



**THE FACTORS INFLUENCING CORPORATE FINANCING
IN CHINESE ENTERPRISES: A CASE STUDY OF DOUYIN
GROUP (HONG KONG) LIMITED**

**WANG ZIQIANG
6717195018**

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY
2025**



**THE FACTORS INFLUENCING CORPORATE FINANCING IN
CHINESE ENTERPRISES: A CASE STUDY OF DOUYIN GROUP
(HONG KONG) LIMITED**

WANG ZIQIANG

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


Advisor:*Jidapa C.*.....
(Dr. Jidapa Chollathanrattanapong)

Date:*11*...../*Dec*...../*2025*..

.....*[Signature]*.....
(Associate Professor Dr. Jomphong Mongkhonvanit)
Dean, Graduate School of Business

Date.....*7*...../*1*...../*2029*
Siam University, Bangkok, Thailand

Title: The Factors Influencing Corporate Financing in Chinese Enterprises: A Case Study of Douyin Group (Hong Kong) Limited
By: WANG ZIQIANG
Degree: Master of Business Administration
Major: International Business Management

Advisor: 
(Dr. Jidapa Chollathanrattanapong)

Date: 11 / Dec 2025

ABSTRACT

In the complex and ever-changing business environment, the effectiveness of corporate financing plays a crucial role in the steady development of enterprises. Enterprises like Douyin Group (Hong Kong) Limited boast a wide range of businesses, spanning social networking, digital content, fintech, cloud computing, and many other fields. Effective corporate financing serves as a vital support for their sustainable development. Against this backdrop, this study focused on the influencing factors of corporate financing of Douyin Group (Hong Kong) Limited, delving deeply into the logic and patterns underlying its financing activities.

Based on financing theories and efficiency theories, this study aimed to explore the influencing factors of corporate financing of Douyin Group (Hong Kong) Limited, construct a structural model of these factors, and validate the research hypotheses and the model. The study analyzed the impacts of internal financing, debt financing, operational capability, and profitability on corporate financing.

This study employed a quantitative research methodology, collecting relevant data through questionnaires. During the data collection process, a total of 400 questionnaires were distributed. After rigorous screening and sorting, 354 valid questionnaires were ultimately retrieved, achieving an effective response rate of 88.5%. This provided a solid data foundation for subsequent research and analysis. Through in-depth analysis of the retrieved valid questionnaires, the study found that internal financing, debt financing, operational capability, and profitability all exerted significant influences on corporate financing. These factors, to varying degrees, affected the scale, cost, and efficiency of corporate financing of Douyin Group, serving as key elements for understanding its corporate financing behavior.

Based on the above research findings, this study proposes the following strategic recommendations to optimize the corporate financing situation of Douyin Group: (1) Optimize internal financing strategies and strengthen internal capital accumulation; (2) Utilize debt financing reasonably and optimize the capital structure; (3) Enhance

operational capability and strengthen the attractiveness of corporate financing; (4) Improve profitability and consolidate the foundation of corporate financing.

Keywords: Douyin Group (Hong Kong) Limited, corporate financing, financing theory, efficiency theory



ACKNOWLEDGEMENT

On the occasion of the completion of this independent study, I, with immense gratitude, would like to extend my heartfelt thanks to all my mentors, colleagues, relatives, and friends who have provided me with support and assistance.

First and foremost, I would like to express my profound gratitude to my supervisor. During the process of writing this independent study, you guided and supervised me through every stage with your profound knowledge and rigorous academic attitude. You offered me invaluable guidance on topic selection, framework construction, research methods, and revision. I also sincerely thank all the teachers on the independent study defense panel. Your precious suggestions have greatly inspired me and further enhanced my understanding of conducting scientific research.

I am deeply grateful to all the leaders, colleagues, and classmates who facilitated my data collection process and provided immense help and support for my research investigation. I would also like to express my heartfelt thanks to all the teachers who participated in this research. I especially appreciate their provision of valuable first-hand research materials.

Finally, I would like to thank my family and friends. Thank you for comforting me when I was down, enabling me to move forward. Thank you for encouraging, guiding, and supporting me when I was at a loss. It is because of your understanding and support that I have had the most perfect graduation season and have always maintained the courage to forge ahead. Your understanding and support constitute the strongest backing for me to complete my studies.

The completion of this independent study not only serves as a summary of my past learning journey but also marks a new starting point for my future academic research. I will continue to uphold a rigorous and truth-seeking academic attitude, ceaselessly exploring and striving forward on the path of education.

WANG ZIQIANG

DECLARATION

I, WANG ZIQIANG, hereby certify that the work embodied in this independent study entitled "*The Factors Influencing Corporate Financing in Chinese Enterprises: A Case Study of Douyin Group (Hong Kong) Limited*" is result of original research and has not been submitted for a higher degree to any other university or institution.

(WANG ZIQIANG)

October 8, 2025



CONTENTS

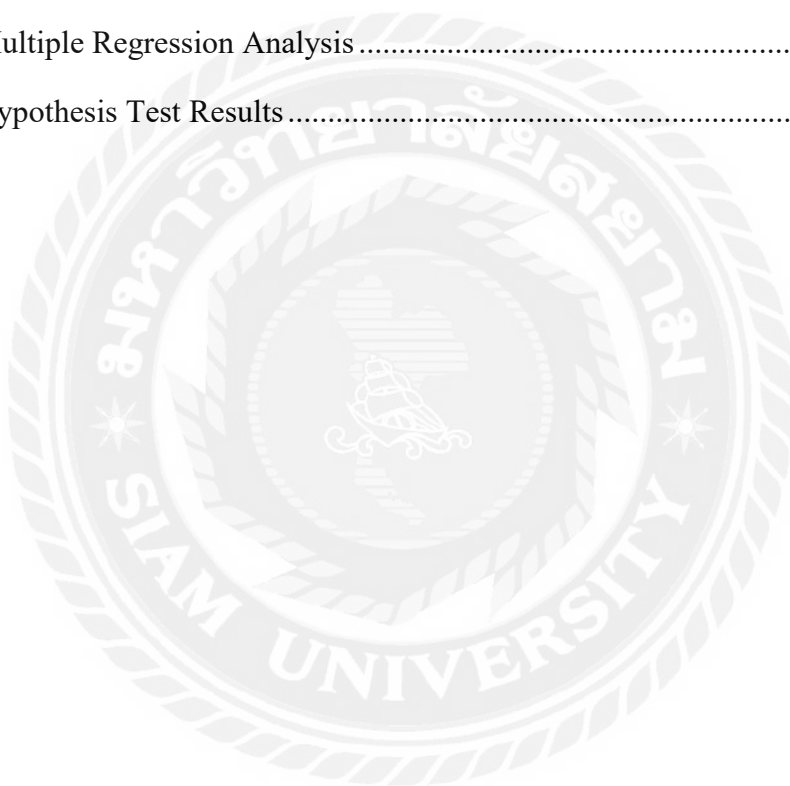
ABSTRACT	I
ACKNOWLEDGEMENT	III
DECLARATION	IV
CONTENTS	V
LIST OF TABLES	VII
LIST OF FIGURES	VIII
Chapter 1 Introduction	1
1.1 Background of the Study	1
1.2 Questions of the Study	2
1.3 Objectives of the Study	3
1.4 Scope of the Study	3
1.5 Significance of the Study	5
1.6 Definition of Key Terms	7
Chapter 2 Literature Review	8
2.1 Introduction	8
2.2 Literature Review	8
2.3 Introduction to Douyin Group (Hong Kong) Limited	23
2.4 Conceptual Framework	25
Chapter 3 Research Methodology	26
3.1 Research Design	26
3.2 Population and Sample	27
3.3 Hypothesis	29
3.4 Research Instrument	30
3.5 Reliability and Validity Analysis of the Scale	32
3.6 Data Collection	36

3.7 Data Analysis	37
Chapter 4 Findings and Discussion	39
4.1 Findings	39
4.2 Discussion	46
Chapter 5 Conclusion and Recommendation	52
5.1 Conclusion	52
5.2 Recommendation	53
5.3 Further Study	57
References	59
Appendix	65



LIST OF TABLES

Table 3.1 Measurement Items	30
Table 3.2 Variable Reliability Test	32
Table 3.3 KMO and Bartlett's Test	34
Table 4.1 Descriptive Statistical Analysis of Participants	40
Table 4.2 Correlation between Variables	41
Table 4.3 Multiple Regression Analysis	43
Table 4.4 Hypothesis Test Results	51



LIST OF FIGURES

Figure 2.1 Conceptual Framework	25
Figure 3.1 Hypotheses	29



Chapter 1 Introduction

1.1 Background of the Study

In today's globalized economic landscape, corporate financing has become a crucial driving force for enterprise development, making it increasingly important. Effective financing strategies determine whether an enterprise can secure sufficient funds to support daily operations, expand production scales, and conduct technological innovations. Moreover, they directly impact an enterprise's ability to survive and thrive in the fiercely competitive market. From a macro perspective, the state of corporate financing exerts a profound influence on a country's stable economic growth, the optimization and upgrading of industrial structures, and the improvement of employment levels. From a micro perspective, rational financing decisions assist enterprises in optimizing their capital structures, reducing financial risks, and enhancing enterprise value (Tanf, 2023).

With the rapid development of information technology, the Internet industry has witnessed explosive growth, and numerous Internet enterprises have emerged rapidly. These enterprises, characterized by innovative business models, powerful technological capabilities, and vast market prospects, have become significant forces driving economic development. However, Internet enterprises possess unique characteristics such as high investment, high risk, and light assets, which lead to substantial differences in financing compared to traditional industry enterprises. During their early development stages, Internet enterprises require substantial funds for technological research and development, market promotion, and user acquisition. Yet, due to a lack of sufficient fixed assets as collateral, they encounter numerous obstacles in traditional financing channels. Therefore, delving into the influencing factors of Internet corporate financing holds significant practical importance for resolving their financing challenges and promoting the healthy development of the Internet industry (Da Rin, 2023).

As a leading enterprise in the Internet sector, Douyin Group (Hong Kong) Limited has a massive user base and extremely high market influence worldwide, thanks to its innovative short-video social model and powerful algorithm recommendation technology. Douyin Group's business scope is extensive, covering multiple areas such as short-video creation and sharing, live-stream e-commerce, and advertising marketing. It has not only transformed people's entertainment and lifestyles but also provided new business opportunities for enterprises and creators. During its rapid development, Douyin Group needs to continuously invest significant funds in technological research and development, content review, and market expansion to maintain its competitive edge and further expand its market share. Therefore, studying the influencing factors of corporate financing of Douyin Group (Hong Kong) Limited not only helps to gain an in-depth understanding of the enterprise's financing decision-making mechanisms and capital operation models but

also provides valuable references and insights for other Internet enterprises (Zámborský et al., 2023).

Analyzing corporate financing issues based on financing theory and efficiency theory can offer solid theoretical support for research. Financing theory elucidates the motivations, methods, and decision-making bases of corporate financing from various perspectives, helping to reveal the economic logic behind corporate financing behaviors. Efficiency theory focuses on how enterprises can achieve maximum benefits through rational resource allocation and capital operation, providing an important criterion for evaluating the effectiveness of corporate financing. By combining these two theories, constructing a structural model of the influencing factors of Douyin Group's corporate financing, and validating relevant research hypotheses and models, we can more systematically and comprehensively reveal the key influencing factors of corporate financing and their interaction mechanisms. This provides scientific theoretical guidance and a practical basis for optimizing corporate financing strategies and enhancing corporate financing efficiency.

1.2 Questions of the Study

In the current highly competitive and capital-demanding business environment, the effectiveness of corporate financing directly impacts an enterprise's survival and development. As a significant enterprise in the Internet industry, the financing activities of Douyin Group (Hong Kong) Limited have attracted widespread attention. The accumulation of internal financing, the channels and costs of debt financing, the efficiency of operational capability, and the level of profitability are interrelated factors that collectively influence Douyin Group's financing decisions and outcomes. Therefore, it is necessary for this study to further explore how internal financing, debt financing, operational capability, and profitability affect the corporate financing of Douyin Group (Hong Kong) Limited.

(1) Does internal financing influence the corporate financing of Douyin Group (Hong Kong) Limited?

(2) Does debt financing influence the corporate financing of Douyin Group (Hong Kong) Limited?

(3) Does operational capability influence the corporate financing of Douyin Group (Hong Kong) Limited?

(4) Does profitability influence the corporate financing of Douyin Group (Hong Kong) Limited?

1.3 Objectives of the Study

In the complex and ever-changing business landscape where capital plays a significant driving role, the formulation and implementation of corporate financing strategies are crucial for an enterprise's sustainable development. As a representative enterprise in the Internet field, Douyin Group (Hong Kong) Limited's financing activities not only relate to its own business expansion and strategic layout but also, to a certain extent, reflect the financing characteristics and trends of the industry. Corporate financing is influenced by multiple factors. Among them, the accumulation scale and utilization efficiency of internal financing, the channel selection and cost structure of debt financing, the efficiency performance of operational capability, and the level of profitability may all have important impacts on the scale, cost, and structure of corporate financing. To gain an in-depth understanding of Douyin Group (Hong Kong) Limited's financing mechanisms and clarify the internal connections between key factors and corporate financing, it is necessary to separately explore the specific impacts of internal financing, debt financing, operational capability, and profitability on its corporate financing.

(1) Explore the impact of internal financing on the corporate financing of Douyin Group (Hong Kong) Limited.

(2) Explore the impact of debt financing on the corporate financing of Douyin Group (Hong Kong) Limited.

(3) Explore the impact of operational capability on the corporate financing of Douyin Group (Hong Kong) Limited.

(4) Explore the impact of profitability on the corporate financing of Douyin Group (Hong Kong) Limited.

1.4 Scope of the Study

This study focuses on the influencing factors of corporate financing of Douyin Group (Hong Kong) Limited, aiming to provide a scientific basis and decision-making references for the enterprise to optimize resource allocation and enhance enterprise performance through systematic research and a comprehensive and in-depth analysis of related issues.

1.4.1 Research Content Dimension

From the perspective of research content, this study employed a questionnaire survey to conduct an in-depth analysis of four dimensions: internal financing, debt

financing, operational capability, and profitability. Specifically, it covered two aspects: First, it thoroughly explores the impact mechanisms of these four factors on the corporate financing of Douyin Group (Hong Kong) Limited. Second, it delved into the interrelationships among these four factors. Through empirical analysis, it verifies whether these four factors have a significant impact on Douyin's corporate financing.

1.4.2 Research Method Dimension

In terms of research method, a quantitative research approach was adopted to delve into relevant issues through systematic and orderly data collection and analysis. The research focused on employees of Douyin Group (Hong Kong) Limited. Given their firsthand positions in the company's operations, they have an intuitive and in-depth understanding of the allocation, utilization efficiency, and actual effects of the company's financial resources in various business segments. Their feedback can provide rich and highly practical information for the research.

1.4.3 Time Dimension and Sample Dimension

The data collection period was set from August 2025 to September 2025. The sample size was set at 400. This determination were made after careful consideration of multiple aspects. As a large-scale company with a substantial number of employees, Douyin required a certain number of samples to ensure that the research results could fully and comprehensively reflect the company's overall situation. Meanwhile, according to statistical principles, while ensuring research accuracy and confidence levels, combined with the experience of previous similar studies and the resource limitations of this research, 400 samples could better cover employees from different departments, levels, and positions within the cost-effective range. This ensured that the sample has sufficient representativeness and diversity, thereby laying a solid foundation for the reliability of the research conclusions.

1.4.4 Data Collection Method Dimension

The distribution and collection of questionnaires were mainly carried out through the online platform Wenjuanxing. A total of 400 questionnaires were distributed to ensure that the research data has an adequate volume and high validity. Distributing questionnaires through an online platform could improve the efficiency and coverage of questionnaire distribution while facilitating real-time monitoring and management of questionnaire collection. This data collection method provided reliable and powerful data support for subsequent data analysis and the drawing of research conclusions.

1.5 Significance of the Study

1.5.1 Theoretical Significance

(1) Enriching the Application of Corporate Financing Theory in the Internet Industry

Traditional corporate financing theories are mostly constructed based on traditional industries such as manufacturing, and their applicability to the internet industry is limited, characterized by high innovation, asset-light features, and a rapid iterative development model. This study focuses on Douyin Group (Hong Kong) Limited, a representative enterprise in the internet industry, and conducts an in-depth exploration of the impacts of internal financing, debt financing, operational capability, and profitability on corporate financing. It can reveal the unique patterns and mechanisms of internet enterprises during the financing process. Through empirical analysis to verify the effects of relevant factors on internet corporate financing, this research helps enrich and refine the connotation and extension of corporate financing theory in the internet field, providing a new theoretical perspective and analytical framework for subsequent research in this area.

(2) Expanding the Research Perspective of Multi-factor Integrated Corporate Financing

Previous studies on corporate financing often focused on the analysis of a single factor. In contrast, this study comprehensively considers the impacts of four dimensions—internal financing, debt financing, operational capability, and profitability—as well as their interrelationships on corporate financing. This multi-factor integrated research perspective can more comprehensively and systematically reveal the complexity and dynamics of corporate financing. It helps break the limitations of single-factor analysis in traditional research, driving the theoretical study of corporate financing towards a more comprehensive and in-depth direction, and providing valuable exploration for constructing a more universal and explanatory corporate financing theoretical model.

