Abstract—This paper attempts to investigate the effect of corporate governance and shareholder monitoring mechanisms on cost of debt of Malaysian listed firms. We assess the quality of corporate governance using comprehensive corporate governance index, which consists of 139 items in six broad categories. We classify shareholder monitoring mechanisms into concentrated ownership, family, insider and government ownerships. Using panel sample from 2003 to 2007, regression results show that high corporate governance quality and concentrated ownership lower firm cost of debt. Debt issuers consider board structure and procedures, board compensation practices, accountability and audit, transparency and social and environmental activities as integral components of a good corporate governance framework.

Keywords—Corporate governance index, cost of debt, ownership structure, Malaysia.

I. INTRODUCTION

This paper investigates the effect of corporate governance and shareholder monitoring mechanisms on the cost of debt of Malaysian listed firms from 2003 to 2007. We define corporate governance as “the ways through which suppliers of capital to corporations assure themselves of getting return on their investment” [1]. We posit that ownership structure represents an important aspect of shareholder monitoring mechanisms that could potentially complement or be a part of a holistic corporate governance framework.

Prior studies on Malaysian listed firms show that ownership structure is an important determinant of firm performance [2]. In fact, corporate ownership structure is seen either as a potent governance mechanism or the source of corporate governance problems [3]. Prior studies do not find an unequivocal support that ownership structure is a significant determinant of firm outcomes, which opens up an opportunity for further empirical research.

Our research is based on both the theoretical perspectives of debt agency costs and the traditional manager-shareholder agency costs. There is scarce literature on the effect of corporate governance and shareholder monitoring mechanisms on agency cost of debt. There is little, if any, empirical work on this issue, particularly in Malaysia. Theoretically, the value of corporate governance in public corporations is widely acknowledged. However, its contribution to value creation for the suppliers of finance remains a subject of an open empirical question. Based on the traditional manager-shareholder agency theory debt issuers suffer from the adverse effects of managerial opportunism and asymmetric information due to the separation of ownership and control [4], which increase the likelihood of default in debt commitment. As debt issuers do not have effective control on the use of funds they provide, they are exposed to the risk that opportunistic managers may possibly divert these funds from the intended objective.

Corporate governance mechanism such as effective board monitoring, external and internal audit may limit managerial tendency to pursue personal agendas such as empire building and wasting firm resources for personal benefits. Debt issuers rely on financial reports to assess the extent of default risk. In this instance, corporate governance serves as an oversight mechanism in financial reporting process, which assures the integrity of financial reports.

The link between ownership structure and debt issuers welfare from the perspective of debt agency cost is vague. On one hand, dominant shareholders may strive to maintain the benefits accruing from their control of the firm by reducing the agency cost of risk against debt issuers so that they can continuously enjoy lower cost of debt. Controlling owners may closely align their interest to wealth maximisation and have incentive to preserve their reputation in the debt market [5]. On the other hand, debt issuers may be adversely affected by entrenched controlling shareholders who indulge in risky investment to pursue ‘empire building’ [6], engage in tunneling activities [7], dilute debt issuers’ claim by issuing debt of higher priority [8] and undertake acquisitions that increase leverage and affect debt seniority [9].

We collect a total of 505 firm-year observations and utilize a comprehensive corporate governance index (the CG Index) developed by [10] for assessing firm corporate governance quality. We find that corporate governance and concentrated ownership have negative relations with the cost of debt after controlling for firm size, leverage, performance, market-to-book ratio, interest coverage ratio, economic growth, industry, and time effects.

We also observe that debt issuers appear to consider board structure and procedures, board compensation practices, accountability and audit, transparency and social and environmental practices and concentrated ownership as vital elements of high quality corporate governance. Our finding reaffirms the argument that in reality firms adopt a range of governance mechanisms, each of which is consistent with maximizing firm value [11].

Our research contributes to both theory and practice in four important ways. First, we provide systematic preliminary evidence linking both corporate governance and shareholder monitoring mechanisms to cost of debt in an important
emerging market. Second, our study contributes to the emerging literature that investigates the relationship between corporate governance, shareholder monitoring mechanisms and cost of debt from the theoretical perspectives of both debt agency costs and the traditional shareholder-manager agency conflicts. Third, we highlight that debt issuers do not only factor in firm corporate governance and shareholder monitoring mechanisms in their lending decisions and pricing of the debt, but also seem to value broad based corporate governance mechanisms to better protect their interest. Finally, our study shows that listed firms could benefit from adopting the Malaysian Code on Corporate Governance’s (2000) [MCCG (2000)] recommendations and other global standards of corporate governance.

II. CORPORATE GOVERNANCE AND OWNERSHIP STRUCTURE IN MALAYSIA

Corporate governance in Malaysian listed firms started to receive prominent attention during the Asian financial crisis in late 1990s. Many large listed firms collapsed during the crisis due to poor corporate governance and financial control [12]. The government responded to the various calls for corporate governance reforms by forming a High Level Finance Committee (the Committee) to conduct a detailed study on the state of corporate governance of listed firms. The study revealed that listed firms had poor corporate governance practices that enabled errant directors and controlling shareholders to expropriate wealth during the financial crisis.

The Committee prescribed the MCCG in 2000, which served as guidelines for the directors to enhance checks and balances and self-regulatory mechanisms. The Committee placed utmost importance on the governance role of board of directors; thus, its recommendations principally focused on establishing various best practices for strengthening board structure and procedures [13]. In 2001, the Malaysian Bourse adopted the MCCG (2000) in its listing requirements and imposed a mandatory obligation for listed firms to disclose in their annual reports the way they have applied the principles of the MCCG (2000) and the extent of compliance with the best practices.

