Capital Structure and Corporate Performance: Panel Evidence from Oil and Gas Companies in Malaysia

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Abstract

The purpose of this study is to examine the relationship between capital structure and corporate performance of public listed oil and gas companies in Malaysia. For this, unbalanced panel data sets of 12 oil and gas companies were tested using panel data regression technique over the period of 2003-2013. Capital structure, the independent variable is measured by three proxies namely short-term to total debt (STDTA), long-term to total debt (LTDTA) and total debt to total asset (TTDTA). While corporate performance is measured by the company's return on equity (ROE), return on asset (ROA) and gross margin (GM). The finding shows that capital structure is negatively related to firm's return on equity, suggesting that an increase in the firm's debt level would negatively affect its shareholders return. The effect of firm's debt level with ROA and GM on the other hand, shows no impact and appears to be insignificant.

Keywords- *capital structure, firm performance, pecking order theory,trade-off theory, panel data*

INTRODUCTION

Capital structure has been the subject of many studies in the field of corporate finance and is often associated with a company's financing decision. In the modern context, this decision is crucial because it affects a company's ability to thrive in a competitive environment, and also the need to maximize shareholders' value (Abor, 2005). Theoretically, capital structure deals with the mixture of variety of sources of funds that include debts and equities of a company. In financial terms, capital structure is the combination of debts, equities or hybrid securities used by a company to finance its assets and operations (Saad, 2010), or it can simply be represented by the gearing (debt-to-equity ratio) level. One challenge that company needs to deal with is making a good financing decision by achieving an optimal set of capital structure; one that minimizes a company's cost of capital, maximizes market value, and increasing shareholder's wealth (Pouraghajan and Malekian, 2012). Conversely, an incorrect financial decision could potentially cause financial distress and eventual bankruptcy.

An important underlying theory in capital structure literature is the Modigliani & Miller (M&M) Theorem in which they argued that capital structure is irrelevant in determining a company's value provided that certain restrictive and perfect market assumptions hold true. However, in reality where market imperfections exist, choices of capital structure made by companies seem to deviate from the M&M's Theorem. This led to many researchers to introduce additional rationalization to M&M's proposition to demonstrate that capital structure affects company's value and performance. An example is the seminal paper of Jensen and Meckling (1976) who came out with the trade-off theory that suggested an optimal capital structure involves the trade-off between taxes, bankruptcy costs and agency costs. Concerning agency cost, they argued that the debt or leverage level in a company's capital structure affects the agency conflicts between managers and shareholders by restricting or encouraging managers to act in the interest of shareholders, thus it can change manager's behavior and operation decisions. This gives rise to agency costs which means that the amount of debt in the capital structure of a company can affect its financial performance (Graham and Harvey, 2001;

Harris and Raviv, 1991). Study done by Hadlock and James (2002) concluded that non-financial companies in the US prefer debt financing because they anticipate higher returns from a higher debt level. In addition, Abor (2005) proved that capital structure (which measured by short term and total debt) has a positive relationship with corporate performance of Ghanaian firms during the period 1998–2002. Similar findings were also verified by Ross (1977), Heinkel (1982) and Noe (1988) in which they argued that firm's decision to increase leverage through debt will give positive impact to corporate performance.

Following Jensen and Meckling's (1976) paper that revealed the possible effects capital structure have on firm performance, many studies have been conducted with the aim to examine the effect of capital structure on firm's performance since the past decades. However, results of these studies were contradictory, mixed and varied according to specific sectors and countries due to different characteristics and legislations that each country has. For example, recent evidence suggests that firm's choice of debts have a positive impact on their performance and this result varied across countries such as United States (Lewellen and Roden, 1995; Hadlock and James, 2002); and Ghana (Abor, 2005). However, contradictory results were found when Zeitun and Tian (2007) supported a negative impact of debt level on firm's profitability in Jordan, which is consistent with Myers and Majlus's (1984) Pecking Oder Theory. Similar results were also confirmed amongst SMEs in Greece and France (Daskalakis and Psillaki, 2005); G-7 countries (Rajan and Zingales, 1995), and European retailers (Gleason, 2000). Therefore, these contradicting results cannot be generalized to every economic sectors and countries as there is no universal and consistent theory on debt-equity choices due to different views on financing options and its effect on corporate performance.

