CORPORATE GOVERNANCE AND COST OF DEBT: REVIEW OF RECENT STUDIES

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We suppose that the agency conflicts between shareholders and bondholders may affect the level of risk of company's debt instruments, therefore, increasing the cost of debt of the firm. A number of corporate governance mechanisms are developed to alleviate the conflicts. This paper surveys research on the relationship between corporate governance and the cost of debt. We pay special attention to the empirical papers with specific findings on cost of debt's nonfinancial determinants in emerging markets.

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Introduction

Why do we suppose that the corporate governance may have substantial effect on the cost of debt? There are a number of mechanisms of this relationship. But the general framework of this influence is the agency conflicts between creditors, managers and shareholders. You may easily calculate that there three types of 'pairwise' agency conflicts and we are going to make the links to all of them in this review.

The first and most researched conflict is one between the managers and shareholders. Separation of ownership and control leads to the agency costs provoked by the specific private goals of managers. Taking cash out, transfer pricing, empire building activity, financial fraud are glaring examples of managers' expropriation of investors' funds. We also pay attention to the conflict between debtholders and equityholders that usually has a significant influence on the cost of debt of the company. Asset sales, investing in too risky projects, increasing dividend payments, and other shareholders' self-serving activity have a detrimental impact on debtholders, increasing investment risks and the cost of debt.

Mechanically there are a number of evident nonfinancial mechanisms influencing the cost of debt. The first mechanism is a credit rating making a straightforward impact on company's cost of debt. The credit rating issued by the leading rating agencies like Standard & Poor's or Moody's determines the yield of the bond. The sovereign rating of the issuer's country usually limits the potential maximum corporate credit rating. Moreover, the sudden decrease of the sovereign rating often leads to the corresponding decrease in the credit rating of the first tier companies implying the new lower ceiling. But we realize that the sovereign rating can be decreased because of the political conflicts.

Let us consider the recent situation in Russia when the sovereign rating was downgraded from BBB to BBB- after the Crimea problems in April 2014. As of today all the first tier Russian companies with BBB rating could be downgraded because of the new ceiling of BBB-. As a result the bond yield of these companies, especially those traded outside Russia, may increase. It's worth mentioning that the companies with lower ratings (e.g. BBB- and BB) are also under pressure: they will have to make the efforts to avoid the downgrade and good corporate governance may play an important role in this case. The same case is typical at the corporate level, i.e. the agency conflicts among the stakeholders of the corporation may lead to the increase in the cost of debt.

The second evident mechanism is the covenants imposed on the company according to loan agreements. The covenants lead the managers and the board to the second best investment and financing decisions instead of those maximizing the shareholders' value. The choice of covenants depends on the negotiation power of equityholders and creditors. The heart of the agency conflict between equityholders and debtholders is totally different risk preferences.

So, both ownership structure & board composition may have the effect on the cost of debt of the company. There is a number of empirical research studying the cost of debt vs. corporate governance mechanisms in developed markets (e.g. Bhojraj and Sengupta, 2003; Anderson et al., 2004; Klock et al., 2005; Ashbaugh-Skaife et al., 2006; Bradley and Chen, 2011). One of the key ideas they prove is that the corporate governance is an important tool that can reduce managerial and stockholder opportunism as well as improve credible information disclosure. The evidence is mixed; and we believe that the country specific factors play important role in the cost of debt nonfinancial drivers. The influence of such mechanisms on the cost of debt of companies in emerging markets still remains unresearched & uncertain (e.g. Funchal et al., 2008; Juniarti and The Lia Natalia, 2012). But we are aimed to put together all the theoretical understanding and empirical evidence that is presented in academic papers.

Our paper is organized as follows. Section 2 reviews mostly empirical issues concerning the impact of ownership structure and changes in ownership on the cost of debt around the world. In this section we pay special attention to the agency conflict between managers and shareholders reflected by the level of ownership concentration and insiders' ownership. We also discuss here the private benefits hypothesis as well as the shared benefits one. Section 3 surveys both theoretical and empirical papers on the corporate governance mechanisms affecting the cost of debt with special attention to the board composition. Section 4 concludes.

Ownership Structure and Cost of Debt: Theoretical and Empirical Findings

In this section, we aim to explore the relation between ownership structure and the cost of debt. We pay special attention to the channels through which it affects debtholders. Shareholding structure enables to align interests of different stakeholders, increase incentives for managers to efficient governance, improve monitoring and control that reduces potential investment risks to investors and leads to a lower cost of debt.

Ownership Concentration

The first aspect of the ownership structure we are going to consider is ownership concentration. The shareholding of the largest owner or a number of blockholders typically characterizes the degree of ownership concentration.

The most popular view is that the agency conflict is a basic channel through which ownership concentration influences creditors. Agency conflicts appear as between managers and shareholders as between shareholders and debtholders. Schleifer and Vishny (1997) argue that large shareholders have a general interest in profit maximization and enough control over the assets to have their interests respected. Investors can easier to cooperate, control and achieve the same goal when control rights are not distributed among many of them. The "shared benefits hypothesis" suggests that benefits from reducing agency risk between managers and shareholders will be shared by all investors. Therefore, ownership concentration leads to a less opportunistic behavior of managers, decreases investment risks and contributes to a lower cost of debt.

