either mislead stakeholders about the underlying economic performance of a firm or to influence contractual outcomes that depend on reported accounting numbers. This perspective highlights the opportunistic dimension of earnings management, emphasizing its potential to distort financial statements for personal or corporate gain. Similarly, Schipper (1989) characterizes earnings management as purposeful intervention in the external financial reporting process with the intent to obtain private benefits, further reinforcing the notion of deliberate manipulation.

In contrast, some researchers adopt a more neutral stance, acknowledging that earnings management may not always be driven by unethical motives. Dechow and Skinner (2020) argued that earnings management can also serve as a tool for signaling private information to investors, particularly when managers use discretion to convey future performance expectations. This view aligns with the "efficient contracting" perspective, wherein earnings management facilitates smoother communication between firms and stakeholders. Walker (2023) suggested that certain forms of earnings management, such as income smoothing, may enhance the informativeness of earnings by reducing short-term volatility, thereby benefiting long-term investors.

Despite these differing interpretations, a common thread across the literature is the recognition of managerial discretion as the central mechanism enabling earnings management. Watts and Zimmerman (2020) emphasized the role of accounting flexibility in allowing managers to exercise judgment, whether for opportunistic or efficiency-enhancing purposes. However, the ethical boundaries remain contentious, as aggressive earnings management can erode financial statement reliability and undermine investor trust (Levitt, 2018). The prevalence of earnings management in practice has also spurred regulatory responses, such as the Sarbanes-Oxley Act, which aims to curb manipulative reporting practices (Cohen et al., 2018).

The literature reveals a tension between the informational and distortive effects of earnings management. While some scholars defend its role in improving market efficiency, others caution against its potential to obscure true economic performance. Future research could further explore the contextual factors that determine whether earnings management serves as a value-enhancing mechanism or a tool for deception.

2.2.4 Capital Structure Decision-Making

The concept of capital structure decision-making has been a central topic in corporate finance, with scholars offering diverse perspectives on how firms determine their optimal mix of debt and equity financing. Modigliani and Miller (1958) laid the theoretical foundation by proposing that, under perfect market conditions, capital structure is irrelevant to firm value—a proposition known as the "capital structure irrelevance theorem." However, their assumptions of no taxes, bankruptcy costs, or asymmetric information have been widely challenged, leading to subsequent refinements that incorporate real-world frictions.

The Trade-off Theory emerged as a dominant framework, suggesting that firms balance the tax benefits of debt against the costs of financial distress (Kraus & Litzenberger, 2023). According to this view, firms target an optimal debt ratio where the marginal tax shield from interest deductions equals the marginal cost of potential bankruptcy. Empirical studies, such as those by Graham (2020), supported this perspective by demonstrating that firms with higher profitability and stable cash flows tend to use more debt to exploit tax advantages. However, the theory has been criticized for its inability to fully explain why many profitable firms maintain low leverage, prompting alternative explanations.

The Pecking Order Theory, introduced by Myers and Majluf (2021), challenges the trade-off model by arguing that firms prioritize internal financing, followed by debt, and issue equity only as a last resort due to information asymmetry. This theory suggests that capital structure decision-makings are driven by financing hierarchy rather than a target debt ratio. Empirical evidence, such as that from Shyam-Sunder and Myers (2020), supports the pecking order's predictive power, particularly for firms with high information asymmetry. Nevertheless, critics argue that the theory fails to account for firms that consistently maintain low debt despite having access to external financing, indicating that other factors may influence capital structure choices.

The Agency Cost Theory further enriches the debate by highlighting conflicts between managers, shareholders, and debt holders. Jensen and Meckling (2021) argued that debt can mitigate agency problems by reducing free cash flow and disciplining managerial behavior, whereas excessive debt may lead to underinvestment or asset substitution. Subsequent research, such as that by Harris and Raviv (2021), explored how different governance structures influence leverage decisions, suggesting that firms with strong shareholder oversight may adopt higher debt levels to curb managerial discretion.

Behavioral finance introduces additional complexity by examining how managerial biases and market timing affect capital affect capital Baker and Wurgler (2022) proposed the Market Timing Theory, which posits that firms issue equity when stock prices are high and repurchase shares when prices are low, leading to persistent deviations from optimal leverage. While this theory helps explain observed financing patterns, it remains controversial due to its departure from traditional rational expectations models.

2.2.5 Earnings Management through Accounting Estimates

Earnings management through accounting estimates represents a critical area of research in financial reporting, where managerial discretion in applying accounting standards can significantly influence reported earnings. Schipper (1989) defined earnings management broadly as the purposeful intervention in financial reporting to achieve private gains, a characterization that encompasses the strategic use of accounting estimates to alter financial statements. Unlike explicit earnings manipulation, which may involve fraudulent activities, the use of accounting estimates operates within the boundaries of generally accepted accounting principles (GAAP), making it both pervasive and difficult to detect (Healy & Wahlen, 2019).

A key mechanism through which firms engage in earnings management is the subjective application of accounting estimates, such as allowances for doubtful accounts, depreciation methods, and fair value measurements. Dechow and Skinner (2020) highlighted that managers exploit the inherent flexibility in these estimates to smooth earnings, meet analyst forecasts, or avoid debt covenant violations. For instance, firms may adjust bad debt provisions to inflate earnings in periods of declining performance, a practice empirically documented by McNichols and Wilson (2018). Such discretionary adjustments often obscure the true economic performance of a firm, raising concerns about the reliability of financial statements.

The motivations behind earnings management via accounting estimates are well-documented in the literature. Watts and Zimmerman (2020) argued that contractual incentives, such as executive compensation tied to earnings targets, drive managers to manipulate estimates opportunistically. Similarly, Burgstahler and Dichev (2021) demonstrated that firms frequently adjust discretionary accruals to avoid reporting losses or earnings declines, suggesting that capital market pressures play a significant role. Regulatory scrutiny, particularly following high-profile accounting scandals, has led to increased attention on the misuse of accounting estimates, prompting standards such as the Sarbanes-Oxley Act to impose stricter oversight (Cohen et al., 2018).

Despite its prevalence, the ethical and economic implications of earnings management through accounting estimates remain debated. Some scholars contend that moderate earnings smoothing can enhance financial reporting by reducing noise and better reflecting long-term performance (Tucker & Zarowin, 2016). However, others caution that excessive discretion undermines transparency and investor confidence, as seen in cases where aggressive estimate adjustments preceded financial restatements (Richardson et al., 2022). The tension between these perspectives underscores the need for further research on how regulatory frameworks and corporate governance mechanisms can mitigate opportunistic behavior while preserving the necessary flexibility in financial reporting.

2.2.6 Earnings Management through Operating Activities

Earnings management through operating activities represents a distinct category of financial reporting manipulation that involves altering real business decisions rather than merely adjusting accounting estimates or accruals. Roychowdhury (2016) provided a seminal definition of this practice, characterizing it as the deliberate deviation from normal operational practices to achieve predetermined earnings targets. Unlike accrual-based earnings management, which operates within the accounting system, real activities manipulation directly impacts a firm's cash flows and underlying economic performance, making it both more consequential and more difficult to detect through traditional financial analysis.

The mechanisms of operating earnings management typically include aggressive sales promotions through price discounts or lenient credit terms, reduction of discretionary expenditures such as research and development (R&D) or maintenance, and timing of asset sales to recognize gains. Cohen and Zarowin (2020) demonstrated that firms engaging in real earnings management often exhibit significant cuts in R&D expenditures when approaching important earnings benchmarks, despite the potential long-term negative consequences for innovation and competitive advantage. Graham et al. (2024) further substantiated this finding through survey evidence, revealing that a majority of executives would sacrifice long-term value by cutting discretionary spending to meet short-term earnings targets.

The motivations behind operating activities earnings management are complex and multifaceted. Zang (2022) proposed a substitution hypothesis, suggesting that firms facing increased scrutiny of accrual-based manipulation may shift to real activities management as a less detectable alternative. This is particularly relevant in the post-Sarbanes-Oxley regulatory environment, where accrual-based manipulation has become riskier (Cohen et al., 2018). Dechow et al. (2023) highlighted how capital market pressures, particularly the need to meet or beat analyst forecasts, create strong incentives for real earnings management, even when such actions may be value-destroying in the long run.

