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The Capital Structure: Government-Linked and Non-Government-Linked Companies in the Trading and Services Industry in Malaysia

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Abstract

Government-Linked Companies perhaps differ from other companies in terms of their capability to absorb socio-political benefit from the government interest. This allows the companies to take greater risk with respect to their capital structure decision. The paper seeks to identify if there are differences in capital structure between Malaysian Government-Linked Companies (GLCs) and Non-Government-Linked Companies (NGLCs). The sample consists of six companies each of the GLCs and the NGLCs, all from trading and services industry. The study uses 21 years of unbalanced panel data from 1993 to 2013. Leverage acts as dependent variable, while profitability, asset tangibility, firm size, and growth are the independent variables. The model uses group dummy to distinguish the sample of GLCs and NGLCs. Within the scope of the study, the paper is unable to proof any differences in capital structure between the two groups of companies. The random effects estimation identify profitability as negatively significant with capital structure decision for GLCs and NGLCs. In contrast, asset tangibility and firm size are positively related to leverage. The interaction effect discloses company growth have a different impact on leverage for GLCs and NGLCs for trading and services companies in Malaysia.

Keywords: Capital Structure, GLCs, NGLCs, Pecking Order Theory, Trade-off Theory

Introduction

The paper explores the possible differences in the capital structure of Government-Linked Companies (GLCs) and Non-Government-Linked Companies (NGLCs) in the trading and services industry in Malaysia. Malaysia's GLCs are relatively among the most extensive and powerful in the world in terms of their capitalization and socio- political mandate. GLCs provide services and generate profits for government investment and other stakeholders, provide linkages through procurement, and enhance employability and serving as training ground for managers, directors and entrepreneurs. A firm can be classified as an ultimate firm if the shareholders own more than 20 percent of the shares due to effective voting rights Paligorova and Xu (2012). The definition is consistent with Ang and Ding (2006) in their study on the government ownership and performance between GLCs and NGLCs in Singapore. The authors identify GLCs as a 20 percent state owns companies.

Capital structure is one of the unique characteristics of GLCs and NGLCs. A company proportion of short-term and long-term debt is being considered when analyzing capital structure. The capital structure refers to leverage or debt ratio which provides useful insight in measuring company risks. Capital structure is how well a firm finances its overall operations and growth by using different sources of fund, either form debt or equity. Worth noting that company may face serious problem if they tolerate excessive debt financing as it may caused a financial distress and bankruptcy. Frank and Goyal (2003) state large firms are predicted to have more debt in their capital structure rather than small firm. This is mainly because of large firms are usually more diversified and have good reputations in bond or debt market, which allow them to have an easy access to the debt market.

GLCs currently comprise of 36 percent of the Malaysian stock exchange's capitalization and 54 percent entities that make up the FBM Kuala Lumpur Composite Index (KLCI). Many previous studies investigate the GLCs focuses on different

countries and its government. Government of China and state is the owner of firms and banks as well as beneficiary of tax (Huang & Song, 2006). The authors state China has two salient features; 1) China is in transition from a command economy to a market economy, 2) Most of Chinese listed company were state owned enterprise (SOEs). In Singapore, GLCs are also the largest single group of employers after the Small Medium Enterprise (SME) sector. Note that, GLCs are not exactly having similar characteristics like other state owned enterprise (SOEs) in other countries. Ang and Ding (2006) touted in the media that these SOEs are well governed in their countries. Hence, different countries may result different characteristics or features of GLCs, thus specific investigation is deemed necessary. In a broader perspective, the unique characteristic of GLCs and NGLCs has become an interesting topic in corporate finance literature.

Huang and Song (2006) document Chinese state-controlled listed firms are designed to be more profit oriented as well as served the purpose of the country's economic welfare. The authors conclude Chinese listed companies have lower leverage since their bond market is small and quite undeveloped. These companies prefer to access the equity financing once they go public. The findings reveal tangibility, ownership structure, size, and non debt tax shield as important determinants of capital structure in China.

