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The Agency Problem: Examining the Dilemma Between Shareholder and CEO Bonus Structures

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Abstract: The principal-agent problem is a well-known issue that arises when one party hires another party to act on their behalf, but the interests of the two parties are not perfectly aligned. When there is information imbalance between the principal and the agent, or when one party has more or better information than the other, this frequently occurs. The principal-agent dilemma in relation to information asymmetry is the main topic of this essay, which is a pervasive issue in various industries and has significant impacts on firm performance and dividend policies. By analyzing and synthesizing previous literature, the paper identifies that agency problems can lead to moral hazard and agency-costs-related issues, which in turn can negatively affect the financial outcomes of the firm. To tackle these problems, the paper proposes three potential solutions, equity incentives and debts, external auditors and consultants, and ownership and board structure. These solutions are effective in reducing agency problems. Moreover, the paper discusses how these solutions can be tailored to different contexts and industries. The proposed solutions can effectively alleviate agency problems, but they need to be implemented appropriately and tailored to specific contexts. To investigate the viability and efficacy of these solutions in various contexts, more study is required.

Keywords: information asymmetry, agency problem, firm performance, ownership structure

1. Introduction

Information asymmetry is a concept first proposed by Nobel laureates George Akerlof and Michael Spence in a 1970 article that shows the risk of firms [1]. It is a situation commonly exists in economic activities in which the parties to a transaction have unequal information so that an unfair exchange appears. In such a scenario, the party with less information is at a disadvantage because they cannot accurately assess the value of the transaction and may end up agreeing to terms that are not in their best interest. This creates an unfair exchange and can result in economic inefficiencies. The two most famous classic theories proposed by George Akerlof and Michael Spence regarding information asymmetry are the "hidden knowledge" model and the "signal" model. The hidden knowledge model suggests that in the presence of information asymmetry, low-quality products, and inferior transactions may occur in the market, leading to market failure. And the signal model contends that transaction parties can alleviate the effect of information asymmetry by sending signals, such as demonstrating their qualifications, training, and experience.

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Information asymmetry occurs in many situations. In the classic theory, for example, the used car market. The seller can know more about the condition of the automobile than the buyer, which could result in the buyer paying more than the car is worth. Similarly, in the market for health insurance, insurance companies may have more information about the health risks of their clients than the clients themselves, which can result in unfair pricing. Vice versa, consumers can also harm insurance companies' interests by engaging in high-risk activities. It can also exist in the real estate market (just the same as the used car market), financial market (corporates may conceal the truth about operating status to investors), and education market (teachers always possess more information on teaching quality than students). In addition to the classic theory, a large research has been conducted to explore the application of information asymmetry. Spence suggests that employers are at an information disadvantage because they cannot accurately know the job seekers' potential and skills, so job seekers should send signals to employers like their certificates and academic qualifications to prove their abilities [1]. Arrow argues that patients are unable to correctly comprehend their health condition and the available treatment options, while doctors have more medical knowledge and information [2]. This situation illustrates an information asymmetry between doctors and patients. Patients may not know the side effect of the medications and their real physical condition. There are also some environmental issues. Scholar Kulkarni points out the clashing environmental interests of a company and the community [3]. The unequal distribution of information between the firm and the community as well as within the community is the primary cause of information asymmetry. Specifically, the firm may have more information regarding the environmental impact of its products, processes, and waste, while the community may lack the relevant information to assess the firm's environmental impact, being injured by environmental pollution. There are more and more research emerges later in this field, which gives plenty of proof that information asymmetry occurs in all kinds of situations. According to the actual circumstances above, we can learn that information asymmetry is a problem that should be alleviated, or it will affect market efficiency and even lead to market failure, impairing both consumer and producer rights.

Information asymmetry also exists within companies, which can appear between management and employees, or between management and shareholders. Principals may delegate decision-making authority to agents, who may not have the same incentives as the principals. One party may do something to hurt the other by hiding the truth. This can lead to conflicts. The conflict between management and employees is a kind of so-called "agency problem", which means that the agency problem arises from information asymmetry. Agency problems can bring harm to a company, making it low-efficiency. In business activities, the occurrence of agency issues in operations can result in resource misallocation, inefficiencies, and social dilemmas. This article's main goal is to examine the various agency issues that arise in businesses and offer solutions to address them.