(3) Providing References for Corporate Financing Research in Specific Regions within the Internet Industry

This study took Douyin Group in Hong Kong as a case. As an international financial center and an important commercial hub, Hong Kong has a unique financial environment and market characteristics. By studying the influencing factors of financing during Douyin Group's business operations in Hong Kong and globally, this research can offer references for corporate financing research in specific regions (such as other international financial centers or areas with similar financial ecosystems)

within the internet industry. It enriches the case library of regional corporate financing research and promotes the differentiated development of regional corporate financing theories.

1.5.2 Practical Significance

(1) Providing Decision-making Bases for Douyin Group to Optimize Financing Strategies

Through an in-depth analysis of the impact mechanisms of internal financing, debt financing, operational capability, and profitability on Douyin Group's corporate financing, this study can offer comprehensive and accurate financing decision-making information to Douyin Group's management. It helps the enterprise understand the costs, risks, and benefits of different financing methods, as well as the supporting role of its own operational capability and profitability in financing. Thus, it enables the enterprise to formulate more scientific and reasonable financing strategies, optimize its capital structure, reduce financing costs, improve financing efficiency, and enhance its financial stability and market competitiveness.

(2) Assisting Internet Industry Enterprises in Solving Financing Difficulties

Internet industry enterprises generally face financing difficulties during their development, such as insufficient collateral due to asset-light characteristics, high innovation risks leading to high financing thresholds set by traditional financial institutions, and the need for substantial capital investment due to intense market competition. The research findings of this study can provide references and insights for other internet enterprises. They can help these enterprises understand the key factors influencing financing, adjust their operation models and profit strategies according to their actual situations, improve their internal financing capabilities, expand debt financing channels, optimize operational processes, and enhance profitability levels, thereby better addressing financing challenges and achieving sustainable development.

(3) Offering Evaluation References for Financial Institutions and Investors

When providing financing services to internet enterprises, financial institutions need to assess the enterprises' financing risks and repayment capabilities. Investors also need to understand the enterprises' financing situations and development potential when making investment decisions. Through an in-depth analysis of the influencing factors of Douyin Group's financing, this study can provide financial institutions and investors with a set of scientific evaluation indicators and methods. This helps them more comprehensively and accurately evaluate the financing needs, financing capabilities, and financing risks of internet enterprises, enabling them to

make more reasonable financing and investment decisions and facilitating the effective alignment of financial resources with internet enterprises.

(4) Promoting the Collaborative Development of the Internet Industry and the Financial Industry

This study helps deepen the mutual understanding and communication between the internet industry and the financial industry. By revealing the characteristics and needs of internet corporate financing, financial institutions can develop financial products and services more suitable for internet enterprises, innovate financing models, and improve the quality and efficiency of financial services. Meanwhile, internet enterprises can better utilize financial resources to achieve their rapid development. This mutually beneficial and collaborative relationship will contribute to the common prosperity of the internet industry and the financial industry, and promote stable economic growth.

1.6 Definition of Key Terms

Internal financing refers to the method of financing through the capital accumulation generated by an enterprise's own business activities. It reflects the degree of investors' (including stakeholders such as the enterprise's original shareholders) expectations for the enterprise's future development.

Debt financing is the act of an enterprise raising funds by borrowing from external creditors (such as banks and bond investors).

Operational capability refers to an enterprise's ability to use various assets to generate profits. It reflects the rate of expansion of the enterprise's asset operation scale.

Profitability refers to an enterprise's ability to obtain returns using its own capital. It is an important indicator for measuring an enterprise's profitability level.

Corporate financing refers to the behavior of an enterprise raising funds through various channels and methods to meet its capital needs for production and operation, investment expansion, debt repayment, etc.

Chapter 2 Literature Review

2.1 Introduction

This chapter reviews the major literature related to financing theories, efficiency theories, and the corporate financing of Douyin Group (Hong Kong) Limited. It provides a theoretical foundation for the relationships between variables and the research hypotheses in this study. The literature review covers key factors influencing the corporate financing of Douyin Group (Hong Kong) Limited, including internal financing, debt financing, operational capability, and profitability. Through a systematic review of existing literature, this chapter offers theoretical support for each variable in the research model, helps determine the relationships among these variables, and provides a basis for subsequent hypothesis testing.

2.2 Literature Review

2.2.1 Financing Theories

(1) Modigliani-Miller (MM) Theory

Modigliani-Miller Theory, proposed by American economists Franco Modigliani and Merton Miller in 1958, is a theory concerning the relationship between a company's capital structure and its market value (Small & Zivin, 2003). This theory holds a significant position in the field of financial economics and is regarded as one of the cornerstones of modern corporate capital structure theory. The original MM theory posits that a company's capital structure and its market value are based on the assumptions of no corporate income tax, identical business risks among firms, and only differences in capital structures. Regardless of changes in a company's debt structure, its total capital cost and total value remain stable. In other words, enterprise value is independent of the degree of corporate debt, and the issue of an optimal capital structure is not considered (Watanabe & Cui, 2019). However, the revised MM theory incorporates corporate income tax into the consideration of enterprise value. According to this theory, when corporate income tax is taken into account, a company's capital structure affects its total value. Since debt financing can bring about tax savings for the company, when the proportion of debt capital in the capital structure approaches 100%, the company's market value reaches its maximum, and this capital structure is considered the optimal one.

The basic assumptions of this theory include: A company's business risk can be measured by the variance of its earnings before interest and taxes (EBIT), and companies with the same business risk are in the same risk class. Investors at different stages have identical estimates of a company's future debt financing level, meaning

their expectations regarding the risks associated with future earnings are consistent. Stocks and bonds are traded in perfect capital markets, implying no transaction costs. Investors can borrow at the same interest rate as the company. The level of debt financing is risk-free for both the company and investors, so the debt interest rate is referred to as the risk-free interest rate. The interest coverage ratio meets investors' expectations, and all cash flows are treated as annuities (Li et al., 2021).

(2) Pecking Order Theory

Pecking Order Theory, proposed by American economist Myers and Chilean scholar Majluf in 1984, primarily takes into account the existence of transaction costs. This theory mainly describes the preferences of enterprises when choosing sources of funds. Its core idea is that before initiating a new round of financing, an enterprise will first consider internal retained earnings and undistributed profits, followed by debt financing, and finally equity financing (Bukalska, 2019). This preference ranking stems from information asymmetry and managers' pursuit of corporate control. Specifically, since investors lack knowledge about a company's product types and future development prospects, some investors choose to trust the company to pay the expected funds. Therefore, if a company adopts external financing, its development may be constrained. Hence, a company should prioritize internal financing. When internal financing is insufficient, it should then consider external financing, and among external financing options, debt financing is preferred over equity financing.

The significance of Pecking Order Theory lies in the fact that it provides an important perspective on corporate financing decisions, emphasizing the importance of internal financing and pointing out the potential costs of equity financing. Additionally, this theory offers valuable references for corporate financial management and investment decisions, helping companies better understand and address information asymmetry issues in the market, optimize their financing structures, and enhance their market value (Eldomiaty, 2016).

2.2.2 Efficiency Theories

(1) Input-Output Efficiency Theory

Input-Output Efficiency Theory is a quantitative analysis method used to study the interdependent relationships between inputs and outputs among various sectors in an economic system. This theory was first proposed by the renowned economist Wassily Leontief (Duong & Okada, 2018). Its core idea is to evaluate the performance of a department effectively by statistically comparing the total input and output of that department with the average input-output scale of the same industry. In the input-output efficiency theory, input refers to the resources consumed in the production process, while output refers to the produced goods, including their

quantity and distribution destinations. Input-output efficiency represents the proportional relationship between input and output, reflecting the production efficiency level of producers during the production process. Input-Output Efficiency Theory not only links the efficiency levels of different industries but also explores the application of efficiency levels in various aspects of social and economic development, such as evaluating the utilization efficiency of university research funds and the input-output efficiency of science popularization (Umaz, 2021). Additionally, by analyzing the connections and interdependencies among different sectors, Input-Output Efficiency Theory provides policymakers with information on economic structure, industrial linkages, and economic benefits, aiding in the formulation of more reasonable and effective economic policies. In summary, Input-Output Efficiency Theory is an important economic analysis tool that helps us better understand and analyze the input-output relationships among various sectors in an economic system, evaluate economic efficiency, and provide decision support for policy formulation and economic management (Hu & Fang, 2022).

(2) Pareto Efficiency Theory

Pareto Efficiency Theory, also known as Pareto optimality or Pareto efficiency (Pareto Efficiency), is an economic concept proposed by the Italian economist Vilfredo Pareto. It describes a "utopia" of resource allocation where, under certain constraints, changes in resource allocation do not produce any impact. In other words, Pareto efficiency refers to achieving the optimal efficiency value for one party without harming the interests of all participating parties (Mendolicchio & Pietra, 2019). To achieve Pareto optimal efficiency, the following three conditions must be met: exchange optimality, production optimality, and product mix optimality. Exchange optimality means that for the same quantity of consumers and goods, their marginal rates of substitution are the same. Production optimality implies that for producers of different products, the marginal rates of technical substitution of the production factors they use are also the same; that is, the ratio at which they are willing to substitute a certain quantity of one production factor for another is equal. Product mix optimality refers to the equivalence between the marginal rate of substitution of the product itself and the marginal rate of substitution for producing such products, reflecting consumer preferences in a combined manner. In the real world, it is difficult to achieve complete Pareto efficiency due to various constraints. Nevertheless, Pareto Efficiency Theory still provides us with an important standard for evaluating resource allocation efficiency, guiding us to conduct more reasonable and effective resource allocation (Hoelle, 2017).

2.2.3 Corporate Financing

(1) Research on Financing

As a crucial juncture for the sustainable development of enterprises, financing has attracted extensive research from domestic and foreign scholars in areas such as corporate financing structures, financing constraints, and capital allocation. Modigliani and Miller proposed the financing structure theory in 1958, arguing that there is no significant correlation between enterprise value and financing structure. However, Modigliani and Miller (1963) revised their view, stating that when debt capital approaches 100% in the capital structure, it represents the optimal capital structure. The interest on debt can reduce the overall capital cost and increase enterprise value. Sun (2001) believed that the financing structure has a positive impact on enterprise fundraising, managerial operating incentives, corporate liquidation, or industrial contraction. Yang and Wang (2020) examined the financing structure from different perspectives and concluded that a sound financing structure has varying degrees of impact on high-quality innovation and innovation output. Liu et al. (2021) explored the impact of the growth of high-tech enterprises on capital structure adjustment and found that the influence of financing constraints on the financing structure exhibits a nonlinear characteristic within an appropriate range. Although scholars have different perspectives and research scopes, they all conclude that reasonable adjustment of the financing structure positively promotes development.

The emergence of financing constraints has attracted widespread attention both domestically and internationally, particularly among small and medium-sized enterprises (SMEs). Czarnitzki (2006) used the Tobit model to study the financing constraints of SMEs in the German manufacturing industry and found that financing constraints have a significant negative impact on enterprise innovation. Wang et al. (2022) argued that the digital transformation of SMEs can not only effectively reduce financing constraints but also improve enterprise information transparency, reduce financing costs, and enhance innovation capabilities. To verify the impact of breaking through financing constraints on enterprises, Ju et al. (2013) analyzed the role of working capital in buffering enterprise innovation investment fluctuations when breaking through innovation constraints and found a close relationship between financing constraints, working capital management, and enterprise innovation activities. Shu and Yu (2022) found, based on research on listed manufacturing enterprises, a significant single-threshold effect between financing constraints and enterprise investment structure. Sun and Li (2022) empirically concluded that big data applications can reduce the financing constraints faced by enterprises, thereby enhancing their innovation efficiency.

Given the diversity of the financing process, numerous scholars have conducted extensive research on capital allocation. Almeida and Wolfenzon (2023) found, based on an equilibrium model, that capital allocation is closely related to corporate financing needs. Shao and Liu (2018) discovered that the separation degree of control rights and cash flow rights within enterprise groups and the group size have a significant impact on enterprise group value. To effectively evaluate the role of

capital allocation in financing, research on capital allocation has extended to another perspective. Cheng and Cheng (2021) analyzed, through the construction of an asymmetric evolutionary game model between entrepreneurs and lenders, that agent group decision-making under financial friction constraints can lead to asset allocation distortions. Li and Jiang (2022) found that digital finance has a significant threshold effect on improving capital allocation distortions. Wang and Li (2023), based on a sample of listed companies in the high-end equipment manufacturing industry, empirically concluded that government subsidies not only alleviate the financing constraints of high-end equipment manufacturing enterprises but also have a bidirectional impact on capital allocation.

(2) Research on Financing Efficiency

In existing research, the definition of efficiency is divided into several types. One is the ratio of input to output in project activities. Another is whether the raised funds achieve the optimal configuration of the capital structure within the enterprise and reach Pareto optimality. The third is based on policy documents, considering the costs and benefits of enterprises, and the evaluation of policy documents.

During the corporate financing process, scholars have focused on enterprise fundraising and capital allocation, among other aspects, and have defined the concept of financing efficiency on this basis. Petr et al. (2020) believed that the value generated after the optimal allocation of funds following corporate financing and the selection of an appropriate financing method with the lowest agency cost can improve financing efficiency. Jayaraman and Shivakumar (2023) pointed out that financing efficiency refers to whether the funds raised by an enterprise can be efficiently used for its development and combined with its own characteristics to achieve maximum profitability.

Zeng (1993) believed that the characteristics of corporate financing in China are more suitable for indirect financing. He did not provide a clear definition of financing efficiency, but later scholars equated concepts such as transaction efficiency, allocation efficiency, capital utilization efficiency, and financing capability with financing efficiency. On this basis, Chinese scholars have discussed the definition of financing efficiency from the perspectives of financing, cost-benefit, and macro-micro views. First, defining financing efficiency from the financing perspective. Wang and Wang (2022) defined financing efficiency as an enterprise's ability to raise the required funds and whether those funds are fully utilized. Shen (2023) believed that financing efficiency refers to whether an enterprise can raise the required funds at the lowest possible cost and whether the raised funds can be efficiently utilized. Second, defining financing efficiency based on financing costs and enterprise benefits. Xiong et al. (2024) believed that corporate financing efficiency refers to the ability to raise funds for the enterprise at the lowest cost and efficiently support enterprise operations to achieve maximum benefits. Ma and Li (2019) pointed out that the financing

efficiency of an enterprise is the efficiency with which the funds raised through low-cost financing are effectively converted into effective output. Song (1998) believed that corporate financing efficiency consists of transaction efficiency and allocation efficiency, with financing costs and the ability to utilize raised funds being the primary influencing factors of financing efficiency. Third, defining financing efficiency from a macro-micro perspective. Lu (2021) defined the financing process from both macro and micro perspectives, focusing on the utilization ratio of capital input and output and considering whether financing activities are beneficial to economic development and the improvement of financing efficiency. Zhang et al. (2019) explained financing efficiency from a macro perspective as the promotion of economic growth by the funds raised in the stock market and the impact on stock market returns. Jia (2023) believed that the formation of financing capabilities and the selection of financing methods for SMEs require numerous conditions and factors. She considers financing capability as a composite function of these factors and uses factor analysis to explore how to enhance an enterprise's own financing capability and break through financing constraints.

There are many methods for measuring financial efficiency. Sulla et al. (2018) used financial data to measure the financing efficiency of SMEs in Central and Eastern European countries and found that the higher the degree of financing constraints, the lower the financing efficiency. Troplini (2019) used the Tobin Q coefficient to analyze the relationship between the efficiency of the Albanian banking industry and capital structure. Until recently, the research perspective has shifted to empirical analysis. Othman et al. (2017) analyzed the financing efficiency of Islamic banks using the SFA method and found that joint-stock banks have higher financing efficiency than other types. Duong and Okada (2018) used the DEA method to measure the efficiency of banks in various countries and found that bank efficiency decreases during crises, and reducing credit constraints can alleviate the impact on economically dependent industries.

Wei (2021) conducted a fuzzy evaluation of the financing efficiency of Chinese SMEs based on five factors, including financing costs and the standardization of financing mechanisms, and concluded that equity financing efficiency is low, while debt financing and internal financing efficiency are high. Pang (2017) conducted an empirical analysis of the factor set for the fuzzy evaluation of the financing efficiency of SMEs and found that the self-accumulation financing method has the highest efficiency. Yan and Meng (2022) used the gray correlation degree model to study the impact of enterprise scale, capital structure, total equity financing, and shareholder profitability on the equity financing efficiency of agricultural listed companies. Fang and Lin (2019) used the weighted gray correlation degree analysis method to screen out key factors significantly associated with the financing capability of companies listed on the New Third Board. Fang and Wu (2020) started from the financing status of SMEs on the New Third Board and used the DEA model to comparatively study the financing efficiency of SMEs on the New Third Board. They found that the low

financing efficiency of SMEs on the New Third Board is due to the blindness of corporate financing, weak growth capacity of main businesses, and narrow market financing channels. Wang et al. (2023) evaluated the financing efficiency of 461 small and medium-sized industrial enterprises using the three-stage DEA method and found that the higher the financing management level of SMEs, the higher the pure technical efficiency. At the same time, the external business environment has an inhibitory effect on financing efficiency.