In other different study, Deesomsak et al. (2004) investigate the capital structure in emerging market in Asia Pacific region including Singapore, Malaysia and Thailand. The findings show tangibility, liquidity, earnings volatility and firm size are not important factors in determining the capital structure as far as Singapore are concerned. On contrary, profitability and size are the crucial factor influence the capital structure in Malaysian listed companies while in Thailand, firm size and growth affect the company's capital structure. The authors conclude that the countries have different legal traditions bankruptcy code, corporate ownership structure and different environment on corporate financing decisions.

Review of the Literature

Serghiescu and Văidean (2014) conclude some theories that relates to capital structure. There are three plausible theories have been used to determine the capital structure, which are the Modigliani and Miller, the trade-off theory and the pecking order theory. The Modigliani and Miller analysis explain of the irrelevance of financing decisions and shows that capital structure decisions does not affect firm value when capital markets are perfect, corporate and personal taxes does not exist and the firm financing and investment decisions are independent. The trade- off theory exposed a firm will borrow up to the point where the marginal value of the tax reduction or tax shield on the interest paid for the contracted loans will be balanced by present value of bankruptcy costs. Meanwhile, the pecking order theory argues asymmetry information exist between managers, shareholders, and investors. Based on this theory, a company prefers to finance their investment using internal resources followed by external financing, debt and equity as the last resort.

Many previous studies investigate the effect of capital structure on profit performance. Salim and Yadav (2012) in the study of capital structure and firm performance find there is negative significant relationship between leverage and return on asset (ROA), return on equity (ROE), Tobin Q and earnings per share which are the proxies of firm performance. This is supported by Vithessonthi and Tongurai (2015), the authors find that leverage is negatively associated with firm performance in the full sample of domestic and international oriented companies. However, the result is contradicted for the international sample, where there is a positive relationship between leverage and performance.

From other angle, previous studies document profitability negatively affects leverage level (Chen, 2004; Paligorova & Xu, 2012). Chen (2004) studies the determinants of capital structure of China listed companies. The study reveals there are a negative relationship between profitability and debt (leverage). On the contrary, different result obtained by Handoo and Sharma (2014), the authors find that profitability give significant positive impact on the leverage structure of Indian Companies. Deesomsak et al. (2004) using the data from Asia pacific region including Thailand, Singapore, Australia and Malaysia reveal profitability shows a negative relationship for the first three countries but indicate a positive relationship between profitability and leverage in Malaysia.

Tangibility can be used to represent asset structure of a firm. It is anticipated to have a positive relationship between leverage and tangibility because there is a potential for a firm with more tangible asset to use more debt since asset can be used as collateral to reduce default risk. Most of the empirical findings shows that there is positive relationship between debt and tangible asset (Frank

& Goyal, 2003; Huang & Song, 2006; Oino & Ukaegbu, 2015; Proença et al., 2014). However, it was contradict with Deesomsak et al. (2004) and Serghiescu and Văidean (2014). The authors study the determinants of capital structure using different sample and time frame, find a negative relationship between tangibility and leverage.

According to the trade-off theory, large firms have higher leverage compared with small firms by reason of diversified and stable cash flow. Therefore, most of the empirical studies have shown a strong significant positive relationship between firm size and leverage (Chang et al., 2014; Mateev et al., 2013; Thippayana, 2014). El-Masry et al. (2008) assert institutional investor would favor to invest in large firms since large firms have the essential resources and the ability to diminish the risk of their stock investment, and hence are less subject to financial distress and bankruptcy risk. Size is a significant determinant of GLCs capital structure and it is positively related where banks willingly offer short-term or long-term loans to GLCs since they have more collateral than small companies (Ahmad & Abdul Rahim, 2013). Quite the opposite, Ting and Lean (2011) initiate that firm size is significant and negatively correlated with debt ratio for GLCs, but it is significant and positively correlated with debt ratio for NGLCs. This is because GLCs prefer to finance its projects internally or to use the least risky equity financing available.