Meanwhile in Malaysia, much of current literatures pay particular attention to factors determining firm's capital structure choices and decisions (see Pandey, 2004; Pratomo and Ismail, 2006; Mahmood and Zakaria, 2007; Mahmood et. al 2011; Abdul Jamal et. al, 2013). Research on the effects of capital structure on corporate performance however, is still scarce and was done according to specific sectors and different size of companies (San and Heng, 2011; Salim and Yadav, 2012) which provides an insufficient empirical evidence to generalize the relationship between capital structure and corporate performance in Malaysia. Apart from that, the lack of consensus on what qualifies as the optimal capital structure also leads to the importance to this study. Therefore, it is necessary to study the debt levels' implication on corporate performance to further examine the validity of the findings of similar studies. Hence the main objective of this research is to examine the significance of the relationship between capital structure and corporate performance of the oil and gas industry in Malaysia. More specifically, the study intends to embark the following objectives:
  i.   To examine the relationship between short-term debts to total asset (STDTA), long-term debt to total asset (LTDTA), total debt to total asset (TTDTA) and return on equity (ROE).
  ii. To examine the relationship between short-term debts to total asset (STDTA), long-term debt to total asset (LTDTA), total debt to total asset (TTDTA) and return on asset (ROA).
  iii. To examine the relationship between short-term debt to total asset (STDTA),long-term debt to total asset (LTDTA), total debt to total asset (TTDTA) and gross margin (GM).

OVERVIEW OF OIL AND GAS INDUSTRY IN MALAYSIA

The oil discovery in Sarawak in 1910 marked the beginning of Malaysia's oil and gas industry. Since then, foreign oil companies were attracted to invest in Malaysia which created numerous employment opportunities and skills transfer to thousands of Malaysians. Among the largest foreign oil companies by production volume are ExxonMobil, Shell and Murphy Oil, with Shell being the largest foreign investor in Malaysia's oil and gas sector. The energy sector plays a critical role to the economics growth of the country, making up about 20 percent of the total gross domestic product (GDP). Looking further into the data, the oil and gas industry makes up the most of the energy sector, taking up a combined 76 percent of the total sector. According to Malaysia Oil and Gas Industry Overview (2013), Malaysia's oil reserves are the fifth largest in Asia-Pacific, proven to have oil reserves of 4 billion barrels as of January 2013.The country's current production rate is at 730, 000 barrels of crude oil products per day. The government of Malaysia contributes significantly to the policies and macroeconomic planning to ensure a long-term success of the oil and gas industry as it aims to be the number one oil and gas hub by 2017 in Asia Pacific Energy policies in Malaysia are set and overseen by the Economic Planning Unit (EPU) and the Implementation and Coordination Unit (ICU), both units reporting directly to the Prime Minister. Specifically, efforts by the government are focusing towards enhancing output from existing oil and gas fields, new marginal fields as well as exploration and development opportunities in deep-water areas. Furthermore, in 2010, tax and investment incentives under the Petroleum Income Tax Act (PITA) were introduced to encourage oil and gas exploration activities (Rahim and Liwan, 2012). Malaysia's national oil and gas company, Petroliam Nasional Berhad (Petronas) holds an exclusive ownership right to all oil and gas exploration production (E&P) projects in the country. For example, it is mandatory under a legislation enacted in 1985 for Petronas to hold a minimum 15 percent equity in production sharing contracts (PSC) with all local and foreign companies. Since its incorporation in 1974, Petronas has developed into a world-renowned integrated international oil and gas company with presence in over 30 countries (Candiah, 2005).

