

RESEARCH ON THE CORRESPONDING RELATIONSHIP BETWEEN DEBT FINANCING AND CORPORATE PERFORMANCE IN LISTED COMPANIES ——TAKING HAINAN AIRLINES AS AN EXAMPLE

CHAPTER 1 INTRODUCTION

1.1 Background of the study

In foreign capital markets, even if the stock market is very active, the financing methods of listed companies are mainly based on debt financing. According to statistics, the total amount of foreign-listed debt financing is 3-10 times that of equity financing, and the financing method of listed companies in China has primarily been dominated by equity financing. Before 2001, the average debt-to-liability ratio of listed companies in China was less than 50% in each year. However, from 2002 to the present, the average average debt-to-liability ratio of listed companies is more than 50% in each year, and it has generally risen. With the development of China's bond market, the debt financing ratio of listed companies will likely increase. As of the end of 2015, the balance of China's bond market reached 46.8 trillion yuan. The balance of 36 trillion yuan in bonds at the end of 2014 increased by 30%, and its growth rate was the highest in nearly six years. The development of the bond market has facilitated the debt financing of listed companies. In addition, as the process of interest rate liberalization progresses, deposit and lending rates will gradually become marketable, which will reduce the cost of borrowings for debt financing of listed companies to banks. Enhance the enthusiasm of listed company debt financing. In 2015, the Central Bank of China reduced its social financing costs, cut its rate of interest for five consecutive times, and cut interest rates. This also prompted listed companies to choose debt financing to a certain extent .

From all aspects, The successful selection and use of capital is one of the key elements of the firms' financial strategy. However, at present, there are many problems in the debt financing of listed companies in China, such as the blindness of debt financing, when the company When there is demand, blindly integrate funds, and do not consider whether the cost of capital is within the scope of the company. When the cost of capital is too large, it will increase the pressure for the company to repay the debt, thereby affecting the company's performance; the debt financing deadline structure is unreasonable From the current practice, listed companies tend to be short-term liquidity debt financing and

less long-term debt financing. Although the financing cost of short-term debt financing is lower than the long-term debt financing cost, short-term debt financing will cause companies to face Repayment of debt pressure may affect the company's daily operations. The debt financing channels are single and the risks are concentrated. How to prevent possible managerial misconduct and improve performance through proper monitoring, auditing and control has been one of the crucial issues since the 1997 Asian financial crisis . Increased vulnerability to external shocks resulting from poor governance in both the corporate and financial sectors was one of the causes of the crisis . The failure of corporate monitoring and control led to managerial problems, whereby excessive levels of inefficient investment and a vulnerable financial structure were perpetuated. The 1997 Asian crisis and the resulting economic crisis clearly demonstrated that the role of the financial market is crucial for corporate governance, which in turn is an essential ingredient for financial stability in emerging markets.

The corporate governance issue has also become one of the most popular research topics among scholars of the South Korean (hereafter the Korean) economy. The major issues covered by this research include: (1) the role of government in reforming chaebol (business group) and corporate governance; (2) reform of bankruptcy procedures and firm exits (Myers, 1977); (3) protection of minority shareholders' rights and the role of outside directors; (4) governance structure of corporate bonds ; and (5) governance and ownership of banks. Having noted that the governance of both the corporate sector and the banking sector was distorted and functioning ineffectively before the crisis, there has been a good deal of discussion as to the required reforms and institutional rearrangements since the crisis occurred.

1.2 The significance and purpose of research

1.2.1 Research significance

In the past research on the relationship between listed companies and company performance in China, scholars have selected a larger range of research: some of the listed companies in the country as the research object, some in the A-share market as the research object, some in an industry For the study. Because the selected research objects are more macroscopic, the samples chosen for the respective research subjects will be different. Under such circumstances, even the same research object will produce different conclusions, which affects the practicality of the research. This article takes Hainan Airlines as an example and studies the relationship between Hainan Airlines's debt financing and corporate performance through case analysis. This can reduce the influence

of sample differentiation to a certain extent, reduce the bias, and make the research more effective. The term capital structure refers to the percentage of capital (money) in the work of a company by type. There are two forms of capital: equity capital and debt capital. Some scholars have pointed out that the company's capital structure means that debt and equity account for the proportion of the company's total capital structure. By recognizing the various means used to raise funds to represent the company's financial structure, the capital structure represents the proportional relationship between long-term debt and equity, and distinguishes the company's capital structure and financial structure. According to the scholars' discussion, the capital structure of a company does not include short-term credit, but refers to the combination of long-term funds the company obtains from various sources. Therefore, the capital structure of a company is described as the capital combination of capital and debt capital in asset financing.