(3) Factors Influencing Financing Efficiency

In terms of the factors influencing corporate financing efficiency, numerous scholars have conducted multi-angle considerations. From a macro perspective, Zhou and Xuan (2019) evaluated the financing efficiency of marine industry-related enterprises by constructing a DEA model and incorporating macroeconomic conditions, industry competition intensity, and enterprise scale into the consideration of influencing factors. They found a significant negative correlation between corporate financing efficiency and macroeconomic conditions. Gu and Bian (2020) conducted an empirical analysis based on 755 technology-based listed enterprises and concluded that the synergy between technology and finance helps improve corporate financing efficiency. Ren (2020) conducted a static and dynamic analysis of the financing efficiency of China's new energy industry based on the new energy industry chain using the DEA-Malmquist model and used the Tobit model to analyze and conclude that continuous technological innovation is the fundamental factor in enhancing and supporting market penetration and public recognition in the new energy industry chain. Shao (2018) believes that the debt financing efficiency of enterprises is significantly influenced by their management system, financing structure, and capital allocation efficiency to varying degrees. Cui et al. (2019) conducted a dynamic analysis based on the financial data of non-listed manufacturing SMEs from 2003 to 2009 and proposed that an enterprise's own qualities and main business conditions have a significant impact. Enterprise profitability, the source, scale, and liquidity of short-term external debt funds, and an enterprise's solvency have a general impact. The cost of commercial credit financing has an insignificant impact.

2.2.4 Internal Financing

(1) Definition of Internal Financing

As an important part of the corporate financing system, internal financing refers to the fund-raising activities that enterprises conduct relying on their own internal resources. The main sources of funds include retained earnings, depreciation, and amortization of the enterprise. Essentially, internal financing represents the reinvestment of an enterprise's operating results, reflecting the efficiency of the

internal circulation and utilization of its funds. This financing method is characterized by strong autonomy, low financing costs, and low risks, providing crucial financial support for the stable development of enterprises (Kamoto, 2011). Numerous scholars have provided in-depth explanations of the concept of internal financing from different perspectives, laying a solid theoretical foundation for subsequent research. Lesser (2020) pointed out that internal financing is the effective integration and allocation of an enterprise's internal funds, representing the financial arrangements made by the enterprise based on its own operating conditions and development strategies. It emphasizes the close connection between internal financing and an enterprise's internal governance and strategic decision-making (Azadi et al., 2021).

(2) Research on the Influencing Factors of Internal Financing

An enterprise's profitability is a key factor influencing the scale and quality of internal financing. Enterprises with strong profitability often generate more retained earnings, thus providing sufficient funding sources for internal financing. A large number of empirical studies have shown that profitability indicators such as net profit and return on equity of an enterprise are positively correlated with the level of internal financing. Through an empirical analysis of listed companies, Azadi et al. (2021) found that as an enterprise's profitability improves, the proportion of internal financing increases on average. This indicates that enterprises with strong profitability are more capable of retaining profits within the enterprise to support reinvestment and expansion. At the same time, high profitability also sends a positive signal to the market, enhancing investors' confidence in the enterprise's future development and further promoting the stable growth of internal financing.

There are different views on the impact of enterprise size on internal financing. Some scholars argue that large-scale enterprises, due to their stronger market position and resource integration capabilities, can better achieve economies of scale, reduce production costs, and improve profitability, thus providing more favorable conditions for internal financing. Mashayekh and Morshedi (2020) pointed out that large-scale enterprises have advantages in technological research and development and market expansion, enabling them to increase profits by improving production efficiency and product quality, thereby expanding the scale of internal financing. However, some scholars also suggest that small-scale enterprises, because of their flexible decision-making and strong innovation capabilities, may have higher profit potential in certain specific fields and can also conduct effective internal financing. The research by Žak (2020) found that some small-scale technology enterprises have achieved high profit margins by focusing on niche markets and innovative products, and the proportion of internal financing in their corporate financing is not lower than that of large-scale enterprises. This indicates that the impact of enterprise size on internal financing is not a simple linear relationship but is comprehensively influenced by various factors such as the industry in which the enterprise operates and its development strategy.

In the start-up stage, due to its small scale, low market recognition, and weak profitability, an enterprise's internal financing is often limited. At this time, the enterprise mainly relies on the founder's own funds and a small amount of angel investment to maintain operations. As the enterprise enters the growth stage, its market share gradually expands, and its profitability strengthens. Internal financing then becomes one of the important sources of funds for the enterprise. The enterprise uses retained profits to support the expansion of production scale and technological upgrades. Rokhmawati's (2023) research found that the proportion of internal financing in growing enterprises increases on average every year. When the enterprise enters the maturity stage, with a stable market position and a high level of profitability, internal financing plays a more prominent role in corporate financing. The enterprise can use its abundant retained earnings for diversified investments and strategic layouts. In the decline stage, an enterprise's profitability declines, and its internal financing capacity also weakens. The enterprise may need to seek external financing to maintain operations and undergo transformation.

The macroeconomic environment also has a significant impact on an enterprise's internal financing. During an economic boom, with strong market demand, smooth product sales, and enhanced profitability for enterprises, the scale of internal financing expands accordingly. At the same time, a favorable macroeconomic environment also boosts investors' confidence in the enterprise, facilitating the retention of profits. Wang (2021) found that macroeconomic variables such as the gross domestic product (GDP) growth rate and the consumer confidence index are significantly positively correlated with the level of an enterprise's internal financing. Conversely, during an economic recession, with shrinking market demand, enterprises facing operational pressures, and declining profitability, their internal financing capacity is suppressed. In addition, macroeconomic policies such as monetary policy and fiscal policy can also indirectly affect an enterprise's internal financing decisions by influencing its financing costs and market environment.

(3) Research on the Impact of Internal Financing on Enterprises

Internal financing has various positive impacts on an enterprise's financial position. Firstly, it can reduce an enterprise's financing costs. Compared with external financing, internal financing does not require the payment of interest and handling fees, reducing the enterprise's financial expenses and increasing its profit level. Secondly, it helps optimize an enterprise's capital structure. By reasonably utilizing internal financing, an enterprise can reduce its dependence on external debt financing, lower its asset-liability ratio, and enhance its financial stability and risk resistance (Yang et al., 2020).

Internal financing provides important financial support for an enterprise's investment decisions. When choosing investment projects, the scale and availability of internal financing will affect an enterprise's investment capacity and direction.

Enterprises with sufficient internal financing can more autonomously conduct long-term and strategic investments, such as research and development, equipment upgrades, and market expansion, without being overly reliant on the restrictions and conditions of external financing. The use of internal financing can also reduce information asymmetry problems and agency costs caused by external financing, improving investment efficiency (Wang, 2021; Yang et al., 2020).

Internal financing also has a certain impact on an enterprise's corporate governance structure. Since internal financing mainly comes from within the enterprise, the owners and managers of the enterprise have greater autonomy and control over the use of funds. This helps strengthen internal management and decision-making efficiency within the enterprise and reduce external shareholder intervention. However, it may also lead to a lack of external supervision and constraints in internal decision-making, posing certain moral hazards and agency problems.

2.2.5 Debt Financing

(1) Definition of Debt Financing

Debt financing is a financing method through which enterprises borrow funds from external creditors to meet their own capital needs. It mainly includes bank loans and bond issuance. Creditors, relying on debt contracts, have the right to recover the principal and obtain interest as agreed during the enterprise's operation, but do not participate in the enterprise's business management decisions. From a financial perspective, debt financing is an important part of an enterprise's liabilities, reflecting the capital lending relationship between the enterprise and creditors. Mande et al. (2019) pointed out that debt financing is an important way for enterprises to obtain external financing. Compared with equity financing, it has advantages such as relatively fixed financing costs and no dilution of enterprise control, but it also increases the enterprise's financial risks.

(2) Research on the Influencing Factors of Debt Financing

An enterprise's credit status is one of the key factors influencing debt financing. A good credit record can enhance creditors' trust in the enterprise, reduce creditors' perceived risks, and thus increase the enterprise's likelihood of obtaining debt financing and lower its financing costs. Credit rating agencies' credit ratings of enterprises are important indicators for measuring an enterprise's credit status. Through empirical research on a large number of enterprises, Kang (2021) found that enterprises with higher credit ratings are more likely to obtain bank loans and issue bonds, and their financing interest rates are relatively lower. Conversely, enterprises with poor credit status may face financing difficulties or high-cost financing.

conditions. An enterprise's credit status depends not only on its financial indicators, such as the asset-liability ratio and current ratio, but also on factors such as its business history and market reputation.

An enterprise's profitability also has a significant impact on debt financing. Enterprises with strong profitability usually have more stable cash flows and can repay the principal and interest of debts on time, thus reducing creditors' risks. Creditors are more willing to provide funds to enterprises with strong profitability. Kim (2023) analyzed the relationship between profitability indicators such as net profit and return on equity, and the scale of debt financing, and found a positive correlation between these profitability indicators and the amount of bank loans obtained and the scale of bond issuance by enterprises. This indicates that the stronger an enterprise's profitability, the easier it is to obtain debt financing support, and the larger the financing scale may be.

The macroeconomic environment has a wide and profound impact on an enterprise's debt financing. During an economic boom, with strong market demand and good business performance of enterprises, creditors' confidence in enterprises increases, and they are willing to provide more funds. The scale of an enterprise's debt financing may expand. At the same time, monetary policy also affects the cost of debt financing. Under a loose monetary policy, market interest rates decline, and the cost of an enterprise's debt financing decreases, which is conducive to debt financing. Marszałek (2020) studied the changes in enterprise debt financing under different macroeconomic cycles and found that during economic recessions, enterprises face greater difficulties in debt financing, and financing costs increase. In addition, the degree of development of financial markets also affects an enterprise's debt financing channels and methods.

Enterprises in different industries have differences in debt financing. Some capital-intensive industries, such as manufacturing and real estate, which require a large amount of capital investment for fixed asset construction and production operations, have a high dependence on debt financing. In contrast, some asset-light industries, such as the Internet and service industries, may face difficulties in debt financing due to a lack of sufficient collateral.

(3) Research on the Impact of Debt Financing on Enterprises

Debt financing will change an enterprise's financial structure and increase its liability level. Moderate debt financing can improve an enterprise's financial leverage and use the tax shield effect of debt interest to increase the enterprise's value. However, an excessively high debt ratio will increase an enterprise's financial risks, which may lead to the enterprise facing repayment pressures and even trigger a financial crisis. By constructing a financial leverage model, He and Xiong (2019) analyzed the changes in an enterprise's value under different debt levels and found

that there is an optimal debt ratio that maximizes the enterprise's value. Enterprises need to reasonably control the scale of debt financing and optimize their financial structures according to their own business conditions and development strategies.

Debt financing will impose certain constraints on an enterprise's business decisions. There is an information asymmetry problem between creditors and enterprises. To protect their own interests, creditors usually set some restrictive clauses in debt contracts, such as restrictions on an enterprise's investment decisions and dividend distribution policies. These restrictive clauses will affect an enterprise's business autonomy and flexibility (Qiang, 2021).

Debt financing helps improve an enterprise's governance structure. As stakeholders of the enterprise, creditors will supervise the enterprise's business management. When an enterprise is in financial distress or violates debt contracts, creditors may take measures, such as requiring the enterprise to repay debts in advance or participating in the enterprise's restructuring, to protect their own interests (Moyen, 2018). This supervision mechanism can prompt enterprises to improve their business management levels and reduce moral hazard and adverse selection problems.

2.2.6 Operational Capability

(1) Definition of Operational Capability

Operational capability refers to an enterprise's ability to use various assets to earn profits. It reflects the rate of expansion of an enterprise's asset operation scale as well as the management efficiency and utilization effect of its assets (Roscoe et al., 2019). Operational capability embodies an enterprise's ability to create value through resource allocation and production and operation activities within a certain period. From the perspective of indicators, commonly used operational capability indicators include the inventory turnover ratio, accounts receivable turnover ratio, and total asset turnover ratio. Wook (2017) pointed out that operational capability is an important part of an enterprise's core competitiveness, which directly affects its profitability and market competitiveness. Good operational capability means that an enterprise can use its assets more efficiently, reduce operating costs, and improve production efficiency.

(2) Research on the Influencing Factors of Operational Capability

An enterprise's production process and management level have a significant impact on its operational capability. A reasonable production process design can improve production efficiency and reduce waste and delays in the production process. Advanced production management methods, such as lean production and Six Sigma management, can optimize the production process and improve product quality and production speed. Through case studies of manufacturing enterprises, Jopinus Saragih

et al. (2020) found that enterprises implementing lean production have significantly improved their inventory turnover ratios and total asset turnover ratios, and their operational capabilities have been significantly enhanced. At the same time, effective supply chain management can also improve an enterprise's operational capability by ensuring the timely supply of raw materials and the smooth sales of products (Mikalef et al., 2020).

Technological level is one of the key factors influencing an enterprise's operational capability. Advanced technology can improve the degree of production automation, reduce labor costs, and improve production efficiency and product quality. Li et al. (2020) analyzed the relationship between the technological levels of enterprises in different industries and their operational capabilities and found that enterprises with high technological levels generally have better operational capability indicators than those with low technological levels. In addition, technological innovation can also drive enterprises to develop new products and expand new markets, enhancing their market competitiveness.

Employee quality also has a significant impact on an enterprise's operational capability. High-quality employees have stronger professional skills and innovation abilities, and can better complete work tasks and improve work efficiency. The teamwork and communication abilities of employees also affect an enterprise's production and operational efficiency. Through survey research, Govind (2017) found a positive correlation between employee training investment and an enterprise's operational capability indicators. By strengthening employee training and improving employee quality, enterprises can enhance their operational capabilities.

Changes in the market environment will affect an enterprise's operational capability. The size and fluctuations of market demand will affect an enterprise's production and sales plans. When market demand is strong, enterprises can expand their production scales and improve operational efficiency; when market demand shrinks, enterprises may face problems such as inventory backlogs and idle production capacity, and their operational capabilities decline. Amoako-Gyampah et al. (2019) studied the impact of the market environment on an enterprise's operational capability and found that the degree of market competition also affects an enterprise's operational strategies and operational efficiency. Enterprises need to adjust their operation strategies promptly according to changes in the market environment to meet market demands.

(3) Research on the Impact of Operational Capability on Enterprises

Operational capability is closely related to an enterprise's profitability. Efficient operational capability can reduce an enterprise's production costs and operating costs, improve product quality and production efficiency, and thus increase its profits. An increase in the inventory turnover ratio can reduce the capital occupied by inventory

and lower inventory costs; an increase in the accounts receivable turnover ratio can accelerate capital turnover and reduce bad debt losses. There is a positive correlation between operational capability indicators and an enterprise's net profit margin. By improving operational capability, enterprises can enhance their profitability and market competitiveness.

Good operational capability helps improve an enterprise's solvency. Enterprises with strong operational capabilities can use their assets more efficiently and generate more cash flows, thus having sufficient funds to repay debts on time. An increase in the total asset turnover ratio means that the utilization efficiency of an enterprise's assets has improved, and assets can be converted into income and cash flows more quickly. Ogutcu (2020) analyzed the relationship between operational capability and an enterprise's solvency indicators and found that enterprises with strong operational capabilities also have relatively better solvency indicators, such as the current ratio and quick ratio. This indicates that improving operational capability can enhance an enterprise's financial stability and solvency.

Operational capability also has a significant impact on an enterprise's development ability. Efficient operational capability enables enterprises to adapt more quickly to market changes, launch new products, and expand new markets. Enterprises can achieve production scale expansion and market share increase by improving their operational capabilities, laying a foundation for their long-term development. Weyn et al. (2021) found that enterprises with strong operational capabilities generally have higher development ability indicators, such as revenue growth rate and asset growth rate.

2.2.7 Profitability

(1) Definition of Profitability

Profitability refers to an enterprise's ability to generate returns using its own capital. It serves as a crucial indicator for measuring a company's profitability level, reflecting the firm's capacity to achieve profits through business operations over a specific period. Profitability embodies the effectiveness with which an enterprise utilizes various resources to create value and constitutes the foundation for its survival and development. Commonly used profitability indicators include Return on Equity (ROE), Return on Total Assets (ROTA), and Net Profit Margin, among others. Profitability not only pertains to a company's immediate interests but also influences its future development and market competitiveness. Enterprises with high profitability can attract more investors, providing ample financial support for their growth (Jun & Kim, 2011).

(2) Research on the Influencing Factors of Profitability

Cost control stands as one of the key factors affecting an enterprise's profitability. Effective cost control can reduce a company's production and operational costs, thereby increasing the gross profit margin of its products. Enterprises can manage costs by optimizing production processes, lowering raw material procurement costs, and enhancing production efficiency. A study by Basu and Das (2020) on manufacturing enterprises revealed that those implementing cost-control measures experienced a significant improvement in their Net Profit Margin and Return on Total Assets. Additionally, reasonable cost control can confer a price advantage on enterprises in the market, boosting their market share.

Product pricing strategies also exert a significant impact on a company's profitability. Reasonable pricing enables firms to maximize profits while ensuring product sales. Enterprises need to formulate pricing strategies based on factors such as product costs, market demand, and competitive conditions. Lee and Devoe (2019) analyzed the impact of different pricing strategies on corporate profitability and found that companies adopting differentiated pricing strategies could set varying prices according to the needs and payment capacities of different customer segments, thereby enhancing their overall profitability. Moreover, the timing and magnitude of price adjustments also affect a company's profitability.