EMPIRICAL STUDIES ON CORPORATE STRUCTURE AND FIRM PERFORMANCE

Capital structure theories and empirical evidence on the determinants of capital structure are abundantly available. However, whether capital structure of companies will influence their corporate performance or not, is a topic that remains largely unexplored especially in the case of developing countries. Even so, results from past studies seemed to be varying and contradicting in some cases. Among the examples of these studies are shown by studies conducted on a sample of 48 United States firms that are involved in leveraged buyout transactions, where Lewellen and Roden (1995) discovered that total debt (a financing package used in leveraged buyout transactions) and the profitability of a firm are positively related. Another research done by Hadlock and James (2002) using a sample of 500 non-financial United States firms concluded that companies prefer debt financing because they anticipate higher returns from a higher debt level. In addition, Abor (2005) proved that capital structure has a positive relationship with corporate performance of Ghanaian firms which was studied during the period 1998–2002.

However, there are researchers that obtained different results. Kester (1986) found a negative relation between capital structure and corporate performance (profitability) for United States and Japanese manufacturing companies. Rajan and Zingales (1995) did a study on the determinant factors of capital structure, choosing a sample size of 4,557 corporations across the G-7 countries (United States, Japan, Germany, France, Italy, Britain and Canada) from the period of 1987 to 1991. One of the determinant factors of capital structure, profitability was concluded to be negatively correlated with financial leverage (i.e. debt level). Other findings indicated that financial leverage has negative relationship with market value to book value ratio but a positive relationship with the value of tangible fixed asset and firm size. Similar evidence was also reported by Wiwattanakantang (1999) where they reported a negative relationship between capital structure (measured by book and market debt value) and performance of 270 Thai firms (measured by ROA). All these researches were conducted in different countries with different results. This proves that the empirical results obtained cannot be applied directly into a target economy. Below are various empirical studies that investigate this relationship in developed countries.

Fosberg and Ghosh (2006) conducted a research on 1022 companies in the New York Stock Exchange (NYSE) and 244 companies in the America Stock Exchange (AMEX) to test for the relationship between profitability, as the independent variable and the debt level in capital structure as the dependent variable, the researchers used ROA and average ROA as measurements for financial performance and debt-to-asset ratio as the measure for debt level. Among the control variables were firm size (measured by total assets, sales and market value of common equities), collateral availability (measured by net property, plant and equipment to total asset ratio), growth opportunities (measured by market to book value of common equity and Tobin's Q). Regression analysis was employed to establish the relationship, carried out separately on AMEX companies and NYSE companies. Results concluded that the there is little or no relationship between profitability and the amount of debt in AMEX firms' capital structure. Nonetheless, strong negative relationship was proved to exist in the case of NYSE firms. This finding was consistent with the Myers and Majluf's (1984) "asymmetric information theory" of capital structure, which also known as the pecking order theory. The theory argues that if asymmetry information exists in the market, new issue of shares will be undervalued by investors due to the lack of information and the firm is better off using internal generated funds to finance its investments. This outcome can be further proven by the fact that NYSE firms generally use 5 to 8 percent more debt financing than AMEX firms. It was also discovered that the debt level in capital structures of AMEX firms have been on the decline since 1985 to 2003, but remained relatively consistent in NYSE firms.