In recent years, the Malaysian Bourse, Securities Commissions (the SC) and Companies Commission of Malaysia have stepped up enforcement and surveillance efforts and brought errant directors and firms to book. Other than beefing up enforcement actions, the regulators have also been providing training for corporate directors and market players on their responsibilities and the implementation of the MCCG (2000). In 2012, the SC introduced the revised Malaysian Code on Corporate Governance [known as MCCG (2012)], which came into effect on 31 December 2012. The MCCG (2012) further clarifies the role of the board in providing leadership and enhancing board effectiveness.

The MCCG (2012) suggests that the effectiveness of the board can be enhanced through strengthening its composition and reinforcing its independence. Firms are to establish corporate disclosure policies and to make public commitment to respecting shareholder rights. Upon implementation of the MCCG (2012), listed firms are required to report their compliance with its principles and recommendations in their respective annual reports. Recent studies have found that the quality of corporate governance has improved greatly following the implementation of these various initiatives [2].

Ownership is highly concentrated in Malaysia and it is common to have listed firms that are closely controlled by a single shareholder [14]. Share ownership in listed firms tends to be concentrated in the hands of a relatively small number of individuals, families and the government or state enterprise [15]. Many of the listed firms including the conglomerates in Malaysia have evolved from traditional family-owned enterprises [16]. A recent study reveals that from the period 1999 through 2005 over 43 percent of the firms listed on the Malaysian Bourse main board are family-owned [17].

Government ownership presents a unique feature of corporate ownership structure in Malaysia, in addition to the typical family-control structure. The involvement of the government in businesses can be attributed to the historical and political developments of Malaysia especially after the implementation of the New Economic (NEP) policy in 1971. The aim of the NEP was to achieve 30 percent corporate ownership and management for the indigenous people of Malaysia, which is known as Bumiputera. The NEP has caused the transfer of ownership and control of companies in major industries such as plantations, mining and banking from foreigners to the government [18]. The government had established various state agencies to facilitate the achievement of this national agenda.

Beginning 1980s the government had aggressively embarked on privatization of key state companies but at the same time remains as a major shareholder in those privatized firms [19]. This privatization exercise coupled with the NEP have further entrenched the government involvement in the corporate sector. Following the Asian financial crisis in 1997, the government established its investment arm company known as Khazanah Nasional Berhad, which is a major shareholder of a few large listed firms.

Reference [20] concede that prior studies on ownership structure yield inconclusive results, which according to them is due to limitation of ownership concentration that does not address the issue of shareholders’ identities. Thus, we examine four types of ownership, namely concentrated, family, insider and government shareholdings. We chose this ownership classification to accurately reflect the ownership structure of Malaysian listed firms as identified in prior studies. More importantly, in our study, the four types of ownership represent the shareholder monitoring aspects of corporate governance.

III. THEORY AND HYPOTHESES

A. Corporate Governance and Cost of Debt

Theoretically, debts issuers may be adversely affected by the agency conflicts between shareholders and managers. When managers are left to their own devices they tend to resort to opportunistic behavior to pursue personal agendas at
the expense of debt issuers. They may also withhold value relevance information from the debt issuers and manipulate financial reports in order to enjoy higher compensation. Debt issuers are very concerned about the extent of default risk and rely on financial reports to assess it. Managerial opportunism, asymmetric information and questionable accounting practices increase the default risk. Higher likelihood of default increases cost of debt because debt issuers impose higher risk premium to compensate them for the potentially risky investment. Effective corporate governance can reduce default risk by enhancing monitoring of managerial opportunistic behavior, influencing the integrity of financial accounting reports and alleviating the extent of information asymmetry between firms and debt issuers.

Reference [21] empirically examines the relationship between corporate governance and bond ratings and yields in a sample of US firms during 1991-1996. They find that firms having greater institutional investor ownership and stronger outside directors’ control enjoy lower yields and superior bond ratings. However, as institutional ownership gets concentrated, firms have lower ratings and higher yields. Reference [22] investigates the relationship between audit quality attributes and cost of debt of 500 Standard and Poor’s companies during 1993-1998. They observe that bondholders feel assured of the integrity of the firms’ accounting information when there is an effective board and audit committee’s monitoring. Hence, they are willing to reduce their risk premium, allowing firms to enjoy lower cost of debt.

Reference [23] examines the relationship between external auditor reputation and firms’ cost of debt in a sample of U.S. firms that went public during 1977-1988. They find that firms that retained Big Six auditors show a lower average cost of debt, implying that debt issuers consider auditor’s reputation is an important in determining the quality of financial information. Using firm-level data from the Investor Research Responsibility Center (IRRC) for the period of 1990-2000, [24] investigate the link between a various anti-takeover mechanisms, shareholder protection factors and the cost of debt. They find strong anti-takeover governance factors lower the cost of debt and vice-versa, suggesting that the anti-takeover provisions are beneficial to protect bond holders’ interest.

Reference [25] investigates the impact of corporate governance on cost of debt based on the idea that the former is an important factor in the assessment of risk profiles and default risk. The risk profile determines the required return by debt issuers. They observe that firms with strong corporate governance have lower cost of debt. Reference [26] finds that corporate governance quality and auditing structure of public firms have a significant reducing effect on the cost of debt. Board monitoring of corporate governance issues and its independence from the influence of the management team coupled with institutional investors’ oversight have significant reducing effect on cost of debt.

