The Effects of Liquidity, Profitability and Board Characteristics on Debt Restructuring Likelihood Among Malaysian GLCs

Adilah Azhari
School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia

Hanita Kadir
School of Economics, Finance and Banking, College of Business, Universiti Utara Malaysia

Abstract
This study investigates the cross-sectional variation in debt restructuring among Malaysian publicly listed Government Linked companies (GLCs) and non-GLCs (NGLCs) for the period of from 2005 to 2015. It attempts to test several firm determinants that can influence the likelihood of Malaysian GLCs to exercise debt restructuring. Past studies argue that liquidity and profitability influences firm’s choice to exercise debt restructuring. This study proposes variants of board of characteristics as one of the influential factors in GLCs debt restructuring since board of directors for this type of organization are usually controlled or owned by government. We employ imbalanced panel data with logistic regression as the method of analysis. The findings show that liquidity, profitability and board characteristics have significant relationship with debt restructuring. The results for profitability indicates that firm with low profitability has higher chance for debt restructuring exercise. However, liquidity has recorded an opposite relationship in our sample. This may be due to our liquidity measures the focuses on short term assets which is less appropriate in debt restructuring context. With regards to board characteristics, three variables such as board size, fraction of Malay directors and fraction of directors with Master degrees show negative and significant relationship influence on the debt restructuring.

Keywords: Debt restructuring; GLCs; Non-GLCs; Board characteristics; Logistic regressions.

1. Introduction
In Malaysia, the government has proactively involved in government linked companies (GLCs). GLCs, which comprise of 36 percent of the market capitalization of the Malaysian stock market, play a significant role in the development of the country’s economy (Mokhtar, 2005). Government linked companies (GLCs) are defined as companies which Malaysian government hold a substantial control stakes through government investment arms, namely Khazanah Nasional Berhad (KNB), Kumpulan Wang Simpanan Pekerja (KWSP), Kumpulan Wang Amanah Pencen (KWAP), Lembaga Tabung Angkatan Tentera (LTAT), Lembaga Tabung Haji (LTH), Kementerian Kewangan Diperbadankan (MKD), and Permodalan Nasional Berhad (PNB). Through these government-linked Investment Companies (GLICs), these GLCs enjoy benefits such as political connection, government subsidies, tax discounts, market power or monopoly and to some extent, government obligations to rescue the outstanding debt from default (Al-Dhamari and Ku Iismail, 2014). As the majority shareholders, government plays a crucial role in setting the financial policy of GLCs to ensure their success.

With this regard, Putrajaya Committee on GLC High Performance (PCG) was formed in January 2005 to monitor and enhance the performance of GLC and also governance of GLCs. Despite the establishment of this committee, recent reports show that Malaysia GLCs are not shielded from financial trouble (Wall Street Journal and The Star). Previous studies show that weaker law enforcement and government corruption are associated with higher corporate debt ratios and shorter debt maturity (Demirguc-Kunt and Maksimovic, 1998; Fan et al., 2012). For example, Malaysian Airlines System (MAS) has undergone 4 phases of debt restructuring from 2001 to 2014. During the time period, Malaysian Government had injected more than RM19 billion worth of rights issues and government-backed debt as part of the ailing national airlines debt restructuring (Laryea, 2010) plan.

Debt can be thought of as a type of debtholder monitoring and relationship-building agent. Higher debt than optimal level would put a firm in default risk which would lead to bankruptcy. Debt can also help managers to control their free cash flow spending (Jensen, 1986). However, poor credit policy can lead to higher credit risk and impact the firms’ ability to meet the interest and principal payments. When incentive problems exist in firms, corporate policy and productivity will deteriorate. For example, La et al. (1998) document that legal protection and integrity of legal system will influence the choice between debt or equity and the maturity term for debts. The lack of monitoring power by debtholders and capital market may exacerbate the high debt level particularly in companies in which they are controlled by government or state-owned companies. This is a normal phenomenon in Malaysian market in which government linked companies are established to achieve certain aspiration of the government.

This study examines the effect of liquidity, profitability and board characteristics on the likelihood of debt restructuring exercises for GLCs and matching sample of non-GLCs firms in Malaysia. The findings suggest that low liquidity and lack of board expertise may increase the chance for debt restructuring.

