

Research on Corporate Financing Decisions and Capital Structure Choices from the Perspective of Information Asymmetry

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Abstract: Information asymmetry is an important feature of capital markets and an important perspective for understanding corporate financing decisions and capital structure choices. Based on the evolution of capital structure theories, this paper incorporates adverse selection, moral hazard, and signaling into a unified framework to analyze the underlying mechanisms through which information asymmetry affects corporate financing decisions. Adverse selection increases external financing costs, thereby increasing firms' reliance on internal funds and affecting their financing choices; moral hazard gives debt financing both governance effects and agency costs, with its effects depending on debt levels, maturity structure, and creditors' monitoring capabilities; signaling makes the choice of financing instruments a channel for information transmission. These three mechanisms jointly affect capital structure choices. Based on this framework, this paper uses the pecking order theory as a reference to analyze the effects of information asymmetry on the volume of external financing and financing structure, and discusses the operation of the three mechanisms and the applicability of the pecking order theory under the institutional environment of China's capital market. This paper adopts a theoretical analysis approach and does not conduct empirical tests; the relevant propositions still require further examination through empirical evidence.

Keywords: Information Asymmetry; Financing Decisions; Capital Structure; Pecking Order Theory; Signaling

1. Introduction

1.1 Research Background and Research

Question

Information asymmetry refers to differences in the information possessed by parties to a transaction regarding the same subject. In capital markets, it primarily manifests as the information gap between corporate management and external investors. This gap constitutes an important constraint on corporate financing decisions. When external investors cannot accurately assess firm value, information asymmetry may give rise to adverse selection: investors may find it difficult to effectively distinguish among firms of different quality, causing high-quality firms to potentially face undervaluation and correspondingly higher financing costs, thereby affecting their financing choices. Myers and Majluf [1] provided an important theoretical foundation for the pecking order theory from the perspectives of information asymmetry and adverse selection, pointing out that, under conditions of information asymmetry, firms tend to rely on internal funds and, when external financing is necessary, prefer debt over equity. However, the applicability of this theory may vary across different markets and institutional environments. In particular, given the specific institutional environment and financing structure of China's capital market, the specific mechanisms through which information asymmetry affects corporate financing decisions warrant further analysis. This leads to the central research question of this study: Through what mechanisms does information asymmetry affect firms' choice of financing methods and capital structure?

1.2 Research Significance and Marginal Contribution

The significance of this study lies in both theoretical and practical aspects. From a theoretical perspective, this paper attempts to incorporate the three mechanisms of adverse selection, moral hazard, and signaling into a

unified analytical framework to gain a more comprehensive understanding of the underlying logic through which information asymmetry affects financing decisions. From a practical perspective, the analysis helps explain potential differences between corporate financing behavior and the predictions of the classical pecking order theory, thereby providing a theoretical reference for understanding firms' choice of financing strategies under different institutional environments.

The marginal contribution of this paper lies in incorporating adverse selection, signaling, and moral hazard from an agency-cost perspective into a unified analytical framework, based on a review of the evolution of capital structure theory, and discussing the logic through which these three mechanisms operate and their applicability in the Chinese context.

2. Literature Review and Theoretical Foundations

2.1 The Evolution of Capital Structure Theory: From Irrelevance to Information Asymmetry

The modern development of capital structure theory began with the irrelevance proposition of Modigliani and Miller [2], which, under assumptions including perfect capital markets, concluded that firm value is independent of capital structure. However, this conclusion rests on a series of strict assumptions. When the relevant assumptions are relaxed, particularly with the introduction of factors such as taxes, financial distress costs, and information asymmetry, capital structure may affect firm value. The subsequently developed trade-off theory incorporated the tax benefits of debt and financial distress costs into capital structure analysis, emphasizing that firms trade off the benefits of debt against the associated costs; however, its core does not regard information asymmetry as the primary explanatory variable.

Agency cost theory further reveals conflicts of interest among shareholders, management, and creditors. Jensen and Meckling [3] discussed the agency costs and related conflicts of interest arising from debt financing, while Myers [4] further revealed the potential underinvestment problem under a heavy debt burden. The pecking order theory subsequently incorporated information asymmetry into capital structure

analysis. The model developed by Myers and Majluf [1] showed that information asymmetry and the resulting adverse selection costs can affect firms' external financing choices, making firms inclined to use internal funds first and, when external financing is required, to favor debt over equity. Thus, information asymmetry has become an important theoretical factor in explaining corporate financing decisions and capital structure.