The competitive "private benefits hypothesis²" implies that the concentrated shareholding exacerbate the conflict between large shareholders and other stakeholders including debtholders. Interests of large investor may differ from the interests of other investors (Schleifer and Vishny,

^{1, 2.} See Barclay and Holderness (1989) for a discussion of the private benefits and the shared benefits hypotheses.

1997), so they can treat themselves preferentially at the expense of other stakeholders. Examples of actions, which have a detriment effect on other stakeholders, include paying themselves special dividends, access to private information, pursuing personal objectives, etc.

This problem becomes potentially more significant when we face a conflict between investors of different types like shareholders and debtholders. Shareholder activities that may lead to the negative effect for debholders' wealth includes asset sales, investing in too risky projects when creditors bear all the costs of failure while shareholders have little upside potential (Jensen and Meckling, 1976), increasing dividend payments, issuance of new debt and other activities that may reduce the cash flows expected to be available for debt payments. These arguments lead to greater risks for debtholders and contribute to a higher cost of debt. Later we concern this issue in the section "Control-Ownership Wedge and Business Group Affiliation".

There is a mixed evidence on the impact of ownership concentration on the cost of debt. Bhojraj and Sengupta (2003) conducted first empirical research on the relation between corporate governance mechanisms and the cost of debt. Using a sample of industrial bond issues of the US companies during 1991-1996 they demonstrated that greater ownership concentration leads to lower credit ratings and higher corporate bond yields. Subsequently, Ashbaugh-Skaife et al. (2006) and Bradley and Chen (2011) confirmed this finding in the US. This result is consistent with a 'private benefits hypothesis'. Cremers et al. (2007) showed that the presence of a strong shareholder is associated with a lower bond risk only if the firm is protected from takeovers. However, Anderson et al. (2004), Sanchez-Ballesta and Garcia-Meca (2011) studying companies from US and Spain found that large blockholders do not have an impact on the cost of debt financing. There is lack of research concerning the relation between large shareholding and the cost of debt in developing countries.

Institutional Ownership

Institutional ownership is one of the types of shareholding structure influencing agency risk between managers and shareholders. According to the "active monitoring hypothesis", institutional shareholders have incentives to monitor corporate performance because they have greater benefits through this monitoring (Shleifer and Vishny, 1986). Thereby, with respect to "shared benefits hypothesis", all stakeholders will share benefits from this control. Aman and Nguyen (2013) mentioned that institutional investors also have better industry knowledge compared with small investors. Thus, greater institutional ownership is associated with a lower potential risks for investors, which reflects in a lower cost of capital. The contrary "passive monitoring hypothesis" assumes that institutional investors have limited incentives to monitor management actions. In this case, they have no effect on the cost of debt.

Research has widely explored the impact of institutional owners on the cost of debt. Bhojraj and Sengupta (2003) documented the first evidence of debtholders' preference for larger institutional ownership. They found that bond yields of the new debt issues are negatively associated with institutional ownership in the US. Later, Klock et al. (2005), Shuto and Kitagawa (2011), and Aman and Nguyen (2013) also confirmed that large institutional shareholding has a favorable effect on the debtholders through greater monitoring in developed countries. In emerging markets, Yi and Zhao (2013) presented similar evidence, using 1,258 listed firms in Taiwan from year 2008 to 2010 showed.

Elyasiani et al. (2010) focused their research on the impact of institutional ownership stability on the cost of debt rather than the influence of commonly studied institutional ownership level. Authors using a sample of 796 companies for the period 1990-1997 presented evidence that higher institutional ownership volatility leads to a higher yield spread and ownership stability plays a bigger role in determining cost of debt than institutional shareholding level.

In contrast, Paige Fields et al. (2012) analyzing 1,460 loans from commercial banks over the period 2003-2005 in the US found positive relation between institutional ownership and the cost of bank debt. This finding is consistent with the hypothesis that such investors contribute little to monitoring and discipline. Finally, Ashbaugh-Skaife et al. (2006), Bradley and Chen (2011), and Sanchez-Ballesta and Garcia-Meca (2011) showed non-significant impact of institutional ownership on the cost of debt studying companies in the developed markets.

Board of directors is a corporate governance mechanism, which aims to protect interest of shareholders and to mitigate the agency risk between managers and shareholders. Managers are responsible for shareholders' funds and are hired by owners to make a return on their investment. We argue that greater management ownership as well as non-executive director ownership initially alleviates the conflict between managers and shareholders. Actually, the executives contribute more to efficient governance and the firm's performance when their interests are in harmony with those of owners. Non-executives director ownership addresses the agency risk between managers and shareholders through greater incentives to monitoring and control of firm's management. Consequently, such shareholder entrenchment may be detrimental to debholders increasing agency risk if their interests do not coincide with those of shareholder (private benefits hypothesis). As debtholders know that their interests might conflict with the interests of shareholders, they will demand a higher yield on corporate debt as a compensation for the added risk. Vice versa, shareholder entrenchment may be viewed positively by creditors, if it reduces opportunistic behavior by management, increases control, and improves governance or performance (shared benefits hypothesis).

