

Agency Problems and its Impact and Relevance on Firms Borrowings

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ABSTRACT

This paper provides a critical review on the relevance and impact of agency problems and its impact on the borrowing levels of firms. We provide a brief look at the fundamental theoretical predictions from a basic framework established in the literature. Furthermore, we discuss the implications of the conflicts between managers and shareholders as well as shareholders and debtholders. The empirical literature provides some interesting insights on the potential mechanisms that can be used to reduce agency problems which range from managerial incentives, concentration of shareholders as well as the level, nature and maturity of debt. The findings are however inconclusive on the ability of such mechanisms to effectively control agency problems and subsequently reduce agency costs. Thus the issues highlighted remain unresolved and leaves ample room for future researchers.

Keywords: Agency conflicts, shareholders' wealth, borrowing

INTRODUCTION

The literature in this area can be traced back to times of Adam Smith who noted that when 'joint-stock' companies were managed by people, who did not own them, there would be a conflict. This conflict is often referred to as the agency theory and describes the agent-principal relationship. In the modern corporation, the agent (the management) works on behalf of the principal (the shareholders) who does not have the capacity or means to scrutinise the actions of the agent, even if they had the incentive to do it. The problem that arises here is that there may be a conflict in the objectives of the managers and the owners. The owners would like to see the value of the firm maximised. Meanwhile, the management would be making decisions to fulfil their own set of objectives that may include a guarantee of their current job and position, reducing the workload by investing in projects that are less complicated or require less attention and also favouring projects that have lower payback period which could mean a more secure alternative.

Managers have every incentive to consume corporate wealth since the costs of such consumption is not borne by himself. Seminal work in this area that relates to corporate financing behaviour indicates that the principal can limit the divergences from his interests by providing appropriate incentives (Jensen and Meckling 1976). The principal would also have to incur monitoring costs to ensure that the agent does not redirect valuable resources from the company to his own benefit. In today's world, the shareholders are dependent on the accounting reports to know what exactly the value of the firm is worth. However, these reports are subject to manipulation by the agents (management) as observed in the accounting scandals around the globe. Jensen and Meckling (1976) also state that it would be impossible to get this done at zero costs and fittingly define agency costs to be inclusive of monitoring expenditures by the principal, the bonding expenditures by the agent and the residual loss that is a result from the excessive perks enjoyed by the management of the company.

Our paper proceeds as follows: the next section introduces the fundamentals of agency problems. Following that, we discuss the relevance of agency problems from two different perspectives, namely the conflicts between managers and shareholders as well as the conflict between shareholders and debtholders. Lastly, we provide a discourse on the impact of these conflicts on firms' borrowings as evidenced in the empirical literature.

THE FUNDAMENTALS OF AGENCY PROBLEMS

Taking into consideration the expected behaviour of managers based on their incentive to transfer wealth from the company to themselves, the price of new equity would be discounted to take into consideration the costs of monitoring such behaviour. Given this scenario, managers would be motivated to issue debt. However, issuing debt to finance investment would also incur agency costs. The conflict that arises from this sort of financing would now be due to the conflict between the debtholders and the shareholders. When a company issues more debt, the managers are given the incentive to invest in riskier projects. If these projects were successful, the shareholders would reap the benefits of such projects. On the other hand, if the project were to fail, the shareholders downside of the losses incurred would be limited given that they are protected by the limited liability whereby a firm is an entity of its own and separated from the owners.

Debt holders on the other hand would not be enjoying the benefits of a success since their returns would be constant but would be exposed to the full downside of the situation if the risky project were to fail and cause the firm to go bankrupt. Assuming that debt holders are rational, they would incorporate a premium into the necessary compensation they would expect to receive given the probability of bankruptcy would increase if the firm were to issue more debt. In practice this is translated to higher interest payments, thus increasing the costs of debts. Given this scenario, Hunsaker (1999) includes the opportunity costs caused by the impact of debt in the investment decisions of the firm; the monitoring and contractual expenditures by the debt holders and the managers as well as the costs associated with bankruptcy and reorganisation as the agency costs of debt.