*Corresponding Author
2. Literature Review and Hypothesis Development

2.1. Liquidity and Debt Restructuring

Liquidity refers to the ability of firms to meet their short-term obligations particularly on interest rate payment. Past studies on GLCs performance argues that there is a positive relationship with liquidity (Phung and Mishra, 2015) and no relationship between the variable with debt restructuring. However, as far as the study is concerned, there is no study done which examine liquidity of firms and likelihood for debt restructuring. However, as argued by, Butler et al. (2005), leverage can be easily influenced by the firm’s liquidity by means of stock offerings as a form of external financing, making it evident that capital structure of a firm is directly related to liquidity. Most of previous studies supported that high liquidity firms tend to borrow less for their future growth as predicted with the Pecking Order Theory. In general, negative relationship between liquidity and leverage as there is no urgent need for external financing because firms having high liquidity finance their future investment by using the current assets that they have (Dzolkarniani, 2006). Therefore, lower debt means lesser need for a company to restructure its debt in its capital structure. Thus, in the context of debt restructuring In GLCs, it is hypothesized that:

Hypotheses 1: GLCs with high liquidity is less likely to exercise debt restructuring

2.2. Profitability and Debt Restructuring

Profitability is a benchmark of performance for a firm. Previous study by Keasey and McGuinness (1995) look at the profitability and efficiency ratio to determine the firm performance following debt restructuring plan. Charitou et al. (2004), use profitability as one of the measurements for their study on financial distress for UK companies. Meanwhile, Tykvova and Borell (2012) focus on liquidity, profitability and solvency ratio as variables for firm performance. As firm’s profitability will reduce the needs for external financing such as debt, this will indicate that decrease in profitability will increase the likelihood of debt restructuring as firm’s with reduced profits will struggle to meet their debt obligations.

Hypotheses 2: GLCs with high profitability is less likely to exercise debt restructuring

2.3. Board Characteristics and Debt Restructuring

Corporate governance has been defined as the entire system of rules, processes and practices by which a company is controlled, directed and managed. The objective of corporate governance is to ensure that company’s objectives are achieved, and the interests of all company’s stakeholders are fulfilled. The board of directors is usually entrusted to oversee the corporate governance practices in the company. Malaysia Code of Corporate Governance (2012) emphasizes that good corporate governance requires a strong board of directors to govern a corporation. This study argues that certain board characteristics are important determinants as it affects the extent of monitoring, decision making controlling.

Board characteristics also can influence the firm’s financial policy. Corporate governance is assumed to play an important role in controlling and monitoring opportunistic behaviour by managers (Fama, 1980). According to Shleifer and Vishny (1997), the divergence of interest between managers and shareholders exists in the absence of effective corporate governance mechanism.

Thus, this study will evaluate whether the internal corporate mechanism could control the existing agency problem. Five board characteristics which are deemed important are hypothesized to have relationship in determining debt restructure. The variables include board size, number of board meeting, fraction of independent directors, fraction of Malay directors on board, and directors’ education level.

2.4. Board Size and Debt Restructuring

Past literatures recorded that there are conflicting ideas about board size with some proponent arguments for smaller board size and others contending that larger is better. Generally, each firm will have its own appropriate board size, which depends on the firm’s characteristics, such as firm size and complexity of the firm’s business. This could also be in firms that contemplate to a corporate exercise such as debt restructuring. Prior empirical studies argue that larger boards are positively associated with leverage (Anderson et al., 2004; Jensen, 1986; Wen et al., 2002). Jensen (1986) argues that larger board membership could result in difficulty in arriving at a consensus in decision making. These conflict arises from bigger board size that have the tendency of weakening corporate governance which consequently leads to higher leverage. Another reason suggested that that large boards, which are more entrenched due to superior monitoring by regulatory bodies, pursue higher leverage to raise company value (Wen et al., 2002). Anderson et al. (2004) also show that the cost of debt is lower for larger boards, presumably because creditors view these firms as having more effective monitors of their financial accounting processes. Since prior studies show mixed results with regards to relationship between board size and level of debt, the next hypothesis is as follows:

Hypotheses 3: There is a relationship between the size of the board of directors and the likelihood of firms to exercise debt restructuring.