Bradley and Chen (2011) showed on the sample of 430 US firms for the period 2002-2007 that greater CEO shareholding leads to lower credit ratings, while Tanaka (2014), using data from 225 Japanese companies during 2005-2009, demonstrated that greater CEO ownership is associated with a higher yield spread. Shuto and Kitagawa (2011) demonstrated on the sample of Japanese companies over the period 1997-2004, that larger director shareholding leads to higher yield spreads. These works confirmed hypothesis of agency risk escalation between shareholders and bondholders in case of greater management ownership.

In contrast, Lorca et al. (2010) and Sanchez-Ballesta and Garcia-Meca (2011) studying Spanish companies found an inverse impact of board ownership on the cost of debt that implies that debholders benefits from greater monitoring and alignment interests between managers and shareholders. Ashbaugh-Skaife et al. (2006), Paige Fields et al. (2012), and Aman and Nguyen (2013) investigated the impact of the shareholding of board members on the cost of debt in developed markets and found that it is not a significant determinant of cost of debt. This lack of effect may be due to the confluence of two opposite factors. There is no evidence of the effect of director or management shareholding on cost of debt in emerging markets.

State Ownership

State ownership can influence debtholder's risk via two potential channels. The first way concerns the impact on company performance; the second one refers to some extra guarantees and opportunities from state for the state owned companies. Schleifer and Vishny (1997) argue that the bureaucrats controlling the state companies have at best only an indirect concern about the profits because cash flow rights do not belong to them and their incentives to efficient governance is little. Politicians pose power over these firms and can direct them to pursue their private goals. Such case obviously has a negative impact on debtholders and is associated with a higher cost of debt. On the other hand, state shareholding is often associated with implicit guarantees for debtholders in case of company's default. Obviously, the government supports and protects the largest companies, which are economically significant for the region. State may help the companies to overcome some bureaucratic barriers in business, increase the availability of resources, support companies in economic recession in form of subsidies, large orders and favorable loan terms. This argument leads to a lower cost of debt financing for this firms.

Evidence of the effect of state shareholding on cost of debt is scarce. In Spain Sanchez-Ballesta and Garcia-Meca (2011) found that greater state ownership is associated with a lower cost of debt. Borisova and Megginson (2011) studying 14 European countries showed that the decrease in state ownership in the companies in the process of privatization leads to a higher yield spreads, whereas fully privatized companies enjoy a lower cost of debt than partially privatized firms do. This result confirmed such benefits of privatization as improvement in the firm's operations, better resource

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allocation and governance. Nevertheless, result also revealed creditor's concerns over uncertainty surrounding ownership change, fear of losing state support and wealth redistribution during privatization. There is an evident gap in the literature because of the lack of research studying the cost of debt effect of state shareholding in emerging markets.

Family Shareholding

Another type of ownership structure that can influence debtholders is family shareholding. Under this term we understand the ownership of founding individuals. There are two points of view concerning the favorable effect of direct family ownership on debholders. First, the founding families have greater interest in firm's long-term survival as they plan to pass the firm to their heirs. They interests lie in passing the firm as a going concern to their heirs rather than merely passing their wealth (Anderson et al., 2003). Second, the families worry about firms' reputation more than other investors do. In fact, reputation for family firms has longer-lasting economic consequences because the management turnover in these companies is lower while large creditors often develop a personal relationship with management and deal with them for longer periods. Debtholders would expect similar actions in the future. Thus, family ownership is associated with better creditworthiness of the company and leads to a lower cost of debt. Alternative theory is that families can reinforce the agency conflicts because they hold all insider information and voting rights to redistribute wealth from the debthodlers, thereby increasing cost of debt.

Anderson et al. (2003) using a sample of 252 US companies discovered that founding family ownership is related to a lower cost of debt. Their results confirm the hypothesis that such a structure mitigates the agency risk between equity holders and creditors.

Control-Ownership Wedge and Business Group Affiliation

Another interesting aspect of ownership structure is a divergence between control (voting) rights and the cash-flow ownership rights of the shareholders. So called "control-ownership wedge" indicates the potential for agency conflicts between ultimate owners and other investors. Ultimate owner² can exercise effective control over a company with relatively small direct stake in the cash-flow rights by the following ways: using shares with superior voting rights, organizing the ownership structure in the firm in a pyramid, and using cross-shareholding (La Porta et al., 1999). Pyramid ownership structure implies that the firm has an ultimate owner and there is at least one company between it and the ultimate owner in the chain of control. Cross-shareholding takes place when firm owns shares in its shareholdings. The channels, through which control-ownership wedge negatively affects debtholders, are similar to those of ownership concentration. Moreover, incentives of controlling shareholders to engage in "tunneling" and other moral hazard activities increase with control-ownership wedge because they have a greater ability to divert corporate resources for private benefits while at the same time bearing a smaller proportion of the financial consequence of such activities (Johnson et al., 2000).