In the Malaysian context, San and Heng (2011) carried out a study on the relationship between capital structure and corporate performance of the Malaysia construction sector. The study focused on 49 construction companies listed on Bursa Malaysia from the year 2005 to 2008. The companies were divided into three groups based on large, small and medium sizes according to their respective paid up capital. A pooling regression model was used for analysis of each group independently. The proxies for capital structure were long-term debt to capital ratio, total debt to capital ratio, total debt to asset ratio, total debt to equity in market value, total debt to common equity and long term debt to common equity. On the other hand, the proxies used to measure corporate performance were return on capital, return on equity, return on asset, earnings per share, operating margin and net profit margin. The results were mixed according to the size of the firms. For large construction companies, return on capital and earnings per share indicated a positive relationship. Comparatively, return on capital possesses the strongest and also positive relationship with total debt to equity in market value in the case of large companies. However, earnings per share were negatively related to total debt to capital ratio. In the case of medium sized companies, results showed that only long term debt to common equity has an impact on corporate performance, whilst other independent variable proxies do not affect corporate performance. Lastly, in the case of small companies, earnings per share were negatively related to total debt to capital ratio, which implies a negative relationship between profitability and capital structure.

Another study on this relationship was done by Salim and Yadav (2012). The study was conducted between the periods of 1995 to 2001 using panel data analysis for a sample of 237 Malaysian public listed companies. The data were divided into six groups according to industry which are consumer product, construction, industrial product, plantation, property, trading, and services. The dependent variables used in this study were return on equity (ROE), return on asset (ROA), Tobin's Q and earning per share (EPS). The independent variables on the other hand were short-term debt to total asset (STDTA) ratio, long-term debt to total asset ratio (LTDTA) and total debt to total asset ratio (TTDTA). Firm size was included in the model to control the effects of firm size on the dependent variables. Final results indicated a negative relationship between capital structure (especially STDTA and TTDTA) and firm performance when measured by ROE. Furthermore, capital structure (especially LTDTA and TTDTA) has negative impact on firm performance when measured by ROA. The author attributed the negative relationship to the default risk associated with having higher debt level. However, results showed that Tobin's Q has a positive relationship with capital structure when measured by STDTA, LTDTA and TTDTA with size as the control variable.

DATA AND METHODOLOGY

The sample size consists of all 29 public listed oil and gas companies in Malaysia (as of June 2014). The main source of data was from the annual financial statements of each company, in which relevant financial data were extracted from the profit and loss statement and balance sheet of the company's report. In this study, the computer software that was used for data analyses were the IBM Statistical Package for Social Science, SPSS (version 20) and STATA (version 10). The required data were first stored in Microsoft Excel (version 2007) and were then imported into SPSS and STATA to carry out analysis.

Variable measures

Corporate performance

Literatures used a number of measurements for a company's financial performance. Basically, these measurements were divided into accounting and market based measures. Examples of accounting based measures are return on equity (ROE), return on asset (ROA) and also gross margin (GM). It represented the financial ratios computed from the balance sheet and financial statements of companies and were found to be commonly used by researchers of similar studies (Abor, 2005; Gorton and Richard, 1995; Majumdar and Chhibber, 1999). Market based measures on the other hand are price-to-earnings ratio (P/E ratio), market value of equity to book value of equity (MBVR) and stock volatility.

In an environment (in particular emerging economies) where the stock market are lacking in maturity and liquidity, using market based measures will not provide good and reliable results compared to accounting based measures. Therefore this study will use three accounting based measures to measure corporate performance namely ROA, computed as the ratio of net profit for the year to total assets; ROE, computed as the ratio of net profit for the year to total equity and lastly GM, computed as the ratio of gross profit to sales revenue.
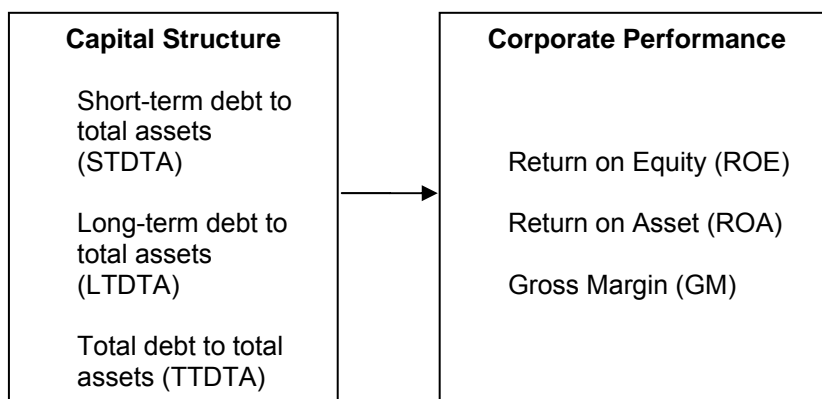
Debt level