2.5. Proportion of Non-Executive Director and Debt Restructuring

One governance feature that has received major attention from researchers is the board of directors’ independence. The percentage of directors considered to be outside directors or not related with internal managers (executives) has effect on reducing agency costs between agents (executive managers) and shareholders (Fama, 1980; Fama and Jensen, 1983; Hermelin and Weisbach, 1998).
A board of directors is composed in such a way that it reduces information asymmetries between managers and potential investors. Within this scope, several research studies have found that firms with better corporate governance devices have better information disclosures and less information asymmetry problems e.g. (Beeks, 2004; Dimitropoulos and Asteriou, 2010; Klein, 2002a; Vafeas, 2000). The intuition is that the board of directors is responsible for monitoring the quality of the information contained in financial reports and provided to the shareholders and, therefore boards that do a more effective job of monitoring management enhance the quality and the frequency of public information released by the executive management. Given these arguments, a more independent and diversified board of directors is expected to decrease information asymmetries between managers and investors and therefore should make it easier to issue external securities and risky securities. The reason is that outside financing requires managers to explain to outside investors the need for the funds and therefore expose themselves to investor monitoring if they want to get best price for the securities.

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 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 researches, which discovered insignificant relation between board independence and debtholders 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. (2011) and Tanaka (2014) demonstrated non-significant association between independence and cost of debt in Spain and Japan respectively. Therefore, effective and independent boards of directors are necessary to regulate the firm’s financial policy and lessen the ongoing friction between upper management and external shareholders (Sharma, 2011). It is therefore hypothesized that:

**Hypotheses 4:** The greater the firm’s proportion of independent directors on its board, the greater likelihood of companies in exercising debt restructuring.

### 2.6. Board Meeting and Debt Restructuring

According to Malaysian Code of Corporate Governance (MCCG), all firms are required to conduct meetings on quarterly basis. For the most part, studies show that frequent board meetings will lead to better monitoring. It is argued that board meetings and attendance to meetings are important in which the directors obtain firm specific information and able to fulfill their monitoring role (Johl et al., 2015) Therefore, board with information on debt situation of a firm will likely proceed for debt restructuring in the company.

**Hypotheses 5:** Frequency of board meeting is positively related to debt restructuring

### 2.7. Directors’ Education and Debt Restructuring

Executives’ educational background provides an indication of their knowledge and skill base and thus, should affect executive decision. For example, Hitt and Barr (1989) found that managers with higher levels of formal education made different managerial compensation decisions from those with less formal education. Furthermore, Hambrick and Mason (1984) proposed that managers’ formal education level was positively related to firm innovation. Highly educated managers are more favourably predisposed toward and more likely to champion innovation. As executives’ education increases, their training experiences and paradigmatic perspectives become more complete and well rounded. As a result, Hitt and Tyler (1991) proposed that the amount of education affects executives’ cognitive models and thereby their strategic decisions. Executives with higher education (e.g., B.S. vs. M.B.A.) are more likely to have a broader educational experience (e.g., undergraduate degree in engineering or liberal arts and masters degree in business). As a result, their knowledge and cognitive experience likely allows them to manage more complex situations. Thus, a top management team with higher levels of education should be more likely to use strategic controls and forestall board involvement in major strategic decisions.

In addition, education may also affect top management team power, both expert and prestige (Finkelstein, 1992). Top management teams with more education may be perceived to have more expertise, reducing the likelihood that the board would feel it necessary to intervene in strategic decisions. The level of education may also affect prestige, particularly if the graduate degree was earned from one of the elite schools (D’Aveni, 1990). Managers’ standing in the managerial elite’ sends powerful signals to others about their personal importance (Finkelstein, 1992). As noted earlier, top management team power helps to forestall active board involvement in major strategic decisions of the firm. As a result, the current study expects a negative relationship between the amount of education of the top management team and board involvement in strategic restructuring.

**Hypotheses 6:** Education level of the top management team is negatively related to likelihood of debt restructuring

### 2.8. Fraction of Malay Directors on Board with Debt Restructuring

As pointed in Chuah (1995), Malaysian managers are said to be associated by race, education and type of organization they work for. Race is selected as it signifies class relations and provides a principle according to which “conflicts over wealth and state power takes place” (Van Fossen, 1998, p.89). Furthermore, the effect of race may be of significance in multicultural societies where ethnic groups prefer to maintain its ethnic identity (Sendut, 1991).
Suggests that in general, managers perform the same functions but the way they do it could be different as it may be associated by one’s own tradition, values, beliefs and culture. Malays are normally associated with high uncertainty avoidance, which may be attributed to their strong belief in religion (Haniffa and Hudaib, 2006). Further, this is portrayed by the values of non-assertiveness, conflict avoidance and uneasiness in dealing with ambiguities and uncertainties (Abdullah, 1992). This is especially true when directors need to face a complex decision such as corporate debt restructuring. On the contrary, Chinese are rated low on uncertainty avoidance, as evidenced by their greater acceptance of new challenges and willingness to take greater risk. Since high debt is perceived to put a firm in a financial distress state, its nature of risk would affect the debt level of a company. Thus, there will be less need for this type of firm to restructure its debt in its financial policy. This study hypothesizes the following:

Hypothesis 7: GLCs with high percentage of Malay directors on board is less likely to exercise debt restructuring.

3. Data and Methodology

GLCs sample is identified based in the list provided by PCG. A matching non GLCs are matched with GLCs based on the market capitalization and in the same Bursa Malaysia sectoral classification. The study is then scrutinizes both samples to examine whether they have exercise debt restructuring over 11-year period from 2009 to 2015. The final sample is 33 GLCs and 33 non GLCs.

Data is analysed using Logistic regression in which 1 is assigned when an observation has completed debt restructuring exercise and 0 if an observation does not involve in the exercise within the specified period. The following model is the specification of this study.

\[ \text{DebtRestruct}_{it} = \beta_0 + \beta_1 \text{Liquid}_{it} + \beta_2 \text{Profit}_{it} + \beta_3 \text{board size}_{it} + \beta_4 \text{IndpBoard}_{it} + \beta_5 \text{BoardMeet}_{it} + \beta_6 \text{Frac Master}_{it} + \text{Control variable} + \varepsilon_{it} \]

4. Empirical Evidence

4.1. Descriptive Analysis Results

Table 1 presents the overall descriptive statistics of the explanatory variables involved for GLCs. In terms of liquidity, current asset to total asset (CA/TA) represents about 2.305 which shows a very high current ratio. On the other hand, the average of working capital to total asset (WC/TA) is marginally at 0.18. The disparity in WC/TA ranges from -0.575 to 0.729. Similarly, CA/TA has a higher average ratio of 0.428 from WC/TA.

With respect to profitability, this study uses three proxies; Net income to Total asset (NI/TA), Earnings before interest and Taxes to total Asset (EBIT/TA) and Net Income to Sales (NI/SALES). Overall, GLC shows a low profitability of less than 1. While NI/SALES show the highest profitability ratio compared to the other two ratios, it shows greatest dispersion of 0.183.

Table 2 describes a descriptive statistic for the whole sample group. For liquidity, it shows that current ratio has a mean of 2.88 which is considered healthy. There are 19 firms with debt restructuring in the sample period of 2005 to 2016. Average board size is 8 (ln = 2.074815) and average number of board meeting is 6 (ln = 1.829859). On average, 48.64% of board is from Malay ethnicity. The frequency of the board meeting has an average of 5. The mean of profitability is ranged from 5.1% to 9.6% based on profitability measures of NI/TA, EBIT/TA and NI/Sales.
## Table 2: Descriptive statistic for all sample companies (GLCs and Non GLCs)

| Variable     | Obs | Mean  | Std. Dev. | Min   | Max   |
|--------------|-----|-------|-----------|-------|-------|
| CA/CL        | 670 | 2.885 | 3.236     | 0.097 | 31.773|
| WC/TA        | 670 | 0.189 | -0.298    | 1.902 | 0.919 |
| CA/TA        | 670 | 0.448 | 0.219     | 0.006 | 0.992 |
| NI/TA        | 670 | 0.051 | -0.102    | 1.247 | 0.618 |
| EBIT/TA      | 662 | 0.082 | -0.109    | 1.242 | 0.631 |
| NI/Sales     | 669 | 0.096 | 0.392     | -4.874| 5.374 |
| DUMMYGLC1    | 689 | 0.441 | 0.497     | 0.000 | 1.000 |
| DEBTRESTRU~0 | 671 | 0.359 | 0.480     | 0.000 | 1.000 |
| LOGBRD_SIZE  | 652 | 2.075 | 0.251     | 1.386 | 2.708 |
| FRAC_NON_IND | 652 | 0.250 | 0.170     | 0.000 | 0.714 |
| FRAC_IND_D   | 652 | 0.486 | 0.145     | 0.000 | 0.909 |
| FRAC_NONEX~D | 652 | 0.258 | 0.193     | 0.000 | 0.833 |
| LOG_BRD_MEET | 639 | 1.830 | 0.425     | 0.000 | 3.296 |
| _MALAY       | 652 | 48.639| 45.479    | 0.000 | 100.000|
| _NONMALAY    | 652 | 6.090 | 13.409    | 0.000 | 60.000 |
| FRAC_BACHE~R | 652 | 0.361 | 0.254     | 0.000 | 1.200 |
| FRAC_MASTER  | 652 | 0.136 | 0.163     | 0.000 | 0.750 |
| FRAC_PHD     | 652 | 0.115 | 0.125     | 0.000 | 0.571 |
| FRAC_PROFES  | 652 | 0.210 | 0.238     | 0.000 | 1.333 |
| FIRM_SIZE    | 670 | 14.222| 2.124     | 9.449 | 18.579|