The economic consequences of operating activities earnings management have been extensively debated in the literature. While some researchers argued that certain forms of real earnings management, such as production smoothing, may have neutral or even positive effects on firm value (Tucker & Zarowin, 2020), the prevailing evidence suggests predominantly negative outcomes. Gunny (2020) found that firms engaging in real earnings management experience lower future operating performance compared to their peers, supporting the view that such practices often represent myopic decision-making. Similarly, Bhojraj et al. (2019) documented that real earnings management is associated with higher subsequent stock price crash risk, as the artificial inflation of current earnings eventually leads to negative surprises.

The detection and measurement of operating activities earnings management present significant methodological challenges. While Roychowdhury (2016) developed widely-used models to estimate abnormal levels of cash flows, production costs, and discretionary expenses, subsequent research has highlighted limitations in these approaches. Kothari et al. (2016) demonstrated that conventional models may misclassify normal business fluctuations as earnings management, particularly in industries with high operational volatility. This measurement issue has spurred ongoing methodological refinements, including the development of industry-specific benchmarks and the incorporation of additional operational metrics.

2.2.7 Income Smoothing Management

Income smoothing management represents a distinct form of earnings management wherein corporate executives strategically manipulate financial reporting to reduce the volatility of reported earnings over time. Ronen and Sadan (2019) provided a foundational conceptualization of income smoothing as the deliberate normalization of income streams through accounting choices or operational decisions, with the primary objective of portraying stable financial performance to external stakeholders. This practice differs from other forms of earnings management in its emphasis on temporal redistribution rather than outright earnings inflation or deflation in any given period.

The theoretical underpinnings of income smoothing behavior have been extensively examined through multiple lenses. Demski (2018) applied agency theory to explain smoothing as a rational response to information asymmetry between managers and external stakeholders, suggesting that reduced earnings volatility may lower firms' cost of capital by decreasing perceived risk. Tucker and Zarowin (2016) provided empirical support for this view, demonstrating that firms engaging in moderate income smoothing exhibit higher earnings informativeness and market valuation. However, alternative perspective challenges this benign interpretation, with Kirschenheiter and Melumad (2022) modeling how smoothing can obscure true economic performance and facilitate managerial opportunism.

Measurement approaches for income smoothing have evolved significantly in the literature. Early studies such as Eckel’s (2016) employed simple variance metrics to identify smoothing behavior, while more recent methodologies incorporate sophisticated econometric techniques. Deond and Park (2017) developed a model distinguishing between discretionary and non-discretionary smoothing components, revealing that managers predominantly use accruals rather than operational decisions for smoothing purposes. This finding has been corroborated by subsequent research, though with important qualifications regarding industry-specific patterns and temporal variations in smoothing strategies.

The economic consequences of income smoothing remain a contested area in academic research. On one hand, studies by Hunt et al. (2017) suggested that moderate smoothing can serve as a credible signaling mechanism, particularly in industries with inherently volatile earnings patterns. Conversely, Barth et al. (2019) presented evidence that aggressive smoothing practices are associated with lower earnings persistence and reduced value relevance, indicating potential market penalties for excessive manipulation. These divergent findings highlight the nuanced nature of income smoothing's impact, which appears contingent on both the degree of smoothing and the underlying motivations of management.

Regulatory responses to income smoothing have created an evolving landscape for financial reporting practices. The implementation of Sarbanes-Oxley provisions and subsequent accounting standards has constrained certain smoothing mechanisms, particularly those involving aggressive accrual management (Cohen et al., 2018). However, recent studies document the adaptability of smoothing strategies, with firms increasingly utilizing operational methods or shifting to more subtle forms of accrual management (Zang, 2022). This regulatory dialectic suggests that income smoothing remains a persistent feature of corporate reporting despite enhanced oversight.

2.2.8 Target-Oriented Earnings Management

Target-oriented earnings management represents a distinct subset of earnings manipulation behavior characterized by deliberate interventions in financial reporting processes to achieve specific predetermined performance benchmarks. Burgstahler and Dichev (2021) provided seminal empirical evidence of this phenomenon, demonstrating that firms systematically manage earnings to avoid reporting losses or earnings declines, creating observable discontinuities in the distribution of reported earnings around zero. This strategic behavior differs from other forms of earnings management in its explicit focus on threshold achievement rather than general earnings inflation or smoothing.

The theoretical framework for understanding target-oriented behavior draws heavily from prospect theory and reference point adaptation. Kahneman and Tversky's (2019) foundational work helped explain why managers perceive performance relative to specific targets as particularly salient, with psychological and economic consequences differing markedly between outcomes that just meet versus just miss important benchmarks. Subsequent accounting research by Degeorge et al. (2016) identified three primary thresholds that motivate earnings management: the avoidance of losses, the maintenance of recent performance levels, and the achievement of analyst forecasts. Each threshold carries distinct implications for firm valuation and managerial decision-making processes.

Empirical methodologies for detecting target-oriented earnings management have evolved considerably since early distributional analyses. Durtschi and Easton (2015) addressed methodological concerns in benchmark studies by developing more robust statistical techniques for identifying abnormal concentrations of observations near key thresholds. More recently, research has incorporated sophisticated accrual models and real activities manipulation metrics to better distinguish between intentional threshold achievement and natural clustering around benchmarks (Roychowdhury, 2016). These methodological advancements have strengthened the validity of findings while revealing the complex interplay between different earnings management techniques in threshold contexts.

The economic consequences of target-oriented behavior present a paradox in financial reporting research. While some studies suggest that narrowly meeting benchmarks can yield short-term market rewards (Bartov et al., 2012), other research documented significant long-term costs associated with threshold-driven manipulation. Graham et al. (2024) found that firms engaging in target-oriented earnings management frequently sacrifice long-term value through suboptimal investment decisions, while Bhojraj et al. (2019) associated this behavior with increased future stock price crash risk. These findings suggest that the apparent market rewards for benchmark achievement may reflect temporary mispricing rather than genuine value creation.

Regulatory responses to target-oriented manipulation have created an evolving detection landscape. The implementation of Sarbanes-Oxley provisions appears to have reduced certain forms of accrual-based threshold management while simultaneously increasing reliance on less detectable real activities manipulation (Cohen et al., 2018). Recent research by Badertscher (2021) suggested that regulatory interventions may have unintended consequences, potentially pushing target-oriented behavior into areas that are more difficult to monitor and regulate effectively.

Emerging research directions explore the cognitive and organizational dimensions of target-oriented behavior. Shalev (2019) examined how internal target-setting processes influence the propensity for earnings management, while Dichev et al. (2023) investigated the linguistic cues associated with threshold achievement in managerial communications. These studies suggest that target-oriented behavior reflects complex organizational dynamics beyond simple opportunism, incorporating elements of managerial cognition, corporate culture, and institutional pressures.

2.3 Introduction to LONGi Green Energy Technology Co., Ltd.

LONGi Green Energy Technology Co., Ltd. (hereinafter referred to as "LONGi") is a globally leading photovoltaic product manufacturer and solar technology enterprise. Since its establishment in 2000, the company has consistently focused on promoting the transition to clean energy as its core strategic objective, striving to build a green energy ecosystem through technological innovation and industrial synergy. Its business spans the entire industry chain, including monocrystalline silicon wafers, high-efficiency solar cell modules, distributed and ground-mounted photovoltaic solutions, and hydrogen energy equipment, forming a sustainable development model driven by technological research and supported by large-scale manufacturing.

At the technological level, LONGi adheres to an innovation path of "mass production of one generation, development of the next generation, and research into the future generation." Over the past five years, its cumulative R&D investment has reached nearly 27 billion yuan, establishing a multi-dimensional R&D system covering materials science, battery technology, and system integration. Its core achievements include groundbreaking progress in the BC technology ecosystem, with module conversion efficiency reaching 24.8% under the HPBC 2.0 technology platform, and HIBC battery R&D efficiency surpassing 27.81% (certified by ISFH). LONGi also holds the world record for crystalline silicon-perovskite tandem cell efficiency at 34.85%. In the field of monocrystalline silicon wafers, it continues to lead the industry in cost reduction and efficiency improvement, maintaining the top position in global cumulative shipments. Its hydrogen energy equipment business employs the "Solar for Solar" model to achieve a closed-loop system of photovoltaic power driving photovoltaic manufacturing, promoting the large-scale application of green hydrogen. To date, the company has secured over 3,500 authorized patents, including 480 related to BC battery modules, establishing a comprehensive technological moat from equipment to auxiliary materials.