One of the main factors that affect corporate performance is capital structure. The concern of capital structure relates mainly to the amount of debt a company uses to finance its assets, which also known as financial leverage. The financial leverage level of a company is usually considered when analyzing capital structure because it provides insight into the risk level of a company. A company with high level of debt is considered risky because it is more likely to face bankruptcy (Altman, 1984) and financial distress (Opler and Titman, 1994). Rajan and Zingales (1995) suggested that the choice of measure (book value or market value) should be based on the objective of the analysis carried out. Similar to corporate performance, measures of financial leverage of a company can be classified as book value and market value based measures.

Following Abor (2005) and Ebaid (2009), the independent variable which is financial leverage is measured by three ratios, namely short-term debt to total asset (STDTA) ratio, long-term debt to total asset ratio (LTDTA) and total debt to total asset ratio (TTDTA). These measurements come about based on the arguments presented by Wijst and Thurik (1993) that any determinants of financial leverage based only on total liabilities may ignore the importance of the difference between short-term and long-term debt. For example, the total liabilities to total asset ratio may be useful as a measure to what is left for shareholders after liquidation, but is not a good measurement to indicate a company's default risk in the short term. This is because liabilities that are used for transaction purposes such as accounts payable will overstate the leverage of a company. Also, since total liabilities is a sum of all balance sheet liabilities items including liabilities that are not related to financing, such as pension liabilities, thereby may overstate the financial leverage. Furthermore, MacKay and Philips (2005) pointed out that the use of book value of financial leverage can be justified on the ground that managers extract the value of debts from the books rather than market value when designing the capital structure. Hence, to get a better understanding on a company's true financial leverage level, the proposed three financial leverage ratios are used in this study. This research was undertaken to investigate the relationship

between debt level and corporate performance. Hence, a research framework (Figure 1 below) was developed to show the link and relationship between the dependent and independent variables as portrayed below:

Figure 1: Research Framework

Capital Structure	Corporate Performance
Short-term debt to total assets (STDTA) Long-term debt to total assets (LTDTA) Total debt to total assets (TTDTA)	Return on Equity (ROE) Return on Asset (ROA) Gross Margin (GM)

RESULTS DISCUSSION

Descriptive analysis

Table 1.1 provides a summary of descriptive statistics which could be interpreted in the light of firstly, the average performance (i.e. mean of ROE, ROA and GM) of the companies for the past 11 years and secondly, the debt dependency of the Malaysian oil and gas companies (i.e. the mean of TTDTA).

Table 1.1: Descriptive Statistics

Variable	Mean	St Dev	Min.	Med	Max.
ROE	0.2242	2.4393	-1.8636	0.1142	5.9883
ROA	-0.0493	1.4094	-20.8220	0.0558	0.3363
GM	0.1887	0.4236	-5.1534	0.1881	1.0000
STDTA	0.4610	0.3351	0.0000	0.3911	1.0000
LTDTA	0.4708	0.3361	0.0000	0.5259	1.0000
TTDTA	0.2703	0.1927	0.0000	0.2728	0.8049

Firstly, the mean values of ROE, ROA and GM were recorded at 0.2242, -0.0493 and 0.1887 respectively whereas the median values for these three variables were 0.1142, 0.0558 and 0.1881 respectively. These results indicated that the Malaysian oil and gas industry recorded moderate performances during the 11 year period from the year 2003 to 2013 in respect to ROE and GM but a relatively poor performance in terms of ROA which stands at a mean of around negative five percent. This may be due to the negative impact of the global financial crisis in 2008 and 2009 in which the industry's ROA reduced by half from around 10 percent to five percent in 2008. In overall, the oil and gas industry of Malaysia is still in the process of expansion in terms of the number of public listed companies. There were only 12 Malaysian public listed oil and gas companies in 2003 but the number of companies more than doubled for the past 11 years, with a total of 29 public listed oil and gas companies registered in 2013.