2.2 Pecking Order Theory: Adverse Selection and Financing Order

Myers and Majluf [1] developed a model in which management is better informed than outside investors about the value of the firm's assets and its investment opportunities. The core logic is that when a firm needs external financing, information asymmetry may make it difficult for investors to effectively distinguish among firms of different quality; under the assumptions of the model, investors price firms according to average quality, and high-quality firms may therefore face undervaluation. In this setting, the adverse selection cost associated with equity financing is greater than that associated with debt financing. Motivated by the desire to protect the interests of existing shareholders, management will give priority to internal funds; when internal funds are insufficient, it tends to choose debt financing and place equity financing further down the order, thereby giving rise to a preferred financing order of "internal funds → debt → equity."

Myers [5] further pointed out that, under the pecking order framework, firms do not have a well-defined target leverage ratio, and actual leverage to some extent reflects the firm's cumulative external financing needs. It should be noted that the implications of this theory rest on specific model assumptions, including that management represents the interests of existing shareholders and that outside investors are rational but insufficiently informed. Therefore, the financing order should be understood as a theoretical financing preference rather than a mechanical rule that all firms strictly follow.

2.3 Signaling Theory: The Informational Content of Financing Behavior

Unlike the pecking order theory, which focuses on the financing order, Ross's [6] signaling model emphasizes the informational content of

financing behavior itself. In Ross's model, information asymmetry exists between management and outside investors, and capital structure becomes a means through which management conveys private information to the market. The core mechanism is that managerial compensation is positively related to firm market value, while bankruptcy imposes punitive losses on management. Management of high-quality firms is better able to sustain higher levels of debt without facing bankruptcy, whereas low-quality firms find it more difficult to imitate such a capital structure because higher leverage increases their probability of bankruptcy. Therefore, under the assumptions of Ross's [6] model, a higher level of leverage can be interpreted by the market as a signal of higher firm quality.

Asquith and Mullins [7] found that announcements of equity offerings were generally accompanied by negative stock price reactions. This finding is consistent with the interpretation that investors may regard equity issuance as a negative information signal, although the observed reaction may also be explained by other factors. Accordingly, their study can be viewed as empirical evidence that financing behavior may contain informational content. Signaling theory explains the informational content conveyed by the choice of financing instruments, whereas the pecking order theory explains the formation of the financing order. The two theories are therefore complementary in explaining financing decisions under information asymmetry.

2.4 Literature Review and Research Gap

Regarding the relationship between information asymmetry and capital structure, relevant theories mainly explain corporate financing behavior from the perspectives of adverse selection, agency conflicts, and signaling. The pecking order theory emphasizes information asymmetry and the financing order; agency cost theory focuses on conflicts of interest and governance effects in debt financing; and signaling theory emphasizes the informational content of financing behavior. Existing theories cannot simply characterize corporate financing behavior as a fixed sequence of "internal funds → debt → equity." Actual financing decisions may also be affected by factors such as financing needs, debt capacity, the extent of information disclosure, financing channels, and the

institutional environment. Therefore, different capital structure theories explain different mechanisms underlying financing decisions. Building on this, this paper incorporates the three mechanisms of adverse selection, moral hazard, and signaling into a unified analytical framework, further discusses their effects on the volume of financing, financing methods, and capital structure choices, and analyzes their applicability in the Chinese context.

3. Theoretical Mechanisms through Which Information Asymmetry Affects Financing Decisions

3.1 Adverse Selection and the External Financing Cost Premium

Adverse selection arises from the information gap between corporate management and outside investors. When a firm seeks external financing, management is generally better informed than potential investors about the firm's true value and the prospects of its investment projects. Under information asymmetry, investors may find it difficult to effectively distinguish among firms of different quality and may, under the assumptions of the model, price firms according to their average quality. As a result, high-quality firms may face undervaluation.