The duration of the debt contract serves as a tool that can be used to mitigate the agency costs of debt financing. This is because the extent of this problem depends largely on the length of the agreement. In other words, debt maturity plays an important role reducing the problem. The longer the duration of the loan, the more opportunities the shareholders have to profit at the expense of debt holders. Johnson (2003) shows that agency costs are smallest for short-term debt. Another possible step that debt holders can take to protect themselves would be to include debt covenants (Smith and Warner, 1979). This can be in the form of a specific set of instructions that will be laid out in the contract and is a condition of giving out the funds to the company. The covenants may range from the type of investment that the firm is allowed to make to the amount of dividend that is paid out to the shareholders. However, Smith and Warner (1979) also argue that these covenants also limit the power of management's decision and may be counter-productive to the overall value of the firm.

CONFLICTING INTERESTS BETWEEN SHAREHOLDERS AND MANAGERS

There are quite a number of possible scenarios or situations in today's business world that would give rise to the conflict of interests between shareholders and managers. The first happens when managers put in lower levels of efforts since the cost of this inefficiency will not be borne by themselves but by the shareholders. This is of course given that the levels of wages do not reduce as well as pointed out in Jensen and Meckling (1976). Another scenario is when managers are reluctant to accept projects that are risky and opt for less risky options as well as lower levels of debts (Hunsaker 1999). In cases where there are inefficiencies, management will tend to resist takeovers even if it is in the best interest of the shareholders. This is because managers will try their best to minimise the likelihood of employment termination (Garvey and Hanka, 1999). In Harris and Raviv (1990) managers are said to always want to continue with the firm's current operations even if liquidation of the firm is preferred by the investors. Managers may also be keen to reinvest all available funds even if paying out cash serves the interest of the shareholder better (Stulz, 1990).

Given these different possible conflicts that arise in the agent-principal relationship that reduces shareholders value, it is important to be able to discipline the actions of managers via different governance mechanisms. These mechanisms could at the very least minimise these problems and in turn reduce the associated agency costs. Jensen (1986) proposes that to reduce inefficient behaviour on the side of managers, the free cash flow that is made available

to them is reduced. This is argued because management would be interested in increasing firm size whereas shareholders ultimate motif is to maximise the value of their shares. Managers would tend to finance less profitable projects with internal funds, which is subject to less scrutiny and monitoring as compared to external funding. Thus, shareholders can opt for two possible actions to prevent this behaviour. The first would be to demand the increase in the levels of dividends. The second possibility would be to increase the levels of leverage in the firm. This would in turn reduce the free cash flow that is available to managers to invest in unprofitable expansions. Hunsaker (1999) also notes that an increase in leverage would increase the possibility of bankruptcy, thus give managers the incentive to consume fewer perks and increase effort levels.

The use of debt as a disciplining tool is also proposed in Haris and Raviv (1990). In this model, reduces the agency costs by giving the debtholders the option to force liquidation if cash flows are poor. However, in this model, the introduction of debt also causes another form of cost, which is the cost of information in the process of liquidation. A firm will then reach an optimal capital structure based on the trade off between the benefit of debt which allows for liquidation versus the cost of investigation. In Stulz (1990), on the other hand, debt works to as a disciplining tool in a different way. In this model, as in Jensen (1986), debt reduces the free cash flows available to managers. This model also proposes an optimal capital structure that is obtained by trading off the benefits of debt with the costs of debt. The cost of debt is that debt payment may more than exhaust free cash. This would lead to a scenario of underinvestment where the necessary cash required for profitable investments would not be available to managers.

Several studies also propose the use of convertible debts to control the behaviour of managers (see Jensen and Meckling, 1976, Green, 1984 and Smith and Warner, 1979). The logic behind this argument comes because this tool allows for the use of debt to control managerial behaviour and at the same time allowing investors to participate in the possibility of increased profits via conversion and thus enjoying the upside of the payoff in terms of capital gains. If the firm has huge potential for growth, then it is possible that the managers would tend to overinvest. Thus to reduce the problem of overinvestment, it is better to introduce convertible debt since ordinary debt would limit the growth potential. Thus, firms with growth opportunities should have a positive relationship with convertible debt and a negative relationship with ordinary debt.

A concentrated level of debtholders would also have the incentive and the ability to monitor managerial behaviour to the extent of reducing the agency costs. The free rider problem that arises from one individual bearing the costs and all of the other investors sharing the benefits of the monitoring and controlling managerial behaviour can be resolved if the debtholders were concentrated (Stiglitz, 1985) According to this view, this costs can be borne by lenders, especially banks in order to effectively exert control over managerial behaviour. Banks have the incentive to monitor the possibility of default and managers are motivated to avoid situations of default. Thus, Berglof (1990) argues that lower levels of debt should be observed in firms with dispersed creditor structure as opposed to concentrated creditor structure. Agency costs can also be reduced through the increase of managerial ownership.