### 4.2. Logistic Regression Analysis Results

Panel A of Table 3 records a logistic regression results from sample of GLCs. Model 1 (full model) contains of all variables examined. After considering in removing insignificant variables, a reduced model is produced as depicted in Model 3 and Model 4 of Panel A. In Model 2, two proxies of profitability which are NI/TA and EBIT/TA shows significant negative and significant positive results respectively. However due to multicollinearity factor that could occur among these variables, they are examined in separate regressions as in Model 3 and 4.

Results of logistic regression on GLC sample shows that 3 variables which are CA/TA, BRD_MEET and FIRM_SIZE are positively related to debt restructuring. Final model in Model 4 shows the results of significant positive relationship (coefficient of 4.7444 and p-value of 0.000) between liquidity ratio is inconsistent with our prediction in H1. Possible justification for this effect is because our measure for liquidity focuses on current asset which is less appropriate in investigating a more permanent financing such as debt restructuring. Another reason is that high liquidity would cover only short-term debt. In situation when GLCS has a substantial debt in the form of long term debt, they need more permanent type of asset to cover its long-term debt. Thus, low liquidity ratio as a result of high needs of total asset actually leads to high debt level. This would subsequently cause debt restructuring to occur. Similarly, for number of board meeting, results shows a significant positive relationship (coefficient of 3.302 and p-value of 0.000) which implies as having frequent meeting is associated with debt restructuring possibilities.

Negative relationships are found in NI/TA, BRD_SIZE, _MALAY, FRAC_MASTER which indicates an increase in profitability, large board size, higher percentages of Malay directors on board and high percentage of Masters education in directors leads to less probability of debt restructuring occurrence.

Panel B of Table 3 shows a comparison of regression between full model and selective models 2 and 3, it shows that profitability (proxy by NI/TA) gives support to the hypothesis that lower profitability increases the debt restructuring occurrence. Our prediction that low liquidity will have higher occurrence of debt restructuring is unsupported because the results shows that CA/TA is positively related to debt restructuring. We can argue that liquidity may be useful for example in debt rescheduling exercise but may not influence other type of debt restructuring such as interest rates reduction and debt forgiveness. On the corporate governance characteristics, more board meeting increases the likelihood of debt restructuring.
Table 3. Logistic regression results for GLCs