The size of market demand and the degree of competition influence a company's product sales and pricing, subsequently affecting its profitability. When market demand is strong, enterprises can expand production scales, raise product prices, and increase profits. Conversely, during periods of shrinking demand or intense competition, companies may face issues such as falling product prices and reduced sales, leading to a decline in profitability. Joshi's (2018) research on the impact of market demand and competition on corporate profitability revealed that enterprises need to continuously innovate and improve product quality to meet market demands and enhance market competitiveness, thereby maintaining and improving profitability.

Corporate innovation capability has a long-term positive impact on profitability. Innovation drives enterprises to develop new products and services, explore new markets, and increase the added value and differentiation of their offerings. Companies with strong innovation capabilities can occupy leading positions in the market and achieve higher profits. Enterprises with robust innovation capabilities generally exhibit higher Return on Equity and sales growth rates. To enhance profitability, companies need to increase research and development investments, cultivate innovative talents, and improve their innovation capabilities (Eldomiaty, 2016; He & Xiong, 2019).

(3) Research on the Impact of Profitability on Enterprises

Profitability is one of the key determinants of a company's value. Enterprises with high profitability can create more value for shareholders and enhance their

market value. According to value assessment theory, a company's value equals the discounted value of its future cash flows, and profitability directly influences these cash flows.

Profitability also significantly impacts a company's financing capacity. Enterprises with high profitability have more stable cash flows and stronger debt-repayment capabilities, making it easier for them to obtain debt financing and equity financing. When providing loans, banks and other financial institutions typically focus on a company's profitability indicators. Companies with strong profitability are more likely to secure loans at lower interest rates. Dexter's et al. (2021) analysis of the relationship between profitability and corporate financing costs revealed that enterprises with high profitability generally face relatively lower financing costs. Additionally, companies with strong profitability are more attractive to investors for equity investments.

Sound profitability serves as the foundation for an enterprise's sustainable development. Companies with strong profitability can allocate more funds to research and development innovation, equipment upgrades, and talent cultivation, thereby enhancing their core competitiveness and long-term development capabilities. In contrast, enterprises with weak profitability may face capital shortages, making it difficult for them to engage in continuous investments and development.

2.3 Introduction to Douyin Group (Hong Kong) Limited

Douyin Group (Hong Kong) Limited (formerly known as ByteDance (Hong Kong) Limited) is a private company limited by shares registered in Hong Kong, China, on May 8, 2012. Its registered address is located on the 37th floor of One International Finance Centre, Central, Hong Kong. As the core vehicle for ByteDance's globalization strategy, the company has constructed a digital ecosystem centered around Douyin by integrating diverse businesses such as short-form videos, news, utility software, and advertising marketing. Its product portfolio includes the globally leading short-form video platforms Douyin (Chinese version) and TikTok (international version). As of 2025, Douyin boasts over 600 million daily active users in China and has surpassed 3 million monthly active users in Hong Kong, marking a 147% increase from the end of 2022. The news platform Jinri Toutiao, the long-form video platform Xigua Video, and the online literature reading platform Fanqie Novel cater to users' full-spectrum needs, ranging from news acquisition to in-depth entertainment. The utility software Jianying (Chinese version) and CapCut (international version) have become the preferred editing tools for global creators due to their user-friendliness and professional features. Meanwhile, Ocean Engine, as an advertising and marketing service platform, facilitates brand growth and commercial conversion for enterprises through data-driven precision advertising and full-funnel marketing solutions.

In terms of corporate structure, Douyin Group (Hong Kong) Limited is led by a board of directors chaired by ByteDance CEO Liang Rubo, with members including Mo Zhaoqi and Zhang Peng, forming an efficient decision-making system. The company's legal representative, Zhang Yiming, serves as the de facto controller, steering the strategic direction. The company has established a business network through wholly-owned subsidiaries (such as Douyin Vision Co., Ltd.) and controlled enterprises (such as Beijing Youzhuju Network Technology Co., Ltd.). As of 2025, it has made investments in 11 external companies, covering fields such as information transmission, software and information technology services, and scientific research and technical services. The investment regions span core economic zones, including Guangdong, Beijing, and Shanghai.

From a technological perspective, the company holds eight patents covering critical areas such as algorithm optimization, content recommendation, and data security. It has also participated in one bidding project, demonstrating its technology-driven development model. In October 2024, ByteDance's cloud service brand BytePlus deployed a local data center in Hong Kong, providing AI cloud infrastructure services for small and medium-sized enterprises (SMEs) and promoting technological inclusivity. Through brand activities such as BytePlus Day, the company assists local enterprises in embracing AI technologies and accelerating their digital transformation. In terms of compliance operations, the company strictly adheres to Hong Kong and international regulations, ensuring transparent operations through procedures such as the Annual Return (NAR1) and Notification of Change of Registered Office (NR1). Its rebranding to "Douyin Group (Hong Kong) Limited" in May 2022 signifies a strategic shift toward a comprehensive focus on the Douyin ecosystem.

In terms of market influence, Douyin has achieved a penetration rate of nearly 40% in Hong Kong, becoming one of the most active social platforms locally, with its user base and engagement continuously leading the industry. Through strategic investments and ecosystem integration, the company has constructed a full-industry-chain layout covering content creation, advertising, marketing, and technology services. Looking ahead, it will continue to deepen the application of AI technologies, expand into international markets, and strengthen collaborations with SMEs to drive sustainable development in the digital economy. During its transformation from a content platform to a comprehensive digital ecosystem service provider, Douyin Group (Hong Kong) Limited is reshaping the commercial and cultural landscape of the digital era with technology as its cornerstone, users at its core, and a global vision as its guide.

2.4 Conceptual Framework

In the fiercely competitive business environment, corporate financing is of paramount importance to enterprises. This study, grounded in financing theories and efficiency theories and drawing on relevant achievements in corporate financing, proposes an influencing factor model for Douyin's corporate financing. The influencing factors are scientifically categorized into four dimensions: internal financing, debt financing, operational capability, and profitability. This study delves into the specific impacts of these four dimensions on Douyin's corporate financing and utilize Figure 2.1 to illustrate the model structure and the relationships among the dimensions, providing a framework and direction for subsequent research.

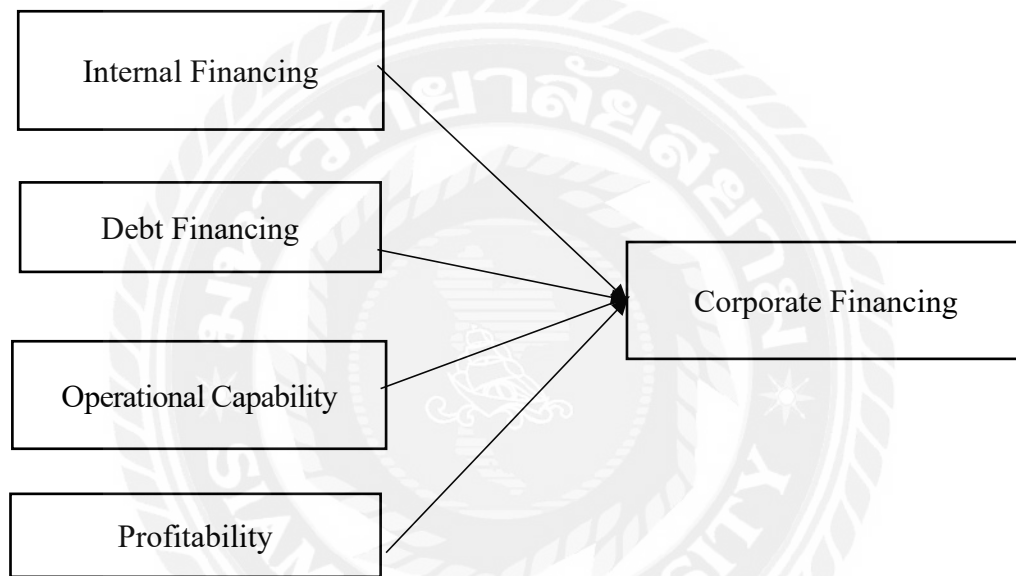


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Research Design

This study employed a quantitative research approach, aiming to systematically and comprehensively analyze the multiple factors influencing corporate financing of Douyin Group (Hong Kong) Limited. The research focused on four key elements: internal financing, debt financing, operational capability, and profitability. It delved deeply into the intrinsic connection mechanisms between these elements and the corporate financing of Douyin Group (Hong Kong) Limited, striving to uncover the influence pathways and magnitudes of each element on corporate financing.

During the data collection phase, this study utilized a questionnaire survey method to obtain primary data. The questionnaire was designed in the form of a 5-point Likert scale, where 1 represents "strongly disagree" and 5 represents "strongly agree." The scale design strictly referenced previous relevant research findings, comprehensively covering the core dimensions of each variable to ensure the completeness and accuracy of data collection. Through this approach, it systematically gathered the perspectives and evaluations of internal personnel at Douyin Group (Hong Kong) Limited regarding various elements of corporate financing, providing rich and reliable data support for subsequent analysis.

The data analysis process followed a scientific and rigorous procedure, divided into multiple steps. Firstly, descriptive statistical analysis was conducted. By calculating mean and standard deviation, it clearly presented the characteristic distribution of the sample in terms of demographics, including gender, age, educational background, position level, and work experience. Simultaneously, it showcased the data distribution characteristics and patterns of each core variable, enabling a comprehensive understanding of the overall data landscape. Secondly, Pearson correlation coefficients were employed to carry out correlation analysis, examining the degree of association between variables. This step determined whether significant correlations existed between factors like internal financing, debt financing, operational capability, and profitability, and corporate financing, providing a theoretical basis for subsequent regression analysis. Furthermore, to quantitatively assess the impact of each factor on corporate financing, a multiple regression model was constructed for multiple regression analysis. This analysis clarified the direction and intensity of the effects of the four major factors, identifying which factors had a more significant impact on the corporate financing of Douyin Group (Hong Kong) Limited, thereby revealing the driving factors of corporate financing.

To ensure the scientificity and rigor of the research methods, prior to formal data analysis, this study used SPSS software to conduct reliability and validity tests on the questionnaire. Reliability testing assesses the reliability of the measurement tool, that is, the consistency and stability of the questionnaire's measurement results, ensuring

the reliability of data collection. Validity testing, on the other hand, evaluates the effectiveness of the measurement tool, namely, whether the questionnaire can accurately measure the studied concepts, ensuring the alignment between the data and the research objectives. Through this testing step, the reliability and validity of the measurement tool were fully guaranteed, laying a solid foundation for the accuracy of subsequent research results. The overall research adhered to a rigorous and scientific analysis process, striving to objectively and accurately reveal the driving factors that promote the enhancement of corporate financing of Douyin Group (Hong Kong) Limited, providing theoretical support and decision-making bases for enterprise management practices.

3.2 Population and Sample

The population of this study consisted of employees within Douyin Group (Hong Kong) Limited who are involved in corporate financing activities. Given that Douyin Group (Hong Kong) Limited serves as the core operational entity and strategic decision-making center of the group, its corporate financing practices are highly representative. Therefore, this study limited the sampling scope to Douyin Group (Hong Kong) Limited. According to internal data, the company has approximately 5,000 on-the-job employees distributed across various management, operational, and professional positions. These employees can access and perceive the company's corporate financing practices from different business dimensions, such as financing, investment, operations, and research and development, ensuring the diversity and effectiveness of the research data sources.

(1) For an infinite population, the sample size formula is as follows:

$$n_0 = \frac{z^2 \cdot p(1-p)}{e^2}$$

where:

z is the critical value of the standard normal distribution (at a 95% confidence level, $z=1.96$)

p is the estimated proportion (taking $p=0.5$ maximizes n)

e is the allowable sampling error

(2) Finite population correction: When the population is relatively small, the finite population correction (FPC) is applied:

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

(3) Sample size calculation

$$n_0 = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = \frac{3.8416 \times 0.25}{0.0025} = \frac{0.9604}{0.0025} = 384.16$$

Population size N=5000

Confidence level: 95% (z=1.96)

Margin of error e=5%=0.05

p=0.5

This study initially determines a sample size of $n_0=385$.

Applying the finite population correction:

$$n = \frac{385}{1 + \frac{385 - 1}{5000}} \approx 351$$

Thus, the sample size is approximately 351 people.

Considering the population size, this study adopted a random sampling method to determine the survey sample. To ensure that the sample size was sufficient to support subsequent empirical analysis and guarantee the statistical power of the results, the researcher determined the minimum sample size to be 351 using the sample size calculation formula at a 95% confidence level and a 5% allowable error range, based on the total population (N=5000). To account for potential issues such as invalid responses and insufficient recovery rates during the questionnaire distribution process, this study planned to actually distribute 400 questionnaires to ensure that the number of valid samples recovered meets the research requirements.

During the sampling process, the research team paid particular attention to the representativeness of the sample's demographic characteristics, striving to achieve broad representation in terms of gender, age, educational background, position level, and work experience. The main purpose of this approach was to enhance the applicability and universality of the research results, enabling them to more accurately reflect the actual situation.

3.3 Hypothesis

Based on the preceding theoretical analysis of the key influencing factors of corporate financing and the construction of the research framework, the following research hypotheses were proposed for testing. These hypotheses aimed to systematically explore the specific action mechanisms of each factor on the corporate financing of Douyin Group (Hong Kong) Limited, providing a clear direction for subsequent empirical analysis:

H1: Internal financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.

H2: Debt financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.

H3: Operational capability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.

H4: Profitability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.

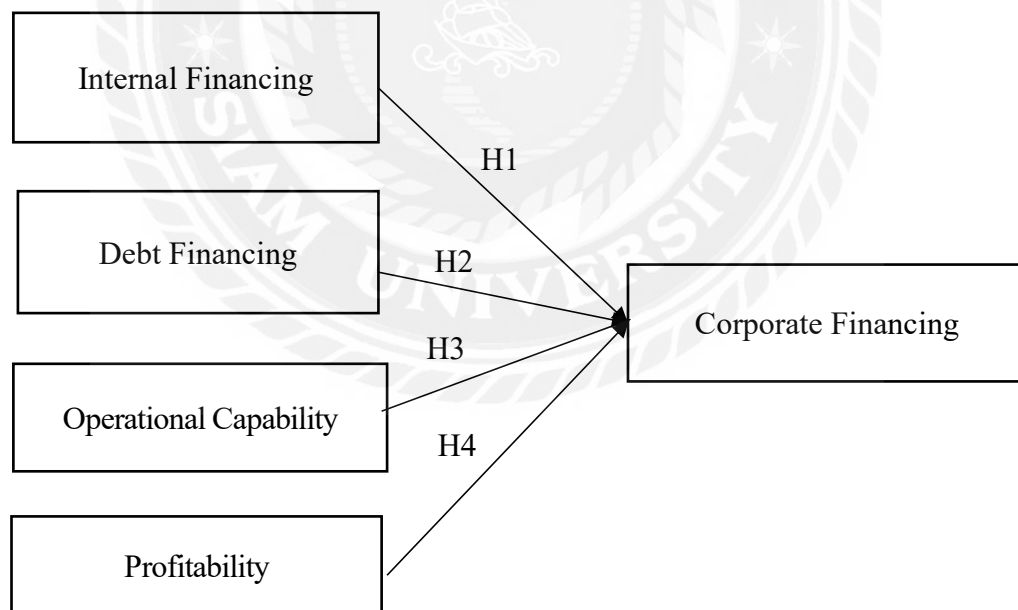


Figure 3.1 Hypotheses

3.4 Research Instrument

This study focuses on the influencing factors of corporate financing in China, using Douyin Group (Hong Kong) Limited as a case study to explore the action mechanisms of four independent variables—internal financing, debt financing, operational capability, and profitability—on the dependent variable of corporate financing. The research employs a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) to quantify each variable. Each variable is designed with five measurement items, and the variable connotations are clarified through summary statements.

Internal financing refers to a company's ability to support its financing needs through funds accumulated from its own business activities (such as retained earnings and depreciation). Debt financing refers to the methods by which a company obtains funds through debt instruments such as bank loans and bond issuance. Operational capability reflects a company's efficiency in utilizing assets to generate revenue, directly influencing its financing appeal. Profitability refers to a company's ability to generate profits through its main business and is a core consideration in financing. Corporate financing refers to the total scale and structure of funds obtained by a company through internal and external channels, reflecting its financing capacity.

Design Explanation: Each item is closely aligned with the variable definitions and designed in consideration of the business characteristics of Douyin Group (such as technology-driven operations and global operations), avoiding abstract expressions. The 5-point Likert scale design facilitates subsequent reliability and validity tests (such as Cronbach's α), correlation analysis, and regression modeling, supporting the verification of the hypotheses (H1-H4).

Through this design, the study can systematically quantify the impact of each factor on corporate financing, providing empirical evidence for optimizing the financing strategies of Douyin Group and similar enterprises, as shown in Table 3.1.