Majority of the firms with high growth opportunities prefer debt financing as a way to finance their investment. Chang et al. (2014) and El-Masry et al. (2008) concur that there is a positive relationship between growth rate and leverage where firms with higher growth tend to have higher leverage. Additionally Mateev et al. (2013) declare that SMEs with more growth opportunities will include more debt in their capital structure to finance long-term investment. Handoo and Sharma (2014) confirm that firms with a high growth options and high cash flow volatility have incentives to decrease debt in their capital structure over a period of time due to small free cash flow problems and high financial distress cost of debt. In case of GLCs, growth opportunities are significantly and positively related to short-term debt ratio because growth potential GLCs use short-term financing instead of long-term financing to finance investments (Ahmad & Abdul Rahim, 2013). Nonetheless, there is no significant influence between growth and debt ratio for both GLCs and NGLCs in Malaysia stated by Ting and Lean (2011). There are also no significant relationships between growth opportunity and leverage ratios discovered by Thippayana (2014) on his study of 144 listed companies in the Stock Exchange of Thailand.

Data and Methodology

The paper aims to identify if there is any differences in term of capital structure between GLCs and NGLCs in Malaysia. The sample consists of six companies from each GLCs and NGLCs, all from trading and services industry. The study covers 12 publicly listed companies for 21 years from 1993 to 2013. The unbalanced panel data comprises of 195 observations of GLCs and NGLCs. The study is also to find the relationship between four possible determinants of companies' capital structure. The model includes the four variables, profitability, tangibility, firm size, and company growth. All data were obtained from the Osiris database by Bureau van Djik. The study incorporates group dummy to distinguish between GLCs and NGLCs, followed by the interaction effect between growth and the group dummy. The interaction effect is meant to investigate if there is any different effect of growth towards company leverage with regards to GLCs or NGLCs. Table 1 exhibits a list with proxy and definitions of the latent variable and the explanatory variables used in the model.

Table 1: Variables Definitions

Variables	Proxy	Definition
Dependent variable:		
Leverage	Debt ratio	Total debt to total assets
Explanatory variables:		
Profitability	Return on equity	Net income to total equity
Tangibility	Fixed asset turnover	Fixed assets to total assets
Firm size	Natural logarithm of total asset	Ln of total assets
Growth	Changes in total asset	Changes in total assets to previous total assets
Group	Group dummy	NGLCs = 0, GLCs = 1

The study employs random effects model (REM) using Statistic/Data Analysis (Stata) software application version 12. The panel data GLS estimation with interaction effect presented in Eq. (1):

$$LEVit = \delta 0 + \delta 1 PROit + \delta 2 TANit + \delta 3 SIZEit + \delta 4 GROWTHit + \delta 5 GROUPit + \delta 6 GROWTHit\ x\ GROUPit + \epsilon it \quad (1)$$

where, LEV is the interest variables, representing capital structure, while PRO,TAN,$SIZE$,$GROWTH$ and $GROUP$ representing profitability, asset tangibility, firm size, company growth and group dummy respectively. Given support from the government, it is expected that different group of companies may have different effect of growth towards company leverage. Thus, the study incorporates the interaction effect of group dummy and growth in the model.

The main objective of the study is to investigate whether the capital structure decision in Malaysian GLCs and NGLCs companies are different. The study is also interested to identify important determinants of capital structure in Malaysian trading and services industry. Additionally, we are concerned to find if there is any different effect of growth towards leverage for GLCs and NGLCs in Malaysia. In achieving our objectives, the study states the following hypotheses:

H_1: There is a significant relationship between profitability and leverage for GLCs and NGLCs in Malaysian trading and services companies.
H_2: There is a significant relationship between asset tangibility and leverage for GLCs and NGLCs in Malaysian trading and services companies.
H_3: There is a significant relationship between firm size and leverage for GLCs and NGLCs in Malaysian trading and services companies.
H_4: There is a significant relationship between company growth and leverage while group for GLCs and NGLCs reacts as the moderating variable in Malaysian trading and services companies.