Some theories³ consider *business groups* as an ultimate owner, whose substantial indirect control rights may have detrimental effect on debtholders. Nevertheless, business groups enable member firms to share risks by smoothing out income flows and reallocating resources, thus leading to coinsurance effect (Khanna and Yafeh, 2005). Protection of the member firms is especially important in emerging markets where external capital markets are not well functioning and creditor rights are poorly protected (Khanna and Palepu, 2000). Therefore, affiliation to some powerful business groups can be associated with a lower cost of debt.

^{1.} Term "control-ownership wedge" was used by Lin et al. (2011)

^{2.} La Porta et al. (1999) argue that a company has a controlling shareholder (ultimate owner) if the sum of this shareholder's direct and indirect voting rights in the firm exceed certain cutoff level (authors used 10% or 20% as a proxy for control). Direct voting rights concern shares registered in shareholder's name, while indirect voting rights refer to shares held by entities that, in turn, this shareholder controls.

^{3.} See related literature in Lin et al. (2011)

Empirical results strongly support theory that control-ownership wedge has a negative impact on creditors and directly reflects the degree of agency risk. Lin et al. (2011) studying 3,468 firms in 22 Western European and East Asian countries during the period from 1996 to 2008 found that cost of debt financing is significantly higher at companies with a wider divergence between the largest owner's control rights and cash-flow rights. Byun et al. (2013) presented similar evidence in South Korea, while L-C Chan and Wen-hsin Hsu (2013) using data on non-financial firms in Taiwan over the period 2001-2008 found that the number of investment layers leads to a higher cost of debt.

Evidence regarding the impact of business group affiliation on debtholders is contrary. Byun et al. (2013) confirmed co-insurance effect and showed that the firms affiliated with *chaebols*, in South Korea, have a lower cost of debt.

Corporate Governance and Cost of Debt: Theoretical and Empirical Findings

In this part, we review both theoretical and empirical papers on the corporate governance mechanisms affecting the cost of debt with special attention to the board composition and shareholder rights protection in terms of takeover defenses.

Board Size

Board of directors is the basic mechanism of corporate governance, which is at the apex of the internal control system and has the final responsibility for the functioning of the firm (Jensen, 1993). One of the important characteristics of board is size. Although different theories suggest a significant impact of board size on the functioning of that internal control mechanism, there is no consensus in the literature about the direction of that relationship.

According to the "resource dependency theory", larger boards are more effective because each new member brings both expertise and access to resources. These resources include new markets, raw materials, and better technologies. In addition, board's ability to monitor and control managers directly depends on number of directors. Dalton et al. (1999) conducting a meta-analysis of 131 studies found a non-zero and positive influence of board size on performance. Klein (2002b) argue that if the firm limits board size, then the number of directors available to serve on the audit committee also will be limited. She found that audit committee independence increases with board size. Therefore, larger boards contribute both to a company performance and control over management that leads to a lower cost of debt.

On the other side, several factors make it difficult for larger boards to carry out the monitoring function. Lipton and Lorsch (1992) mentioned that greater number of board members is associated with lack of opportunity to express their ideas and opinions in limited time and lack of effective dialogue and clear communication with each other, thus making board disconnected and reducing directors' work toward a common purpose. Jensen (1993) stated that larger boards are less likely to function effectively and are easier for the CEO to control. Consistent with this theory, Yermack (1996) found an inverse relation between firm market value of large industrial companies in the US, as represented by Tobin's Q, and the size of the board of directors. Thus, ineffectiveness of larger boards may endanger company performance and increase agency risk that leads to a higher cost of debt.

Academic literature thoroughly covers the impact of board size on the cost of debt. Anderson et al. (2004) using a sample of 252 firms in the US over the period 1993-1998 conducted the first empirical research on the influence of great range of board characteristics on the cost of debt. Authors looked through the reliability of financial reports at board size and demonstrated that the cost of debt is inversely related to board size, thus confirming theory that larger boards contribute to a greater monitoring of the financial accounting process. Later, Paige Fields et al. (2012) supported this finding studying 1,460 bank loans in the US over the period 2003-2005, while Yi and Zhao (2013) confirmed favorable impact on creditors in Taiwan.

^{1.} For detailed information see Dalton et al. (1999) or Ning et al. (2010)

СБХСРБ Выпуск Nº2 (30), 2014 © корпоративные финансы, 2014 Nevertheless, Lorca et al. (2010) studying 151 Spanish companies during 2004-2007 presented non-linear relationship between board size and the cost of debt, thus indicating that poorer communication and decision-making associated with larger groups exceed benefits from greater monitoring from certain level. Bradley and Chen (2011) demonstrated non-robust relation between number of board members and the cost of debt on the sample of 430 firms in US during 2002-2007. Piot and Missonier-Piera (2007) and Tanaka (2014) found non-significant impact on the cost of debt in France and Japan respectively.