2. Agency Problem

2.1. Application of Agency Problem in Corporates

Agency problem appears in many zones. For a company, the agency problem is always a task for corporate governance, which mainly exists in two ways. On the one hand, it includes conflicts of interest between management and employees. Due to their different goals, their relationships are affected. For instance, the management may take measures to increase the company's stock price and have short-term returns, such as cost-cutting, layoffs, and reducing welfare, which can lead to employee turnover or increased labor costs. On the other hand, agency problems also manifest as conflicts of interest between management and shareholders, which always be a topic for discussion. Regardless of the company's long-term objectives and steady operations, management may make careless or speculative actions in an effort to maximize short-term revenues. Additionally, the interests of the business and its shareholders may be harmed if management uses company resources and assets to fulfill personal desires, such as making monetary investments or purchasing private property with corporate money on company accounts. In short, managers may withhold important information from shareholders or make strategic decisions that benefit themselves rather than the company as a whole, ultimately having significant negative impacts on a company's performance and reputation. Therefore, we should find ways to alleviate this phenomenon.

2.2. Impact of Agency Problem

2.2.1. Moral Hazard

Arrow's article "The Economics of Agency", published in the Journal of Economic Literature in 1984, is widely regarded as a seminal work in the fields of agency theory and corporate governance [4]. In the piece, Arrow talks about the issue of agency between principals and agents and introduces the idea of moral hazard, where an agent's actions might not be in the principal's best interests because of the agency relationship, resulting in harmful actions and moral hazard. This article, which has since become a significant classic reference in the field, provided the framework for subsequent research on agency theory and moral hazard. Holmström explores the connection between observability and moral hazard [5]. The author argues that moral hazard is a special type of agency problem in which the behavior of an agent is difficult to observe and thus may create a conflict of interest. When the behavior of the agent is not easy to observe, it is necessary to establish a reasonable incentive mechanism to constrain the behavior of the agent in order to reduce the moral hazard.

2.2.2. Agency Costs

Contractual and regulatory costs between the agent and principal might result from agency issues, which can result in additional expenditures. Jensen and Meckling first introduced the concept of agency costs, which presents a framework for understanding the agency problems that arise between owners and managers of firms [6]. The authors argue that these agency problems create agency costs, which are the costs incurred by owners in trying to align their interests with those of managers. Agency costs can affect firm performance and dividend policies. From Jensen’s theory, it can be figured out that managers (CEO) and owners (shareholders) have conflicts [6]. Scholars examine how variations in capital structure are impacted by CEO supremacy using agency theory. Their findings are consistent with earlier research, which suggests that strong CEO dominance may increase agency expenses and lower firm value. When agency problems are severe, the positive effect of CEO power diminishes, and agency costs increase, leading to lower firm performance. A study manifests that agency problems also have an important impact on the formulation of corporate dividend policy, especially in the case of weak corporate governance. Companies are more likely to pay lesser dividends when there is an agency problem because CEOs are more likely to use the money for their own personal advantage. Research also demonstrates that the dividend payout ratio has a negative relationship with the percentage of influence held by the controlling shareholder, as well as a negative relationship with the presence of another significant shareholder. The findings also suggest that different ownership forms in control have different effects on dividend policy. Especially, they discover that businesses pay fewer dividends, particularly when the CEO is also a significant stakeholder.

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3. Responses to Agency Problem

3.1. Equity Incentives and Debts

An equity incentive is a type of compensation that gives employees or executives equity ownership, like stock options or restricted stock, as part of their pay. Equity incentives connect the interests of employees and shareholders since both parties stand to gain from an increase in the company's stock price. This helps motivate employees and managers, and it also reduces the differences in information between managers and shareholders, which can help reduce problems with management.