1.2.2 Research purpose

This article is based on the traditional western corporate debt financing theory and Hainan Airlines' debt financing and company performance. The relevant data of Hainan Airlines was selected and the econometric model was established as the main research method. From the empirical perspective, the relationship between Hainan Airlines' overall debt structure, debt maturity structure, debt source structure and corporate performance was obtained. Through empirical research results, the problems and irrationalities of Hainan Airlines's debt financing are identified. Finally, the proposal to optimize the feasibility of debt financing structure is proposed, hoping to achieve the goal of improving the performance of Hainan Airlines.

The chaebols' affiliates had relatively better access than independent firms to the credit market by reason of the superior collateral power generated by mutual debt payment. In theory, the interlocking shareholdings or equity ownerships could encourage efficient action in settings in which firms were concerned with expropriation and hold up problems arising from relationship-specific investments (Fee & Hadlock, 2006). The loan policies and complicated structures of chaebols may have contributed to overcoming the coordination failures in the capital market in the early stages of development (Shin & Park, 1999). Berle–Meansian scholars argue that an owner–manager company can reduce agency costs because corporate governance is more effective .

1.3 Conceptual indicators and theories of debt financing and corporate performance

1.3.1 Concepts and indicators of debt financing

1.3.1.1 Related concepts of debt financing

Debt financing means that companies or enterprises and institutions raise funds or materials for repaying obligations. Compared with other major financing methods, equity financing is the biggest difference in debt financing with the obligation to repay the principal. In addition, debt financing is still limited and compensatory. Term nature means that the company as the debtor must repay the principal and interest within a specified time or time. The near lack of long-term debt financing in these economies, for instance, exposes firms to high risk of liquidation and creates room for opportunistic creditors to use the threat of liquidation to expropriate the profits of even the healthy firms. There are several common ways for companies to raise funds through debt financing:

Bank borrowing: Bank borrowing refers to the method of borrowing money from a commercial bank when the company's daily operations are undercapitalized or when the project investment requires funds. Bank borrowing is also the main method of debt financing for Chinese companies. This is because banks usually provide companies with loans. The huge single amount, bank loans can be separated from the industrial capital cycle, and China's bond market is not yet perfect. Theoretically, before a company applies for a loan from a bank, the bank conducts a due diligence on the company's financial status and development prospects. After the loan has been released, the bank will supervise the company's daily operations for the sake of its own funds and prevent creditors from being harmed. Benefits of business behavior. The supervision of the bank by the company can, in theory, constrain the behavior of the company's managers and make the company managers work harder to improve the company's performance. However, in reality, due to problems such as moral hazard and information asymmetry, it is difficult for banks to supervise the company effectively. Therefore, whether bank loans can improve the company's performance remains to be verified.

Commercial credit: Commercial credit is a liability formed by the company's daily business operations and the commercial transactions with other companies. It is generated during the process of capital circulation. Commercial credit is very common in the company's operations, but its financing amount accounts for a small proportion of the company's total financing, and its debt time span is relatively short, usually within one year. From the point of view of cost of debt, the cost of funds is relatively low. Under normal circumstances, it will not cause too much burden on the company. The specific forms of commercial credit include: accounts payable, advance receipts, and notes

payable. Through commercial credit companies, temporary shortages of funds in daily operations can be solved and the circulation of goods can be smoothly carried out. Therefore, commercial credits have a positive effect on the company's daily operations. From a theoretical point of view, commercial credit can improve the company's performance level to some extent.

The existing literature, however, focuses mainly on the issue of 'internal' governance from an institutional perspective. In contrast, this paper will analyse the issue of 'external' governance in the context of corporate finance.² External corporate governance in this paper refers to the process by which investors monitor and control the actions of corporate management to assure themselves of obtaining a return on their investment. One of the lessons of the 1997 financial crisis has been a renewed recognition of the importance of links between the corporate and financial sectors, both theoretically and empirically (Masulis, 1983). Furthermore, the relationship between chaebols and financial intermediaries has changed since the 1997 crisis because of sweeping reforms and changes to corporate financing.