Table 3.1 Measurement Items

Influencing Factor	Explanation	Measurement Item	NO.
Internal Financing	Reflecting the degree of investors' expectations for the company's future	The retained earnings of Douyin Group are sufficient to meet short-term funding requirements.	1
		The depreciation funds of the company can effectively supplement the operational funding gap.	2
		The stability of internal cash flow has a significant impact on financing decisions.	3
		Management tends to prioritize the use of	4

		internal funds over external financing.	
		The cost of internal financing is lower than that of external debt financing.	5
Debt Financing	Reflecting the company's long-term solvency	Douyin Group can obtain long-term bank loans at relatively low interest rates.	6
		The bond market shows high acceptance of the group's corporate bond issuance.	7
		The debt maturity structure (such as the ratio of long-term to short-term loans) is reasonable.	8
		The repayment pressure from debt financing has not significantly affected operational stability.	9
		The improvement in the group's credit rating has reduced the cost of debt financing.	10
Operational Capability	Reflecting the growth rate of the company's asset operation scale	The asset turnover ratio (e.g., accounts receivable and inventory turnover) of Douyin Group is higher than the industry average.	11
		The optimization of supply chain management efficiency has shortened the cash flow cycle.	12
		The standardization of operational processes has reduced unit costs.	13
		Technological investments (such as AI algorithms) have enhanced operational efficiency.	14
		High operational efficiency has boosted investors' confidence in financing.	15
Profitability	Reflecting the company's ability to generate returns on its own capital and measuring its profitability	The net profit margin of Douyin Group consistently exceeds the industry average.	16
		The gross profit margin of core businesses, such as advertising revenue, has shown steady growth.	17
		Cost control measures have effectively expanded the profit margin.	18
		A high ROE (Return on Equity) has enhanced the attractiveness of equity financing.	19
		Stable profit expectations support long-term financing planning.	20
Corporate Financing	Reflecting the company's comprehensive ability to meet its asset expansion	The financing scale of Douyin Group has grown in tandem with business expansion in recent years.	21
		The financing structure (the ratio of internal, debt, and equity financing) aligns with strategic needs.	22
		The financing costs (interest rates, handling fees)	23

	and profitability goals through internal and external funding channels	are among the lowest in the industry.	
		The diversification of financing channels has reduced the risk of single dependency.	24
		The financing efficiency (such as approval speed and fund availability rate) meets business requirements.	25

3.5 Reliability and Validity Analysis of the Scale

3.5.1 Questionnaire Reliability Analysis

Table 3.2 Variable Reliability Test

Influencing Factor	Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Cronbach's Alpha
Internal Financing	Q1	0.722	0.804	0.825
	Q2	0.774	0.815	
	Q3	0.791	0.807	
	Q4	0.788	0.812	
	Q5	0.793	0.801	
Debt Financing	Q6	0.801	0.824	0.841
	Q7	0.805	0.836	
	Q8	0.804	0.814	
	Q9	0.801	0.833	
	Q10	0.798	0.832	
Operational Capability	Q11	0.782	0.845	0.851
	Q12	0.795	0.822	
	Q13	0.789	0.827	
	Q14	0.782	0.838	
	Q15	0.776	0.845	
Profitability	Q16	0.768	0.837	0.844
	Q17	0.774	0.822	
	Q18	0.752	0.831	
	Q19	0.772	0.842	
	Q20	0.765	0.827	
Corporate Financing	Q21	0.801	0.841	0.859
	Q22	0.794	0.854	
	Q23	0.793	0.837	
	Q24	0.778	0.841	
	Q25	0.804	0.832	

Table 3.2 shows that the data encompasses five variables (internal financing, debt financing, operational capability, and profitability as independent variables, and corporate financing as the dependent variable), with each variable having five items (Q1 - Q25). The Corrected Item-Total Correlation reflects the degree of correlation between a single item and the total score of the other items within its corresponding variable. A higher value indicates a stronger consistency between the item and the variable. Cronbach's Alpha if Item Deleted indicates how the overall Cronbach's Alpha of a variable would change if the current item were removed, which is used to assess the contribution of an item to the reliability of the scale. Cronbach's Alpha (overall reliability coefficient) is an indicator for measuring the internal consistency of a scale. A value of ≥ 0.7 is generally considered reliable, and a value of ≥ 0.8 indicates high reliability.

(1) Variable-by-Variable Analysis

In the internal financing dimension, there are five items, Q1 - Q5. The Corrected Item-Total Correlation for each item is at a relatively high level, with Q1 at 0.722 and Q2 - Q5 ranging from 0.774 to 0.793. This indicates that each item has a strong correlation with the total score of the other items within this dimension, suggesting high-quality items that can effectively reflect the construct of internal financing. Regarding "Cronbach's Alpha if Item Deleted", after removing any item, the overall Cronbach's Alpha fluctuates between 0.801 and 0.815, all of which are lower than the dimension's overall Cronbach's Alpha of 0.825. This implies that each item makes a positive contribution to the overall reliability, and retaining all items helps maintain a high level of internal consistency in the scale.

The debt financing dimension consists of five items, Q6 - Q10. In terms of Corrected Item-Total Correlation, the values for Q6 - Q10 range from 0.798 to 0.805, showing a high degree of correlation between each item and the total score of the other items within the dimension. This means these items can effectively measure debt financing together. Regarding the "Cronbach's Alpha if Item Deleted" metric, the Cronbach's Alpha values after removing each item range from 0.814 to 0.836, all of which are lower than the dimension's overall value of 0.841. This indicates that each item is an important component of the scale's reliability, and removing any of them would reduce the reliability. Therefore, all items should be retained.

The operational capability dimension has five items, Q11 - Q15. The Corrected Item-Total Correlation shows that the values for Q11 - Q15 range from 0.776 to 0.795, indicating a good correlation between each item and the total score of the other items within this dimension, enabling them to reflect operational capability. From the perspective of "Cronbach's Alpha if Item Deleted", the Cronbach's Alpha values after removing different items range from 0.822 to 0.845, all of which are lower than the dimension's overall value of 0.851. This suggests that each item is indispensable for maintaining the reliability of the operational capability dimension scale, and retaining

all items can optimize the scale's reliability.

The profitability dimension includes five items, Q16 - Q20. In terms of Corrected Item-Total Correlation, the values for Q16 - Q20 range from 0.752 to 0.774, indicating a relatively good correlation between each item and the total score of the other items within the dimension, allowing them to measure profitability. Regarding the “Cronbach's Alpha if Item Deleted” metric, the Cronbach's Alpha values after removing each item range from 0.822 to 0.842, all of which are lower than the dimension's overall value of 0.844. This shows that each item has a positive impact on the reliability of the profitability dimension scale, and all items should be retained to enhance the scale's reliability.

The corporate financing dimension has five items, Q21 - Q25. The Corrected Item-Total Correlation shows that the values for Q21 - Q25 range from 0.778 to 0.804, indicating a strong correlation between each item and the total score of the other items within this dimension, enabling them to reflect the situation of corporate financing. From the perspective of “Cronbach's Alpha if Item Deleted”, the Cronbach's Alpha values after removing different items range from 0.832 to 0.854, all of which are lower than the dimension's overall value of 0.859. This implies that each item is crucial for the reliability of the corporate financing dimension scale, and retaining all items helps ensure a high level of internal consistency in the scale.

(2) Overall Scale Analysis

Taking all dimensions into account, the Corrected Item-Total Correlation for all items is within a reasonable range, and the Cronbach's Alpha values after removing any item are all lower than the overall Cronbach's Alpha values of their respective dimensions. This indicates that the entire scale is well-designed, with appropriately selected items. The items within each dimension have a high degree of correlation and internal consistency, enabling them to measure the corresponding theoretical constructs. This provides a reliable data foundation for subsequent research, such as factor analysis and hypothesis testing.

3.5.2 Questionnaire Validity Analysis

Table 3.3 KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.887
Bartlett's Test of Sphericity	Approx. Chi-Square	2135.6
	df	402
	<i>p</i>	0.000

(1) Analysis of KMO Test Results

The Kaiser-Meyer-Olkin (KMO) measure is used to assess the partial correlations among variables and determine whether the data is suitable for factor analysis. The general criteria are as follows:

Above 0.9: Extremely suitable for factor analysis

0.8 - 0.9: Suitable

0.7 - 0.8: Moderate

Below 0.6: Unsuitable

In this study, the KMO value is 0.887, which falls within the "suitable" range and is close to the threshold for "extremely suitable" (0.9). This indicates that there are strong common factors among the variables, and the data structure is appropriate for extracting latent dimensions through factor analysis. A high KMO value suggests that the item design is reasonable, with high correlations among the items within each variable (such as internal financing, debt financing, etc.), enabling them to reflect the underlying constructs. This provides a solid data foundation for subsequent analyses.

(2) Analysis of Bartlett's Sphericity Test Results

Bartlett's test is used to verify whether the correlation matrix among variables is an identity matrix (i.e., whether the variables are independent). If the test is significant ($p < 0.05$), the null hypothesis (that the variables are independent) is rejected, indicating significant correlations among the variables and suitability for factor analysis.

In this study, the p-value is < 0.001 , which is far below the significance level, leading to a strong rejection of the null hypothesis. This indicates significant correlations among the variables. Combined with the KMO results, it further supports the suitability of the data for factor analysis, suggesting that the items for each variable (such as internal financing, debt financing, etc.) can collectively reflect the underlying factor structure, providing a statistical basis for subsequent analyses.

The KMO value of 0.887 and the significant Bartlett's test ($p < 0.001$) together indicate that the current data meet the prerequisites for factor analysis, with sufficient common variance among the variables to extract latent factors. This suggests that the scale design is reasonable, and the items can effectively measure the theoretical constructs (such as the various influencing factors of corporate financing), providing reliable data support for subsequent research.

The KMO and Bartlett's test results in Table 3.3 strongly support the suitability of the current data for factor analysis, indicating significant common variance among the variables and a scientifically designed scale. Based on this, the study can proceed with factor extraction, validity testing, and hypothesis verification, providing a reliable basis for understanding the influencing factors of corporate financing. This conclusion lays a solid foundation for subsequent research, ensuring the rationality of the analytical approach and the credibility of the results.

3.6 Data Collection

3.6.1 Sample Selection and Determination

This study focuses on Douyin Group (Hong Kong) Limited, aiming to explore the relevant factors influencing corporate financing. To ensure the representativeness of the sample and the reliability of the data, a random sampling method was employed for sample selection. A total of 400 employees from Douyin Group (Hong Kong) Limited were randomly selected for the questionnaire survey.

3.6.2 Data Collection Methods and Process

This study primarily collected data through a questionnaire survey. The questionnaire design was closely aligned with the research objectives and the various factors influencing corporate financing, covering multiple dimensions such as internal financing, debt financing, operational capability, profitability, and corporate financing. During the formal survey, the questionnaires were distributed online via the Wenjuanxing platform. A total of 400 questionnaires were sent out online, with 354 valid questionnaires recovered, resulting in an effective response rate of 88.5%.

3.6.3 Data Quality Control

After collecting the questionnaires, a rigorous screening process was conducted. Questionnaires with the following issues were excluded: incomplete responses; obvious errors in the answers; and questionnaires completed in an excessively short or long time, which may indicate careless or inattentive filling. Through strict screening, the quality of the data entering subsequent analyses was ensured.

3.7 Data Analysis

3.7.1 Descriptive Statistical Analysis

This study conducted descriptive statistical analysis on the collected data to understand the basic characteristics of the sample and the distribution of each variable. Standard deviation analysis was used to assess the degree of data dispersion and determine the magnitude of differences among enterprises in each dimension.

3.7.2 Reliability Analysis

Cronbach's Alpha coefficient was used to test the reliability of the scale. This study conducted a reliability analysis on the items for each dimension, including internal financing, debt financing, operational capability, profitability, and corporate financing. The results showed that the Cronbach's Alpha coefficients for all dimensions were greater than 0.8, indicating high internal consistency of the scale and strong correlations among the items, enabling reliable measurement of the corresponding constructs. Additionally, further analysis was conducted on each item using "Corrected Item-Total Correlation" and "Cronbach's Alpha if Item Deleted." It was found that the Corrected Item-Total Correlation for all items was within a reasonable range, and the Cronbach's Alpha value after deleting any item was lower than the overall Cronbach's Alpha value for its respective dimension. This suggests that the scale design is reasonable, the item selection is appropriate, and no items need to be deleted.

3.7.3 Validity Analysis

During the scale design process, extensive literature reviews were conducted, and expert opinions and actual enterprise situations were considered to repeatedly refine and modify the scale content, ensuring that it could comprehensively and accurately reflect the various factors influencing corporate financing.

Factor analysis was used to test the structural validity of the scale. First, KMO (Kaiser-Meyer-Olkin) and Bartlett's sphericity tests were conducted to determine whether the data were suitable for factor analysis. The results showed that the KMO values were all greater than 0.7, and the significance level of Bartlett's sphericity test was less than 0.001, indicating that the data were suitable for factor analysis. Then, principal component analysis was used to extract factors, and the maximum variance method was employed for factor rotation. Further analysis revealed that the items included in each factor were consistent with the presumed dimensions of the study, indicating good structural validity of the scale.

3.7.4 Correlation and Regression Analyses

To explore the correlations between various influencing factors and corporate financing, Pearson correlation analysis was conducted. The correlation coefficients between each dimension (internal financing, debt financing, operational capability, and profitability) and corporate financing were calculated.

Based on the correlation analysis, multiple linear regression analysis was conducted to further determine the specific impact magnitudes and directions of each influencing factor on corporate financing. A regression model was constructed with corporate financing as the dependent variable and internal financing, debt financing, operational capability, and profitability as the independent variables.



Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Participants

This survey focused on employees within Douyin Group (Hong Kong) Limited who are involved in corporate financing activities. It aimed to comprehensively understand the characteristic distributions of this group in terms of gender, age, educational background, position level, and years of work experience. A total of 400 employees were randomly selected for the questionnaire survey, and ultimately, 354 valid questionnaires were recovered, resulting in an effective response rate of 88.5%, providing a relatively reliable data foundation for subsequent analyses.

Gender: There were 203 male employees, accounting for 57.3%, and 151 female employees, accounting for 42.7%. The number of male employees exceeded that of female employees, indicating that males may occupy a relatively larger proportion in positions related to corporate financing.

Age: The age distribution was relatively broad. Employees aged between 31 and 35 years old constituted the largest group, with 106 individuals, representing 29.9%. This was followed by the 25 - 30 age group, with 77 employees, accounting for 21.8%. The 36 - 40 age group had 75 employees, making up 21.2%. Employees under 25 and over 40 were relatively fewer, accounting for 14.4% and 12.7%, respectively. This suggests that employees involved in corporate financing-related work are predominantly young and middle-aged. People in this age range may possess richer experience and energy to tackle various challenges in financing work.

Educational Background: Employees with a master's degree were the most numerous, totaling 128 individuals, representing 36.2%. This was followed by those with a bachelor's degree, numbering 117, accounting for 33.1%. Employees with a doctoral degree numbered 58, making up 16.4%. Those with junior college degrees or below were the fewest, with 51 individuals, accounting for 14.4%. The significant proportion of highly educated employees indicates that corporate financing work demands a high level of knowledge and professional competence from employees. A high educational background helps employees better understand and handle complex issues in the financing process.

Position Level: Junior-level employees were the most numerous, with 251 individuals, accounting for 70.9%. Middle-level managers numbered 75, representing 21.2%, while senior-level managers were the fewest, with 28 individuals, accounting for 7.9%. Junior-level employees play a dominant role in corporate financing-related work, likely because they are the specific executors of various financing tasks,

whereas middle- and senior-level managers primarily play decision-making and guiding roles.

Years of Work Experience: Employees with 5 - 10 years of work experience were the most numerous, totaling 105 individuals, representing 29.7%. This was followed by those with less than 5 years of experience, numbering 81, accounting for 22.9%. Employees with 11 - 20 years of experience numbered 75, making up 21.2%. Those with 21 - 30 years of experience numbered 60, accounting for 16.9%. Employees with over 30 years of experience were the fewest, with 33 individuals, accounting for 9.3%. The distribution of years of work experience was relatively even, with employees of different experience levels participating in corporate financing work to a certain extent. This ensures the presence of both experienced employees and newly joined ones, facilitating the exchange of knowledge and experience, as shown in Table 4.1.

Table 4.1 Descriptive Statistical Analysis of Participants

Variable	Option	Number	Total	Percentage%
Gender	Male	203	354	57.3
	Female	151		42.7
Age	Under 25 Years Old	51	354	14.4
	25-30 Years Old	77		21.8
	31-35 Years Old	106		29.9
	36-40 Years Old	75		21.2
	Over 40 Years Old	45		12.7
Educational Backgrounds	Junior College and Below	51	354	14.4
	Undergraduate	117		33.1
	Master's Degree	128		36.2
	Doctoral Degree	58		16.4
Position Level	Grassroots Employee	251	354	70.9
	Middle-Level Managers	75		21.2
	Senior Managers	28		7.9
Working Experience	Less than 5 Year	81	354	22.9
	5-10 Years	105		29.7
	11-20 Years	75		21.2
	21-30 Years	60		16.9
	More than 30 Years	33		9.3

4.1.2 Correlation Analysis

Table 4.2 Correlation between Variables

		Independent Variable				Dependent Variable
		Internal Financing	Debt Financing	Operational Capability	Profitability	Corporate Financing
Independent Variable	Internal Financing	1				
	Debt Financing	.652**	1			
	Operational Capability	.642**	.651**	1		
	Profitability	.645**	.672**	.653**	1	
Dependent Variable	Corporate Financing	.665**	.663**	.655**	.662**	1

This study focuses on the relationship between corporate financing and its potential influencing factors. It selected internal financing, debt financing, operational capability, and profitability as independent variables, with corporate financing serving as the dependent variable, to conduct a correlation analysis. The obtained data reveal numerous statistically significant results.