Empirical Results and Findings

Table 2 presents the random effects model GLS estimation of our model. The results can be summarized as in Eq. (2):

$$LEVit = -0.24 - 0.17PROit + 0.13TANit + 0.20SIZEit + 0.04GROWTHit - 0.09GROUPit + 0.13GROWTHit \; x \; GROUPit \quad (2)$$

Table 2: Random Effects Model Estimation

	Coefficient	z-value	Marginal Effect
Profitability	-0.17***	-2.65	-0.17
Tangibility	0.13*	1.94	0.13
Firm Size	0.20***	7.27	0.20
Growth	0.04	1.10	0.10
Group dummy	-0.09	-1.03	-0.09
Growth x Group Dummy	0.13*	1.77	
NGLCs			0.04
GLCs			0.17
Constant	-0.24	-2.17	
Number of observations	195		
Number of groups	12		
R-squared (overall)	0.0972		
Wald chi2 (7)	90.95		
Prob > chi2	0.0000		

*Note: ***z-value is significant at 1%,**z-value is significant at 5%, *z-value is significant at 10%.*

The REM estimation identifies three variables that are statistically significant in determining capital structure for GLCs and NGLCs in Malaysia. The three variables are profitability, asset tangibility and firm size. Profitability is significant at 1 percent level and negatively related to leverage. The study finds profitable companies (GLCs and NGLCs) have lower leverage position. It is commonly understand, company with an outstanding profit performance is less dependence on external fund, especially the debt financing. Our finding is consistent to previous literature (among others, Chen, 2004; Danis et al., 2014; Huang & Song, 2006).

The results also managed to reject the null hypothesis for asset tangibility; hence there is a significant relationship between asset tangibility and leverage. The relationship is statistically significant at 10 percent level. The positive relationship between the variables implies that the greater the fixed asset composition for GLCs and NGLCs, leads to greater leverage. This is possibly due to a greater access to the debt financing with the availability of tangible assets as collateral (Handoo & Sharma, 2014; Oino & Ukaegbu, 2015).

Another important factor that influence leverage level for GLCs and NGLCs is firm size. At 99 percent confidence interval, the study rejects the null hypothesis, thus accept the alternate. The REM finds positive significant relationship between firm size

and leverage. The result indicates larger GLCs and NGLCs have higher leverage than the smaller one. This is consistent to the trade-off theory where, large companies have higher leverage compared with small companies because of diversified and stable cash flow for a larger company. Inter alia, Ahmad and Abdul Rahim (2013) finds similar relationship between firm size and leverage.

The study fails to find significant difference between GLCs and NGLCs for the selected sample in term of their leverage level. The study also finds no evidence of significant relationship between company growth and capital structure decision for these companies. However, the interaction effect between growth and group dummy is statistically significant at 10 percent level. The result suggests there are a significant different effect of company growth towards leverage position between GLCs and NGLCs in Malaysian trading and services industry (w.r.t. our sample selection). There are positive relationship between company growth and leverage level. Growing activities for the GLCs has a greater leverage level than growing NGLCs. Other variables remaining constant, an increase of 1 unit change of total assets induce the unconditional expected value for debt ratio to increase 0.17 units for GLCs but only increase by 0.04 units for the NGLCs. The result provides evidence of government interference as safeguard for the GLCs to accept more risk and expand (Chang et al., 2014; El_Masry et al., 2008).

Conclusion

Malaysia GLCs are relatively among the most extensive and powerful companies in the world in terms of their capitalization and socio-political mandate. Given this criteria, GLCs is different from the NGLCs where, GLCs is exposed to greater morale hazards in term of leverage. The main objective of the study is to finds evidence of differences capital structure decision between GLCs and NGLCs for the selected trading and services companies in Malaysia. The finding however, is unable to find any evidence of leverage level between the two groups of companies.

The paper is also to investigate the determinants of capital structure for GLCs and NGLCs in Malaysia within our scope of sample. The results managed to reject the null hypotheses for profitability, asset tangibility and firm size, indicates the three variables give significant influence for the GLCs and NGLCs capital structure decision. There are negative relationship between profitability and leverage while asset tangibility and firm size are positively related with leverage.

The paper extends the investigation by incorporating the moderating effect of company growth and group dummy. Although the finding finds no evidence of significant relationship between growth and leverage, the interaction effect gives a new insight to the capital structure literature for GLCs and NGLCs. The results imply there is different impact of company growth towards leverage between the two groups of company.

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