In terms of global expansion, LONGi has established a sales network covering more than 160 countries and regions, with regional headquarters and production bases in key markets such as Europe, the Americas, and the Asia-Pacific. This has enabled the company to operate a localized manufacturing and global service system. Its products are widely used in distributed rooftop installations, large-scale ground-mounted power stations, commercial and industrial applications, and projects in complex environments. Renowned for their high reliability, superior power generation, and low-carbon attributes, LONGi’s products have become the preferred choice for numerous global benchmark projects. Furthermore, the company actively strengthens its voice and influence in the global photovoltaic industry chain by participating in international standard-setting and leading industry technology forums.

As a publicly listed company on the A-share market, LONGi has consistently integrated the concept of sustainable development into its corporate strategy. Through green manufacturing, circular economy models, and carbon neutrality planning, it drives the photovoltaic industry toward low-carbon and intelligent transformation. The company's technological breakthroughs and industrial practices not only provide a Chinese solution for the global energy transition but also contribute to the realization of global clean energy goals by fostering an open and collaborative innovation ecosystem.

2.4 Conceptual Framework

Based on accounting information quality theory and considering LONGi's capital structure characteristics as a leading enterprise in the new energy industry, this study conducts an in-depth analysis of how earnings management behaviors influence its capital structure decision-making, constructing a corresponding research model. Drawing on relevant theoretical explanations and literature reviews, the study establishes a research model from the perspective of accounting information quality to explore the impact of earnings management on capital structure decision-making. This model includes four core variables: earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management. Capital structure decision-making serves as the dependent variable in the model. By examining LONGi's specific practices as a case study, the study systematically analyzes how different forms of earnings management behaviors influence accounting information quality and, in turn, impact the selection and adjustment of the company's capital structure.

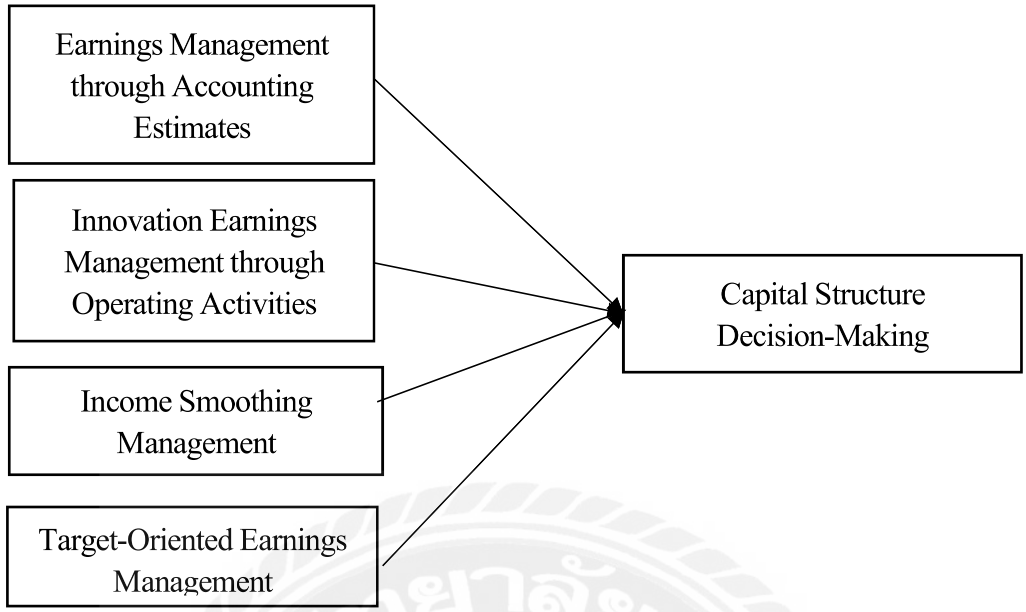

Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study adopted a combined approach of theoretical analysis and case study, focusing on LONGi Green Energy Technology Co., Ltd. as the research subject. Based on accounting information quality theory, it systematically explored the influence mechanisms of four types of earnings management behaviors on capital structure decision-making. The research design encompasses the following four aspects.

3.1.1 Theoretical Framework Construction

The study built on capital structure theory to construct a theoretical transmission framework of "earnings management behaviors—accounting information quality—capital structure decision-making." This framework posited that the four types of earnings management behaviors—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—affected the quality characteristics of accounting information, such as reliability, relevance, comparability, and prudence. This altered the internal and external information environment of the enterprise, impacted financing costs, debt covenant terms, and equity financing constraints, and ultimately influenced the selection and adjustment of the enterprise's capital structure.

3.1.2 Variable Definition and Measurement

The independent variables in this study are as follows:

(1) Earnings management through accounting estimates: Focuses on the impact of management's adjustments to significant accounting estimates, such as asset impairment provisions, depreciation periods, and estimated liabilities, on earnings.

(2) Earnings management through operating activities: Examines behaviors where enterprises adjust earnings by altering real operational activities, such as sales policies, R&D expenditures, and production scale.

(3) Income smoothing management: Refers to manipulations aimed at reducing earnings volatility.

(4) Target-oriented earnings management: Focuses on manipulations conducted to achieve or exceed specific earnings thresholds.

The dependent variable in this study is capital structure decision-making, which refers to a series of strategic financial arrangements involving the selection, combination, and adjustment of various capital sources—primarily debt and equity—at specific points in time and dynamically over time.

3.1.3 Case Selection Rationale

The selection of LONGi Green Energy Technology Co., Ltd. as the case study subject is primarily based on the following considerations:

(1) Industry representativeness: As a leading enterprise in the photovoltaic industry, its capital-intensive, technology-intensive characteristics and strong cyclicality provide a typical scenario for observing the interaction between earnings management behaviors and capital structure decision-making.

(2) Typicality of financing behavior: The enterprise has experienced a complete cycle from relying on external financing during its high-growth phase to optimizing its capital structure during its maturity phase, with diverse financing methods and significant changes in capital structure.

(3) Prominent research value: Against the backdrop of energy transition, exploring its financial decision-making mechanisms holds significant theoretical and practical importance.

3.1.4 Research Method and Data Collection

This study employed a quantitative research method, collecting data through structured questionnaires. It included demographic variables including employee gender, age, years of work, job position, and monthly income to control for the influence of individual differences on the results.

The questionnaires were distributed using random sampling. Data were collected electronically via the "Questionnaire Star" platform, with assistance from academic advisors. After excluding invalid questionnaires with excessive missing values, careless responses, or prominent response bias, 328 valid electronic questionnaires were obtained.

3.1.5 Data Analysis Strategy

This study adopted quantitative analysis methods to systematically explore the relationship between four core independent variables—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—and capital structure decision-making. Descriptive statistical analysis was first used to preliminarily understand sample characteristics and variable distributions. Subsequently, Cronbach's α coefficient and confirmatory factor analysis were employed to test the internal consistency and structural validity of the scales, ensuring the reliability of the measurement tools. Correlation analysis is further applied to reveal the linear relationships between variables. Multiple linear regression models were used to examine the independent influence of each variable on acceptance, with the adjusted R^2 value evaluating the overall explanatory power of the model. Variance inflation factors were utilized to diagnose multicollinearity issues. Finally, the data analysis process was completed using SPSS and AMOS software, providing quantitative support for analyzing the factors influencing LONGi Green Energy Technology Co., Ltd.'s capital structure decision-making.

3.2 Population and Sample

3.2.1 Study Population Definition

The study population comprised all current employees at the Xi'an headquarters of LONGi Green Energy Technology Co., Ltd. This population covered various functional departments at the headquarters, including financial management, strategic planning, operations management, R&D technology, and other core business units. It comprehensively reflected the relevant practical cognition of the enterprise in earnings management and capital structure decision-making.

3.2.2 Sampling Method Design

Simple random sampling was used to select the study sample. The complete roster of current employees obtained from the company's human resources system served as the sampling frame. A random number generation program was employed to randomly sort the employees, ensuring each employee has an equal probability of being selected.

3.2.3 Sample Size Determination

The sample size was set at 400 based on the following considerations:

(1) Statistical power requirements: Meeting the basic sample size requirements for structural equation modeling analysis.

(2) Research feasibility: Considering the time and resource constraints of the survey implementation.

(3). Precision assurance: At a 95% confidence level, the expected sampling error is controlled within ±5%.