From an overall perspective of the data, the correlations among all variables have reached a highly significant level. Specifically, within the independent variables, the correlation coefficient between internal financing and debt financing is 0.652**, indicating a strong positive correlation between the two. This suggests that when a company performs well in terms of internal financing, its debt financing may also be at a relatively high level, implying that the two may mutually reinforce each other or be influenced by certain common factors.

The correlation coefficient between internal financing and operational capability is 0.642**, showing a significant positive association. This indicates that the stronger a company's internal financing capability, the more outstanding its operational capability may be. It reflects a potential close connection between a company's self-accumulated funds and its daily operational efficiency. A good operational capability can help a company accumulate internal funds, while sufficient internal funds can, in turn, provide strong support for the company's operations.

The correlation coefficient between internal financing and profitability is 0.645**, demonstrating a significant positive correlation. This means that the stronger a company's profitability, the stronger its internal financing capability may also be. Profitability is an important source of a company's internal funds, and an increase in profitability will naturally expand the scale of its internal financing.

The correlation coefficient between debt financing and operational capability is 0.651**, indicating a significant positive correlation. This may imply that after obtaining funds through debt financing, a company can effectively invest them in operational activities, thereby enhancing its operational capability. Alternatively, companies with stronger operational capabilities may find it easier to obtain debt financing because their debt repayment capabilities are relatively more secure.

The correlation coefficient between debt financing and profitability is 0.672**, showing a significant positive association. This indicates that debt financing may, to a certain extent, help a company improve its profitability, for example, by using debt funds for investment or expanding production scale to increase profits. At the same time, companies with strong profitability may also be more inclined to engage in debt financing to leverage financial resources and obtain more returns.

The correlation coefficient between operational capability and profitability is 0.653**, indicating a highly significant positive correlation between the two. This shows that the higher a company's operational efficiency, the stronger its profitability tends to be. Operational capability encompasses various aspects of a company, including production, sales, and management. Efficient operations can reduce costs, improve product quality and market competitiveness, thereby enhancing profitability.

In terms of the relationship between independent variables and the dependent variable, the correlation coefficient between internal financing and corporate financing is 0.665**, indicating a significant positive impact of internal financing on corporate financing. This suggests that a company's self-accumulated funds play an important role in the corporate financing process, and companies with strong internal financing capabilities may have relatively better overall financing conditions.

The correlation coefficient between debt financing and corporate financing is 0.663**, showing a significant positive driving effect of debt financing on corporate financing. Debt financing is one of the important external funding sources for a company, and its scale and condition directly affect the company's overall financing capability.

The correlation coefficient between operational capability and corporate financing is 0.655**, indicating a significant impact of operational capability on corporate financing. Good operational capability implies that a company has strong market competitiveness and debt repayment capability, which helps it obtain more financial support in the financing market.

The correlation coefficient between profitability and corporate financing is 0.662**, demonstrating a significant positive impact of profitability on corporate financing. Companies with strong profitability usually have better credit status and

development prospects, making them more attractive to investors and creditors and thus more likely to obtain additional financing.

In conclusion, internal financing, debt financing, operational capability, and profitability all exhibit significant positive correlations with corporate financing. These factors interact and influence each other in the corporate financing process, jointly determining a company's financing situation. When formulating financing strategies, companies should fully consider the relationships among these factors. By enhancing internal financing capabilities, optimizing debt financing structures, improving operational efficiency, and boosting profitability, companies can improve their financing environments and meet their capital needs for development.

4.1.3 Multiple Regression Analysis

Table 4.3 Multiple Regression Analysis

Item	Key statistics	value
C	Unstd. B	2.245
	t	8.71
	Sig.	0.000
F		53.413***
Durbin-Watson		1.654
Internal Financing	Std. Beta	0.457
	t	3.78
	Sig.	0.000
	VIF	1.12
Debt Financing	Std. Beta	0.556
	t	3.66
	Sig.	0.000
	VIF	1.18
Operational Capability	Std. Beta	0.542
	t	6.59
	Sig.	0.000
	VIF	1.16
Profitability	Std. Beta	0.544
	t	6.32
	Sig.	0.000
	VIF	1.13
Model Fitting Degree	R Square	0.656
	Adjusted R Square	0.653

This regression analysis focuses on the influencing factors related to corporate financing, involving variables such as the constant term (C), internal financing, debt financing, operational capability, and profitability. It also includes several key statistical indicators, including model fit. The following is a detailed analysis of these data.

(1) Analysis of the Constant Term (C)

Unstandardized Coefficient (Unstd. B): The unstandardized coefficient of the constant term is 2.245. This indicates that when all independent variables (internal financing, debt financing, operational capability, and profitability) take a value of 0, the predicted value of corporate financing is 2.245. However, in practical economic terms, the situation where independent variables take a value of 0 may be uncommon. This constant term primarily serves as a basic adjustment in the regression model.

t-value: The t-value is 8.71, which is relatively large. In regression analysis, the t-value is used to test whether the regression coefficient is significantly different from 0. A large t-value indicates that the constant term is highly statistically significant.

Significance Level (Sig.): The significance level is 0.000, meaning that under common significance levels (such as 0.05 or 0.01), the coefficient of the constant term is significantly different from 0. In other words, the constant term has a significant impact on the corporate financing model.

(2) F-test Analysis

The F-value is 53.413***, where *** typically indicates significance at the 0.001 level. The F-test is used to assess the overall significance of the regression model, that is, whether all independent variables, taken as a whole, have a significant impact on corporate financing. The large F-value and extremely low significance level suggest that the independent variables—internal financing, debt financing, operational capability, and profitability—jointly have a highly significant explanatory effect on corporate financing, and the model as a whole is valid.

(3) Durbin-Watson Test Analysis

The Durbin-Watson value is 1.654. This value is used to test for autocorrelation in the residuals of the regression model. Generally, the Durbin-Watson value ranges from 0 to 4. When the value is close to 2, it indicates the absence of autocorrelation in the residuals. In this model, the Durbin-Watson value of 1.654, which is close to 2, suggests that there is no significant autocorrelation problem in the residuals, meeting the basic assumptions of regression analysis.

(4) Analysis of Independent Variables

Internal Financing: The Std. Beta for internal financing is 0.457, indicating that when other independent variables remain constant, a one-standard-deviation increase in internal financing leads to a 0.457-standard-deviation increase in corporate financing. This shows that internal financing has a positive impact on corporate financing, and the degree of influence is relatively significant. The t-value is 3.78,

indicating that the coefficient of internal financing is statistically significantly different from 0. The Sig. value is 0.000, suggesting that the impact of internal financing on corporate financing is highly statistically significant. The VIF (Variance Inflation Factor) value is 1.12. Generally, when the VIF value is less than 10, there is no serious multicollinearity problem among the independent variables. The VIF value in this model is far less than 10, indicating no significant multicollinearity between internal financing and other independent variables.

Debt Financing: The Std. Beta for debt financing is 0.556, the largest among all independent variables. This means that when other independent variables remain unchanged, a one-standard-deviation increase in debt financing leads to a 0.556-standard-deviation increase in corporate financing. This shows that debt financing has the most prominent positive impact on corporate financing. The t-value is 3.66, indicating that the coefficient of debt financing is statistically significant. The Sig. value is 0.000, suggesting that the impact of debt financing on corporate financing is highly statistically significant. The VIF value is 1.18, also indicating no serious multicollinearity between debt financing and other independent variables.

Operational Capability: The Std. Beta for operational capability is 0.542, indicating that when other independent variables remain stable, a one-standard-deviation increase in operational capability leads to a 0.542-standard-deviation increase in corporate financing. This shows that operational capability also has a strong positive impact on corporate financing. The t-value is 6.59, a relatively large value, indicating that the coefficient of operational capability is highly statistically significant. The Sig. value is 0.000, further confirming the significance of the impact of operational capability on corporate financing. The VIF value is 1.16, indicating no significant multicollinearity between operational capability and other independent variables.

Profitability: The Std. Beta for profitability is 0.544, indicating that when other independent variables remain unchanged, a one-standard-deviation increase in profitability leads to a 0.544-standard-deviation increase in corporate financing. Profitability also has a significant positive impact on corporate financing. The t-value is 6.32, indicating that the coefficient of profitability is statistically significant. The Sig. value is 0.000, suggesting that the impact of profitability on corporate financing is highly statistically significant. The VIF value is 1.13, indicating no serious multicollinearity between profitability and other independent variables.

(5) Model Fit Analysis

R Square: The R Square value is 0.656, indicating that the independent variables can explain 65.6% of the variation in the dependent variable. This suggests that the model has a relatively good fit to the data, meaning that the independent variables can predict changes in the dependent variable to a certain extent.

Adjusted R Square: The Adjusted R Square value is 0.653. It takes into account the impact of the number of independent variables on the coefficient of determination. When more independent variables are added, the Adjusted R Square does not increase as easily as the R Square. The fact that this value is close to the R Square further indicates that the model's fit is relatively stable, and the increase in independent variables has a reasonable effect on improving the model fit.

From the above analysis, it can be seen that the overall performance of this regression model is good. The constant term, internal financing, debt financing, operational capability, and profitability all have a significant impact on the dependent variable. There is no serious multicollinearity among the independent variables, and there is no significant autocorrelation problem in the residuals. The model can explain approximately 65.6% of the variation in the dependent variable, indicating a relatively high fit.

Therefore, according to the results of the data analysis, internal financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited, which supports Hypothesis 1. Debt financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited, which supports Hypothesis 2. Operational capability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited, which supports Hypothesis 3. Profitability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited, which supports Hypothesis 4.

4.2 Discussion

4.2.1 Analysis of H1: The Significant Impact of Internal Financing on Corporate Financing of Douyin Group (Hong Kong) Limited

From the perspective of corporate financing theory, internal financing refers to a financing method where enterprises rely on their own internal accumulations. It is characterized by low costs, low risks, and high autonomy. For Douyin Group (Hong Kong) Limited, its business spans multiple fields and boasts a vast user base and diversified profit-generating channels, such as advertising revenue and e-commerce commissions. The profits generated from these businesses can be converted into internal financing funds, providing stable financial support for the company's development. Internal financing does not require the payment of interest or dividends, thus not increasing the financial burden of the enterprise. It helps the enterprise maintain financial stability and flexibility, theoretically supporting the hypothesis that internal financing has a significant impact on corporate financing.

In the regression analysis, the standardized regression coefficient (Std. Beta) of internal financing is 0.457, with a t-value of 3.78 and a significance level (Sig.) of 0.000. This indicates that for every standard deviation increase in internal financing, the dependent variable related to corporate financing will, on average, increase by 0.457 standard deviations. Moreover, at an extremely low significance level, the regression coefficient of internal financing is significantly different from 0. This demonstrates a significant positive linear relationship between internal financing and corporate financing, with the data results strongly supporting the hypothesis that internal financing has a significant impact on the corporate financing of Douyin Group.

In actual business operations, Douyin Group (Hong Kong) Limited can optimize its internal financial management and improve the efficiency of capital utilization to retain more profits within the enterprise. For example, Douyin Group can reasonably control operating costs, reduce unnecessary expenditures, and allocate the saved funds to key areas such as research and development, innovation, and market expansion. This method of internal financing can enhance the enterprise's self-development capability and reduce its reliance on external financing, thereby having a significant impact on corporate financing.

Compared with other enterprises in the same industry, Douyin Group, with its strong brand influence and market competitiveness, can achieve higher profit levels and thus possesses richer internal financing resources. Some smaller or less competitive enterprises may rely more on external financing, while Douyin Group can meet part of its capital needs through internal financing, reducing financing costs and risks. This industry comparison further highlights the importance of internal financing for the corporate financing of Douyin Group.

From the perspective of corporate strategic development, internal financing can provide solid financial support for the long-term development of Douyin Group (Hong Kong) Limited. The enterprise can use internal financing for strategic investments, such as acquiring related businesses and expanding into new market areas, to achieve scale expansion and diversified development. Meanwhile, stable internal financing also helps the enterprise cope with market fluctuations and uncertainties, enhancing its risk resistance capability. Therefore, internal financing has significant strategic implications for corporate financing.

4.2.2 Analysis of H2: The Significant Impact of Debt Financing on Corporate Financing of Douyin Group (Hong Kong) Limited

Debt financing is a method where enterprises raise funds by borrowing from financial institutions such as banks or issuing bonds. For a large enterprise like Douyin Group (Hong Kong) Limited, debt financing is one of its important financing

channels. Due to its good credit standing and high market reputation, Douyin Group can obtain bank loans or issue bonds at relatively low costs. Debt financing can provide large-scale financial support to meet the enterprise's capital needs at different development stages, such as project construction and equipment renewal.

The regression analysis results show that the standardized regression coefficient of debt financing is 0.556, with a t-value of 3.66 and a significance level of 0.000. This indicates that for every standard deviation increase in debt financing, the dependent variable related to corporate financing will, on average, increase by 0.556 standard deviations. Moreover, at a significant level, the regression coefficient of debt financing is significantly different from 0. The data clearly shows a significant positive relationship between debt financing and corporate financing, providing strong data support for the hypothesis that debt financing has a significant impact on the corporate financing of Douyin Group.

Debt financing can affect an enterprise's financing effectiveness through financial leverage. Appropriate debt financing can increase an enterprise's financial leverage and improve shareholders' return on equity. Douyin Group can arrange the proportion of debt financing reasonably according to its own operating conditions and market demands, using financial leverage to optimize its capital structure. For example, when the enterprise is in a good profit-making situation, increasing debt financing can amplify shareholders' returns, thus having a positive impact on corporate financing.

The influence of the market environment on debt financing cannot be ignored. In a stable financial market with abundant funds, Douyin Group can more easily obtain debt financing at relatively low costs. Conversely, in a volatile financial market with tight funds, the difficulty and cost of debt financing may increase. Douyin Group needs to closely monitor changes in the market environment and flexibly adjust its debt financing strategies to adapt to different market conditions, ensuring a stable impact of debt financing on corporate financing.

Although debt financing can provide financial support to enterprises, it also comes with certain risks, such as debt repayment pressure and interest rate risks. When engaging in debt financing, Douyin Group needs to establish a comprehensive risk management system and arrange debt repayment plans reasonably to reduce debt risks. Through effective risk management, Douyin Group can fully leverage the advantages of debt financing while avoiding adverse impacts on corporate financing and operations due to debt problems, ensuring that the significant impact of debt financing on corporate financing is positive and sustainable.

4.2.3 Analysis of H3: The Significant Impact of Operational Capability on Corporate Financing of Douyin Group (Hong Kong) Limited

Operational capability reflects the efficiency with which an enterprise utilizes resources to create value. For Douyin Group (Hong Kong) Limited, efficient operational capability means being better able to manage its vast user data, content resources, and advertising business, among others. By optimizing algorithms to enhance the accuracy of content recommendations, Douyin Group can increase user stickiness and engagement, thereby improve the display effectiveness and click-through rates of advertisements, and subsequently boost advertising revenue. This efficient operational capability can generate more cash flow for the enterprise, strengthening its financing capacity.

In the regression analysis, the standardized regression coefficient of operational capability is 0.542, with a t-value of 6.59 and a significance level of 0.000. This indicates that for every standard deviation increase in operational capability, the dependent variable related to corporate financing will, on average, increase by 0.542 standard deviations. Moreover, at an extremely low significance level, the regression coefficient of operational capability is significantly different from 0. The data fully demonstrates a significant positive relationship between operational capability and corporate financing, indicating that operational capability has a crucial impact on the corporate financing of Douyin Group.

Within Douyin Group's ecosystem, supply chain management involves multiple links, including content creators, advertisers, and e-commerce platforms. Strong operational capability can optimize supply chain management and enhance the collaborative efficiency among various links. Douyin Group can establish close cooperative relationships with content creators to ensure a continuous supply of high-quality content. Effective communication and cooperation with advertisers can improve the effectiveness and return on investment of advertising placements. This efficient supply chain management can elevate the overall operational level of the enterprise, creating favorable conditions for corporate financing.

Operational capability is also closely related to an enterprise's brand image. Through efficient operations, Douyin Group can provide high-quality products and services to users, establishing a positive brand image. A good brand image can enhance the confidence of investors and financial institutions in the enterprise, increasing its attractiveness in the financing market. Investors are more willing to invest in enterprises with high operational efficiency and a good brand image, as such enterprises possess higher growth potential and investment value.

Enterprises with strong operational capability usually place greater emphasis on innovation and development. Douyin Group continuously introduces new features and services, such as short video special effects and live-streaming e-commerce, to meet

the ever-changing needs of users. Innovation and development can bring new growth points and competitive advantages to the enterprise, improving its profitability and market position. When assessing corporate financing capacity, financial institutions consider an enterprise's innovation ability and development potential. Therefore, operational capability exerts a significant impact on corporate financing by promoting innovation and development.

4.2.4 Analysis of H4: The Significant Impact of Profitability on Corporate Financing of Douyin Group (Hong Kong) Limited

Profitability is the foundation for an enterprise's survival and development, and also an important guarantee for corporate financing. Douyin Group (Hong Kong) Limited, with its diversified business model and a large user base, exhibits strong profitability. Its advertising and e-commerce businesses can generate substantial revenue and profits for the enterprise. High profitability means that the enterprise has sufficient funds to repay debts, pay interest and dividends, reducing the risks for financial institutions and investors, and thereby enhancing the enterprise's financing capacity.