In South Korea, [27] examines the effect of corporate governance practices on the default risk and cost of debt. They observe that dividend policies, shareholder rights protection and audit committee reduce cost of debt. The effect is more pronounced in larger firms than smaller firms. Reference [28] utilizes a large set of board of directors’ quality measures such as board size, board member independence, and share ownership and observes that firms with higher quality board borrow at lower interest rate. Bank lenders appreciate larger board, higher independent directors’ ratio and more experienced board members with advisory members. Thus, we hypothesize:

\[ H_1: \text{Firms with higher corporate governance quality enjoy lower cost of debt} \]

B. Concentrated Ownership and Cost of Debt

The active monitoring hypothesis posits that concentrated owners have mostly undiversified investments; hence they have less incentive to ‘exit’ the firm and extract benefits from the firm for which it might impair their own wealth. They need to monitor the managers in order to limit managerial opportunism. The shared benefits hypothesis posits that debt issuers feel secure due to the concentrated owners’ active monitoring; hence, they are willing to impose lower risk premium effectively reducing cost of debt. Concentrated owners may also attempt to reduce the agency risk against lenders so that they can continue to enjoy cheaper cost of debt.

However, prior studies document inconsistent results. Reference [29] observes that concentrated ownership is associated with higher (lower) yields if the firm is exposed to (protected from) takeovers. Reference [26] shows that the monitoring power of institutional block-holders have a reducing effect on the cost of debt. References [30] and [31] observe that an increase in a dedicated group of institutional investors’ shareholdings mitigates information asymmetry and lowers cost of debt. Thus, we offer the following hypothesis:

\[ H_{2a}: \text{Firms having concentrated ownership have lower cost of debt} \]

In contrast, concentrated owners may have the tendency to indulge in ‘empire building’ [6], engage in tunneling activities [7], dilute debt issuers’ claim by issuing debt of higher priority [8] and undertake acquisitions that increase leverage and affect debt seniority [9]. In this instance, the default risk is higher prompting the debt issuers to impose higher cost of debt.

Reference [21] finds that firms with concentrated institutional shareholders suffer from lower ratings and higher bond yields. Similarly, [32] observe that bondholders in both East Asian (including Malaysia) and Western European countries view concentrated equity holders as detrimental to their interest. Reference [33] reports that cost of debt is significantly higher in firms that have wider divergence between the largest ultimate owner’s control rights and cash-flow rights in their study of Western European and nine East Asian countries including Malaysia during the 1996 - 2008. Thus, we hypothesize:

\[ H_{2b}: \text{Firms having concentrated ownership have higher cost of debt} \]
C. Family Ownership and Cost of Debt

Family ownership can be a powerful governance mechanism to curb managerial opportunism and promote long-term survival of the firm. Family owners exert control over the firm’s management and they might refrain from undertaking activities that could potentially impair their wealth; thus, alleviating agency conflicts between managers and debt issuers; thus, reducing the cost of debt.

Reference [5] investigates the effect of founding family ownership on the cost of debt and finds that it reduces cost of debt. Debt issuers are willing to demand low risk premium because they view founding family ownership as a potent monitoring mechanism to protect their interest. However, this finding may be unique to the U.S. market because it has a strong investor protection law (see [34] and [1]). Debt issuers may be comfortable with family ownership because they can get effective legal recourse or protection against any form of wealth expropriation by the family owners. Thus, we offer the following hypothesis:

H3a: Firms with higher percentage of family ownership enjoy lower cost of debt

Private benefits hypothesis, on the other hand, suggests that family ownership leads to a conflict between family controlling shareholder and debt issuers [5]. Family owners have the incentive to expropriate wealth from debt issuers by investing in riskier projects. In this situation, shareholders benefit from most of the gains when the riskier projects pay off but the debt issuers bear most of the cost [4]. Debt issuers protect their interest by insisting on protective covenants and oversight mechanisms. But, the covenants are usually difficult to enforce and the oversight mechanisms are costly and imperfect [22] prompting the debt issuers to demand higher risk premium leading to higher cost of debt.

Reference [33] notes family firms with concentrated ownership have significantly higher cost of debt. This adverse effect is amplified when (1) the CEO of firms is a member of the controlling family, (2) the borrower has poor financial transparency, (3) firms have lower credit rating and higher credit risk and (4) financial crisis sets in. They also find that the collateral and loan covenants together with strong legal rights and efficient debt enforcement minimize the impact of excess controls on cost of debt.

Likewise [32] find strong evidence that family control is perceived as a potential risk of expropriation by both bondholders and rating agencies. Reference [35] observes that family firms originating from low investor protection environments suffer from high debt cost whilst firms originating from the high legality countries benefit from lower debt costs compared to non-family firms. Thus, we hypothesize:

H3b: Firms with higher percentage of family ownership have higher cost of debt

D. Insider Ownership and Cost of Debt

The convergence-of-interest hypothesis posits insider ownership promotes goals congruence and lowers agency cost because insiders are not only managers but also owners of the firm. Owner-managers avoid value destruction activities in order to protect their mainly undiversified shareholdings. Reference [30] finds that the insiders’ tendency to protect firms’ investment reduced the perceived risk of a firm, thereby prompting investors to accept a reduction in the risk premium leading to a lower cost of capital. Thus, we hypothesize:

H4b: Firms with higher percentage of family ownership have higher cost of debt

In contrast, based on the entrenchment hypothesis controlling insiders may be entrenched; hence, they are likely to engage in activities that are detrimental to the interest of debt issuers [4]. Debt issuers may charge a higher level of cost of debt for taking the risks linked to insider ownership. The studies of [22] and [28], on the other hand, show that insider ownership is not related to the cost of debt. Thus, we hypothesize:

H4a: Firms with higher percentage of insider ownership have higher cost of debt

E. Government Ownership

Theoretically, government owners are likely to perform a stewardship role and prominent monitors of the management behavior [36]. The government represents a wider interest of the society; hence, they need to ensure that their investment in listed entities is profitable. In view of these factors, debt issuers may be willing to impose lower charge on the funds provided. Reference [32] in a study of selected East Asian (including Malaysia) and Western European countries observed that government ownership does not have any effect on firms’ yield spreads. But government ownership is positively related to bond ratings implying that rating agencies do not view government as an additional potential risk factor of expropriation; instead, their presence increases bond ratings. Thus, we offer the following hypothesis:

H5a: Firms with higher percentage of government ownership enjoy lower cost of debt

Government owners, on the other hand, have been viewed as being problematic and riskier mainly due to the difficulty to manage the conflicting priorities between social welfare maximization and profit maximization. Further, [37] posits that government-owned firms face free rider problem in monitoring firms’ performance. Reference [38] finds that government-owned firms are riskier than privately owned firms prompting debt issuers to demand higher risk premium to compensate them for this potentially risky investment. In Malaysia, government-owned firms are generally not as profitable as other listed firms due to the existence of political patronage and rent-seekers’ mentality [39]. In this situation, debt issuers may view investment in government-owned firms as risky and seek compensation in the form of higher risk premium, leading to higher cost of debt. Thus, we offer the following hypothesis:

H5b: Firms with higher percentage of government ownership have higher cost of debt
IV. METHODOLOGY

A. Data

Our sample comprised 101 firms listed on the Main Board of the Malaysian Bourse between 2003 and 2007. We exclude all finance-related firms, banks, insurance, and unit trusts companies from the sample because they have different regulatory requirements and framework, financial reporting standards, compliance [14] and materially different types of operations [40].

B. Research Variables

1. Cost of Debt

Following [23], [27], [26] and [28], we use interest rate as proxy for cost of debt. We compute interest rate by dividing interest expenses by average short-term and long term debt for a given year. We use one measure of cost of debt only due to the unavailability of data to compute alternative measures such as yield spread and credit ratings.

2. Corporate Governance

We use the CG Index developed in [10] to assess corporate governance quality. The elements of the CG Index are based on the MCCG’s (2000) principles and best practices and related prior studies (e.g. [41], [27], [42]). The CG Index consists of 139 items in six categories: board structure and procedures, board compensation practices, shareholder rights and relations, accountability and audit, transparency and social and environmental. Table I shows the definition of each category of the CG Index. Following [10], we do not assign any weight to the categories and items of the CG Index because there is no proven weighting system that is globally accepted [43] and lack of theoretical basis for assigning weight for each category [41].

We apply a dichotomous procedure in scoring firm corporate governance. We give a “1-point” score for each item that is in line with good corporate governance practices as indicated on the CG Index and otherwise, we give a “0-point” score. A high corporate governance score (CGSC) implies a high quality of corporate governance. The approach of scoring is additive, giving a measure of CGSC for firm $i$ based on an equal weighting scheme used for the six categories:

$$CGSC_i = \frac{1}{139} \sum_{j=1}^{139} X_j \times 100$$

where $X_j$ is equal to 1 if the $j$th governance provision is adhered to and 0 if it is not so that $0 \leq CGSC_i \leq 100$.

We also compute the governance measure for each of the five years of the study period. The computation of the scores of the individual categories of the CG Index is as follows:

$$CGM1_i = \frac{1}{68} \sum_{j=1}^{68} A_j \quad CGM2_i = \frac{1}{14} \sum_{j=1}^{14} B_j$$

$$CGM3_i = \frac{1}{6} \sum_{j=1}^{6} C_j \quad CGM4_i = \frac{1}{17} \sum_{j=1}^{17} D_j$$

We subject our CG Index to a pilot test on ten company annual reports for the purposes of examining the extent of variations in corporate governance practices between different firms, ensuring that the items of the CG Index are not vague and subjective, eliminating any redundant items and finally, ensuring its overall functionality. Based on the pilot test findings we amend a few statements that have unfamiliar or inappropriate words or syntax and delete a few repetitive items.

Consistent with the approach of [44], we employ Cronbach’s alpha coefficient test of internal consistency in order to verify the reliability of the CG Index. The overall Cronbach’s alpha coefficient of the CG Index is 0.89, indicating that our CG Index has good internal consistency and is a reliable instrument for evaluating corporate governance quality [see 45].

We adopt the test-retest method of kappa coefficient as in [46] and [47] to assess the reliability and stability of the corporate governance scores. The assessor reads the ten annual reports twice and scores the corporate governance items on two separate occasions. We analyze the scored items from the two separate occasions together using the kappa coefficient method. We find that the two scores are highly similar or consistent as evidenced by the kappa coefficient values of at least 0.60. Kappa values greater than or equal to 0.75 represent excellent agreement beyond chance, values between 0.40 and 0.75 may be taken to represent fair to good agreement and values below 0.40 or so may be taken to represent poor agreement beyond chance.

3. Shareholder Monitoring Mechanisms

The second set of independent variables consists of the concentrated, family, insider and government ownerships, which represents the shareholder monitoring aspect of corporate governance. We rely on prior studies such as [5],

where $A_j$, $B_j$, $C_j$, $D_j$, $E_j$ and $F_j$ are equal to 1 if the $j$th governance provision is adhered to and 0 if it is not so that $0 \leq CGM1_j, CGM2_j, CGM3_j, CGM4_j, CGM5_j$ and $CGM6_j \leq 100$.