For high-quality firms, issuing securities at prices below their true value may harm the interests of existing shareholders, thereby increasing their external financing costs relative to those under symmetric information. The model of Myers and Majluf [1] shows that, under its model assumptions, adverse selection costs are more pronounced in equity financing. Consequently, firms facing information asymmetry may prefer internal funds or debt financing. Asquith and Mullins [7] found that equity issuance announcements were generally accompanied by negative stock price reactions. This finding is consistent with the interpretation that investors may perceive equity issuance as a negative information signal and is also consistent with the analysis that equity financing may face higher costs under information asymmetry. Thus, adverse selection may affect firms' choice of financing methods by increasing external financing costs [8].

3.2 Moral Hazard and the Governance Effects of Debt Financing

Under conditions of information asymmetry and

agency conflicts, debt financing has dual effects. On the one hand, the pressure of debt service can reduce the discretionary cash flow available to management, thereby potentially constraining agency behavior such as overinvestment; the governance role of debt is related to its mandatory cash flow payment obligations. On the other hand, debt financing may also exacerbate conflicts of interest between shareholders and creditors: at higher debt levels, shareholders may tend to undertake higher-risk projects (Jensen and Meckling [3]), and when the firm faces positive-NPV investment opportunities, a heavy debt burden may also reduce shareholders' willingness to invest. Starting from the relationship between debt and growth opportunities, Myers [4] provided a theoretical analysis of underinvestment under high leverage.

Therefore, debt may both play a governance role and give rise to agency problems such as underinvestment, and its effects depend on factors such as the level of debt, debt maturity structure, and creditor monitoring.

3.3 Signaling and the Choice of Financing Instruments

Under conditions of information asymmetry, the choice of financing instruments can itself serve as a means for management to convey private information to the market. Ross's [6] signaling model indicates that, under its specific model assumptions, management can convey information about firm quality to the market through capital structure: high-quality firms are better able to sustain higher levels of debt, whereas low-quality firms find it more difficult to imitate such a capital structure because higher debt increases their risk of bankruptcy. Therefore, under the assumptions of the model, a higher level of debt can be interpreted by the market as a signal of higher firm quality.

Asquith and Mullins [7] found that announcements of equity offerings were generally accompanied by negative stock price reactions. This finding is consistent with the interpretation that investors may perceive equity issuance as a negative information signal, although alternative explanations may also exist. Thus, financing behavior carries informational content, but the specific signaling effect depends on signaling costs, firm characteristics, and the market environment.

Further, based on this theoretical reasoning,

when operating risk or cash flow uncertainty is high, the cost of a high-debt signal may rise, and firms may choose alternative signaling mechanisms or reduce their debt levels.

3.4 Integration of the Three Mechanisms

Adverse selection, moral hazard, and signaling characterize the effects of information asymmetry on financing decisions from different perspectives. Adverse selection affects firms' assessment of external financing costs and financing methods; moral hazard makes the governance effect of debt financing coexist with agency costs; and signaling affects how the market interprets corporate financing behavior.

These mechanisms do not operate independently. Rather, they jointly influence corporate financing decisions: financing preferences affect "what firms are willing to use," the governance effect of debt affects "how much firms can use," and signaling effects affect "how the market interprets" financing behavior. The three mechanisms interact with one another and jointly affect firms' capital structure choices, thereby providing a theoretical basis for further analyzing the relationship between information asymmetry and the volume of financing and financing structure.

4. Financing Decisions and Capital Structure from the Perspective of Information Asymmetry

4.1 Information Asymmetry and External Financing Volume Decisions

The effect of information asymmetry on the total amount of external financing can be analyzed through the three mechanisms of adverse selection, moral hazard, and signaling. Adverse selection may increase external financing costs. Under information asymmetry, investors may find it difficult to effectively identify firm quality, while high-quality firms may face undervaluation, thereby increasing their reliance on internal funds. Moral hazard means that debt financing simultaneously generates governance effects and agency costs. The pressure of debt service can constrain management, whereas a higher level of debt may lead to underinvestment. Consequently, firms' decisions regarding the amount of debt are also affected by debt burden, maturity structure, and creditor monitoring. Signaling implies that external financing behavior contains informational content. Under

the relevant signaling model, debt financing may be interpreted as a signal of higher firm quality, whereas equity financing may be interpreted as negative information [6,7].