Secondly, the TTDTA ratio had an average value of 0.2703 and median value was recorded at 0.2728 over the past 11 years. These readings suggested that the public listed oil and gas companies in Malaysia in general do not rely heavily on debt as only approximately 27 percent of assets were financed by debt. Consequently, this suggested that these companies operated with low level of debt. On the other hand, these readings also pointed out that oil and gas companies which were known to be capital intensive in nature, operates with a huge asset base hence explaining the low value of TTDTA ratio. With respect to short-term and long-term debts, the mean values for STDTA and LTDTA were 0.4610 and 0.4708 respectively and the median values were recorded at 0.3911 and 0.5259 respectively, suggesting that the oil and gas companies in Malaysia have equal accessibility to short and long term debts in the market, hence the assets of these companies were financed equally (approximately 50 percent each) by short-term and long-term debts. Furthermore, these results implied that Malaysia has a considerably developed debt capital market that provides not only direct borrowings from banks but allows public listed companies to carry out financing activities in the form of corporate bonds and various debt issuances.

Regression Analysis

Table 1.2: Regression analysis results with ROE as dependent variable

Variable	Model 1	Model 2
STDTA	-1.860(0.062*)	
LTDTA	-4.940(0.00***)	
TTDTA		-5.480(0.00***)
Constant	4.930(0.000***)	5.610(0.000***)
R-Squared	0.246	0.196
F-Value	14.520	30.050
Sig.	0.000	0.000

*, *** *indicate significance at 0.10 and 0.01 level respectively.*

Table 1.2 presented the results of testing the relationship between capital structure and firm's return on equity (ROE). The significance of this relationship was tested through two models in which STDTA and LTDTA ratios were used as the independent variables in Model 1, and TTDTA as independent variable under model 2. F-statistics was to prove the validity of the models. Following the results of Hausman test, the random effect estimator models were used to generate the regression results of both Model 1 and Model 2. Result revealed that LTDTA and TTDTA were found to have negative relationship with firm's ROE. In model 1, the coefficient of LTDTA was negative at one percent significance level. This suggests an increase in long term debt levels within a company's capital structure is associated with a decrease in profitability as measured by ROE.

As described by the descriptive analysis earlier, the average ROE (around 22 percent) for the past 11 years may be underperforming due to the Malaysian oil and gas companies' strong reliance on short-term and long-term debts to finance their assets which was proven to have a significant negative relationship with shareholders' return. This can be argued that debt financing activities in Malaysia are considerably expensive, thus increasing the related financing costs which ultimately impacts the profitability. In short, debt level is proved to have a negative significant relationship with the profitability of companies measured by ROE.

Table 1.3: Regression analysis results with GM as dependent variable

Variable	Model 1	Model 2
STDTA	-0.190(0.846)	
LTDTA	2.41(0.018)	
TTDTA		1.15(0.249)
Constant	0.798(-0.260)	0.588(0.54)
R-Squared	0.009	0.002
F-Value	0.400	0.250
Sig.	0.672	0.614

Table 1.3 depicts the result of relationship between capital structure and the firm's gross margin (GM). The significance of this relationship was tested under two models with STDTA, LTDTA ratios as the independent variables in Model 1 and TTDTA as the sole independent variable in Model 2. Following the Hausman Test, fixed effect estimator models were used to generate the regression results of Model 1 and the random effect estimator model was used for Model 2. The result revealed that all the three variables were found to have no significant relationship with firm's gross margin. This can further be explained by the coefficients of STDTA, LTDTA in Model 1 and also the coefficient of TTDTA in model 2 that shows no statistical significance of at least 10 percent significance level. Thus, it was proven statistically that STDTA, LTDTA and TTDTA have no significant relationships with corporate performance as measured by GM.