Independent and Outside Directors

Fama (1980) and Fama and Jensen (1983) argue that the composition of individuals who serve on the board of director is an important factor in creating a board that is an effective monitor of management actions. Despite authors mentioned that the board should include a mix of insiders (managers) and outsiders (non-employee), the viability of the board as an internal control mechanism is enhanced by the inclusion of outside directors. Fama and Jensen (1983) argue that outside directors have strong incentives to act as arbiters in disagreements among internal managers and to carry out tasks that involve serious agency problems between internal managers and owners. Such incentives originate from the desire of outside directors to develop reputation as experts in decision control because the value of their human capital depends primarily on their performance as internal decision managers.

A number of corporate governance researchers suggest to classify outside directors into one of two categories: "independent directors" and "grey directors", because traditional distinction may fail to account for the actual and potential conflicts of interests between outside directors and the firms they serve. Grey directors' independence may be decreased by being relatives of management, consultants and suppliers of the firm, etc. Nevertheless, authors traditionally predict that higher percentage of both outside and independent directors increase board's effectiveness. Beasley (1996) considered board composition in the context of likelihood of financial statement fraud and found that no-fraud firms have significantly higher percentage of outside directors than fraud firms. Klein (2002b) documented a negative relation between board independence and abnormal accruals. To sum up, larger number of outside directors mitigate agency risk through a greater control over managers and contributes to a lower cost of debt.

Many papers regarding the relation between corporate governance and cost of debt documented strong evidence of the inverse impact of board independence on the cost of debt. Anderson et al. (2004), Ashbaugh-Skaife et al. (2006), Paige Fields et al. (2012) studying companies in the US demonstrated significant negative association between board independence and the cost of debt, thus confirming the hypothesis that independence provides greater managerial oversight. This result is consistent with the first such evidence in the US provided by Bhojraj and Sengupta (2003). Piot and Missonier-Piera (2007) using a sample of 91 firms over the period 1999-2001 showed that board independence contributes to a lower cost of debt in France.

Nevertheless, there are several research, which discovered insignificant relation between board independence and debholders in developed markets. Bradley and Chen (2011) found insignificant influence of percentage of independent directors on the cost of debt financing in US, but showed negative relation with volatility of stock returns. Lorca et al. (2010) and Tanaka (2014) demonstrated non-significant association between independence and cost of debt in Spain and Japan respectively.

Board Committees

Another potential mechanism of board functioning includes committees. Boards often delegate oversight of key functions or decision making to standing committees such as audit, compensation, nomination, strategy, finance, risk-management, etc. Committees have specific defined functions, may include board members and meet separately from the full board. Characteristics of board's committees determine ability to achieve objectives and concern potential risks of investors.

^{1.} See Beasley (1996) for further information and literature review

One of the most relevant and important committees is audit committee. It primary oversees the firm's financial reporting process and meets regularly with the firm's outside auditors and internal financial managers to review the corporation's financial statements, audit process, and internal accounting controls. Similar to the overall board's structure, independent directors play a key role in audit committee's effectiveness. Klein (2002a) using a sample of 692 publicly traded U.S. firm-years found a negative relation between audit committee independence and abnormal accruals. This result implies that audit committee independence may improve quality and credibility of financial reports, thus addressing the risk of debtholders' incorrect evaluation of company. Therefore, greater independence contributes to a lower cost of debt. Evidence regarding direct impact of characteristics of audit committee on debtholders is ambivalent. Anderson et al. (2004) found that larger audit committees with greater number of independent members lead to lower yield spreads. This result is in line with the hypothesis that large more actively involved committees are associated with a greater financial statement reliability. In contrast, Piot and Missonier-Piera (2007), Lorca et al. (2010) found that relation between audit committee independence and the cost of debt is not significant.

Another part of academic interest refers to finance and/or long-term investment or strategic development committees¹. Finance committee is responsible for reviewing the firm's annual financing policies and procedures, making recommendations about dividend policy and corporate financing, and sometimes with the investment of funds. The main responsibilities of investment or strategic development committees concern review and approval of long-term investment strategies and projects. Klein (1998) hypothesize that inside directors on these committees positively affect firm's performance because they have more specialized and expert information about the firm's activities to evaluate and ratify the firm's long-term strategies than outside directors. She demonstrated a positive relation between the percentage of inside directors on finance and investment committees and accounting and stock market performance measures, studying board composition of companies in the US. This result implies a favorable effect on debtholders, since firm performance is expected to improve a firm's creditworthiness. However, investigating factors influencing cost of debt, Ashbaugh-Skaife et al. (2006) demonstrated no significant impact of insiders on finance committee (or on overall board, if firm has not finance committee) on credit ratings.

Primary role of compensation or remuneration committee is to act as independent monitor². Compensation committee is in charge of all compensation for senior officers of the firm. The conflict of interest between managers and investors can be alleviated when incentive and bonus schemes of managers constructed in a harmony with the goals of fund's owners. The intuition implies that independent directors make better monitors. Therefore, independence of compensation committee can reduce agency risk and leads to a lower cost of debt. Piot and Missonier-Piera (2007) confirmed theoretical hypothesis showing that presence of independent compensation committee leads to a lower cost of debt in France. Author also found non-significant relation between independence of nominating committee and the cost of debt.