Researchers from the University of Utah deeply investigate non-tax advantageous employee stock-purchasing project which is for incentive reasons [7]. The findings indicate that equity-based compensation plans increase shareholder wealth for reasons other than tax savings, this is to a large extent because the plans can improve employee motivation, contributing to firm performance. In this way, managers and shareholders should be aligned in their interests. And they also find key executives are more motivated by equity ownership than lower-level employees. Zhang also indicates incentive compensation coordinates management's objectives with those of shareholders and encourages them to work more to advance shareholder interests, it can help to solve difficulties with free cash flow agency [8]. Furthermore, because debt enhances the firm's financial leverage and financial discipline and encourages management to use cash flow more carefully, it can also help to decrease the free cash flow agency problem. It's presumably because debts must be repaid on time; since borrowed debts must be paid back within a set period of time, management cannot use corporate cash flow at will for personal or other uses. This has prompted the management to use corporate cash flow more carefully to ensure the development and operation of the business. Agrawal and Knoeber apply an empirical OLS test to examine seven factors that may be related to solving agency issues which include shareholdings of insiders and debt policy [9]. The main conclusion of this paper is that some mechanisms (such as executive shareholding, board independence, and compensation contract) have a positive effect on reducing the existence of agency problems and improving firm performance after controlling the influence of other relevant factors. At the same time, these mechanisms can produce different effects under different market conditions, and can also interact to strengthen or weaken each other's effects. Therefore, choosing an appropriate mechanism needs to consider the company's own characteristics and market conditions.

The usefulness of equitable incentives has been extensively studied. Commonly there are two ways to implement equity incentives: equity awards and equity options. Researchers come to the conclusion that the type of plan and ownership structure such as option plans or share plans affect how successful equity incentives are. The findings show that option-based incentives can significantly reduce agency expenses, making them more effective than stock-based incentives. Additionally, the effects of equity incentives are significantly influenced by ownership structure. Following the introduction of equitable incentives, the agency costs of companies with more decentralized ownership decrease, whereas the impact is minimal in companies with concentrated ownership. One concept that must be referred to is the risk incentives effect: the employees holding the options must be concerned about the risk of their company which is highly relevant to equity value. A study in 2014 related to the risk incentives effect proves a positive correlation between ESO (executive stock options) risk incentives and all categories of corporate innovations, which means that stock options can improve the employee innovation ability. The efficiency of the incentive scheme is also influenced by the company's risk: For product-related creative activities that are more closely linked to systematic risk than idiosyncratic risk, there are greater ESO risk incentive effects. This could be due to the fact that innovation initiatives involving systemic risks are more likely to have a significant impact on the company's future development, so employees are more motivated to actively participate. Not only

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can equity incentive policy enhances innovation, but it is also certain to improve responsibility and the sense of belonging.

However, Equity incentives can also bring harm to shareholders, which may have an impact on shareholder equity, such as diluting shareholder equity and affecting stock prices. Therefore, it is necessary to design reasonable equity incentive plans to balance the interests of employees and shareholders.

3.2. External Oversight: External Auditors and Consultants

Compliance with work standards and regulations is crucial for the growth of a company. Effective external oversight is one way to manage corporate operations and avoid agency issues. Compliance with domestic and international work standards and regulations is crucial for the growth of a company. These norms and guidelines can aid in regulating managers' activity and averting agency issues. The best course of action in this situation is to engage external auditors to routinely assess the veracity and objectivity of the company's financial reporting [10]. The audit reports will be handed to management and shareholders, which can be used to assess the corporate's market value. If the value is lower than expected, shareholders would like to sell their shares, which is a signal of the bad operation status of a company. The decreasing market value can urge the board of directors to reform the company's management team. So this evaluation can help ensure that the company's financial reports are truthful, accurate, and not manipulated. Through this approach, the company can better manage its operations and gain the trust of shareholders and investors.