3.3 Hypothesis

Based on accounting information quality theory, this study constructed a research hypothesis system regarding the impact of earnings management behaviors on capital structure decision-making. The four core hypotheses proposed theoretical predictions from different dimensions of earnings management:

H1: Earnings management through accounting estimates has a significant positive impact on LONGi 's capital structure decision-making.

H2: Earnings management through operating activities has a significant positive impact on LONGi 's capital structure decision-making.

H3: Income smoothing management has a significant positive impact on LONGi 's capital structure decision-making.

H4: Target-oriented earnings management has a significant positive impact on LONGi's capital structure decision-making.

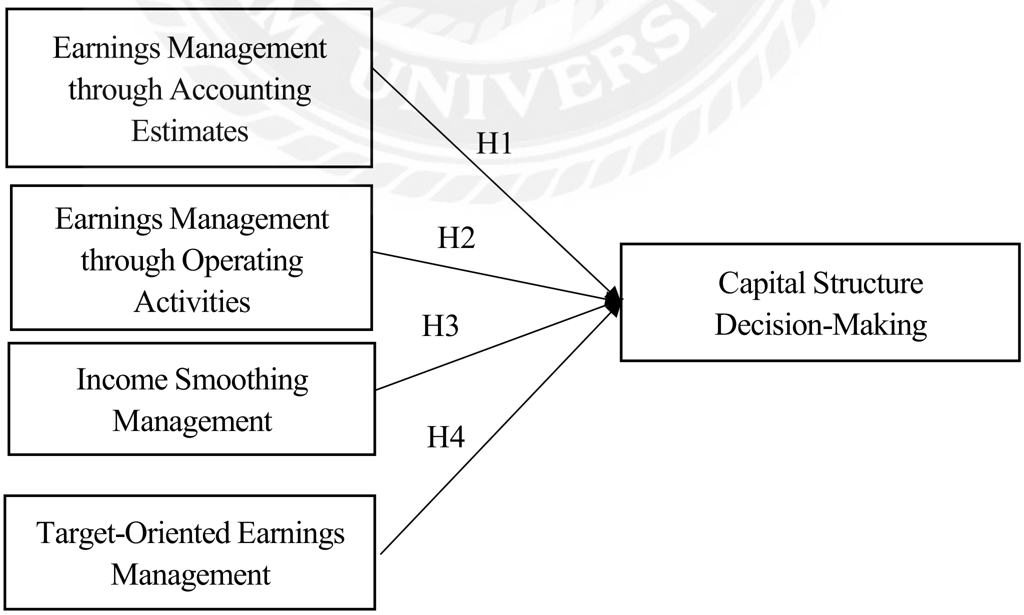

Figure 3.1 Hypotheses

3.4 Research Instrument

This study employs a Likert five-point scale as the measurement tool. The scale options are symmetrically designed, with specific responses as follows: "A. Completely inconsistent; B. Slightly inconsistent; C. Moderately consistent; D. Mostly consistent; E. Completely consistent." These options are scored from 1 to 5 points. This section aims to understand the autonomous judgments and choices made by the company's management regarding accounting estimates.

Earnings management through accounting estimates: This section aims to understand the autonomous judgments and choices made by the company's management regarding accounting estimates. Accounting estimates involve judgments about the future cash flow impact of assets and liabilities, such as asset impairment and depreciation periods.

Earnings management through operating activities: This section aims to understand whether the company influences reported earnings by adjusting real operational activities. Such behaviors are directly related to the company's actual operations and cash flow.

Income smoothing management: This section aims to understand whether the company intentionally smooths reported profits across periods to present a stable growth trajectory to the external world.

Target-oriented earnings management: This section aims to understand whether the company engages in earnings management around specific, clear profit targets, such as turning losses into profits, achieving growth, or meeting benchmarks.

Capital structure decision-making: This section aims to understand the key factors influencing the company's capital structure (debt-to-equity ratio) decision-making.

Table 3.1 Measurement Items

Variable	Item ID	Item
Earnings Management through Accounting Estimates	1	Management adjusts the useful life or depreciation method of fixed assets based on profit targets.
	2	When making provisions for asset impairment (e.g., inventory devaluation, long-term asset impairment), management heavily considers the overall profitability of the current period.
	3	For estimated liabilities such as product warranties and litigation, management tends to adopt estimates that minimize the impact on current-period profits.
	4	The company adjusts revenue recognition aspects

		involving significant judgments (e.g., fulfillment progress, variable considerations) to smooth inter-period profits.
	5	When preparing financial reports, management may change accounting estimates (e.g., bad debt provision ratios) to achieve specific financial reporting objectives.
Earnings Management through Operating Activities	6	To achieve quarterly or annual sales targets, the company adopts abnormal promotional policies or relaxes credit conditions around the period-end to boost revenue.
	7	When under profit pressure, the company postpones or reduces necessary discretionary expenditures, such as R&D, advertising, or maintenance.
	8	The company adjusts production plans (e.g., overproducing to reduce unit fixed costs) to achieve the expected gross profit margin level.
	9	To meet profit targets, management arranges the disposal of long-term assets or engages in other non-recurring transactions at inappropriate times.
	10	The company transfers profits or expenses through related-party transactions to adjust reported profits across periods.
Income Smoothing Management	I1	In highly profitable years, the company tends to adopt more conservative revenue recognition policies or accrue more provisions.
	I2	In less profitable years, the company releases provisions or deferred revenues accumulated in prior years to boost current-period profits.
	I3	The annual volatility of the company's overall profitability is lower than the industry average (excluding significant incomparable factors).
	14	Management consciously controls profit distribution across quarters to avoid significant fluctuations.
	15	The company tends to avoid reporting earnings that significantly exceed or fall short of analyst forecasts or its own performance guidance.
Target-Oriented Earnings Management	16	The company takes special measures to avoid reporting net losses in annual reports.
	17	To maintain a record of continuous profit growth (e.g., quarter-on-quarter or year-on-year positive growth), management makes specific earnings adjustments.
	18	It frequently occurs that the company's profits just meet or slightly exceed analyst consensus forecasts.

	19	Management highly prioritizes and strives to achieve publicly announced profit forecasts or performance guidance.
	20	To meet key financial indicator requirements (e.g., interest coverage ratio) in debt agreements (e.g., bank loans), the company makes corresponding earnings adjustments.
Capital Structure Decision-Making	21	When determining debt levels, the company prioritizes fully utilizing the "tax shield" effect of interest expenses to enhance shareholder value.
	22	When choosing debt financing, the company places great emphasis on the risks and costs of financial distress (e.g., bankruptcy) that may arise from excessive debt.
	23	In financing decisions, the company follows the sequence of "internal funds first, then debt, and equity financing as a last resort."
	24	The company tends to conduct equity financing when stock market valuations are high and considers share repurchases when valuations are low.
	25	The determination of the company's capital structure (debt ratio) results from the agency problems and trade-offs among management, shareholders, and creditors.

3.5 Reliability and Validity Analysis of the Scale

3.5.1 Questionnaire Reliability Analysis

Reliability analysis, also known as consistency analysis, is conducted to test the consistency and authenticity of sample data. The most commonly used measure is the Cronbach’s α coefficient. The α coefficient typically ranges between 0 and 1. A negative value indicates the presence of reverse-coded items in the questionnaire, which need to be recoded as positively phrased items before re-evaluation. A coefficient value below 0.6 suggests issues with the questionnaire items, necessitating the revision of the scale. A coefficient value between 0.6 and 0.7 is considered marginally acceptable; a value between 0.7 and 0.8 indicates good reliability; and a value greater than 0.8 signifies excellent reliability. The reliability analysis of the current questionnaire is as follows:

Table 3.2 Variable Reliability Test

Variables	Cronbach's Alpha	CR	Reliability Assessment
Earnings Management through Accounting Estimates	0.811	0.857	Good
Earnings Management through Operating Activities	0.795	0.847	Good
Income Smoothing Management	0.803	0.825	Good
Target-Oriented Earnings Management	0.814	0.835	Good
Capital Structure Decision-Making	0.822	0.841	Good

All variables in this study exhibited Cronbach's α coefficients exceeding the critical threshold of 0.7, and the composite reliability (CR) values were all above 0.8. These results indicate high internal consistency reliability across all scales in the questionnaire, confirming the stability and reliability of the measurement tools.