Financial leasing: Financial leasing belongs to the category of debt financing. It means that the company sells fixed assets to financial leasing companies in order to obtain capital financing. After the sale of fixed assets, the seller still has the right to use fixed assets, but it needs to pay to financial leasing. The company rents at a certain price; or the company and the financial leasing company agree that the financial leasing company will purchase the fixed assets on behalf of the company, and the company that uses the fixed assets must pay a certain rent to the financial leasing company. Financing generally takes place in companies with a large amount of capital occupied by fixed assets, such as airlines and cruise ships. Through financial leasing, the company can use the funds occupied by fixed assets to obtain a large amount of cash flow. If the company's cash flow is tight, financial leasing can ease the pressure of cash flow, which may have a positive impact on the company's performance.

1.3.1.2 Relevant indicators of debt financing

In corporate finance, a variety of financial indicators are commonly used to measure the debt level of a company. Here are some indicators of debt financing:

Asset-liability ratio (DAR): The debt-to-asset ratio refers to the ratio of total liabilities to total assets. Through the asset-liability ratio, one can understand the overall

asset structure of a company and can measure the level of a company's overall debt, when the debt ratio is high. At that time, it shows that the company has fully utilized its financial leverage, but excessively high asset-liability ratios may expose the company to financial risks.

Short-term debt ratio (SD): The short-term debt ratio refers to the ratio of total short-term liabilities to total assets. It is a key indicator for measuring the size of a company's short-term liabilities. When the company's short-term debt ratio is high, the company will face short-term debt payment. The pressure of gold and interest will have a certain impact on daily operations. In the company's finances, the short-term liabilities consist of accounts payable, bills payable, dividends payable, short-term borrowings, and non-current liabilities due within one year.

Long-term debt ratio (LD): Long-term debt ratio refers to the ratio of total long-term liabilities to total assets, which directly measures the size of the company's long-term debt share. When the company's investment project cycle is long, it is generally based on long-term debt financing. In corporate finance, long-term liabilities mainly include long-term borrowings and bonds payable.

Bank Borrowing Rate (BD): The bank borrowing ratio refers to the ratio of total bank borrowings to total assets, and measures the size of bank loans' share of the company's assets. Currently, bank borrowing is the main source of financing for most company debt. In corporate finance, bank loans include short-term borrowings and long-term borrowings.

Commercial Credit Rate (CD): Commercial credit ratio refers to the ratio of total commercial credit to total assets and measures the share of commercial credit in corporate assets. The size of the commercial credit is determined by the size of the company's business. Usually the company with a large business scale has a large amount of commercial credit. In corporate finance, commercial credit includes accounts payable, advance receipts, and notes payable.

1.3.2 Concepts and indicators of corporate performance

1.3.2.1 Related concepts of corporate performance

Corporate performance is a concept to measure the company's operating conditions, used to evaluate the company's operating results and operating efficiency. For a

company's management is complete, whether to create value for the company's owner will be reflected in the company's performance. When the assumption of the absence of taxes is relaxed, the fact that companies can benefit from the so called tax shield can be taken into account. Since corporate performance is an abstract, difficult-to-quantify concept, it is common to use specific indicators to judge company performance. Scholars generally classify the indicators that judge company performance into two categories: First, financial indicators, such as return on net assets, return on total assets, profit rate of main business, and earnings per share, etc.; Such as the value of the stock, the value of the mogul Q, etc.

1.3.2.2 Related indicators of corporate performance

The abstraction of company performance needs to be reflected by various indicators. Now we briefly introduce some indicators of company performance measurement:

Return on Equity (ROE): ROE, also known as equity return, is the ratio of net profit to stockholders' equity. It measures the company's operating results from the perspective of shareholders and can fully reflect the company's ability to create value for shareholders. , is an important indicator of judging the company's performance level, experts and scholars at home and abroad in the study of corporate performance, the net return on assets as an important reference index of company performance. However, this indicator only measures the company's profitability from the perspective of shareholders' equity, and there is room for manipulation.