Directors Characteristics

Fama (1980) and Fama and Jensen (1983) argue that outside directors are effective monitors because they have incentives to develop reputations as experts in decision control and their human capital primarily depends on their performance. This theory implies a direct link between directors' reputation and their performance. Analysis of the qualifications and expertise of board members can be useful in order to assess the effectiveness of potential monitoring and control as well as decision quality. Therefore, greater monitoring expertise is associated with less managerial opportunism and investment risks for debtholders. The empirical literature reveals some evidence. Anderson et al. (2004) classified independent directors according to their occupation and studied influence of employment characteristics on the cost of debt. Authors found that all occupational characteristics are inversely related to the cost of debt, which means that debholders rather appreciate independent directors monitoring than certain expertise of director. Ashbaugh-Skaife et al. (2006) showed that

^{1.} See Klein (1998) for hypothesis development

^{2.} See Klein (1998) for hypothesis development

greater number of independent directors that hold seats on other firms' boards contributes to higher credit ratings, while Bradley and Chen (2011) and Lorca et al. (2010) found non-significant effect. Paige Fields et al. (2012) examined the impact of as many corporate governance characteristics on bank loan costs as possible. They found that greater directors' competence as well as greater outside executive expertise is associated with lower cost of debt.

The effect of board tenure on the monitoring is doubtful. On the one hand, greater tenure is associated with an effective monitoring because it is potentially an acquired skill, thus mitigate agency conflicts between managers and investors. On the other hand, managers may be better able to influence director's opinion as board tenure increases, thus increasing potential agency risk. Anderson et al. (2004) showed a direct relation between board tenure and the cost of debt, which indicates that as director tenure increases, managers are potentially more able to influence board opinion. In contrast, Paige Fields et al. (2012) found that greater percentage of directors with more than 15 years of service contributes to a lower cost of debt.

CEO Power

According to the basic principle of corporate governance, splitting corporate roles of the CEO and the chairman of the board or 'dual leadership' is an important mechanism to mitigate agency conflicts between managers and investors. Terms 'CEO duality' or 'unitary leadership' would refer to the circumstance where the CEO holds both titles. Jensen (1993) mentioned that the function of the chairman is to run board meetings and oversee the process of hiring, firing, evaluating, and compensating the CEO. Performing this function, the CEO cannot deviate from his or her personal interest, thus internal control system fails and board's effectiveness in monitoring top management reduces. Fama and Jensen (1983) and Jensen (1983) insist that separation the CEO and the chairman positions is important for the board electiveness. Goyal and Park (2002) using a sample of 823 firms showed that that the sensitivity of CEO turnover to firm performance is significantly lower when one individual holds both the CEO and chairman duties, thus confirming a view that duality decreases effectiveness of board functioning. Therefore, split of chairman and CEO position diminishes agency conflicts and reduce cost of capital.

Competitive theory suggests that dual leadership has potential benefits as well as potential costs. Brickley et al. (1997) argue that appointment of outside director chairman of the board introduces a new agency costs related to the controlling his behavior because granting increased decision rights over such things as firing the CEO and agenda setting, we give the individual enormous power to extract rents from the firm. Another costs concern information flow. Dual leadership requires the costly and generally incomplete transfer of critical information between the CEO and the chairman. Costs of changing the succession process, dilution of power to provide effective leadership, potential for rivalry between the CEO and the chairman, opportunistic behavior of outsiders, extra compensation for the chairman and other arguments, excellently described by Brickley et al. (1997), indicate that how significant inconsistencies can arise in board functioning when authority is divided among more than one person. Using a sample of large U.S. firms, the authors demonstrated that the costs of separation are larger than the benefits for most large firms. Thus, unitary leadership can improve board functioning and avoid extra conflicts of interests that improves company credit-worthiness and contributes to a lower cost of debt.

Ashbaugh-Skaife et al. (2006) constructed a measure of the power that CEO exercises over board. This composite measure takes one point if CEO serves chairman position (duality) and one for each committee that the CEO serves on. They showed a negative impact of CEO power on credit ratings of US firms. In contrast, Bradley and Chen (2011) following abovementioned methodology demonstrated non-significant impact of duality on both credit rating and yield spread of companies in the US. Piot and Missonier-Piera (2007) in France presented similar evidence. Finally, Lorca et al. (2010) demonstrated weak evidence that splitting of CEO and Chairman positions is associated with higher cost of debt. They suggest that losses from communication breakdown and information asymmetry during separation exceeds benefits from mitigation of agency conflicts.

^{1, 2.} These terms were developed by Brickley et al. (1997)

Another potential source of risk for all stakeholders comes from hostile takeovers. To protect their benefits of control managers enact several takeover defenses to resist takeovers. This mechanism limits shareholder's ability to sell to a hostile bidder and shifts the balance of power between shareholders and managers. There are two competitive theory regarding the effect of such actions on the creditors. Management self-serving behavior and increase in probability that the firm will be in financial distress are one of the most glaring examples¹ of negative effect of takeover defenses on debtholders. Another theory suggests that takeovers can positively affect debtholders due to coinsurance effect². This effect implies that two risky cash flow streams combined through merger will result in a less risky stream because cash flows are not perfectly positively correlated. Billet et al. (2004) found on the sample of 3,901 bonds strong evidence of a positive coinsurance effect on target bondholders.