<table>
<thead>
<tr>
<th>Category of Corporate Governance CATEGORIES</th>
<th>Number of items</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board structure and procedures</td>
<td>68</td>
<td>The structural elements of the board and the process of governing by the directors</td>
</tr>
<tr>
<td>Board compensation practices</td>
<td>14</td>
<td>The practices adopted by the board in determining and deciding the remuneration for the directors</td>
</tr>
<tr>
<td>Shareholder rights and relations</td>
<td>6</td>
<td>The empowerment of shareholders and shareholder communication</td>
</tr>
<tr>
<td>Accountability and audit</td>
<td>17</td>
<td>The accountability mechanisms and process of the board of directors</td>
</tr>
<tr>
<td>Transparency</td>
<td>23</td>
<td>The ability of stakeholders to assess the true position, prospect and performance of the company</td>
</tr>
<tr>
<td>Social and environmental</td>
<td>11</td>
<td>The company’s ethical and socially responsible activities</td>
</tr>
</tbody>
</table>

TABLE I

DEFINITION OF CORPORATE GOVERNANCE CATEGORIES OF THE CG INDEX
[36] and [15] for the determination of the types of shareholder monitoring mechanisms in the Malaysian context.

Ownership is defined as the amount of equity shares an ultimate owner holds in the sample firms. In Malaysia, the Companies Act 1965 requires firms to disclose directors’ report and ownership data including family affiliations in their annual reports. Hence, ownership data are readily available from the sections on the analysis of shareholdings and director’s reports of firms’ annual reports. Similar to the approach of [48] concentrated ownership is defined as the sum of ownership percentage of non-family shareholders who hold a minimum five percent of the total common equity of the firm.

The literature does not provide commonly accepted definition, measure or criterion for identifying a family ownership [5]. We identify family relationship based on the information provided in the section on director’s profile of firms’ annual reports. We measure family ownership as the cumulative percentage of family members’ common equity ownership.

Consistent with [2] we define insider ownership as the cumulative percentage of executive directors’ equity shares. In line with [40], we exclude the shares held by independent non-executive directors because they are expected to play a monitoring role and minimize self-interested behavior of the executive management.

Similar to [36] we define government ownership as the sum of ownership percentage of government institutions and government-controlled bodies. Following [48], we define government institutions and government-controlled bodies institutions established under the Parliament Act of Malaysia. This definition includes the largest pension fund organization known as Employees Provident Fund, which is government-controlled.

4. Control Variables

The control variables that we select are standard for the literature that examines the link between corporate governance, shareholder monitoring and cost of debt. All numeric control variables are in natural log form except GDP Rate. We log transformed these variables because they are not normally distributed. Size is a natural log of total assets in millions of Malaysian Ringgit. Leverage is a natural log of the ratio of the long-term debt to total assets. Return on asset is a natural log of the operating income to total assets ratio. Market-to-book ratio is a natural log of market value of common stock to book value of common stock ratio. Interest coverage ratio is a natural log of income before interest and tax to interest expense ratio. GDP rate is the gross domestic product rate of Malaysia for each year under observation. It is a proxy for the general macroeconomic situation and growth that could possibly affect cost of debt. As our sample consists of companies from all the nine industry sectors of the Malaysian Bourse we include a dummy variable to control for possible variation in the cost of debt across industry. Following [49], we include year dummy variable because our data set is cross-sectionally dominated.

C. Empirical Model

We test our hypothesis using one basic specification that relates the corporate governance scores and the four types of shareholder monitoring mechanisms to firm cost of debt. We also control the effects of company size, leverage, and return on assets, market-to-book ratio, interest coverage ratio, industry and time. According to our theoretical framework, the hypothesis on corporate governance effect on cost of debt is supported when $\beta_4$ is negative and significant. Further, the hypotheses on shareholder monitoring variables are supported when $\beta_4$ is significant. The first model is as follows:

$$\text{IntRate}_t = \beta_0 + \beta_1 \text{CGSC}_t + \sum_{k=1}^{4} \beta_k \text{OWN}_k + \sum_{l=1}^{4} \beta_l \text{Control}_l + \mu$$

We also examine the individual effect of corporate governance categories and shareholder monitoring mechanisms on the cost of debt. Hence, consistent with previous studies (e.g. [27]; [42]), we analyse the individual score of each of the six corporate governance categories and the four type of shareholder monitoring mechanisms against the cost of debt. The second model is defined as follows:

$$\text{IntRate}_t = \beta_0 + \beta_1 \text{CGSC}_t + \sum_{k=1}^{6} \beta_k \text{OWN}_k + \sum_{l=1}^{8} \beta_l \text{Control}_l + \mu$$

We use pooled generalized least squares panel data estimation procedure because our data suffer from both heteroskedasticity and autocorrelation problems. We detect substantial skewness and/or kurtosis in the distributions of the overall corporate governance scores (CGSC) and all the control variables except GDP rate. A normally distributed variable should have skewness and kurtosis near zero and three, respectively [2]. To address the non-normality of distribution problems and influence of outliers we transform CGSC and all our control variables into natural logarithm. We obtain the Variance Inflation Factors (VIF) of all the independent variables and find that the VIF value of each variable is well below ten, which indicates multicollinearity is not an issue in our data (refer Table III).

V. RESULTS

A. Descriptive Statistics

1. Corporate Governance and Corporate Governance Categories

Table II presents the overall and yearly descriptive statistics of the variables. Based on the full sample on average firms have adopted slightly above 60 percent of the desirable corporate governance practices. There is a considerable variation in firm corporate governance scores. Whilst there are firms that have commendable standard of corporate governance some have a rather deplorable quality as evidenced by the lowest score of 41.26. Annual trend shows...
that on average firms have shown steady but little improvement of about 8.17 percent in their corporate governance quality during the five-year period. It seems that despite the efforts expended to enhance the awareness of directors on the importance of corporate governance, in general, some firms are still falling behind the desirable standards.