The regression analysis results show that the standardized regression coefficient of profitability is 0.544, with a t-value of 6.32 and a significance level of 0.000. This indicates that for every standard deviation increase in profitability, the dependent variable related to corporate financing will, on average, increase by 0.544 standard deviations. Moreover, at a significant level, the regression coefficient of profitability is significantly different from 0. The data validates a significant positive relationship between profitability and corporate financing, indicating that profitability has a critical impact on the corporate financing of Douyin Group.

Profitability is one of the key factors influencing an enterprise's credit rating. When evaluating an enterprise's credit status, financial institutions focus on its profitability and profit stability. The high profitability of Douyin Group enables it to obtain a higher credit rating, thereby securing more favorable financing conditions in the market, such as lower interest rates and longer repayment terms. A good credit rating can enhance the enterprise's financing capacity and reduce financing costs.

Enterprises with strong profitability can provide higher returns to shareholders. When investing in an enterprise, shareholders expect stable dividend income and capital appreciation. By improving profitability, Douyin Group can increase shareholder returns and attract more investors. Meanwhile, higher shareholder returns can also enhance the enterprise's market value and competitiveness in the financing market, having a positive impact on corporate financing.

Profitability provides financial support for enterprises to engage in strategic investments. Douyin Group can utilize the funds accumulated through its profitability to conduct strategic investment activities such as acquisitions and mergers, achieving enterprise scale expansion and business diversification. Strategic investments can further enhance the enterprise's profitability and market position, creating a virtuous cycle. When assessing corporate financing capacity, financial institutions and investors consider an enterprise's strategic investment ability and development prospects. Therefore, profitability exerts a significant impact on corporate financing by supporting strategic investments.

Table 4.4 Hypothesis Test Results

NO.	Hypothesis	Result
H1	Internal financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.	Supported
H2	Debt financing has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.	Supported
H3	Operational capability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.	Supported
H4	Profitability has a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited.	Supported

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study focused on the influencing factors of corporate financing for Douyin Group (Hong Kong) Limited. Through theoretical analysis and empirical research, it conducted an in-depth exploration of the relationships between internal financing, debt financing, operational capability, profitability, and corporate financing, and draws the following significant conclusions.

From the perspective of financing channels, both internal financing and debt financing have a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited. As a financing method relying on the enterprise's own accumulation, internal financing offers advantages such as low cost, low risk, and strong autonomy. Leveraging its diversified business and large user base, Douyin Group can optimize internal financial management, enhance the efficiency of capital utilization, and retain more profits within the enterprise. This provides stable financial support for key areas such as research and development, innovation, and market expansion, reducing reliance on external financing and thus exerting a positive influence on corporate financing. In terms of debt financing, Douyin Group, with its good credit standing and high market reputation, can obtain bank loans or issue bonds at relatively low costs. Moderate debt financing can increase shareholders' returns through financial leverage, providing large-scale financial support to meet the enterprise's capital needs at different development stages, and playing a crucial role in corporate financing.

At the level of the enterprise's intrinsic capabilities, operational capability, and profitability also significantly affect corporate financing. Operational capability reflects the efficiency with which an enterprise utilizes resources to create value. Through efficient operations, Douyin Group can optimize supply chain management, improve the collaborative efficiency among various links, provide high-quality products and services to users, and establish a positive brand image. Good operational capability not only generates more cash flow, enhancing the enterprise's financing capacity, but also boosts the confidence of investors and financial institutions in the enterprise, increasing its attractiveness in the financing market. Profitability is the foundation for an enterprise's survival and development. With its diversified business model and large user group, Douyin Group possesses strong profitability. High profitability means the enterprise has sufficient funds to repay debts, pay interest, and dividends, reducing the risks for financial institutions and investors. It also enables the enterprise to obtain a higher credit rating, securing more favorable financing conditions in the market, and providing financial support for strategic investments, further promoting the enterprise's development and enhancing its financing capacity.

In summary, internal financing, debt financing, operational capability, and profitability are interrelated and mutually influential, collectively exerting a significant impact on the corporate financing of Douyin Group (Hong Kong) Limited. In its future development, the enterprise should fully recognize the influence of these factors, optimize its financing structure reasonably, and improve operational efficiency and profitability to achieve sustainable financing and development.

5.2 Recommendation

(1) Optimize Internal Financing Strategies and Strengthen Internal Capital Accumulation

Douyin Group (Hong Kong) Limited should further optimize its cost structure and reduce operating costs as much as possible while ensuring business quality. In content production, Douyin Group can optimize production processes and improve production efficiency to cut unnecessary expenses. In terms of marketing, it can precisely target users to enhance marketing effectiveness and reduce marketing costs. Reasonably controlling R&D expenses ensures that R&D investment matches output. Through these measures, the enterprise can increase its profit levels and retain a larger proportion of profits within the enterprise as an important source of internal financing, providing stable financial support for its development.

Douyin Group needs to establish a sound capital management system to conduct comprehensive and real-time monitoring and analysis of the enterprise's capital flows. By optimizing capital allocation, it can improve the efficiency of capital utilization and avoid capital idleness and waste. The enterprise can arrange the timing of capital receipts and payments reasonably to ensure efficient capital turnover. It also needs to strengthen the management of accounts receivable, shorten the collection cycle, and reduce bad debt losses. Additionally, it should reasonably control inventory levels to lower inventory costs. Efficient capital management enables the enterprise to better utilize internal capital and enhance its internal financing capacity.

In addition to its existing advertising and e-commerce businesses, Douyin Group can actively explore new business areas such as virtual reality (VR) and augmented reality (AR) content creation and online education. Diversified businesses can bring more income sources to the enterprise and increase its profit accumulation. Meanwhile, different businesses can create synergies, share resources and technologies, and reduce operating costs. The advertising business can provide user traffic and brand promotion support for new businesses, while the development of new businesses can also bring more innovative forms and cooperation opportunities for the advertising business, thus promoting the overall profit growth of the enterprise and strengthening internal financing.

Douyin Group can formulate reasonable internal incentive mechanisms to encourage employees to participate in the enterprise's innovation and development, enhancing their work enthusiasm and creativity. It can establish an innovation reward fund to provide material rewards and spiritual recognition to employees who propose valuable innovative ideas and solutions. It can also implement an employee stock ownership plan to allow employees to share in the enterprise's development achievements, enhancing their sense of belonging and responsibility to the enterprise. Active participation and innovation by employees can bring new business growth points and competitive advantages to the enterprise, thereby increasing its profit levels and providing strong support for internal financing.

(2) Utilize Debt Financing Reasonably and Optimize the Capital Structure

Before engaging in debt financing, Douyin Group should conduct a comprehensive and in-depth assessment of its capital needs and debt repayment capacity. It needs to accurately predict the capital gap in the future based on the enterprise's strategic development plans and business expansion plans. The enterprise should avoid over-financing, which could lead to an excessive debt burden and affect its financial stability. It should also prevent under-financing, which may fail to meet the enterprise's development capital needs.

In addition to traditional bank loans, Douyin Group can actively expand diversified debt financing channels. For example, it can issue corporate bonds, which offer advantages such as a large financing scale and long terms, and can design different bond types and term structures according to the enterprise's needs. Furthermore, it can consider engaging in supply chain finance business to obtain financing support along the supply chain through cooperation with upstream and downstream enterprises. Diversified debt financing channels can reduce the enterprise's reliance on a single financing channel, diversify financing risks, and provide more financing options.

Douyin Group can arrange the term structure of debt financing reasonably, combining long-term and short-term debts appropriately based on its capital utilization plans and debt repayment capacity. Long-term debts can provide stable capital sources for the enterprise's long-term investments and strategic development. Short-term debts can meet the enterprise's temporary capital needs, such as seasonal business fluctuations. By optimizing the term structure, the enterprise can reduce its financing costs and debt repayment pressure and improve its financial flexibility. For instance, when engaging in large-scale fixed asset investments, the enterprise can appropriately increase the proportion of long-term debts. During its daily operations, it can arrange short-term debts reasonably to meet short-term capital needs.

Douyin Group needs to establish a sound debt financing risk management system to comprehensively identify, assess, and monitor potential risks in the debt financing

process. It should formulate corresponding risk response measures, such as establishing a debt repayment reserve fund system to use the reserve fund promptly in case of debt repayment difficulties. The enterprise can strengthen communication and cooperation with financial institutions to stay informed of market interest rate changes and financial policy adjustments, and make preparations in advance. Meanwhile, it should arrange debt repayment plans reasonably to ensure timely and full debt repayment, maintain a good credit record, and create favorable conditions for future debt financing.

(3) Enhance Operational Capability and Strengthen the Attractiveness of Corporate Financing

Douyin Group should continuously monitor user needs and market trends, and consistently optimize its content operation strategies. It needs to increase support for high-quality content creators by providing more creative resources and training opportunities, encouraging them to produce more appealing and innovative content. Utilizing big data and artificial intelligence technologies, Douyin Group can precisely analyze users' interests, preferences, and behavioral patterns to offer personalized content recommendations, thereby enhancing user engagement and activity. High-quality content can attract more users, increase advertising exposure opportunities and e-commerce transaction volumes, thereby improving the enterprise's operational efficiency and profitability, and strengthening the attractiveness of corporate financing.

Within Douyin Group's ecosystem, the supply chain encompasses multiple links, including content creators, advertisers, and e-commerce platforms. Douyin Group can strengthen supply chain collaborative management by establishing efficient communication mechanisms and cooperation platforms to facilitate information sharing and resource integration across various links. It can forge close partnerships with content creators to ensure the timely supply of high-quality content. Effective communication and cooperation with advertisers can enhance the effectiveness and return on investment of advertising placements. Collaborating with e-commerce platforms to optimize logistics and delivery, as well as after-sales services, can improve the user shopping experience. By enhancing supply chain collaborative management, Douyin Group can improve its overall operational efficiency, reduce costs, and strengthen its competitiveness.

Technological innovation is key to enhancing operational capability. Douyin Group should increase investment in technology research and development to continuously introduce new features and services to meet evolving user needs. It can optimize video shooting and editing technologies to improve video quality and effects. Strengthening research and development in live-streaming technologies can enhance the stability and interactivity of live broadcasts. Exploring the applications of new technologies such as virtual reality (VR) and augmented reality (AR) in content

creation and user experience can bring new competitive advantages to the enterprise, improve operational efficiency and market share, and thereby strengthen corporate financing capabilities.

Operational talent is a crucial guarantee for enhancing an enterprise's operational capability. Douyin Group should focus on cultivating and attracting professionals with rich operational experience and innovative capabilities. It can establish a comprehensive talent development system, providing employees with training and career advancement opportunities to stimulate their work enthusiasm and creativity. Actively recruiting outstanding external operational talent can bring new perspectives and methods to the enterprise. Excellent operational talent can formulate scientific and reasonable operational strategies, improve the enterprise's operational efficiency and effectiveness, and enhance its attractiveness in the financing market.

(4) Improve Profitability and Consolidate the Foundation of Corporate Financing

Douyin Group should actively expand into high-profit business areas based on its existing operations. In the advertising business, in addition to traditional display advertising, Douyin Group can increase investment in performance-based advertising to improve conversion rates and return on investment. In the e-commerce business, it can strengthen cooperation with brand owners to launch exclusive customized products, increasing product added value and profit margins. Simultaneously, exploring new business models such as knowledge payment and membership services can create new profit growth points for the enterprise.

Douyin Group can establish a strict cost control system to comprehensively and meticulously manage various enterprise costs. In the procurement process, forging long-term and stable partnerships with suppliers allows for negotiating more favorable procurement prices. In the production process, optimizing production processes can enhance production efficiency and reduce production costs. In the sales process, it needs to control sales expenses and improve sales efficiency. Through strengthening cost control and management, Douyin Group can reduce operational costs and increase profit margins.

Brand is an important pillar of an enterprise's profitability. Douyin Group should strengthen brand building to enhance brand value and recognition. It can establish a positive brand image by providing high-quality products and services. Conducting brand marketing activities can increase brand exposure and reputation. Leveraging brand advantages, Douyin Group can enhance product premium capabilities, enabling it to sell products at higher prices in the market and thereby increase profits.

Douyin Group can utilize big data and data analysis technologies to conduct in-depth analyses of enterprise operational and market data, providing strong support for enterprise decision-making. Through data analysis, it can understand user needs

and behaviors to optimize products and services. Analyzing market trends and competitor situations can help formulate scientific and reasonable market strategies. Accurate data analysis and decision support can improve enterprise operational efficiency and profitability, laying a solid foundation for enterprise development and financing.

5.3 Further Study

Although this study conducted in-depth explorations into the impacts of internal financing, debt financing, operational capability, and profitability on the corporate financing of Douyin Group (Hong Kong) Limited and achieved certain results, it is still limited by factors such as research conditions and data acquisition. There remain numerous areas that warrant further exploration.

(1) Expansion of Research Scope

This study primarily focused on the impacts of internal financing, debt financing, operational capability, and profitability on corporate financing. However, corporate financing is a complex and systematic endeavor influenced by a multitude of internal and external factors. Future research can further expand the research scope to include equity financing, an important financing method. Equity financing not only alters a company's capital structure but also introduces new shareholders, exerting profound influences on corporate governance structures and strategic decision-making. Meanwhile, research can consider macroeconomic environmental factors, such as economic growth rates, inflation rates, and interest rate fluctuations, as well as industry policy changes, such as regulatory policies and tax policies. These factors may affect Douyin Group's financing decisions and capabilities through various mechanisms.

(2) Deepening of Research Methods

In terms of research method, this study mainly employed empirical analysis. Although empirical analysis can test hypotheses through data and reveal relationships between variables, it has certain limitations. Future research can combine case study methods, selecting specific financing cases of Douyin Group at different development stages and under varying market conditions for in-depth analysis. By thoroughly examining the financing decision-making processes, influencing factors, and ultimate outcomes in these cases, a more intuitive understanding of the complexity and dynamism of corporate financing can be achieved, uncovering details and underlying causes that are difficult to capture through empirical analysis.

(3) Cross-Regional and Cross-Cultural Comparative Studies

As a globally influential enterprise, Douyin Group conducts business in different regions and cultural contexts, and its financing behaviors and environments may vary significantly. Current research is mostly based on the domestic market or specific cultural backgrounds, lacking in-depth exploration of cross-regional and cross-cultural comparisons. Future research can conduct cross-regional comparative studies, analyzing differences in financing policies, financial market environments, and investor preferences faced by Douyin Group in different countries and regions, as well as how these differences affect the enterprise's financing strategies and outcomes. Simultaneously, research can also carry out cross-cultural comparative studies, examining differences in the perceptions, attitudes, and decision-making styles of enterprise managers towards financing under different cultural backgrounds, as well as how cultural factors interact with other factors in corporate financing.