Return on total assets (ROTA): The return on total assets refers to the ratio of net profit to total assets, which is an indicator that fully reflects the return on investment of the company's total assets. Some scholars use the return on total assets to express the company's performance. However, because the scope of the index is large and targeted, the effect is not very good when studying specific issues. Therefore, less scholars use it to study the company's performance. Performance.

Operating profit rate (TTM): operating profit ratio is the ratio of operating profit to main business income. It can be intuitively understood how the company's profitability is, what competitive position is in the market, and the company's operating ability is used to evaluate the company's operating capabilities. The level of performance. Some scholars also use the company's operating profit rate to analyze the company's performance level, but different types of companies' operating income account for a large share of the

company's revenue. Therefore, the operating profit rate cannot fully reflect the company's performance level.

Earnings per share (EPS): Earnings per share refers to the net profit and the weighted average number of ordinary shares outstanding. It reflects the degree of profitability of shareholders, and also reflects the company's operating results. It is a commonly used measure of company performance. Some scholars use the earnings per share as a reference when studying company performance. However, the earnings per share is only a concept of share. The company's other information, such as the size of the stock's risk and the size of the stock's price, cannot be reflected in the earnings per share. The shareholder's profits are also related to the company's dividend policy, and the earnings per share are high. , shareholders may not be able to obtain corresponding returns. Therefore, using the earnings per share can not fully measure the company's performance.

Stock market value (MC): The stock market value is the price of the stock issued by the company in the capital market. Under the circumstances that the developed capital market and information are effective, the stock market value is usually positively correlated with the company's performance level, and the company's performance level will be reflected. Into the stock market value, the stock market value is a barometer of company performance. In the research of corporate performance in the West, some scholars use the stock market value as a reference, but the stock market in our country is not perfect. The stock market value often deviates from the company's real value, and the price of the stock is also easily manipulated. Therefore, the use of stock market value to study company performance is not practical.

Mog Q (Q): The Mog Q refers to the ratio of the market value of the company's total assets to the entire company's replacement capital. Many foreign scholars use the mogul Q value as a parameter to study company performance. They think that the mogul Q Values overcome the shortcomings of other financial parameters that only consider the historical value. The value of the mogul Q considers the current market value and the time value of the future cash flow. In addition, the value of the mogul Q also takes into account various intangible assets and is a comprehensive one. Measure the performance of the company. However, like the stock market value, because China's capital market is not perfect, the market value of assets is difficult to estimate, and the value of intangible assets is also difficult to assess. Therefore, it is less practical to measure the company's performance with the value of the tonnage Q.

1.4 Theory of relationship between debt financing and corporate performance

The theory of the relationship between debt financing and corporate performance originated from the study of corporate capital structure and corporate value. To a certain extent, the capital structure of a company depends on whether the company conducts debt financing or debt financing, and the value of the company can be considered as Equivalent to the company's performance. Therefore, the theory of the relationship between the company's capital structure and the company's value can be approximated to the theory of the relationship between corporate debt financing and corporate performance. The theory about this is recognized as the earliest in 1958. Some scholars put forward the original MM theory in the article "Cost of Capital, Corporate Finance and Investment Theory" (Jesen, 1986). There have been revised MM theory, bankruptcy theory, trade-off theory, agency theory, and signal transmission theory. Now we briefly introduce each theory:

1. The original MM theory

The original MM theory is based on the perfectionism of the capital market, with very harsh assumptions: no transaction costs, no personal and corporate income taxes, the market is fully effective. Under the above assumptions, MM theory believes that the company's capital structure has nothing to do with the company's value. The company's use of debt financing or equity financing will not change the company's total value, and the relative proportion of debt financing and equity financing will not change the company's The total value affects only the company's shareholders and creditors' control of the company. Therefore, according to the MM theory, it can be concluded that whether the company has undertaken debt financing or whether the ratio of debt financing to the entire fund has nothing to do with the performance of the company. However, the assumption of harsh conditions is not realistic in the real capital market. The original MM theory's conclusion also has some deviation from the actual empirical research results.