3.5.2 Questionnaire Validity Analysis

Validity analysis assesses the rationality of the data design, specifically whether the extracted factors align with the expected theoretical framework. The Kaiser-Meyer-Olkin (KMO) measure is used to determine the suitability of the data for factor extraction. Generally, a KMO value above 0.8 is required to indicate excellent validity and strong suitability for factor extraction. For Bartlett's Test of Sphericity, the p-value is examined. To confirm validity, the p-value must be less than 0.05.

Table 3.3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.974
Bartlett's Test of Sphericity	Approx. Chi-Square	2012.604
	df	35
	Sig.	0.000

According to the data presented in Table 3.3, the KMO Measure of Sampling Adequacy was 0.974, exceeding the excellent threshold of 0.9. This indicates significant common factors among the variables, demonstrating high data adequacy and strong suitability for factor analysis. Simultaneously, Bartlett's Test of Sphericity yielded an approximate Chi-Square value of 2012.604, with a significance level of 0.000 ($p < 0.001$) under 35 degrees of freedom. Together, these two test results indicate that the measurement questionnaires used in this study possess strong structural validity, with sample data of exceptional quality. This provides a solid statistical foundation for subsequent exploratory and confirmatory factor analyses, indirectly reflecting the high theoretical rationality and measurement effectiveness of the variable framework and scale structure in the research design.

3.6 Data Collection

This study employed a structured questionnaire as the primary method for data collection. The data collection process followed standardized procedures to ensure the validity and reliability of the obtained data.

The formal survey was conducted in November 2025. Electronic questionnaires were distributed to 400 randomly selected employees at LONGi Green Energy Technology Co., Ltd.'s Xi'an headquarters via the company's internal communication system. Prior to participation, respondents were informed of the study's purpose, data confidentiality measures, and academic ethical commitments. During the survey period, two reminder mechanisms were implemented to enhance the response rate.

A total of 342 questionnaires were returned, yielding a response rate of 85.5%. After data cleaning, which involved excluding 14 invalid questionnaires due to incomplete responses, evident logical inconsistencies, or excessively short response times, 328 valid questionnaires were retained. This resulted in an effective response rate of 82.0%. The valid sample size meets the basic requirements for structural equation modeling analysis.

3.7 Data Analysis

To ensure the scientific rigor and reliability of the research findings, this study employed a multi-level statistical analysis approach to systematically process and test the collected data. The data analysis process strictly adhered to empirical research norms. First, descriptive statistical analysis was conducted on the valid sample to clarify the mean, standard deviation, and distribution characteristics of each variable, providing an understanding of the basic data structure. Subsequently, reliability tests were performed to confirm the internal consistency of each scale, utilizing Cronbach's α coefficient and composite reliability (CR) indicators for a comprehensive evaluation, ensuring the stability and reliability of the measurement tools. Following this, the study applied exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to examine the structural validity of the variables. The KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity were used to confirm the suitability of the data for factor extraction, and the fit between the theoretical model and actual data was validated to assess the effectiveness of the measurement model.

To test the research hypotheses, the study employed a combination of multiple linear regression analysis and structural equation modeling (SEM). These methods were used to explore the independent and comprehensive influence paths of the four independent variables—earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management—on capital structure decision-making-making. During the regression analysis, control variables and core independent variables were introduced sequentially. Variance inflation factors (VIF) were used to diagnose multicollinearity issues, ensuring unbiased model estimation.

Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Participants

Table 4.1 Descriptive Statistical Analysis of Participants

Variable	Option	Number	Percentage%
Gender	1. Male	211	64.3
	2. Female	117	35.7
Age	1. 25 years old and below	45	13.7
	2. 26-35 years old	110	33.5
	3. 36-45 years old	85	25.9
	4. 46-55 years old	63	19.2
	5. 56 years old and above	25	7.6
Work Experience	1. Less than 1 year	42	12.8
	2. 1-3 years	113	34.5
	3. 4-5 years	86	26.2
	4. 6-10 years	59	18.0
	5. More than 10 years	28	8.5
Job Position	1. Senior Management (e.g., General Manager, Deputy General Manager, Director)	5	1.5
	2. Middle Management (e.g., Department Manager, Project Manager)	21	6.4
	3. Financial Management; Accounting Position	78	23.8
	4. Investment; Financing Management Position	80	24.4
	5. Internal Audit; Risk Control Position	42	12.8
	6. Other	102	31.1
Average Monthly Income Level	1. Below 6000 yuan	50	15.2
	2. 6001-10000 yuan	104	31.7
	3. 10001-12000 yuan	95	29.0
	4. 12001-15000 yuan	58	17.7
	5. Above 15000 yuan	21	6.4
Total		328	100

Based on the analysis of demographic characteristics of the valid sample from LONGi Green Energy Technology Co., Ltd.'s Xi'an headquarters, the participants structure exhibits the following distribution characteristics:

In terms of gender composition, male employees account for 64.3% (n=211), while female employees constitute 35.7% (n=117). The significantly higher proportion of male employees aligns with the gender distribution patterns typical of technical and management positions in manufacturing enterprises.

Regarding age structure, the sample is predominantly composed of young and middle-aged employees. The 26-35 age group represents the largest proportion at 33.5% (n=110), followed by the 36-45 age group at 25.9% (n=85). The age groups of 25 and below and 46-55 account for 13.7% (n=45) and 19.2% (n=63), respectively, while employees aged 56 and above constitute a relatively smaller proportion at 7.6% (n=25). This distribution reflects a workforce primarily composed of young and middle-aged professionals in the experience accumulation phase, while also maintaining a certain level of age-based hierarchy.

The distribution of work experience shows that employees with 1-3 years of experience represent the highest proportion at 34.5% (n=113). Those with 4-5 years and 6-10 years of experience account for 26.2% (n=86) and 18.0% (n=59), respectively. New employees with less than one year of experience make up 12.8% (n=42), while senior employees with over ten years of experience constitute 8.5% (n=28). This distribution indicates that the workforce is relatively experienced overall, with most employees in the growth or stable stages of their careers. This enables the provision of reliable feedback based on practical experience for the study.

The distribution of job positions is notably distinct. Financial management/accounting positions account for 23.8% (n=78), and investment/financing management positions represent 24.4% (n=80), together comprising nearly half of the sample. This ensures the relevance and professionalism of the survey content. Internal audit/risk control positions make up 12.8% (n=42), while middle and senior managers collectively account for 7.9% (n=26). Other functional positions constitute 31.1% (n=102).

In terms of income levels, the group earning 6,001-10,000 yuan represents the highest proportion at 31.7% (n=104). The groups earning 10,001-12,000 yuan and 12,001-15,000 yuan account for 29.0% (n=95) and 17.7% (n=58), respectively. Employees earning less than 6,000 yuan and more than 15,000 yuan constitute 15.2% (n=50) and 6.4% (n=21), respectively. The income distribution exhibits a reasonable pattern of higher proportions in the middle ranges and lower proportions at both ends.

Overall, the sample demonstrates a broad distribution and reasonable structural composition across dimensions such as gender, age, work experience, job functions, and income levels. This not only reflects the actual composition of the enterprise's human resources but also ensures the diversity and representativeness of the research perspective. As a result, it provides a high-quality data foundation for subsequent statistical analyses.

4.1.2 Correlation Analysis

Table 4.2 Correlation between Variables

	Earnings Management Through Accounting Estimates	Earnings Management Through Operating Activities	Income Smoothing Management	Target-Oriented Earnings Management	Capital Structure Decision-Making
Earnings Management Through Accounting Estimates	1	.720	.734	.808	.755
Earnings Management Through Operating Activities		1	.725	.838	.717
Income Smoothing Management			.712	.817	.707
Target-Oriented Earnings Management			1	.825	.718
Capital Structure Decision-Making					1

NOTE： . Correlation is significant at the 0.05 level (2-tailed).. Correlation is significant at the 0.01 level (2-tailed).

Table 4.2 presents the correlation matrix among five variables: earnings management through accounting estimates, earnings management through operating activities, income smoothing management, target-oriented earnings management, and capital structure decision-making. According to the data analysis results, all variables exhibit significant positive correlations, indicating relatively close relationships among them.

Specifically, the correlation coefficients between capital structure decision-making and the four earnings management variables range from 0.707 to 0.755. Among these, the strongest correlation is observed with earnings management through accounting estimates (r = 0.755), while the weakest correlation is with income smoothing management (r = 0.707). These results suggest that different dimensions of earnings management behavior are significantly positively associated with the enterprise's capital structure decision-making.