Literature, concerning the impact of takeover provisions on debtholders, provide different findings. Klock et al. (2005) using a sample of 678 industrial firms in the US found that firms with antitakeover governance provisions have a lower yield spreads. Authors employed anti-takeover measure based on Gompers et al. (2003) index, containing 24 antitakeover provisions. Higher values of the index refer to the greatest management rights, while the index with the lowest values has the strongest shareholder rights³. Cremers et al. (2007) showed that presence of large blockholder (strengthening shareholder control) does not benefit all bondholders, especially not those bondholders who experience greater takeover vulnerability. Authors used ATI index as a proxy for takeover defenses, which based on the information regarding three anti-takeover provisions – the existence of blank check preferred stock, classified boards, and restrictions on calling special meetings and action through written consent. Paige Fields et al. (2012) following Bebchuk et al. (2009) employed "BCF" index as a proxy for shareholder right protection, which is developed on the base of the Gompers et al. (2003) index and includes six most important shareholder protection aspects. Authors demonstrated that borrowers with greater shareholder protection (lower probability of takeover) pay less for their bank loans.

Board Activity

Lipton and Lorsch (1992) argue that lack of time has a number of negative consequences for directors, such as poorer communication among themselves or with management, and difficulties in understanding of great amount and complexity of data received from management. Effective monitoring function of boards and strengthening the cohesive bonds among the independent directors demand a longer time and greater number of meetings. Therefore, higher board activity can contribute to a lower cost of debt due to increase in board's effectiveness and mitigating agency conflicts.

Anderson et al. (2004), Lorca et al. (2010) found that greater number of audit committee meetings reduces cost of debt thus indicating that debholders associate frequency of meetings with one of the characteristics of the financial accounting process quality.

Female Directors

Women usually hold only one or two corporate seats in boards in the majority of companies around the world, and that is often regarded as evidence of tokenism. Nevertheless, many authors argue that diversity could enhance board effectiveness, allocate more effort to monitoring and bring new ideas and perspectives. Adams & Ferreira (2009) found that female directors have better attendance records and are more likely to join monitoring committees. They also showed that boards with more female directors are characterized by tougher monitoring of the CEO through greater turnover-performance sensitivity. Thus, female directors may address agency risks of debtholders and contribute to a lower cost of debt.

- 1. See Klock et al. (2005) for advanced discussion
- 2. See Billet et al. (2004) for more information on coinsurance effect
- 3. See Gompers et al. (2003) for a procedure of building the index

On the other hand, companies can experience negative impact of board diversity. Conflicts of interests between females and males could lead to a poorer communication between directors, thereby adversely influencing the working of boards. That decrease company performance and increase debtholders' risks. Adams & Ferreira (2009) demonstrated negative effect of gender diversity on performance for firms with fewer takeover defenses. Authors suggested that greater gender diversity could lead to adverse effect of overmonitoring in those firms.

The evidence of the direct relation between board diversity and the cost of debt is poor. Tanaka (2014) found that firms in Japan with female outside directors enjoy lower cost of debt, but Paige Fields et al. (2012) did not find a statistically significant relation between the percentage of female board members and loan costs in the US. The effect of board diversity on creditors in developing markets is not studied.

Director Limited Liability

Another corporate governance mechanism, which may have strong impact on corporate managers and directors, is *limited liability provisions*. Directors can suffer enormous losses of their personal wealth from stockholder litigation and as a result, reduced pressure from judicial intervention caused by liability limitation may have a strong effect on directors' behavior. According to the "talent attraction" hypothesis, limited liability helps companies to attract or retain talented directors. Thereby, such provisions may indirectly improve performance and should contribute to a lower cost of capital. On the other side, protection from shareholder suits may engage directors in more risk-taking behaviors or increase director's incentives to pursue their own objectives, thus exacerbating agency problem and increasing cost of capital.

Bradley and Chen (2011) investigated the impact of provisions of limited liability and indemnification for corporate directors on the cost of debt financing in the US, using "L-index" as a proxy for the strength of the directors' limited liability. They showed that greater liability is associated with a lower yield spreads and higher credit ratings, but argued that directors' self-serving behavior is a key mechanism through which limited liability influence debtholders, and not attraction of talented directors. Authors assert that these provisions are not detrimental to debtholders because directors concern for the benefits from control and have incentives to undertake low-risk operating strategies, which reduces investment risks. Interestingly, the result of empirical research in emerging market is opposite. Yi and Zhao (2013) using 1,258 listed firms in Taiwan over the period 2008-2010 found that firms with directors' liability insurance have higher cost of debt. Evidently, in emerging markets, director's discipline plays a decisive role for debholders and threats from limited liability outweigh any potential benefits.