2. Modified MM theory

In 1977, some scholars considered the existence of a capital market for corporate income tax and personal income tax, adding the income tax to the original MM theoretical analysis, resulting in the revised MM theory: Due to debt financing companies The interest expense has the advantage of deducting the income tax. If the other risks are the same, the value of the debt financing company is equal to the value of the debt-free company plus the interest deducted from the income tax. Therefore, the company's value will increase as the proportion of debt financing increases. When the company's debt

financing ratio is 100%, the value of the company's tax shield will reach its maximum, and then the value of the company will be the largest. Therefore, according to the modified MM theory, the company's performance will increase with the increase of the company's debt financing ratio. When the company's financing is entirely derived from debt financing, the company's performance will be maximized. Compared to the original MM theory, the modified MM theory takes into account the income tax, which is a big improvement. However, the revised MM theory does not consider the issue of financing costs and corporate financial risk as the size of the debt increases.

3. Bankruptcy theory

The emergence of MM theory has enriched scholars' research on the company's capital structure and debt financing. However, MM theory did not consider the financing costs and financial risks, and then led to corporate bankruptcy. The bankruptcy theory believes that the company's debt financing will increase the company's costs, and it will increase the possibility of financial distress, and in serious cases it will lead to bankruptcy. Specifically, before the company goes bankrupt, debt financing will increase the operating costs, such as paying excessively high interest expenses will affect the company's daily operations, financial constraints will restrict the company's development, and as the scale of debt increases, the company's With the increase of risk, equity holders will require the company to provide additional risk compensation, and the company's comprehensive financing costs will increase, which in turn will affect the company's performance. In addition, when the scale of the company's debt financing is too large, the above introduction will be formed. In addition to the direct costs, there are indirect costs that affect the company's performance, such as negative impact on the company's goodwill and brand value. In short, according to bankruptcy theory, the scale of debt financing of the company should not be too large. When the debt financing of the company reaches a certain percentage, it will have a negative impact on the performance of the company. This is in contrast to the modified MM theory that the greater the scale of the debt, the greater the value of the company.

4. Trade-off theory

Following the theory of MM and bankruptcy theory. The trade-off theory is actually a product of the combined MM theory and bankruptcy theory. The modified MM theory believes that the increase in debt can be used to offset taxes and fees. It can save costs and increase the value of the company. It does not take into account that excessive debt size can cause companies to become financially troubled and lead to bankruptcy. Excessive scale of debt has a series of negative impacts. Excessive debt ratio is likely to cause the

company to go bankrupt, but it ignores the interest generated by debt financing can be used to offset the tax and fee. The trade-off theory not only considers the role of debt financing tax shield, but also considers the financial distress risk arising from debt financing. There is an optimal debt financing ratio between the two, so that the company can obtain the benefits of the tax shield and not As for financial troubles, the value of the company at this time is maximized. Therefore, according to the trade-off theory, when the company's debt financing ratio reaches a balanced value, the company's performance will reach the highest level.

5. Agency Theory

With the development of economy, modern companies have generally formed the separation of ownership and management rights. Although this separation model has improved the company's operating efficiency, it has caused conflicts between the company's managers and owners' interests. Scholars began to study the issue of ownership and management rights. A scholar proposes the famous agency theory in 1976. Agency theory believes that when a company has a lot of cash flow (the cash flow may come from equity financing, debt financing, or other sources) (Tao, 2007). the company's managers will irrationally use cash flow to expand the company's scale, even the net Projects with negative or high-value risks are also invested. They only need to expand the size of the company and do not consider the long-term development of the company. This will seriously affect the interests of the company's owners. On the other hand, if the company has a large amount of cash flow, managers will consider their own interests, pay high salaries and generous benefits for themselves, squander the company's cash flow, and cause unnecessary waste of company resources. Therefore, the company's expansion of the company's cash flow through debt financing will lead to blind investment and cash flow squandering, which in turn will have a negative impact on the company's performance. However, agency theory also analyzes the relationship between corporate debt financing and corporate performance from another angle. The agency theory believes that when a company makes debt financing, the company will have to pay the principal and interest of the debt. If the company cannot repay the principal and interest, the company will Faced with the risk of bankruptcy, the company's ownership will be transferred to creditors, and the company's managers will have the possibility of being fired. Therefore, after the company has undertaken debt financing, the managers will work hard to avoid bankruptcy for their own management positions. Therefore, from the perspective of agency theory, debt financing can also improve company performance. Overall, according to the agency theory, whether debt financing can improve the company's performance depends on the specific circumstances.