Kim and Sorensen (1986) suggest that lenders would be able to have a clearer view of managerial actions that reduce the value of debt if management concentration were higher and also be more willing to negotiate to increase the levels of equity to balance out the risks of increase levels of leverage.

CONFLICTING INTERESTS BETWEEN SHAREHOLDERS AND DEBTHOLDERS

Any firm that has leverage in its balance sheet would be confronted with this type of agency problem. This conflict exists if the investment decision has different consequences on the value of equity and the value of debt. According to Jensen and Meckling (1976), managers who are working for the interests of shareholders, will tend to over-invest. The over-investment problem is especially true when the firm is facing financial distress. There will be some amount of information asymmetry whereby managers will have the advantage of knowing whether the firm will be facing financial distress in the future or not. In such cases, the managers would have the incentive to invest in risky projects that they would not have accepted otherwise. The downside of this scenario is borne by the debtholders but the upside is enjoyed by both the shareholder as well as the debtholders. This is also commonly referred to as asset substitution where shareholders will have the incentive to substitute risky investments for safe ones after issuance of debt.

Another possible form of conflict is when the exact opposite behaviour occurs when the firm is facing financial distress. During such circumstances, shareholders would again be having a conflict of interest with debtholders. However, instead of accepting risky projects, they will be declined to finance new, positive NPV projects. In such a situation, there would be an under-investment problem. The project would increase the value of the debt but would not increase the value of the equity. This situation is known as debt overhang (Myers, 1977). The reluctance to accept the project would be costly for debtholders and be detrimental to the value of the firm. According to Myers (1977), this cost is higher for firms that are likely to have profitable future growth opportunities requiring large investments.

There is also a possibility of conflict when managers would sell the assets of the company and use the proceeds to pay out dividends to the shareholders. This would leave the bondholders with valueless assets if the company were to be liquidated and thus their claims would be worthless (Smith and Warner, 1979). Smith and Warner (1979) also identify another source of conflict between debtholders and shareholders which is the claim dilution. When bonds are issued, they are normally priced assuming that the firm will stick to a particular level of leverage. Thus, in the event where managers decide to increase their leverage levels and issue more debt, the value of the bonds would have decreased since their claim to the assets of the company would have decreased. Galai and Masulis (1976) in their model show that the transfer of wealth from the shareholder to the bondholder can result from an increase in the level of risks in the firm, an increase in the leverage levels and a payout to the shareholder. However, Jensen and Meckling (1976) argue that investors are well aware of these conflicts and the costs associated with them and thus will discount any bonds issued. Thus shareholders would not benefit from such actions.

Debtholders are aware of this conflict and thus the use of convertible debt (as with the case of conflict between shareholder and managers) reduces the costs of conflict between shareholders and debtholders. This is because the option that is given to bondholders to convert their bonds to shares would allow them to share in any possible wealth transfer that might occur. Thus shareholders have less incentive to act in such ways (Green, 1984 and Masulis, 1983). Based on this logic, the discount applied by the investors on bonds issued by the company would be reduced. Thatcher (1985) supports this notion and shows that the issue of convertible debt reduces this sort of agency problem.

Managerial reputation also plays a role when analysing the conflict of interests (Diamond, 1991). According to Diamond (1991), managerial reputation is an important aspect that investors look at when determining the borrowing rate. Firms can be classified into safe and risky categories based on their choice of investments. Firms that invest in safe assets will have a lower risk of default. On the other hand, firms that invest in risky projects would have a higher risk of default. Investors, being outsiders to the firm, are only able to observe default. Thus, the longer the firm is able to remain default free, the better its reputation. This leads to a lower borrowing rate. Based on this, it can be suggested that older and more established firms will opt for safer and less risky options because they would be trying to maintain their reputation. Younger and relatively unknown firms would be inclined to choose risky projects with higher returns in the short run. In the long run, once these firms become profitable and reputable, they would then switch to less risky projects. Based on this, Diamond argues that older firms tend to have lower levels of debts.