Turning to the categories of the CG Index, overall, firms show reasonably good scores in all categories except for board compensation practices and social and environmental. Firms show a steady but only slight improvement over the five-year period in board structure and procedures category as evidenced by the small difference in the mean scores from 59.87 in 2003 to 65.23 in 2007. These results suggest that more effort needs to be expended to further improve this most important aspect of corporate governance in Malaysian listed firms. The performance in this category is disappointing despite of great emphasis placed by the regulators and the MCCG (2000) on strengthening board monitoring.

Firms have poor board compensation practices as evidenced by an average score of 35.21. In Malaysia, board compensation practices are unregulated; hence firms may be taking advantage of this situation. This result suggests that more effort needs to be expended to encourage firms to improve their compensation practices. Firms demonstrate poor performance in social and environmental practices as evidenced by a relatively low average score of 14.92. The low level of social and environmental practices is comparable to a similar prior study of [40].

2. Shareholder Monitoring Mechanisms

Table II Panels A and B provide the pooled sample and annual descriptive statistics results of the shareholder monitoring mechanisms respectively. Overall, our results reconfirm the findings of prior studies that ownership is highly concentrated in Malaysian listed firms. The mean ownership of 56.65 percent is comparable to prior studies. Annual trend shows little variation in the concentration of ownership over the five-year period. Based on the results the mean of 20.75 percent indicates that family ownership is also a significant type of ownership in Malaysia. Annual statistics show that family ownership shows little fluctuation during the period under observation. Insider ownership is also a prominent feature with a mean of 25.28 percent. These results are comparable to those of prior studies. There is no drastic change to the pattern of insider ownership from 2003 to 2007.

Overall, government ownership has a mean of 11.98 percent and most notably it is on a slight but steady declining trend during the five-year period. Reference [2] observes the same declining trend when they compare the mean of government ownership percentage in 2002 with the mean value in 2005. Overall, our results further confirm that corporate ownership structure in Malaysian listed firms is highly concentrated and can be classified into concentrated, family, insider and government ownership.

<table>
<thead>
<tr>
<th>Variable/Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate</td>
<td>0.10</td>
<td>0.09</td>
<td>0.09</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td>Corporate governance score</td>
<td>58.2</td>
<td>60.41</td>
<td>61.50</td>
<td>62.47</td>
<td>62.96</td>
</tr>
<tr>
<td>Board structure and procedures score</td>
<td>59.87</td>
<td>62.58</td>
<td>63.77</td>
<td>65.23</td>
<td>66.01</td>
</tr>
<tr>
<td>Board compensation practices score</td>
<td>33.88</td>
<td>35.00</td>
<td>35.99</td>
<td>36.28</td>
<td>34.87</td>
</tr>
<tr>
<td>Shareholder rights and relations score</td>
<td>63.20</td>
<td>63.70</td>
<td>61.88</td>
<td>62.38</td>
<td>62.21</td>
</tr>
<tr>
<td>Accountability and audit score</td>
<td>74.72</td>
<td>77.64</td>
<td>79.03</td>
<td>79.80</td>
<td>80.02</td>
</tr>
<tr>
<td>Transperancy score</td>
<td>75.25</td>
<td>76.63</td>
<td>77.57</td>
<td>77.96</td>
<td>78.35</td>
</tr>
<tr>
<td>Social and environmental score</td>
<td>10.80</td>
<td>13.50</td>
<td>13.95</td>
<td>16.47</td>
<td>19.89</td>
</tr>
<tr>
<td>Concentrated ownership</td>
<td>56.94</td>
<td>57.13</td>
<td>56.24</td>
<td>56.19</td>
<td>56.74</td>
</tr>
<tr>
<td>Family ownership</td>
<td>20.75</td>
<td>20.79</td>
<td>20.52</td>
<td>20.61</td>
<td>20.83</td>
</tr>
<tr>
<td>Insider ownership</td>
<td>25.88</td>
<td>25.51</td>
<td>24.84</td>
<td>24.74</td>
<td>25.40</td>
</tr>
<tr>
<td>Government ownership</td>
<td>12.92</td>
<td>12.77</td>
<td>12.29</td>
<td>11.48</td>
<td>10.44</td>
</tr>
<tr>
<td>Size</td>
<td>1893</td>
<td>2048</td>
<td>2137</td>
<td>2395</td>
<td>2661</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.63</td>
<td>0.58</td>
<td>0.55</td>
<td>0.55</td>
<td>0.53</td>
</tr>
<tr>
<td>Return on assets</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.07</td>
</tr>
<tr>
<td>Market-to-book ratio</td>
<td>1.64</td>
<td>1.43</td>
<td>1.16</td>
<td>1.40</td>
<td>1.83</td>
</tr>
<tr>
<td>Interest coverage</td>
<td>17.60</td>
<td>15.24</td>
<td>12.10</td>
<td>14.12</td>
<td>16.79</td>
</tr>
<tr>
<td>GDP rate</td>
<td>4.2</td>
<td>5.20</td>
<td>7.10</td>
<td>5.20</td>
<td>5.90</td>
</tr>
</tbody>
</table>

B. Regression Results

Table III Model 1 presents the regression results on the effect of corporate governance score, concentrated, family, insider and government ownerships on the cost of debt after controlling for the effects of firm size, leverage, firm performance, market-to-book ratio, interest coverage ratio, gross domestic product rate, industry sectors and time period. Corporate governance has a significant negative relationship with the cost of debt at one percent level; thus, supporting...
hypothesis 1. Our result indicates that firms having higher corporate governance quality has lower cost of debt. Our result supports the theoretical proposition that high quality corporate governance can serve as an effective control mechanism; thus, reducing debt issuers’ exposure to the risks associated with the managers’ self-interested behavior.