Corporate Governance Index

Many early studies consider the relation between different corporate governance mechanisms and cost of debt separately. Nevertheless, Myers (1999) introduce a "financial architecture" approach, which means the entire financial design of the business, including ownership (e.g. concentrated vs. dispersed), the legal form of organization (e.g. corporation vs. limited-life partnership), incentives, financing and allocation of risk. In recent research, following similar intuition, a composite measure of corporate governance has been implemented. Authors compressed the information on large number of corporate governance mechanisms into one single index in order to reflect overall quality of a firm's corporate governance. Although the creation and use of composite governance scores has intensified among researchers, this measure has serious disadvantage. Brown et al. (2011) argue that the problem with the construction of governance indices is that the methods employed are largely arbitrary and researchers do not have an agreed theory of corporate governance to guide variable construction or to indicate which aspects should receive greater weighting, thus making the results biased and questionable.

There are several empirical research regarding the effect of corporate governance index on the cost of debt. Interestingly, this approach is especially popular in the developing countries. Schauten and

^{1.} See Bradley and Chen (2011) for a procedure of building "L-index".

Dick van Dijk (2011) used Deminor Rating as a proxy for the quality of corporate governance of the 186 large non-financial European firms during the period 2001-2009 and found non-significant effect of corporate governance index as well as all sub-components of index on the yield spreads. Nevertheless, authors developed 'share rights or disclose' hypothesis and showed that disclosure leads to a lower credit spread only if shareholder rights are low. Deminor Rating includes 300 different governance indicators, which can be subdivided into four principal categories: rights and duties of shareholders, range of takeover defenses, board structure and functioning, and disclosure on corporate governance. Aldamen and Duncan (2012) investigated the cost of debt–corporate governance relationship across intermediated and non-intermediated debt types. Authors, examining 560 public non-financial Australian listed companies, found that better corporate governance diminishes the cost of debt of companies that carry non-intermediated debt on their balance sheet. Researchers built their own corporate governance composite index, GOV, which includes 14 corporate governance proxy measures, comprising three dimensions – board structure and processes, financial reporting. monitoring and transparency, and ownership and control characteristics. Funchal et al. (2008) and Juniarti and The Lia Natalia (2012) conducted analysis in the Brazil and Indonesia respectively. In Brazil, authors showed that companies with higher score on Brazilian Corporate Governance Index (BCGI) enjoy a lower cost of debt. Aggregate measure comprise four governance attributes: disclosure, board composition and functioning, ownership structure and control, shareholder rights. In contrast, Juniarti and The Lia Natalia (2012) using a sample of 38 non-financial companies over the period 2005-2009 found non-significant relation between Corporate Governance Perception Index (CGPI Index) based on ten different characteristics and the cost of debt.

Subjective methodology and ambiguous results make index approach disputable, while the comparison of the relation between corporate governance and cost of debt in different countries impossible. Nevertheless, the idea of including several corporate governance characteristics reflecting the entire design of business remains reasonable and actual.

Conclusion

In the course of surveying the research studying the link between corporate governance and the cost of debt, we try to pay special attention to the theoretical framework of the field. We reveal that this link mostly deals with the agency problem. In this paper we refer to two agency conflicts: the first one is between managers and shareholders & the second one is between shareholders and creditors. We try to demonstrate that these agency conflicts may be deep and the corporate governance mechanisms in line with ownership structure changes can mitigate the conflicts.

One of the board's primary responsibilities is to monitor and inspect financial reporting process as well as disciplining firm management. We suggest that board composition considerably influences agency conflicts reduction and assists credible information disclosure. We focus on several board composition characteristics that affect the cost of debt according to the existing research.

To conclude we would like to say that we reviewed a lot of interesting empirical findings concerning the corporate governance influence on the cost of debt. The evidence is mixed that gives us a large field for future research. Great variety of empirical findings let us suppose that the country specific effect plays substantial role in this link between corporate governance and cost of debt. This means that relation between corporate governance and cost of debt depends on the debtholders' estimation of the dominant effect in certain market in certain time.

When writing this survey we faced a lot of still open questions. Here we simply raise some of them.

First, this is quite evident that the state ownership may skew the influence of the standard governance mechanisms on the agency conflicts mitigation. State-owned firms are more likely associated with some benefits and guarantees for debtholders than losses. State helps companies to overcome some bureaucratic barriers in business, makes more resources available for a company, support companies during the economic recession in form of subsidies and favorable loan terms. Moreover state ownership is especially important in industries where monopoly power and distributional issues affect social wealth. Such social welfare arguments underlie the traditional case for state own-

ership of railroads, electricity and others similar companies (Laffont and Tirole, 1993; Sappington and Stiglitz, 1987). But the evidence is mixed and the question how state ownership influences the cost of debt is still open.

Second, that is still unclear how exactly the investor protection mechanisms influence the cost of debt. We suppose that would be interesting to study the joint influence of investor protection level and the corporate governance quality on the cost of debt.

Third, academic literature explains both positive and negative effect of concentrated ownership on stakeholder's wealth. But the research on the performance effect of high ownership concentration demonstrates that the negative effect of ownership concentration is more typical for the developed countries, while in emerging markets the motivation aspect of ownership dominates. So, that is a still open question whether the country specific issues play the dominant role in nonfinancial drivers of the cost of debt.

So, this review deals with a number of open questions we are going to work over in our next paper. It is focused on the most interesting question of comparative analysis of the impact of corporate on creditors in developed and emerging markets.

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