Furthermore, there is a high degree of correlation among the various earnings management dimensions. The correlation coefficient between earnings management through accounting estimates and target-oriented earnings management is 0.808, between earnings management through operating activities and target-oriented earnings management is 0.838, and between income smoothing management and target-oriented earnings management is 0.817. All these coefficients exceed 0.80, indicating strong synergy or co-variation among different earnings management behaviors. Notably, target-oriented earnings management shows the highest correlation with the other three earnings management dimensions, with coefficients all exceeding 0.80. This may imply that target-oriented earnings management plays a central role in the enterprise's earnings management practices, with other types of earnings management behaviors potentially serving specific earnings targets.

4.1.3 Multiple Regression Analysis

Table 4.3 Multiple Regression Analysis

<table>
<tr><th>Item</th><th>B</th><th>Beta</th><th>t</th><th>Sig.</th><th>VIF</th><th>F</th><th>Durbin-Watson</th></tr>
<tr><td>C</td><td>2.401</td><td>-</td><td>8.80</td><td>0.000</td><td></td><td rowspan="5">54.01</td><td rowspan="5">1.511</td></tr>
<tr><td>Earnings Management Through Accounting Estimates</td><td>0.434</td><td>0.466</td><td>3.82</td><td>0.000</td><td>1.12</td></tr>
<tr><td>Earnings Management Through Operating Activities</td><td>0.324</td><td>0.335</td><td>3.74</td><td>0.000</td><td>1.15</td></tr>
<tr><td>Income Smoothing Management</td><td>0.574</td><td>0.572</td><td>6.56</td><td>0.000</td><td>1.17</td></tr>
<tr><td>Target-Oriented Earnings Management</td><td>0.531</td><td>0.535</td><td>6.74</td><td>0.000</td><td>1.11</td></tr>
<tr><td>R Square</td><td colspan="7">0.643</td></tr>
<tr><td>Adjusted R Square</td><td colspan="7">0.651</td></tr>
</table>

NOTE：*P*<0.05, *P*<0.01, *P*<0.001

Table 4.3 reports the results of the multiple regression analysis with capital structure decision-making as the dependent variable and the four earnings management behaviors as independent variables. The overall model fit is good, with an adjusted R^2 of 0.651, indicating that the four independent variables collectively explain 65.1% of the variation in capital structure decision-making. The model demonstrates strong explanatory power. The F-statistic is 54.01 ($p < 0.001$), reaching an extremely significant level, which confirms the overall validity of the regression model.

In terms of the regression coefficients of the variables, all four independent variables exhibit a significant positive influence on capital structure decision-making (p-values are all 0.000). Income smoothing management has the highest standardized regression coefficient (Beta = 0.572), indicating the strongest influence on capital structure decision-making. This is followed by target-oriented earnings management (Beta = 0.535), earnings management through accounting estimates (Beta = 0.466), and earnings management through operating activities (Beta = 0.335). This order suggests that, in the practices of LONGi Green Energy Technology Co., Ltd., management behaviors aimed at smoothing earnings fluctuations and conveying stability signals have a greater impact on financing structure and debt level choices compared to other operations. In contrast, behaviors involving adjustments to actual operational activities have a relatively weaker influence.

Regarding multicollinearity diagnostics, the variance inflation factor (VIF) for all independent variables is significantly below the critical threshold of 10 (ranging from 1.11 to 1.17), indicating the absence of severe multicollinearity issues. This ensures the stability and reliability of the regression coefficient estimates. Additionally, the Durbin-Watson statistic is approximately 1.511, close to 2, suggesting that the residual series does not exhibit significant first-order autocorrelation. This satisfies the independence assumption of the regression model.

In summary, the regression analysis results robustly support research hypotheses H1 to H4, confirming that earnings management through accounting estimates, earnings management through operating activities, income smoothing management, and target-oriented earnings management all have a significant positive impact on LONGi Green Energy Technology Co., Ltd.'s capital structure decision-making. Particularly noteworthy is the prominent influence of income smoothing management, which may reflect the strong motivation of management in the context of cyclical volatility in the photovoltaic industry to smooth profits in order to maintain capital market confidence and secure more favorable financing conditions. This constitutes a key pathway linking earnings management and capital structure decision-making..

Therefore, according to the results of the data analysis, earnings management through accounting estimates has a significant positive impact on LONGi 's capital structure decision-making, which supports Hypothesis 1. Earnings management through operating activities has a significant positive impact on LONGi 's capital structure decision-making, which supports Hypothesis 2. Income smoothing management has a significant positive impact on LONGi 's capital structure decision-making, which supports Hypothesis 3. Target-oriented earnings management has a significant positive impact on LONGi's capital structure decision-making, which supports Hypothesis 4.

4.2 Discussion

4.2.1 Earnings Management through Accounting Estimates Has a Significant Positive Impact on LONGI's Capital Structure Decision-Making

The positive impact of earnings management through accounting estimates on capital structure decision-making is empirically supported. Regression analysis results indicate a standardized coefficient of 0.466 for this variable, significant at the 0.001 level, demonstrating that management's adjustments to accounting estimates can indeed influence corporate financing decisions. This finding aligns with the fundamental principles of agency theory, as management can utilize the discretionary power inherent in accounting estimates to enhance the financial condition presented in financial statements, thereby boosting creditor confidence.

From the perspective of information asymmetry, adjustments to accounting estimates can alter the book representation of a company's asset quality and profitability. During the technological evolution within the photovoltaic industry, LONGi Green Energy Technology Co., Ltd.'s choices regarding accounting estimates—such as depreciation policies for fixed assets and the capitalization of R&D expenditures—directly affect its balance sheet structure and profit levels. The signals conveyed by these accounting choices to the market may influence investors' judgments regarding the company's risk levels.

At the level of capital structure decision-making, earnings management through accounting estimates operates through two mechanisms. First, it directly influences the financial covenant terms in debt contracts, and second, it indirectly affects the market pricing of equity financing. Empirical data reveal that the coefficient value for earnings management through accounting estimates ranks third among the four types of earnings management, indicating that although its influence intensity is weaker than that of income smoothing and target-oriented behaviors, it remains a significant factor in capital structure decision-making.

The impact of earnings management through accounting estimates exhibits industry-specific characteristics. As a capital-intensive industry, the photovoltaic sector features large-scale fixed assets and rapid technological updates, providing greater flexibility for adjusting accounting estimates such as depreciation policies. The case of LONGi Green Energy Technology Co., Ltd. demonstrates that such adjustments do indeed influence the company's leverage decisions, particularly its ability to secure long-term debt.

4.2.2 Earnings Management through Operating Activities Has a Significant Positive Impact on LONGI's Capital Structure Decision-Making

The hypothesis that earnings management through operating activities has a positive impact on capital structure decision-making is supported, though its influence intensity is relatively the weakest. The statistical result of a standardized coefficient of 0.335 indicates that while behaviors aimed at influencing earnings through adjustments to real operating activities can affect financing decisions, their effectiveness is lower compared to other forms of earnings management.

The uniqueness of earnings management through operating activities lies in its substantive economic consequences. Unlike purely accounting treatments, this type of behavior involves practical operational decisions, such as adjustments to sales policies or cuts in R&D expenditures. In the context of intense industry competition, LONGi Green Energy Technology Co., Ltd. may adjust production plans or marketing strategies to meet short-term financial targets. However, such decisions are often accompanied by real costs and risks.

From a temporal perspective, the impact of earnings management through operating activities exhibits a lagging effect. In the short term, adjusting operational rhythms may improve financial statements, but over the long term, it could undermine the company's core competitiveness. As a technology-driven enterprise, LONGi Green Energy Technology Co., Ltd. risks weakening its long-term competitive advantage if it excessively reduces R&D investments to meet financing conditions. This contradiction must be carefully weighed in capital structure decision-making.

The mechanism through which earnings management through operating activities influences capital structure is relatively complex. On one hand, temporary promotional policies can enhance short-term cash flow performance and improve debt financing capacity. On the other hand, professional investors in the capital market may recognize such short-term behaviors, questioning their sustainability and thereby increasing equity financing costs. This dual effect may explain the relatively weak influence coefficient observed.

4.2.3 Income Smoothing Management Has a Significant Positive Impact on LONGI's Capital Structure Decision-Making

Income smoothing management exhibits the strongest influence among the four types of earnings management, with a standardized coefficient of 0.572. This result supports the original hypothesis and reveals that, in LONGi Green Energy Technology Co., Ltd.'s capital structure decision-making, earnings stability may be more important than the level of earnings itself.