Next, we find that concentrated ownership has a significant reducing effect on the cost of debt; thus supporting our hypothesis 2a. Debt issuers seem to regard that concentrated ownership as an organizational attribute that better protects their interest. As predicted, we observe that family and government owners have significant positive relationships with the cost of debt; hence, lending support to our hypotheses 3b and 5b respectively. In Malaysia, debt issuers seem to consider family and government owners as detrimental to their interest; hence, they demand higher risk premium to compensate for the potentially risky investment. Insider ownership is not significant in explaining the cost of debt; thus, we reject hypotheses 4a and 4b.

In terms of control variables, firm size has a significant negative relationship with cost of debt. This result is in line with the theoretical expectation that larger firms enjoy greater stability and therefore may have a lower cost of debt. Leverage exhibits a significant positive relationship with the cost of debt, which is in line with the theoretical expectation that the higher financial leverage increases the cost of debt. The log of market-to-book ratio has a significant positive association with the cost of debt suggesting that debt issuers associate high-growth firms (having high MTB ratio) with greater risk; thus, they impose higher cost of debt. We find that GDP rate has significant negative relationship with the cost of debt, which means it is cheaper to go for debt financing during booming economy period. Surprisingly, in this study, firm profitability and the log of interest coverage ratio are not statistically significant in influencing the cost of debt.

Table III Model 2 reports the results of the regression of the individual effects of corporate governance categories and shareholder monitoring mechanisms on the cost of debt after controlling for the influence of the same set of control variables. Board structure and procedures, board compensation practices, accountability and social and environmental activities are significant in explaining the level of cost of debt. All categories are significant at one percent except for accountability and audit category, which is significant at five percent level. Shareholder rights and relations category is not significant, implying that shareholder rights and relations category does not influence the level of cost of debt. This finding indicates that debt issuers do not view this category of corporate governance as effective in protecting their interest because it is solely meant to safeguard shareholder interest.

In this paper, we examine the effects of corporate governance and shareholder monitoring mechanisms on firm cost of debt. We test both the traditional manager-shareholder agency conflicts and the agency cost of debt between the managers, shareholders and debt issuers. Our empirical results indicate that corporate governance is an important element in debt pricing. Debt issuers are willing to accept lower risk premium from firms that have high quality corporate governance; thus, effectively lowering cost of debt. We find support for the theoretical proposition that high quality corporate governance can alleviate asymmetric information, managerial opportunism and default risk. Our finding suggests...
that debt issuers are sensitive to corporate governance practices and structures that protect their interest. This finding is also consistent with the view that corporate governance can improve the quality of managerial decision-making and lead to better firm performance; implying that better firm performance results in lower cost of debt [50].

In terms of the individual effect of a specific category of the CG Index, we find that debt issuers value an effective board monitoring. As they mainly rely on financial reports to assess the extent of default risk debt issuers are appreciative of the board characteristics and practices that affect the credibility of financial reporting process and the extent of managerial opportunism. Debt issuers are also sensitive to the responsibility and commitment of the board to ensure that the remuneration of executive directors is not excessive and open to manipulation. They are willing to impose lower cost of debt if firms have compensation practices that do not only promote the interest of the suppliers of finance but also transparent. In view of this significant result we suggest that Malaysian firms and regulators take immediate and concrete steps to improve this important aspect of corporate governance.

We also observe that accountability and audit category is significant in explaining the cost of debt. In line with theoretical expectation, debt issuers are concerned with the credibility of financial reports, which could influence the extent of default risk. They rely on accounting numbers to assess the extent of debtors’ compliance to debt covenants and to monitor lending agreements [51]. Hence, our finding supports the important role of an independent audit committee and external auditors in enhancing board accountability and by extension reducing cost of debt.

Our study also shows that transparency category has a reducing effect on firm cost of debt. Greater transparency mitigates information asymmetry, which is a great concern to debt issuers. Firms that are more willing to share timely, accurate and complete information are perceived to have low likelihood to suppress value-relevant unfavorable information that could increase the default risk of the firm. Our result underscores the point that disclosure or transparency is regarded as one of the important dimensions of corporate governance.

We also document an interesting and surprising finding that investment in improving employee’s welfare and environmental protection practices lowers cost of debt. Our result implies that debt issuers are willing to lower their risk premium for firms that invest in activities or practices that protect stakeholders’ well-being. A decrease in risk premium suggests that investment in social and environmental activities is value-enhancing for firm. As our study highlights that promoting social and environmental welfare is an important determinant of cost of debt, we urge Malaysian firms to improve their performance in this category. Finally, we find that shareholder rights and relations category does not have any significant effect on firms’ cost of debt. Rightfully, debt issuers might not appreciate this aspect of corporate governance because it is exclusively meant to protect the rights and interest of shareholders, which may exacerbate the divergence of interest between the two parties.

In summary, our study reaffirms the role the MCCG (2000) in improving Malaysian firms’ corporate governance quality. Our findings underscore the point that debt issuers are concerned with firms’ corporate governance quality in evaluating financing decisions and pricing of debt. As such, MCCG (2000) does not only benefit equity investors but debt issuers alike.

B. Shareholder Monitoring Mechanisms

Our study shows concentrated ownership has a negative association with the cost of debt. On the other hand, we find that family and government ownerships have significant positive effects on the cost of debt; thus, supporting our hypotheses 3b and 5b. The negative effect of concentrated ownership on the cost of debt indicates that firms having concentrated owners experience a lower cost of debt.