External auditors mentioned above are responsible for evaluating the truthfulness and accuracy of a company's financial reports. External auditors typically work on a set schedule or plan and provide assessment results and opinions to a company's board of directors or shareholders. Apart from engaging external auditors to assess financial reports, companies can implement various external management measures to manage their operations and mitigate agency problems. One such measure is to hire external consultants or independent directors to supervise and evaluate their operations. External consultants provide assistance to companies when they need professional opinions and advice, usually in the areas of strategy, decision-making, and planning. They can offer expertise and experience tailored to specific issues of a company, and provide recommendations on market trends and industry developments. External consultants usually work on specific projects or issues for a company and may only provide services when needed. Therefore, although both are external entities, the responsibilities and working methods of external consultants and external auditors are different. External consultants typically focus more on providing professional advice and recommendations, while external auditors focus more on evaluating the accuracy and compliance of a company's financial reports. Using both methods in conjunction with each other is more beneficial for the company's oversight.

3.3. Ownership and Board Structure

Ownership structure and board structure are two key components of corporate governance that play critical roles in ensuring effective decision-making, accountability, and transparency within a company. Ownership structure, board structure, and their concentration level evidently affect corporate operation quality.

Ownership structure refers to the number and percentage of shares held by the company's owners or shareholders, including both direct ownership and indirect ownership, which significantly affects corporate governance, business decision-making, and equity transactions. Studies find that discover that when an outsider manages the company instead of an insider, agency costs are significantly higher. Agency costs rise with the number of nonmanager shareholders and are inversely related to the manager's ownership percentage.

Board structure refers to the composition and structure of the board of directors, including the composition of the board of directors' size, identity and number of members, the setting of committees, and the relationship between the board of directors and the management. The board of directors' organizational structure significantly affects the company's ability to manage, supervise, and make decisions. A board with a diverse mix of skills, experience, and backgrounds can bring different perspectives and insights to the decision-making process, which can lead to better outcomes. For example, a board with members from different industries, geographies, and cultures can provide a more comprehensive understanding of the company's operations and the markets in which it operates. Similar to that, a board made up of independent members who are not connected to the business or its management can offer an unbiased viewpoint on important choices.

The analysis of the concept of it means that board structure also has a deep impact on addressing agency problems. The prevalent ways should be increasing the proportion of independent directors, introducing outside directors, and so on, in which way companies can make sure the board has enough independent viewpoints to oversee management and protect shareholder interests. A higher percentage of independent directors on boards is useful in lowering earnings management, which effectively reduces agency issues related to entrenchment and expropriation in family enterprises, according to a study on family-controlled corporates. Chaudhary noted that the size of the board had a negative impact on agency costs [11]. Cooperation may be more difficult if the board is larger, or the CEO can find it simple to force his or her opinions on the board. Additionally, the author noted that companies should have a substantial institutional ownership in stock, particularly from investors who are not vulnerable to pressure, as they can minimize concerns with agency.

4. Conclusion

This paper mainly studies the very common principal-agent problem in information asymmetry. By analyzing and summarizing previous literature, it can be found that agency issues can lead to moral hazard and agency-costs-related problems such as affecting firm performance and dividend policies. And the paper focuses on solutions to this problem. Three solutions are analyzed above: equity incentives and debts; external auditors and consultants; Ownership and Board Structure. It must be mentioned that these solutions can be applied in different backgrounds, for example, in the context of startups, equity incentives, and debts may be more fitted, whereas external auditors and consultants may be more effective in addressing agency problems in established firms.

However, while these solutions can be effective in alleviating the principal-agent problem, they need to be used appropriately to be effective. For example, equity incentives may be a useful strategy for balancing the interests of the agent and the principal, but they need to be structured in a way that ensures that the agent is not taking excessive risks. Similarly, external auditors and consultants can provide valuable insights, but they need to be independent and objective to be effective. Finally, ownership and board structure can be effective, but they must be planned so that owners and board members have the knowledge and incentives they need to act in the company's best interests..

The agency problem is hard to solve because there is a basic conflict of interest between shareholders and management. Although methods like corporate governance practices and equity incentives are used to reduce the problem, they cannot completely eliminate agency costs. It's important to understand that these solutions can only reduce the problem to some extent and that a complete resolution of the agency problem is unlikely. Thus, it's essential to keep trying to improve corporate governance and align shareholder and management interests to decrease agency costs and enhance the company's long-term success.

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