By reducing earnings volatility, income smoothing behavior can signal to the capital market that the enterprise's operations are stable. Against the backdrop of significant cyclical fluctuations in the photovoltaic industry, LONGi Green Energy Technology Co., Ltd.'s management may have a strong incentive to smooth profits across periods to alleviate concerns among external investors regarding operational risks. This signaling mechanism is particularly critical for debt financing, as creditors typically prioritize the stability of an enterprise's debt-servicing capacity.

From the perspective of financing costs, a smoothed earnings sequence can reduce the enterprise's risk premium. Stable profitability may lead to higher credit ratings, thereby lowering debt financing costs. Simultaneously, equity investors tend to assign valuation premiums to enterprises with predictable earnings, creating favorable conditions for equity financing. The practices of LONGi Green Energy Technology Co., Ltd. demonstrate that maintaining earnings stability through inter-period adjustments indeed helps optimize overall capital costs.

The influence of income smoothing management is also reflected in the timing of financing. When an enterprise presents a stable and growing earnings trajectory, management gains greater discretion in selecting financing windows. LONGi Green Energy Technology Co., Ltd. can flexibly choose between equity or debt financing instruments under favorable market conditions, without being forced to finance during unfavorable periods due to earnings volatility. This flexibility is of significant importance for the dynamic optimization of capital structure.

4.2.4 Target-Oriented Earnings Management Has a Significant Positive Impact on LONGI's Capital Structure Decision-Making

The influence of target-oriented earnings management on capital structure decision-making is strongly supported, with a standardized coefficient of 0.535, second only to income smoothing management. This finding indicates that earnings adjustments aimed at specific thresholds—such as profit targets or analyst forecasts—play a key role in LONGi Green Energy Technology Co., Ltd.'s financing decisions.

Target-oriented behavior is directly linked to the management of capital market expectations. As a publicly listed company, LONGi Green Energy Technology Co., Ltd. must meet analyst forecasts and market expectations to maintain stock price stability. Achieving or exceeding these targets not only impacts short-term stock price performance but, more importantly, influences the subsequent financing environment. Failure to meet key thresholds may lead to increased financing costs or even restricted access to financing channels.

From the perspective of debt covenants, target-oriented earnings management often serves specific financial constraints. Provisions such as debt service coverage ratios in bank loan agreements or profit commitments in bond issuances may prompt management to engage in threshold-oriented earnings adjustments. LONGi Green Energy Technology Co., Ltd.'s financing activities demonstrate that such adjustments do help meet debt covenant requirements and maintain the stability of existing financing arrangements.

The influence of target-oriented earnings management exhibits asymmetry. Earnings management aimed at avoiding negative thresholds—such as losses—may have a more significant impact on capital structure than efforts to achieve positive thresholds. As a leading enterprise in the industry, avoiding losses may be perceived by LONGi Green Energy Technology Co., Ltd. as a baseline for maintaining market confidence. This baseline mindset may amplify the influence of target-oriented behavior on capital structure decision-making.

Target-oriented behavior exhibits synergistic effects with other earnings management methods. Correlation analysis shows that target-oriented earnings management correlates with the other three types of earnings management at coefficients above 0.80, indicating that these behaviors often work together in practice. This synergy further amplifies the overall impact of target-oriented behavior on capital structure decision-making.

Table 4.4 Hypothesis Test Results

NO.	Hypothesis	Result
H1	Earnings management through accounting estimates has a significant positive impact on LONGi 's capital structure decision-making.	Supported
H2	Earnings management through operating activities has a significant positive impact on LONGi 's capital structure decision-making.	Supported
H3	Income smoothing management has a significant positive impact on LONGi 's capital structure decision-making.	Supported
H4	Target-oriented earnings management has a significant positive impact on LONGi's capital structure decision-making.	Supported

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study systematically explored the mechanisms through which four types of earnings management behaviors influence capital structure decision-making, based on the theoretical perspective of accounting information quality, using LONGi Green Energy Technology Co., Ltd. as a representative case. Through theoretical construction and empirical testing, the following conclusions were drawn.

All four types of earnings management behaviors exhibit a significant positive impact on LONGi Green Energy Technology Co., Ltd.'s capital structure decision-making. Multiple regression analysis results show that income smoothing management has the highest standardized coefficient ($\beta = 0.572$), indicating its most prominent role in influencing corporate capital structure. This is followed by target-oriented earnings management ($\beta = 0.535$), while earnings management through accounting estimates ($\beta = 0.466$) and earnings management through operating activities ($\beta = 0.335$) also demonstrate statistically significant effects. This finding confirms the existence of a systematic association between corporate earnings management behaviors and financing decisions, with variations in the intensity of influence across different types of earnings management.

Income smoothing management emerges as a critical factor influencing capital structure, a finding with significant theoretical implications. In the market environment characterized by pronounced cyclical volatility in the photovoltaic industry, enterprises can effectively reduce financing costs and optimize financing conditions by smoothing earnings fluctuations to signal operational stability to the capital market. Income smoothing behavior not only affects the accessibility of debt financing but also creates a more favorable market environment for equity financing, thereby granting enterprises greater flexibility in capital structure decision-making.

The influence intensity of target-oriented earnings management ranks second only to income smoothing management, reflecting the importance of threshold management in corporate financing practices. Earnings adjustments aimed at specific targets—such as avoiding losses, meeting analyst forecasts, or fulfilling debt covenant requirements—directly impact the external financing environment of enterprises. This finding indicates that in capital structure decision-making, enterprises must not only consider long-term financial optimization but also address the practical pressures of short-term market expectations and contractual constraints.

Although earnings management through accounting estimates and earnings management through operating activities have relatively weaker influence intensities, they still play important roles in specific contexts. Adjustments to accounting estimates influence creditor risk assessments by altering the asset quality and profitability presented in financial statements. In contrast, operational adjustments, while involving substantive economic decisions, are constrained by the need to maintain long-term competitiveness. The mechanisms underlying these two types of behaviors reveal the complex pathways through which earnings management affects capital structure decision-making.

Correlation analysis indicates strong interrelationships among the four types of earnings management behaviors (correlation coefficients ranging from 0.712 to 0.838), with target-oriented earnings management showing particularly high correlations with the other three types. This finding suggests that in practice, different types of earnings management behaviors often operate synergistically and are employed in combination to collectively serve the overall financial objectives of the enterprise. This synergistic effect further amplifies the comprehensive impact of earnings management behaviors on capital structure decision-making.

In summary, this study empirically elucidates the specific mechanisms through which earnings management behaviors influence capital structure decision-making, confirming the critical mediating role of accounting information quality in their relationship. The research conclusions not only enrich the understanding of accounting information quality and capital structure theories in specific industry and corporate contexts but also provide empirical evidence for enterprises to optimize their financial decision-making.

5.2 Recommendation

5.2.1 Strengthen the Identification and Monitoring Mechanisms for Earnings Management

Enterprises should establish a systematic identification and evaluation framework for earnings management. Management can develop multi-dimensional monitoring indicators to regularly track and quantitatively analyze behaviors such as adjustments to accounting estimates and abnormal changes in operating activities. These monitoring indicators should cover key items in financial statements, with particular attention to areas involving significant subjective judgment, such as changes in depreciation policies, asset impairment provisions, and revenue recognition timing.

The internal audit department should play a central role in monitoring earnings management. Audit teams should expand the scope of traditional financial audits by incorporating earnings management risk assessments into annual audit plans. Audit procedures should include reviews of management's significant judgments and in-depth examinations of the commercial substance of abnormal transactions. Internal audit reports should independently and objectively reflect the overall status of the enterprise's earnings management.

Information technology tools can significantly enhance the efficiency and accuracy of earnings management identification. Enterprises can introduce artificial intelligence-based financial analysis systems that utilize machine learning algorithms to identify abnormal patterns in financial data. Data analysis modules can automatically benchmark against industry standards, track time-series changes, and detect threshold-breaking behaviors, providing real-time warnings for management decisions.

The board of directors and its audit committee should strengthen their oversight responsibilities in monitoring earnings management. The committee should regularly review specialized reports from management on the status of earnings management and evaluate the effectiveness of related internal controls. For significant earnings management behaviors identified, the committee should require management to explain their commercial rationale and impact on accounting information quality.