6. Information transmission theory

The theory of information transfer holds that the information held by internal managers and external investors of the company is asymmetrical. The internal staff of the company understands the company's operating conditions and development prospects more than external investors, and has more inside information. Based on this premise, a scholar analyzes how the scale of debt financing through the establishment of models conveys information to investors. After investors feedback information, their investment behavior will affect the performance of the company. The company's financing is equity financing and debt, Managers will often choose the financing method that can maximize the company's interests. When the stock price of the company is overvalued, the company will use the equity to raise funds in order to be able to integrate more funds. When such information is passed to investors, investors use the game to believe that the company's stock is overvalued. With equity financing, investors will sell their stocks for their own gains, causing stock prices to fall and negatively affecting company performance. If companies use debt to finance, there will be no such consequences. In addition, the theory of information transfer also illustrates the impact of debt financing on corporate performance from another perspective. If the company uses equity financing, the proceeds from the investment project should be shared with the new shareholders. Therefore, if the company has a high-yield investment project, it will use the debt to finance, so that most of the project's revenue is owned by the company's original shareholders, and there is no need to share the benefits with the new shareholders. In this way, when the company is undertaking debt financing, it will send investors a signal that the company has high-yield projects. The investors will be optimistic about the company's prospects, and various positive signals will have a positive impact on company performance. In short, according to the information transfer theory, the company's debt financing will improve the company's performance.

The summary of the relationship between debt financing and corporate performance is summarized in the following table:

Table 1: Summary of the relationship between debt financing and corporate performance

Theoretical name	Mechanism of action	The effect of debt financing on company performance
Original MM theory	In the perfectly hypothetical capitalist economic market, the company's total value will not change with changes in the financing method and financing ratio.	No effect
Correct MM theory	In the economic market that considers income tax, debt financing has the role of tax shield, and its role increases with the increase of the proportion of debt financing, which in turn improves corporate performance.	positive influence
Bankruptcy theory	After considering the financial costs and bankruptcy risks, the company's debt financing will increase the company's cost burden, and in serious cases it will cause the company to go bankrupt.	Negative impact
Trade-off theory	The core theories of the revised MM theory and bankruptcy theory are integrated, and the optimal debt financing ratio is reached at the equilibrium point.	Depending on the circumstances
Agency Theory	When corporate debt is financed, there is a large amount of cash flow, and management may squander cash flow; management may also strive to operate for its own benefit.	Depending on the circumstances
Information transfer theory	When the company chooses debt financing, it shows that the company has good-quality high-quality investment projects that will send good information to the outside world, and then improve and improve company performance.	positive influence

From the above table, it can be seen that each theory is quite different from the result of the relationship between debt financing and corporate performance. This is due to the difference in premise assumptions and the different focus of research in each theory. Therefore, each theory can be used as a theoretical reference for researching company

debt financing and company performance. However, the relationship between corporate debt financing and corporate performance cannot be generalized based on the results of the theory. It should be analyzed based on specific research situations.

CHAPTER 2 LITERATURE REVIEW

2.1 Literature review

The origins of research on the relationship between corporate debt financing and corporate performance in the West originated earlier. In the 1970s, there were many studies on this aspect, and as China's money market and capital market started relatively late, research on debt financing was relatively late. The monitoring hypothesis states that debt can also reduce the agency conflict by creditor monitoring, especially when companies engage in bank loans. In the following, we introduce foreign and domestic research in this area respectively, and divide the relationship between corporate debt financing and corporate performance into: the relationship between the overall debt structure and corporate performance, the relationship between debt maturity structure and corporate performance, and the structure of debt sources. The relationship between company performance is introduced separately.

Business groups have also led Korean exports through the creation of global brands and competitiveness. The top five export items including shipbuilding and motor vehicles are largely from the heavy and chemical industries (HCIs) produced by chaebols. Samsung has become a world leader in several key manufacturing industries such as memory-chips, flat-panel monitors (the absolute leader), DVD players (the second) and cellular phones (the third). The brand value of Samsung is estimated at \$16.2 billion U.S. . Other chaebols such as Hyundai Motor Co. (global brand value ranking 84th in 2006) and LG Electronics (global brand value ranking 94th in 2006) have also become among the world's best known producers of automobiles, air conditioners, and CD-ROM drives. Business groups have contributed to creating jobs domestically and establishing the brand image of Korea globally.