Our result suggests that the active monitoring and shared benefits hypotheses are more dominant in Malaysian corporate environment. Debt issuers share the benefits of the concentrated owners’ monitoring role and in exchange the debt issuers are willing to impose lower risk premium. Alternatively, concentrated owners resort to self-protection due to an inadequate investor legal protection [34]. Shareholders that are not accorded sufficient legal protection against misappropriation by firm management will resort to self-protection by becoming controllers themselves.

Contrary to the findings of [5] and [35], we observe that family owners pay higher cost of debt. Our finding is similar to [33]. One possible reason for our finding is that due to the potential use of family owners’ voting power to encourage management to undertake risky investments or engage in ownership changes debt issuers feel that their interests are harmed. Ownership can change via merger and acquisition, which requires shareholders’ approval. Whilst mergers and acquisition may serve shareholders’ interest, it does not necessarily benefit debt issuers ([52], [9]).

Family shareholders reap most of the benefits when the riskier projects yield positive returns but debt issuers bear most of the cost [4]. One apparent cost or drawback of risky projects is that they increase the likelihood of default and bankruptcy. Hence, given this potential conflict of interest with the family owners and the increased possibility of default debt issuers impose lending agreements and loan covenants to protect their interest. However, in general, debt covenants are rarely effective in completely eliminating shareholder-debt issuers conflict [5]. In Malaysia, the covenants may not be successfully enforced due to the relatively weak legal protection accorded to investors during the period under observation [33]. Therefore, in return for accepting such risks and the trouble to successfully defend their interest against expropriation by family owners debt issuers require higher risk premium for the funds provided.

We also observe that government ownership has a positive relationship with the cost of debt, implying that debt issuers are not confident that this form of shareholder monitoring
mechanism is able to protect their interest. Alternatively, government owners seem to be an undesirable form of monitoring mechanism from the perspective of debt issuers, perhaps, due to several reasons such as the conflicting objectives of social welfare maximization and profit maximization [53], political motives [54] and interferences [55] and free-rider problems [37], which make them inefficient monitors. Our result also implies that although the Malaysian government has taken steps to improve the performance of the companies that they have stakes, it is still inadequate to produce a significant positive impact from the perspective of debt issuers.

Another possible reason for this finding can be attributed to the agency conflicts between the government owners and their agents who are appointed to manage such investment and directly exercise governance role [56]. In Malaysia, the government’s involvement in listed firms is predominantly made and managed through its investment arm body, Khazanah Nasional. This investment body has its own set of professional managers or bureaucrats appointed by the Finance Minister. The government then relies on these professionals to manage its investment and to produce better corporate governance and financial performance, effectively establishing an agency relationship.

As in any agency relationship, the government may suffer from agency conflicts, which negative effects may be permeated to other stakeholders such as debt issuers. The agents of the government do not necessarily share the same aspiration as the government in terms of optimizing its investment and monitoring of other salaried managers. In addition, the agents may not be able to effectively alienate themselves from the potential political interferences of powerful government leaders due to rent-seekers mentality as suggested by [57]. In view of these issues, the government owners will not be effective monitors, leading to higher cost of debt.

In sum, our study has confirmed the philosophy that debt issuers include firms’ corporate governance quality in their investment decision and they are also sensitive toward the type of shareholder monitoring mechanisms that could potentially affect their interest. In particular, debt issuers in Malaysia seem to value high corporate governance quality and concentrated ownership in their assessment of financing decision and pricing of the debt.

VII. LIMITATIONS AND FUTURE RESEARCH

Notwithstanding the positive findings we acknowledge a few limitations of our study, which provide avenues for future research. First, our study examines Malaysian firms only; hence, we are unable to observe the effect of country-level legal protection of investors on firm cost of debt. It is likely for firm-level governance and country-level shareholder protection to be substitutes for each other in reducing firm cost of debt. Corporate governance can have greater effect on cost of debt in countries that provide relatively poor legal protection for investors.

Second, in terms of family ownership we utilize the percentage of equity shares held by family members only. In Malaysia, many listed firms are managed by founding family members who hold influential top management positions. Founding family members in management positions are able to exert greater influence over the allocation of resources and decision making. Hence, there could be possible differential impact between firms having family owners but they do not get involve in top management positions and firms with founding family members holding vast management control.

Finally, in relation to social and environmental activities, firms may not disclose their actual and complete corporate social responsibilities in the annual reports. As such, some aspects of CSR may not be captured by the CG Index and statistical analysis. On a related point, whilst we claim that our CG Index is more comprehensive, it does not necessarily mean that we have included all possible corporate governance practices. But, at least we have attempted to include a great number of best practices in relatively broader categories in the CG Index.

Going forward we suggest that future research investigates the effect of corporate governance and shareholder monitoring mechanisms on the cost of debt under different investor protection environments including those emerging economies. Next, future research may investigate the possible differential effect of family ownership when the founders or their family members’ serve as CEO or top management positions compared to when the family firms hired outside CEO. Founders may bring unique, value-adding skills to the firm, whilst the founders’ descendents may detract from performance, probably because they get into the top positions as a result of family ties rather than merits. Hence, there could be potential differential effect on firm cost of debt between family members who are merely having equity ownership and those that have ownership and control as well as those that serve in management positions.

Finally, future research may examine the important role of ethical value of directors as an integral element of an effective corporate governance framework. It is reasonable to expect that establishing various corporate governance mechanisms alone is not sufficient to prevent future corporate scandals if the directors and top management team continue to behave unethically.

REFERENCES


Kingdom. He obtained his BSBA in Finance from the University of Denver, Colorado, USA. His research interest includes corporate governance and capital markets-based research, corporate social responsibility, business ethics and finance.