When other conditions are similar, a higher degree of information asymmetry may increase firms' reliance on internal funds and raise the relative cost of external financing. As information asymmetry decreases, the conditions for firms to use external financing may improve. However, the total amount of external financing is also affected by investment demand, internal cash flow, financing constraints, and financing channels [9]. Therefore, information asymmetry primarily affects the amount of external financing through financing costs, debt capacity, and the signaling effects of financing behavior, rather than independently determining financing scale.

4.2 Information Asymmetry and External Financing Structure Decisions

When a firm's internal funds are insufficient and external financing is needed, the choice of financing methods is also affected by information asymmetry. When other conditions are similar, greater information asymmetry may lead firms to rely more on financing channels that perform information production and monitoring functions. Diamond's [10] theory of financial intermediation points out that financial intermediaries can reduce information and incentive problems in lending relationships through specialized information production and delegated monitoring. Therefore, compared with direct access to public market financing, bank loans may have certain advantages in information acquisition and creditor monitoring, providing a financing channel for firms with a high degree of information asymmetry. Compared with bank loans, public market financing relies more on public information disclosure and market pricing; therefore, the extent of information disclosure may affect the conditions under which firms can access public debt and equity markets.

Thus, financing choice is not merely a matter of "debt over equity"; within debt financing, different financing channels also differ in information production, monitoring, and pricing mechanisms. The pecking order theory proposes a financing preference of "internal funds → debt → equity." This paper further develops a theoretical extension based on information

production and monitoring mechanisms: when information asymmetry is high, firms may rely more on bank loans; as information disclosure becomes more sufficient and the market's ability to identify firm information improves, the conditions for firms to access public debt market financing may improve. Therefore, this paper further argues that information asymmetry not only affects firms' choice between debt and equity, but may also affect the internal structure of debt financing.

4.3 Changes in the Three Mechanisms and Their Theoretical Applicability in the Chinese Context

The institutional environment and financing structure of China's capital market affect the specific ways in which the three mechanisms of information asymmetry operate. China's equity issuance system has shifted from an approval-based system to a comprehensive registration-based system, and issuance regulation places greater emphasis on information disclosure as the core [11]. The banking system continues to play an important role in corporate financing, and banks can alleviate some information asymmetry problems through credit review, information acquisition, and creditor monitoring. At the same time, firm characteristics such as ownership nature and financing channels may also affect the specific ways in which the mechanisms of information asymmetry operate [12].

Therefore, in the Chinese context, the effects of the three mechanisms of information asymmetry are influenced by factors such as the financing system, bank monitoring, ownership nature, and financing channels. The pecking order theory can still serve as an important theoretical foundation for analyzing corporate financing choices, but its classic predictions need to be interpreted in light of the specific institutional environment and should not be directly regarded as a universal rule governing corporate financing behavior in China.

5. Conclusion and Outlook

Information asymmetry affects corporate financing decisions through three mechanisms: adverse selection, moral hazard, and signaling. Adverse selection may increase external financing costs and affect firms' choices among internal funds, debt, and equity financing. Moral hazard gives debt financing both governance

effects and agency costs, with its effects depending on factors such as debt levels, investment opportunities, and creditor monitoring. Signaling gives financing behavior informational content and influences how the market interprets different financing methods. These three mechanisms jointly affect corporate financing decisions and capital structure choices. This paper further argues that information asymmetry may affect not only the volume of external financing but also the structural choice among different financing channels. In the Chinese context, factors such as the financing system, bank monitoring, ownership nature, and financing channels further affect the specific ways in which the aforementioned mechanisms operate. Therefore, the classic predictions of the pecking order theory need to be interpreted in light of the specific institutional environment.

This paper adopts a theoretical analysis approach, discussing the relationship between information asymmetry and corporate financing decisions through theoretical review, mechanism analysis, and logical deduction, without conducting empirical testing, which constitutes the main limitation of this paper. The analysis in this paper regarding the relationship between information asymmetry and the volume of external financing, financing methods, and capital structure still requires further empirical testing. Future research could employ Chinese firm-level data and appropriate proxies for information asymmetry to examine the specific roles and applicable boundaries of the three mechanisms from dimensions such as ownership nature, financing channels, and institutional environment. Future studies may also further test differences in firms' choices among financing methods under conditions of information asymmetry.

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