Rational managers would try to enhance their personal reputation in managing the firms. Their reputation is closely tied to the perceived human capital value that they add to the company. Thus, a manager would opt for investment decisions that would build their reputation (Hirshleifer and Thakor, 1992). Their compensation packages would be tied to the successes and failures of the projects that they choose to invest in. Therefore, managers would have the incentive to go for projects that have the highest possibility of success even though they may have poor cash flows or may not be the best (optimal) choice. Hirshleifer and Thakor (1992) term this moral hazard as an excessive level of managerial conservatism and can cause the firm value to be lowered. However, this behaviour that results in sub-optimal value of the firm does have a plus side. This is because managers that would be interested in protecting their reputation would not choose the risky projects. The result from this would be a reduced level of expropriation of debtholders by shareholders, causing a reduction in the cost of borrowing. Given this, the company would be able to have higher levels of leverage than otherwise, resulting in greater tax savings due to the tax deductibility of interest payments.

EMPIRICAL STUDIES ON AGENCY PROBLEMS

Managers as agents of shareholders act on their behalf to make decisions in the day to day running of the company. However, to evaluate the effectiveness of this decision making is extremely difficult. This is due to the complexity in measuring the agency costs involved in the dynamics of today's modern corporate. Ang et. al. (2000) provide a measure of agency

costs for equity for companies under different ownership structures. This is done by comparing the performance of such firms with a base firm which is hypothetical in nature as a benchmark. This firm is 100% manager owned. The analysis is done for small firms and shows that agency costs are higher for firms with higher levels of non-managerial ownership. Agency costs can be lowered by via greater monitoring, mainly by banks and increasing manager's ownership share. Habib and Ljungqvist (2005) further compare this benchmark to provide a direct estimate of agency costs in publicly held corporations using the Tobin's Q as a measure. The results show that due to agency costs, the firm is about 16% below its benchmark value which translates into \$1432 million. Thus the reduction of this significant amount of costs would see the firm performance improve in comparison to its peers in the same industry or class.

Increased levels of managerial ownership should lead to lower levels of agency costs. Thus, it can be argued that leverage ratios can be explained by the agency costs reasoning. Kim and Sorensen (1986) test this notion by dividing firms into groups of 'insider' and 'outsider'. Insider refers to firms where insiders own more than 25% of the firm, whereas outsiders are defined as firms where insiders own less than 25% of the firm. Debt was measured as the ratio of long term debt to total market capitalisation. The results show that insiders firms on the average have significantly higher levels of debt ratios than outsider firms. Insider firms are observed to have about 6-7% higher debt levels than outsider firms in the same industry. The results also suggest that large firms with high levels of insider ownership tend to rely more on long term debt. This could be due to insiders opting to issue to more debt to maintain control over ownership. Debt is also preferred as a financing option since it does not carry the high agency costs of equity. Another reason for this observation is that firms with higher levels of insider ownership by itself would have lower levels of agency costs due to more control in observing covenants and provisions that are part and parcel of debt as well as sub-optimal levels of investment reducing the expropriation of debtholders. Chen and Steiner (2000) also find a strong positive relationship between managerial ownership and leverage levels thus lending support to the argument of lowering agency costs of debt due to sub-optimal levels of investment reducing the asset substitution effect.

Shareholders would also be interested in reducing the agency conflict that gives rise to the under-investment problem. This can be done by including some form of equity as a compensation package to the management. Datta et. al. (2001) show that managers that have some form of ownership tend to be involved in risk-increasing acquisitions that would benefit shareholders as the increased risks would usually be accompanied by an increase in returns. Ryan and Wiggins (2002) show that firms where managers compensation packages include equity ownership tend to have higher levels of R&D investment. The findings also observe the opposite where the R&D investment levels are lower for firms which do not have equity ownership as a part of the management compensation packages. This shows that the firms would have lower levels of growth potential. Overall, the empirical papers suggest that agency costs can be lowered via managerial ownership, which causes the firm value to be maximised.