5.2.2 Optimize the Design of Financial Management and Decision-Making Processes

Financial management processes should clearly distinguish between normal earnings management and opportunistic behaviors. Enterprises need to establish clear standards for accounting policy selection and approval authority, ensuring that significant changes in accounting estimates undergo thorough justification and appropriate levels of approval. Process design should balance the flexibility of financial reporting with the long-term value creation of the enterprise.

The capital structure decision-making mechanism should fully consider the impact of earnings management behaviors. When conducting financing planning, the finance department should perform sensitivity analyses on current and potential earnings management behaviors. Specific decisions, such as debt maturity structure design and the timing of equity financing, should be based on an objective assessment of earnings quality.

Performance evaluation systems should avoid incentivizing short-sighted earnings management behaviors. Management incentive mechanisms should extend the evaluation cycle, incorporate non-financial indicators, and balance short-term performance pressures with long-term value objectives. Particularly for decisions directly affecting operational activities, evaluation metrics should prevent behaviors that undermine core competitiveness, such as excessive reductions in R&D investments.

Enterprises should establish a risk assessment and response framework for earnings management behaviors. This framework should systematically evaluate the potential impact of various earnings management behaviors on accounting information quality and the risks they may pose, such as attracting regulatory scrutiny from capital markets or fluctuations in investor confidence. For identified high-risk behaviors, enterprises should develop clear improvement measures and timelines.

5.2.3 Enhance External Information Communication and Transparency Management

Management should establish regular communication mechanisms with capital market participants. Information exchange activities, such as periodic earnings briefings and analyst meetings, should provide in-depth interpretations of the operational substance behind the enterprise's financial performance. Communication content should go beyond surface-level financial figures to clarify the business logic and economic substance underlying significant accounting policy choices.

Financial report disclosures should enhance transparency regarding earnings management-related information. Notes to the financial statements should provide detailed explanations of the judgment basis and sensitivity analyses for significant accounting estimates, as well as retrospective adjustment information for key judgment changes. The management discussion and analysis section should candidly explain the enterprise's earnings management policies and their impact on financial reporting.

Enterprises need to develop differentiated communication strategies for various stakeholders. For creditor groups, communication should focus on substantive assessments of debt-servicing capacity. For equity investors, emphasis should be placed on the relationship between earnings quality and long-term value creation. For regulatory bodies, enterprises should proactively disclose accounting treatments that may attract attention and their compliance evaluations.

Transparency efforts should extend to the enterprise's governance structure and decision-making processes. Companies may consider disclosing the audit committee's oversight opinions on significant accounting judgments and independent directors' evaluations of the commercial substance of complex transactions. Such governance-level disclosures can enhance external stakeholders' trust in the enterprise's financial reporting process, creating a more stable external environment for capital structure decision-making.

5.3 Further Study

Building on the existing research, future studies can deepen and expand across multiple dimensions. Industry comparative research will be an important direction for expansion, as different industry characteristics may significantly influence the relationship mechanism between earnings management and capital structure decision-making. For example, comparing the heavy-asset, highly cyclical features of the photovoltaic industry with the light-asset, weakly cyclical characteristics of the consumer goods industry can reveal the moderating effects of the industrial environment on the interaction between accounting information quality and financing decisions.

The application of diversified research methods is another direction worth exploring in the future. While this study primarily employed questionnaires and regression analysis, future research could incorporate methods such as in-depth case interviews and experimental studies for triangulation. Particularly for understanding the motivations and decision-making processes behind earnings management behaviors, qualitative research methods can provide richer explanatory insights, addressing the limitations of quantitative research in exploring process mechanisms.

Investigating temporal dynamics should be a focus of subsequent studies. Current cross-sectional research reveals correlations between variables but fails to fully capture the dynamic interaction process between earnings management and capital structure decision-making. The application of panel data analysis methods can track the evolution trajectory of long-term corporate financial behaviors and analyze the temporal causal relationships between earnings management strategies and capital structure adjustments.

Research on the moderating effects of the macro-policy environment is of urgent practical importance. Under the backdrop of the "dual carbon" goals, macro factors such as green finance policies and industry support policies are reshaping the financing environment for the photovoltaic and other new energy industries. Studying how these policies alter the relationship between corporate earnings management behaviors and capital structure decision-making holds significant reference value for understanding policy transmission mechanisms and optimizing policy design.

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Appendix

Dear Sir/Madam,

Thank you for your participation in this questionnaire survey. The survey will be conducted anonymously, and your relevant information will be kept confidential. Thank you again for your cooperation.

Part I:

1. Gender
Male
Female
2. Age
25 years old and below
26-35 years old
36-45 years old
46-55 years old
56 years old and above
3. Work Experience
Less than 1 year
1-3 years (including 3 years)
3-5 years (including 5 years)
5-10 years (including 10 years)
More than 10 years
4. Job Position
Senior Management (e.g., General Manager, Deputy General Manager, Director)
Middle Management (e.g., Department Manager, Project Manager)
Financial Management; Accounting Position
Investment; Financing Management Position
Internal Audit; Risk Control Position
Other
5. Average Monthly Income Level
Below 6000 yuan
6001-10000 yuan
10001-12000 yuan
12001-15000 yuan
Above 15000 yuan

Part II:

Please judge to what extent you agree with the following statement; choose the most appropriate option, and mark the corresponding number "√. " The questionnaire used a Likert scale, ranging from 1 to 5 in which one indicates strongly disagree, two indicates relatively disagree, three indicates neutral, four indicates relatively agree, and five indicates strongly agree

Measuring Item	Strongly Disagree	Relatively Disagree	Neutral	Relatively Agree	Strongly Agree
Earnings Management through Accounting Estimates					
Management adjusts the useful life or depreciation method of fixed assets based on profit targets.					
When making provisions for asset impairment (e.g., inventory devaluation, long-term asset impairment), management heavily considers the overall profitability of the current period.					
For estimated liabilities such as product warranties and litigation, management tends to adopt estimates that minimize the impact on current-period profits.					
The company adjusts revenue recognition aspects involving significant judgments (e.g., fulfillment progress, variable considerations) to smooth inter-period profits.					
When preparing financial reports, management may change accounting estimates (e.g., bad debt provision ratios) to achieve specific financial reporting					

objectives.					
Earnings Management through Operating Activities					
To achieve quarterly or annual sales targets, the company adopts abnormal promotional policies or relaxes credit conditions around the period-end to boost revenue.					
When under profit pressure, the company postpones or reduces necessary discretionary expenditures, such as R&D, advertising, or maintenance.					
The company adjusts production plans (e.g., overproducing to reduce unit fixed costs) to achieve the expected gross profit margin level.					
To meet profit targets, management arranges the disposal of long-term assets or engages in other non-recurring transactions at inappropriate times.					
The company transfers profits or expenses through related-party transactions to adjust reported profits across periods.					
Income Smoothing Management					
In highly profitable years, the company tends to adopt more conservative revenue recognition policies or accrue more provisions.					
In less profitable years, the company releases					

provisions or deferred revenues accumulated in prior years to boost current-period profits.					
The annual volatility of the company's overall profitability is lower than the industry average (excluding significant incomparable factors).					
Management consciously controls profit distribution across quarters to avoid significant fluctuations.					
The company tends to avoid reporting earnings that significantly exceed or fall short of analyst forecasts or its own performance guidance.					
Target-Oriented Earnings Management					
The company takes special measures to avoid reporting net losses in annual reports.					
To maintain a record of continuous profit growth (e.g., quarter-on-quarter or year-on-year positive growth), management makes specific earnings adjustments.					
It frequently occurs that the company's profits just meet or slightly exceed analyst consensus forecasts.					
Management highly prioritizes and strives to achieve publicly announced profit forecasts or performance guidance.					
To meet key financial indicator requirements (e.g., interest coverage					

ratio) in debt agreements (e.g., bank loans), the company makes corresponding earnings adjustments.					
Capital Structure Decision-Making					
When determining debt levels, the company prioritizes fully utilizing the "tax shield" effect of interest expenses to enhance shareholder value.					
When choosing debt financing, the company places great emphasis on the risks and costs of financial distress (e.g., bankruptcy) that may arise from excessive debt.					
In financing decisions, the company follows the sequence of "internal funds first, then debt, and equity financing as a last resort."					
The company tends to conduct equity financing when stock market valuations are high and considers share repurchases when valuations are low.					
The determination of the company's capital structure (debt ratio) results from the agency problems and trade-offs among management, shareholders, and creditors.					