References

- Almeida, H., & Wolfenzon, D. (2023). The Effect of External Finance on the Equilibrium Allocation of Capital. *Journal of Financial Economics*, 75(01), 133–164.
- Amoako-Gyampah, K., Boakye, K. G., Famiyeh, S., & Adaku, E. (2019). Supplier integration, operational capability and firm performance: An investigation in an emerging economy environment. *Production Planning & Control*, 11(10), 1–21. <https://doi.org/10.1080/09537287.2019.1700570>
- Azadi, M., Moghaddas, Z., Farzipoor Saen, R., & Hussain, F. K. (2021). Financing manufacturers for investing in industry 4.0 technologies: Internal financing vs. external financing. *International Journal of Production Research*, 14(2), 1–17. <https://doi.org/10.1080/00207543.2021.1912431>
- Basu, D., & Das, D. (2020). Profitability and investment: Evidence from India's organized manufacturing sector. *Macroeconomic*, 68(1), 47–90. <https://doi.org/10.1111/meca.12126>
- Bukalska, E. (2019). Testing trade-off theory and pecking order theory under managerial overconfidence. *International Journal of Management and Economics*, 0(0). <https://doi.org/10.2478/ijme-2019-0008>
- Cheng, D. J., & Cheng, L. W. (2021). The evolutionary mechanism of financial friction, capital allocation, and asset bubbles: An evolutionary game analysis based on micro-group behavior. *Operations Research and Management Science*, 30(11), 155–161.
- Cui, J., Hu, H. Q., & Zhang, D. H. (2019). Research on the influencing factors of the financing efficiency of non-listed small and medium-sized enterprises: Evidence from manufacturing non-listed small and medium-sized enterprises. *Soft Science*, 28(12), 84–88.
- Czarnitzki, D. (2006). Research and Development in Small and Medium-sized Enterprises: The Role of Financial Constraints and Public Funding, Scottish. *Journal of Political Economy*, 53(03), 335–357.
- Da Rin, M. (2023). Legs: Financing experimentation. *Journal of Corporate Finance*, 15(5), 102350. <https://doi.org/10.1016/j.jcorpfin.2022.102350>
- Dexter, F., Macario, A., & Cerone, S. M. (2021). Hospital profitability for a surgeon's common procedures predicts the surgeon's overall profitability for the hospital. *Journal of Clinical Anesthesia*, 10(6), 457–463.
- Duong, Q. T., & Okada, M. (2018). Maximum efficiency formulation for multiple-input multiple-output inductive power transfer systems. *IEEE Transactions on Microwave Theory and Techniques*, 66(7), 3463–3477. <https://doi.org/10.1109/tmtt.2018.2805339>
- Eldomiaty, T. I. (2016). An empirical assessment of the reality of pecking order theory. *SSRN Electronic Journal*, 16(6). <https://doi.org/10.2139/ssrn.2993557>
- Fang, J. G., & Lin, F. L. (2019). Research on the corporate financing ability of listed companies on the New Third Board based on key factors. *Journal of Nanjing University of Aeronautics and Astronautics (Social Science Edition)*, 21(01),

- Fang, X. M., & Wu, Y. Y. (2020). Research on the financing efficiency of small and medium-sized enterprises in the New Third Board market. *Economic Management Journal*, 37(10), 42–51.
- Govind, B. (2017). Increasing the operational capability of a horizontal axis wind turbine by its integration with a vertical axis wind turbine. *Applied Energy*, 199(10), 479–494. <https://doi.org/10.1016/j.apenergy.2017.04.070>
- Gu, H. F., & Bian, Y. C. (2020). Has the technology-finance coupling and synergy improved corporate financing efficiency? Evidence from 755 technology-based listed companies in China. *Journal of Statistics and Information*, 35(9), 94–109.
- He, Z., & Xiong, W. (2019). Equilibrium debt financing. *SSRN Electronic Journal*, 21(4). <https://doi.org/10.2139/ssrn.1571985>
- Hoelle, M. (2017). Stationary inflation and pareto efficiency with incomplete markets and a large open economy. *Economic Theory Bulletin*, 6(1), 115–128. <https://doi.org/10.1007/s40505-017-0128-1>
- Hu, M., & Fang, M. (2022). The impact of R&D investment on innovation-driven efficiency-based on the application of input-output theory in financial analysis teaching. *BCP Business & Management*, 19(13), 239–245. <https://doi.org/10.54691/bcpbm.v19i.810>
- Jayaraman, S., & Shivakumar, L. (2023). Agency-based Demand for Conservatism: Evidence from State Adoption of Antitakeover Laws. *Review of Accounting Studies*, 14(10), 95–134.
- Jia, L. H. (2023). An analysis of the financing problems of small and medium-sized enterprises in China. *Reform of Economic System*, 7(1), 113–116.
- Jopinus Saragih, Tarigan, A., Silalahi, E. F., Jumadiah Wardati, & Ikbar Pratama. (2020). Supply chain operational capability and supply chain operational performance: Does the supply chain management and supply chain integration matters? *International Journal of Supply Chain Management*, 9(4), 1222–1229.
- Joshi, A. (2018). A study of profitability analysis of selected FMCG companies in India. *Indian Journal of Applied Research*, 3(6), 368–370. <https://doi.org/10.15373/2249555x/june2013/122>
- Ju, X. S., Lu, D., & Yu, Y. H. (2013). Financing constraints, working capital management, and enterprise innovation sustainability. *Economic Research Journal*, 48(01), 4–16.
- Jun, T., & Kim, J. (2011). Profitability of a merger on networks. *The Manchester School*, 79(4), 776–788. <https://doi.org/10.1111/j.1467-9957.2010.02175.x>
- Kamoto, S. (2011). Impacts of internal financing on investment decisions by optimistic and overconfident managers. *European Financial Management*, 20(1), 107–125. <https://doi.org/10.1111/j.1468-036x.2011.00624.x>
- Kang, M. (2021). Is Japan facing a public debt crisis? Debt financing and the development of the JGB market. *Asian Politics & Policy*, 2(4), 557–582. <https://doi.org/10.1111/j.1943-0787.2010.01213.x>

- Kim, J. H. (2023). Debt financing frictions and access to public debt. *SSRN Electronic Journal*, 13(9). <https://doi.org/10.2139/ssrn.2024084>
- Lee, B., & Devoe, S. (2019). Flextime and profitability. *Industrial Relations: A Journal of Economy and Society*, 51(2), 298–316.
- Lesser, A. (2020). Internal financing. *Challenge*, 7(10), 51–55. <https://doi.org/10.1080/05775132.1959.11468953>
- Li, J., Zhao, D., Ge, B., Jiang, J., & Yang, K. (2020). Disintegration of operational capability of heterogeneous combat networks under incomplete information. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 50(12), 5172–5179. <https://doi.org/10.1109/tsmc.2018.2867532>
- Li, S., Gao, D., & Hui, X. (2021). Corporate governance, agency costs, and corporate sustainable development: A mediating effect analysis. *Discrete Dynamics in Nature and Society*, 2021(12), e5558175.
- Li, X. L., & Jiang, T. Y. (2022). The improving effect of digital finance on capital allocation distortions and regional heterogeneity: Empirical evidence from the prefecture-level city level in China. *Reform of Economic System*, 5(6), 120–126.
- Liu, L. D., Meng, W. Z., & Liu, L. Z. (2021). The impact of the growth of high-tech enterprises on capital structure adjustment from the perspective of financing constraints. *Macroeconomic Research*, (02), 85–98.
- Lu, F. C. (2021). Analysis of corporate financing efficiency [Doctoral dissertation, Chinese Academy of Social Sciences Graduate School].
- Ma, L. L., & Li, X. J. (2019). Hierarchical system, market-making system, and corporate financing efficiency: An empirical study based on listed companies on China's New Third Board. *Issues in Economic Theory*, 6(3), 56–64.
- Mande, V., Park, Y. K., & Son, M. (2019). Equity or debt financing: Does good corporate governance matter? *Corporate Governance: An International Review*, 20(2), 195–211. <https://doi.org/10.1111/j.1467-8683.2011.00897.x>
- Marszałek, J. (2020). Design of convertible debt financing - some observations from the American market. *Business and Economic Horizons*, 11(2), 64–75. <https://doi.org/10.15208/beh.2015.06>
- Mashayekh, S., & Morshedi, F. (2020). Managerial overconfidence, internal financing and investment. *Iranian Journal of Finance*, 4(4), 102–125. <https://doi.org/10.30699/ijf.2020.121887>
- Mendolicchio, C., & Pietra, T. (2019). Full and constrained pareto efficiency with incomplete financial markets. *Economic Theory*, 6(2). <https://doi.org/10.1007/s00199-019-01239-y>
- Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2020). Exploring the relationship between big data analytics capability and competitive performance: The mediating roles of dynamic and operational capabilities. *Information & Management*, 57(2), 103169. ScienceDirect. <https://doi.org/10.1016/j.im.2019.05.004>
- Modigliani, F., & Miller, M. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, 48(03), 261–297.

- Modigliani, F., & Miller, M. (1963). Corporate Income Taxes and the Cost of Capital: A Correction. *The American Economic Review*, 53(03), 433–443.
- Moyen, N. (2018). Investment distortions caused by debt financing. *SSRN Electronic Journal*, 51(5). <https://doi.org/10.2139/ssrn.237088>
- Ogutcu, S. (2020). Assessing the contribution of Galileo to GPS+GLONASS PPP: Towards full operational capability. *Measurement*, 151(31), 107143. <https://doi.org/10.1016/j.measurement.2019.107143>
- Othman, N., Abdul, M., & Abdul, A. (2017). Partnership Financing and Bank Efficiency. *Pacific-Basin Finance Journal*, 6(46), 1–13.
- Diallo, B. (2018). Bank Efficiency and Industry Growth during Financial Crises. *Economic Modelling*, 6(8), 11–22.
- Pang, X. J. (2017). Research on the financing efficiency of small and medium-sized enterprises in Anang: Based on the fuzzy comprehensive evaluation method. *Modern Management Science*, 3(8), 55–57.
- Petr, P., Robertson, D., & Lind, M. (2020). The New Role of the Corporate Treasurer: Emerging Trends in Response to the Financial Crisis. *International Research Journal of Finance and Economics*, 12(78), 319–339.
- Qiang, W. (2021). Infrastructure projects financing. an alternative to debt financing. *IOSR Journal of Business and Management*, 15(5), 48–52. <https://doi.org/10.9790/487x-1554852>
- Ren, Y. Q. (2020). Research on the financing efficiency of listed companies in the new energy vehicle industry chain based on the DEA model [Doctoral dissertation, Zhejiang University].
- Rokhmawati, A. (2023). Do financial constraints moderate the impact of financing decisions from internal-financing sources on investment? *Journal Keeanga Dan Perbankan*, 21(3). <https://doi.org/10.26905/jkdp.v21i3.1357>
- Roscoe, S., Cousins, P. D., & Handfield, R. (2019). The micro foundations of an operational capability in digital manufacturing. *Journal of Operations Management*, 12(5). <https://doi.org/10.1002/joom.1044>
- Shao, J., & Liu, Z. Y. (2018). The economic consequences of internal capital allocation in enterprise groups: Evidence from Chinese enterprise groups. *Accounting Research*, 3(4), 47–53.
- Shao, X. F. (2018). Research on the debt financing efficiency evaluation of listed companies in the textile industry [Doctoral dissertation, Xi'an Polytechnic University].
- Shen, C. (2023). Research on the financing efficiency of small and medium-sized enterprises in the New Third Board market: Based on the three-stage DEA model for private placements. *Audit & Economy Research*, 32(3), 78–86.
- Shu, X., & Yu, B. (2022). Financing constraints, uncertainty, and enterprise investment structure: An empirical test based on the panel threshold regression model. *Journal of Finance and Economics*, 37(04), 80–95.
- Small, A. A., & Zivin, J. G. (2003). A Modigliani-miller theory of corporate social responsibility. *SSRN Electronic Journal*, 45(2).
- Song, W. B. (1998). Several issues that need to be clarified regarding financing

- methods. *Journal of Financial Research*, 6(1), 35–42.
- Sulla, V., Sarria, D., & Allende, V. (2018). Small and Medium Size Enterprise Financing in Eastern Europe. *American Economic Review*, 8(6), 459–487.
- Sun, J., & Li, J. (2022). Big data application, financing constraints, and enterprise innovation efficiency. *Securities Market Herald*, (11), 13–23.
- Sun, Y. X. (2001). Ownership, financing structure, and corporate governance mechanisms. *Economic Research Journal*, (01), 45–53.
- Tanf, W. (2023). Analysis of financing decisions: A TCCM validation. *European Economic Letters*, 2(3). <https://doi.org/10.52783/eel.v13i3.256>
- Troplini, R. (2019). The Determinants of Bank Capital Ratio on the Market Efficiency of Albanian Banks. *Folia Pomerance Universitatis Technologize Steineses. Oeconomica*, 4(73), 199–209.
- Umaz, R. (2021). SIDO: A single-input double-output energy harvesting architecture operating in burst mode with 74.87% peak end-to-end efficiency. *International Journal of Circuit Theory and Applications*, 49(6), 1599–1612. <https://doi.org/10.1002/cta.2969>
- Wang, C. R., & Wang, Z. (2022). Analysis of corporate financing efficiency of listed companies on the "New Third Board". *Shanghai Finance*, 5(11), 70–75.
- Wang, H. (2021). Factors influence the effectiveness of internal audit services at ministry of finance and planning in Zanzibar. *Research Journal of Finance and Accounting*, 11(8). <https://doi.org/10.7176/rjfa/12-2-02>
- Wang, J. Y., Sun, T., Li, P., Kuang, B. (2022). Digital transformation and corporate financing constraints: Empirical evidence from listed small and medium-sized enterprises. *Scientific Decision Making*, (11), 1–23.
- Wang, X. L., & Li, Z. M. (2023). Research on government subsidies, financing constraints, and capital allocation efficiency: Based on data from listed companies in the high-end equipment manufacturing industry. *Investment Research*, 42(01), 73–87.
- Wang, X. N., Du, L., & Wang, Q. T. (2023). Analysis of the financing efficiency of small and medium-sized enterprises based on the three-stage DEA model. *Statistics & Decision*, 12(5), 179–182.
- Watanabe, H. C., & Cui, Q. (2019). Quantitative analysis of QM/MM boundary artifacts and correction in adaptive QM/MM simulations. *Journal of Chemical Theory and Computation*, 15(7), 3917–3928.
- Wei, K. W. (2021). Fuzzy analysis of the financing efficiency of small and medium-sized enterprises. *Journal of Financial Research*, 11(9), 67–74.
- Weyn, J. A., Durran, D. R., & Caruana, R. (2021). Can machines learn to predict weather? Using deep learning to predict gridded 500-hpa geopotential height from historical weather data. *Journal of Advances in Modeling Earth Systems*, 11(8), 2680–2693. <https://doi.org/10.1029/2019ms001705>
- Wook, S. (2017). The effect of supply chain integration on the alignment between corporate competitive capability and supply chain operational capability. *International Journal of Operations & Production Management*, 26(10), 1084–1107. <https://doi.org/10.1108/01443570610691085>

- Xiong, Z. D., Yang, F. J., & Wan, J. (2024). Research on the debt financing efficiency of listed companies based on the two-stage DEA model: Taking the new energy vehicle industry in strategic emerging industries as an example. *Finance & Economics Theory & Practice*, 35(5), 51–56.
- Yan, A. X., & Meng, F. P. (2022). Analysis of the influencing factors of equity financing efficiency of agricultural listed companies: Based on the grey relational degree model. *Journal of Shanxi Agricultural University (Social Science Edition)*, 14(12), 1205–1212.
- Yang, F., & Wang, M. C. (2020). Financing structure, institutional environment, and innovation ability: Mathematical analysis and empirical testing from a micro perspective. *Research on Economics and Management*, 41(10), 59–85.
- Yang, L., Qin, H., Gan, Q., & Su, J. (2020). Internal control quality, enterprise environmental protection investment and finance performance: An empirical study of China's a-share heavy pollution industry. *International Journal of Environmental Research and Public Health*, 17(17), 6082. <https://doi.org/10.3390/ijerph17176082>
- Żak, K. (2020). The diagnosis of internal financing and bank financing of physical investments in the corporate sector: A comparative analysis Poland and Hungary. *Zesty Ndukwe Uniwersitates Szczecin inking Finance Rinki Finans owe*, 5(11), 267–278. <https://doi.org/10.18276/frfu.2017.89/1-22>
- Zámborský, P., Yan, Z., Michailova, S., & Zhuang, V. (2023). Chinese multinationals' internationalization strategies: NEW realities, new pathways. *California Management Review*, 66(1). <https://doi.org/10.1177/00081256231193467>
- Zeng, K. L. (1993). How to view direct financing and indirect financing. *Journal of Financial Research*, (10), 7–11.
- Zhang, Y. L., Hu, C., & Hu, X. Y. (2019). A comparative study on the financing efficiency of stock markets in BRICS countries based on the DEA method. *World Economy Research*, 6(7), 44–52.
- Zhou, C. S., & Xuan, C. K. (2019). Research on the financing efficiency and influencing factors of marine industry-related enterprises: Based on empirical data from DEA-Random Effects Models. *Journal of Ocean University of China (Social Sciences Edition)*, 15(2), 13–20.

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 :

Please fill in the following basic information:

1. Your Gender

A Male

B Female

2. Your Age

A Under 25 Years Old

B. 25-30 Years Old

C 31-35 Years Old

D 36-40 Years Old

F Over 40 Years Old

3. Your Educational Backgrounds

A Junior College and Below

B Undergraduate

C Master's Degree

D Doctor

4. Position Level

A. Grassroots Employee

B. Middle-Level Managers

C. Senior Managers

5. Working Experience

A Less than 5 Year

B 5-10 Years

C 11-20 Years

D 21-30Years

F More than 30 Years

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
Internal Financing					
The retained earnings of Douyin Group are sufficient to meet short-term funding requirements.					
The depreciation funds of the company can effectively supplement the operational funding gap.					
The stability of internal cash flow has a significant impact on financing decisions.					
Management tends to prioritize the use of internal funds over external financing.					
The cost of internal financing is lower than that of external debt financing.					
Debt Financing					
Douyin Group can obtain long-term bank loans at relatively low interest rates.					
The bond market shows high acceptance of the group's corporate bond issuance.					
The debt maturity structure (such as the ratio of long-term to short-term					

loans) is reasonable.					
The repayment pressure from debt financing has not significantly affected operational stability.					
The improvement in the group's credit rating has reduced the cost of debt financing.					
Operational Capability					
The asset turnover ratio (e.g., accounts receivable and inventory turnover) of Douyin Group is higher than the industry average.					
The optimization of supply chain management efficiency has shortened the cash flow cycle.					
The standardization of operational processes has reduced unit costs.					
Technological investments (such as AI algorithms) have enhanced operational efficiency.					
High operational efficiency has boosted investors' confidence in financing.					
Profitability					
The net profit margin of Douyin Group consistently exceeds the industry average.					
The gross profit margin of core businesses, such as advertising revenue, has shown steady growth.					
Cost control measures have effectively expanded the profit margin.					
A high ROE (Return on Equity) has enhanced the					

attractiveness of equity financing.					
Stable profit expectations support long-term financing planning.					
Corporate Financing					
The financing scale of Douyin Group has grown in tandem with business expansion in recent years.					
The financing structure (the ratio of internal, debt, and equity financing) aligns with strategic needs.					
The financing costs (interest rates, handling fees) are among the lowest in the industry.					
The diversification of financing channels has reduced the risk of single dependency.					
The financing efficiency (such as approval speed and fund availability rate) meets business requirements.					