Agency costs also can be reduced by increased levels of ownership concentration. Ownership concentration can also be observed via institutional ownership. Firth (1995) studies the effect of institutional ownership and managerial ownership on capital structure decisions. The variables used to reflect the composition of ownership in this study are the year-end market value of the management's shares, percentage of ownership by management and percentage of ownership by institutional investors. The market value of management's shares is found to be negative and significantly related to the debt-equity ratio. The percentage of ownership by management is also negative but insignificant. This lends support to the notion that managers would try to enhance their reputation to influence the perceived value they add to the company as the human capital. The percentage of ownership by institutional investors on the other hand is found to be positive and significant to the debt-equity ratio. This shows that there is a reduction in the agency costs and thus leads to a higher level of gearing by the firm. Agrawal and Mendelker (1992) also find that institutional ownership leads to better monitoring and thus reduces agency costs that affect firms.

The reduction of agency costs of debt via concentrated ownership is further supported by the work of Amihud et. al. (1990). This is due to the reduction in monitoring costs thus reducing the agency costs associated with debt. Shleifer and Vishny (1986) also find that large shareholders play an active role in monitoring management. The voting power that comes along with significant levels of ownership also influence the ability of large shareholders to reduce agency costs. The existence of such a strong voting power would tend to motivate managers to perform optimally as the threat of losing their jobs would be perceived to be real. Denis and Sarin (1997) show that firms with higher levels of concentrated or large shareholders have a higher level of executive turnover. Denis and Serrano (1996) also show that firms with large shareholders tend to outperform firms with dispersed ownership. Overall, the effective role of large-block shareholders of monitoring and exerting a perceived threat to manager's job safety, reduces the agency costs and is enjoyed by all shareholders.

Empirical studies however are unable to conclusively establish the effect of concentrated shareholders on agency costs. Large shareholders should reduce agency costs and thus firms with a higher level of large shareholders should have higher levels of leverages. Zeckhauser and Pound (1990) assess the impact of large shareholders towards corporate performance. Large shareholders should be able to gather information for monitoring purposes more efficiently than smaller shareholders. Thus, the leverage levels of firms with at least one large shareholder should be higher than that of firms without any large shareholders. The reason for this expected observation is that the firms would be able to exploit the benefits of debt more extensively. The results show that there is no significant difference in leverage ratios of these 2 groups of firms. This shows that large shareholders conduct the monitoring function only for equity owners and do not have an impact on debtholders. The notion of large shareholders reducing agency costs however has an agency conflict of its own. Large shareholders may vest personal interests in their holdings and choose to pursue actions that wouldn't coincide or be aligned to the interest of minority shareholders (La Porta et. al. 1998). They would be able to utilise the assets of the companies for their own personal purpose which would then be done at the expense of the minority or smaller and dispersed

shareholders. In these cases, the levels of agency costs may in fact be higher with large shareholders rather than without them. Classens et. al. (2002) show that a greater concentration of voting rights has a negative effect on the firm value. These studies show that large shareholders may enjoy a private benefit that would in turn increase the agency costs instead of minimising the costs of the conflict.

Studies also focus on the impact of concentrated shareholders on the R&D investment, which is generally seen as a growth potential and in turn influences the value of the firm. The literature however has mixed results regarding to the relationship between large blockholders and the R&D activities. The first strand of literature has found that concentrated ownership encourages R&D investments (such as Wahal and McConnel, 2000 and Hosono et. al., 2004). There are also studies such as Yafeh and Yosha (2000) which find that this relationship is negative. On the other hand, some empirical studies find that concentrated shareholders have no impact on R&D activities at all (see Holderness and Sheehan, 1988 and Francis and Smith, 1995). Recent studies have started focusing on the type of block shareholders that influence the R&D expenditure policies of the firm. Hosskisson et. al. (2002) found that the type of concentrated ownership influences the R&D investment policy that the firm decides to pursue. The results show a significant difference between the firms that had pension funds and professional investment funds as the main shareholders. Firms in the latter category pursued a more aggressive and thus highly intensive R&D expenditure.

CONCLUSION

Our paper reviews the relevance of agency problems and its implications on firms' borrowings. We provide a summary of the theoretical development in the area and provide a short discourse on the empirical literature which tests the framework. We discuss the framework by looking at agency conflicts from two different perspectives. Initially, we dissect the issue at hand by looking at the conflicts that arise between managers and shareholders. Furthering the argument, we analyse the conflicts that arise between shareholders and debtholders. Furthermore, our paper looks at the empirical literature that generally finds some support on the mechanisms that are used to control agency problems and costs. However the literature also provides some contention and the findings remain inconclusive. Our paper highlights this gap in the literature which provides some useful insights and direction to future studies.

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