Table 1.4: Regression analysis results with ROA as dependent variable

Variable	Model 1	Model 2
STDTA	-0.920(0.362)	
LTDTA	-0.470(0.639)	
TTDTA		-0.940(0.352)
Constant	2.790(0.007*)	3.200(0.002**)
R-Squared	0.148	0.129
F-Value	7.710	18.250
Sig.	0.000	0.000

*, ** *indicate significance at 0.10 and 0.05 level respectively.*

Table 1.4 presented the results of testing the relationship between capital structure and corporate performance represented by firm's return on asset (ROA). Similarly, the significance of this relationship was tested under two models in which STDTA, LTDTA ratios were the independent variables in Model 1 and TTDTA was the sole independent variable in Model 2. Following the results of Hausman test, the fixed effect estimator models were used to generate the regression results of both Model 1 and Model 2. Results in Table 1.4 indicated that capital structure was found to have no significant relationship with the firm's return on asset. The negative coefficients of STDTA, LTDTA in Model 1 and the negative coefficient of TTDTA in model 2 did not show statistical significance of at least 10 percent significance level. The R-square value of Model 1 indicated that around 14.8 percent of the volatility in profitability in terms of ROA can be explained by the change in STDTA and LTDTA whereas TTDTA explained around 12.9 percent of it according to the R-square value of Model 2. The remaining changes in ROA were to be explained by other factors. Hence, it can be concluded that capital structure do not significant relationship with corporate performance as measured by ROA. In general terms, the readings found in Table 1.4 indicated that the capital structure choice, i.e. the amount of debt level, had no significant impact on the corporate performance of the oil and gas companies in Malaysia as measured by ROA.

CONCLUSION

Based on the empirical results achieved, it was proven that capital structure represented by LTDTA and TTDTA had a negative significant relationship with the corporate performance represented by ROE of the oil and gas companies in Malaysia. In other words, the higher the long-term debt level of the company is, the less profitable it will be for shareholders. Moreover, results shown in Table 1.3 and 1.4 implied that capital structure choices were irrelevant and did not have significant impact on the profitability of companies measured by GM and ROA. Nevertheless, in general terms, capital structure is proved to have a significant negative impact on the profitability of oil and gas companies in Malaysia.

These findings were found to be consistent with those of Fischer et. al (1989); Rajan and Zingales (1995); Chen and Strange (2005); Zeitun and Gang Tian (2007); and Salim and Yadav (2012) which suggested that the negative relationship between capital structure and firm's ROE was due to the costs companies have to bear associated with the default risks of incurring high debt levels. Apart from that, the findings support the trade off theory that predicted a negative relation between capital structure and profitability of a company due to the risks and costs of bankruptcy and financial distress. The theory explains that due to the tax shield provided by debts, companies will increase their debt level but at the same time, debt also increases their risk level. Moreover, results obtained in Table 1.2 can be further supported by the pecking order theory of Myers (1984) which stated that companies that are profitable will prioritize the use of internal funds, i.e. retained earnings, to finance the businesses and are expected to use less debt capital. As a result, there is a negative relationship between debt capital and profitability of a company. The findings however contradicted with that of Abor (2005) in Ghana where capital structure was said to have positive relationship with ROE where profitable companies have high dependence on debt as their financing choices, consisting mainly of short-term debts. Capital structure choices made by companies are among important factors that influence their companies' performances. This paper provides a comprehensive study on the issue of optimal capital structure by highlighting relevant theories of capital structure and also unbiased comparison among various empirical studies done on this subject across different countries and sectors. Therefore, it is the duty of the managers to always consider the effects of leverage to firm's profitability as it enables them to take necessary steps to maximize shareholders' wealth.

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