| VARIABLE          | Model 1      | Model 2      | Model 3      | Model 4      |
|-------------------|--------------|--------------|--------------|--------------|
| CA/CL             | -0.2120      |              |              |              |
|                   | (0.4430)     |              |              |              |
| WC/WL             | -1.2330      |              |              |              |
|                   | (0.6410)     |              |              |              |
| CA/TA             | 8.804***     | 4.077***     | 4.411***     | 4.744***     |
|                   | (0.0000)     | (0.0010)     | 0.0000       | 0.0000       |
| NI/TA             | -76.545***   | -64.739***   | -4.859*      |              |
|                   | (0.0000)     | 0.0000       | (0.0690)     |              |
| EBIT/TA           | 60.233***    | 57.347***    | 0.6910       |              |
|                   | 0.0000       | 0.0000       | (0.7820)     |              |
| NI/SALES          | 2.7410       |              |              |              |
|                   | (0.1600)     |              |              |              |
| LGBRD_SIZE        | -4.734***    | -4.033***    | -3.827***    | -3.726***    |
|                   | 0.0000       | 0.0000       | 0.0000       | 0.0000       |
| FRAC_NON_I-D      | -2.1080      |              |              |              |
|                   | (0.6260)     |              |              |              |
| FRAC_IND_D        | -6.0350      |              |              |              |
|                   | (0.1730)     |              |              |              |
| FRAC_NONEX_D      | 1.0630       |              |              |              |
|                   | (0.7830)     |              |              |              |
| LG_BRD_MEET       | 4.631***     | 3.464***     | 3.390***     | 3.302***     |
|                   | 0.0000       | 0.0000       | 0.0000       | 0.0000       |
| _MALAY            | -9.2410      | -10.4390     | -6.4580      | -6.2060      |
|                   | (0.1820)     | 0.0000       | 0.0000       | 0.0000       |
| _NONMALAY         | 6.3570       |              |              |              |
|                   | (0.3660)     |              |              |              |
| FRAC_BACH         | 3.3630       |              |              |              |
|                   | (0.6500)     |              |              |              |
| FRAC_MASTER       | -3.8840      | -5.264***    | -3.599***    | -3.646***    |
|                   | (0.6130)     | 0.0000       | 0.0020       | 0.0010       |
| FRAC_PHD          | -4.6170      |              |              |              |
|                   | (0.544)      |              |              |              |
| FRAC_PROFES       | -7.0250      |              |              |              |
|                   | (0.3530)     |              |              |              |
| FIRM_SIZE         | 1.583***     | 1.129***     | 0.885***     | 0.921***     |
|                   | 0.0000       | 0.0000       | 0.0000       | 0.0000       |
| _CONS             | -15.9910     | -7.3330      | -7.1160      | -7.8130      |
|                   | (0.0240)     | (0.0050)     | (0.0030)     | (0.0010)     |
| chi2              | 229.3270     | 195.8580     | 153.9890     | 157.5350     |
| Likelihood ratio test (p-value) |            |              |              |              |
|                   | 33.4700      |              |              |              |
|                   | 0.0000       | 77.9         | (0.000)      |              |
|                   |              |              |              | 75.3 (0.000) |

In other words, frequent board meeting will highlight the problems in debt burdens, and board will likely propose for debt restructuring. It also shows that the higher board education (master or above), the lower the likelihood for debt restructuring. It can be argued that board that has better expertise will likely provide better monitoring and reduce the needs for debt restructuring exercise.

Table 4 presents the logistic regression for full matching sample GLCs and non-GLCs (66 companies). For Model 1 (full model), it shows there are negative and significant relationship for liquidity and profitability proxies. This lends support for hypotheses 1 and 2 where low liquidity and profitability will lead to debt restructuring. Meanwhile, for board characteristics, it shows that frequency of board meeting has positive and significant relationship on debt restructuring as per findings for Table 3 (GLCs only). This supports hypotheses 5 similar with GLCs sample only.

To reduce the multicollinearity problem, the Model 2 and 3 is further tested for proxies of liquidity, profitability and board characteristics. All the results hold in term of relationship strengths. In addition, we find that board Masters education level is negatively associated with debt restructuring. This can be attributed to better monitoring as the level of education increases and supports hypotheses 6.
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Table 4. Logistcs regression for GLCs and NonGLCs

| Variable     | Model 1       | Model 2       | Model 3       |
|--------------|---------------|---------------|---------------|
| CA/CL        | -0.15948576  | -0.15948576  |               |
| WC/TA        | -5.2987992*** |               |               |
| CA/TA        | 6.2260677***  | 1.7470804***  | 1.8752072***  |
| NI/TA        | -16.220682**  | -16.657855*** | -16.67376***  |
| EBIT/TA      | 7.0481566     | 9.9123696*    | 9.5412692*    |
| NI/SALES     | 1.2621574**   |               |               |
| DUMMYGLC1    | 21.428306*    | 1.1418006     |               |
| LOGBRD_SIZE  | 0.34813686    | -.39741679    | -.41716031    |
| FRAC_NON_I-D | 3.4033558     |               |               |
| FRAC_IND_D   | 1.753739      |               |               |
| FRAC_NONEX-D | 4.3568906     |               |               |
| LOG_BRD_MEET | 2.3888712***  | 2.181044***   | 2.2332277***  |
| _MALAY       | 0.2225864*    | -0.00945191   | 0.00201398    |
| _NONMALAY    | 0.20009249    |               |               |
| FRAC_BACHE-R | 0.560166      |               |               |
| FRAC_MASTER  | -1.0484435    | -2.268421**   | -2.0605086**  |
| FRAC_PHD     | -1.3627843    |               |               |
| FRAC_PROFES  | 0.73980798    |               |               |
| FIRM_SIZE    |               |               |               |
| _cons        | -31.967262**  | -7.8265396*** | 6.8786488***  |
| chi2         | 255.07468     | 152.12949     | 150.50021     |
| df           | N             | 627           | 628           |

Legend: * p<.05; ** p<.01; *** p<.001

Finally, we are looking at the sample of companies with debt restructuring exercises. Table 5 shows the summary statistics for 19 companies. Among these companies' record very low profitability (average 1.8% for NI/TA) and higher board size (average 9) compared with total sample of GLCs and non-GLCs. However, when checking for robustness of differences between GLCs and non-GLCs companies, results obtained are not significant.

Table 5. Summary statistics for Firms with Debt Restructuring exercise

| Variable     | Obs  | Mean   | Std. Dev. | Min  | Max  |
|--------------|------|--------|-----------|------|------|
| CA/CL        | 240  | 1.864166 | 1.718632  | 0.104575 | 13.95681 |
| WC/TA        | 240  | 0.093242 | -0.37346  | 1.902014 | 0.919138 |
| CA/TA        | 240  | 0.451606 | 0.2304    | 0.081747 | 0.99235 |
| NI/TA        | 240  | 0.018184 | -0.1134   | 1.246793 | 0.471185 |
| EBIT/TA      | 239  | 0.052953 | -0.11748  | 1.242379 | 0.524696 |
| NI/SALES     | 239  | 0.055599 | -0.22398  | 1.529554 | 1.338996 |
| DUMMYGLC1    | 241  | 0.560166 | 0.4974    | 0     | 1    |
| DEBTRESTRU~0 | 241  | 1      | 0         | 1     | 1    |
| LOGBRD_SIZE  | 233  | 2.104634 | 0.234144  | 1.609438 | 2.70805 |
| FRAC_NON_I-D | 233  | 0.218802 | 0.150691  | 0     | 0.666667 |
| FRAC_IND_D   | 233  | 0.477374 | 0.117962  | 0.222222 | 0.75 |
| FRAC_NONEX-D | 233  | 0.304861 | 0.184807  | 0     | 0.777778 |
| LOG_BRD_MEET | 233  | 2.045064 | 0.417303  | 1.098612 | 3.044523 |
| _MALAY       | 233  | 41.10895 | 46.4349   | 0     | 100 |
| _NONMALAY    | 233  | 3.363962 | 9.174249  | 0     | 50  |
| FRAC_BACHE-R | 233  | 0.380015 | 0.246844  | 0     | 0.888889 |
| FRAC_MASTER  | 233  | 0.158574 | 0.168125  | 0     | 0.666667 |
| FRAC_PHD     | 233  | 0.110657 | 0.118732  | 0     | 0.571429 |
| FRAC_PROFES  | 233  | 0.194047 | 0.204186  | 0     | 1.333333 |
| FIRM_SIZE    | 240  | 14.63827 | 2.072605  | 9.865526 | 18.57864 |

5. Conclusion

This study focusses on debt restructuring on GLCs. Our findings show that liquidity, profitability and board characteristics have significant relationship with debt restructuring. The results for profitability indicates that firm with low profitability has higher chance for debt restructuring exercise. However, liquidity has recorded an opposite relationship in our sample. This may be due to our liquidity measures the focuses on short term assets which are less appropriate in debt restructuring context. With regards to board characteristics, three variables such as board size, fraction of Malay directors and fraction of directors with Master degrees show negative and significant relationship influence on the debt restructuring. This may be due to board expertise, less efficient in decision making for larger
board size especially in debt restructuring and Malay majority board members leads to delay in urgent decision like restructuring and risk averse on the risky corporate exercise. On the other hand, the higher the number of board meetings, the higher the likelihood for debt restructuring due to increase in monitoring for debt burdens.

The limitations of this study are availability of debt restructuring data from Corporate Debt Restructuring Scheme. Incomplete data also is the inherence in our analysis. In future research, it will be interesting to study the changes in profitability, liquidity and board characteristics after debt restructuring exercises are completed. In order to produce more comprehensive study in the future, more ratio such as performance and earnings management can be included.

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