# THE RELATIONSHIP BETWEEN LEVERAGE AND FINANCIAL PERFORMANCE OF SHARIAH COMPLIANT COMPANIES MALAYSIA

By:

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#### Abstract

Shariah compliant securities become popular among investors nowadays because they found that these securities are more ethical stance and transparent over product profitability activities. This paper study on the influences of debt toward financial performance of shariah compliant companies which listed under Kuala Lumpur Shariah Index of Bursa Malaysia from the year 2006 until 2010. We found that Shariah Compliant Companies performance are influence by leverage ratio when Debt ratio and Long term debt ratio showed a significant negative relationship with performance proxy by profitability. In order to sustain the level of companies performance the managers need to reduce the level of debt financing so that the company will not suffer a high financial risk. Generally, 78% of the shariah compliant securities have an ideal debt ratio around 0% - 33%. However, 22% of shariah compliant companies have more that 34% debt ratio which is not healthy for the companies in the long run. Industrial product market sectors have the highest percentage of leverage level at 27% follow by consumer product at 26% and trading and services (16%). Therefore there are needs to overcome the leverage problem among shariah compliant companies in order to improve the performance of shariah compliant securities to be listed in KLSI in the future.

Keywords: Financial Performance, Capital Structure, Shariah Compliant Companies, Kuala Lumpur Shariah Index, leverage

# 1. Introduction

The Shariah Approved Companies that traded their shares in the opened market listed in Bursa Malaysia Main Board are known as Shariah Compliant Securities. In Malaysia the number of shariah complaint securities had increased year by year. About 86 per cent of the securities listed on Bursa Malaysia are shariah-compliant (Bursa Malaysia, 2011). The existent of shariah complaint securities had made Malaysia as one of the best Islamic Capital Market in Asia. (Bursa Malaysia, 2011).

However there are some investors who claim that most of the shariah complaints securities are not as performing as other conventional companies because their investment are limited to a certain type of investments as restricted by shariah principles which will reduce the companies investment returns. However Noriah<sup>1</sup> (2009) claimed that this happened because some investors lack of experience and knowledge of investment exposure. She stated that shariah compliant securities performed similar with the conventional securities in the long run and most of shariah compliant securities are less leverage in their capital management and that is why during the economic downturn they tend to be more resilient compared to non compliant securities.

The performance of a company is not rely on the investment return only but also through the level of leverage in the companies' capital structure where most of the companies fail to identified. Besides that shariah compliant securities are more ethical and transparent in operating the profitability activities because they are bound by Islamic shariah principles and responsible to provide true and fair view information to investors on the companies' investments activities and transactions (Noriah, 2009). The combination of Islamic values in business transaction will increase the level of confidence among investors' to invest in shariah compliant companies. As a result the shariah compliant companies performance will improve in the future.

In the new era of globalization, most investors are seeking for more ethical or screened investment in line with shariah principle for superior investment decision or choice (Mohamed Albaity and Rubi Ahmad ,2008). Shariah compliant securities in Bursa Malaysia has grown from 279 companies in 1999 to 847 companies in the year 2011. The drastic growth of shariah compliant securities forces Bursa Malaysia to expand its index series by launching new shariah benchmark index, the FTSE Bursa Malaysia Emas Shariah Index replacing Kuala Lumpur Shariah Index (KLSI) as a broad reference for shariah compliant equity in Malaysia. Recently Bursa Malaysia launched the new FBM Hijrah Shariah Index to expend its existing index series which internationally accepted benchmark designed using FTSE's global indexing standard (Bursa Malaysia, 2011). This rigorous movement had increase the level of competitiveness among shariah compliant securities in Malaysia and creates more opportunities for investors seeking for shariah investments as part of their other investment portfolio.

On 27 May 2011 the Securities Commission Malaysia (SC) released an updated list of Shariah-compliant securities approved by its Shariah Advisory Council (SAC) featuring a total of 847 Shariah-compliant counters which constitute 89% of the total 957 listed securities on Bursa Malaysia. The list includes 24 newly classified Shariah-compliant securities. It also indicates that Shariah-compliant securities are well represented in all sectors of industry (see tables 1). (Bursa Malaysia, 2011)

<sup>&</sup>lt;sup>1</sup> Datuk Noriah Kamso is the CEO of CIMB –Principal Assets Management Bhd.

Market Sector	Syariah-compliant	Total Securities	Percentage (%) of Syariah-
	Securities		compliant Securities
Consumer Products	130	142	92
Industrial Products	276	287	96
Mining	1	1	100
Construction	45	46	98
Trading / Services	169	195	87
Properties	76	90	84
Plantation	38	41	93
Technology	102	104	98
Infrastructure (IPC)	7	7	100
Finance	3	38	8
Hotels	Nil	5	Nil
Closed End Fund	Nil	1	Nil
TOTAL	847	957	89

 Table 1: Syariah-Compliant Securities on Bursa Malaysia December 2010

Souce: Bursa Malaysia(2011)

From Table 1 we can see that more than 84% of companies listed under Bursa Malaysia are shariah compliant securities except for Hotels and Closed End Fund. However there is a poor percentage shown by Finance market sector under shariah compliant securities where from 38 securities only 38 securities (7%) are classified under shariah compliant securities listed in Bursa Malaysia in the year 2010.

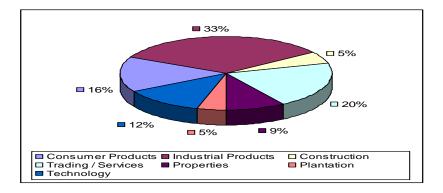


Diagram 1 : The Percentage of Major Market Sectors of Shariah Compliant Company Listed in Bursa Malaysia 2010

The percentage of major sectors in shariah compliant securities listed can be summarised in diagram 1. The diagram shows that 33% of the shariah compliant securities market sectors are from the Industrial Product follow by 20% and 16% coming from Trading/Services and Consumer Products respectively. Market sector for Technology and

Properties have the percentage of 12% and 9% each. However Construction and Plantation sharing the same 5% of the overall shariah compliant major market sectors listed in Bursa Malaysia.

In order to maintain an outstanding performance, the shariah compliant securities in Bursa Malaysia need to sustain a controllable level of leverage and continuous growth in financial performance in the long run. When the levels of leverage are so high, there is a probability that these securities will suffer a financial problem in the future.

The Shariah Approved Companies(SAC) need to fulfill shariah compliance criteria in order to be listed in KLSI of Bursa Malaysia and one of the criteria is that total interest bearing debt should not exceed 40% of the total assets. The question is how many percent of total debt to total assets that need to be bear by shariah compliant companies in order to be classified in KLSI? There should be stricter rules on the limit of debt level among the shariah compliant companies. Having a high level of debt can reduce the company's performance and that is why Dow Jones Index set the norm for level of debt financing should be less than 33% of market capitalization or debt capital ratio (Khatkhatay and Nisar, 2008). The companies listed under Dow Jones Index are the companies that are globally accepted and highly recognized by all investors around the world. Shariah Compliant companies should be aware that having a high level of debt can cause high risk of liquidation especially during the economics crisis. Therefore the objectives of this research is to investigate whether the existent of debt financing influence the financial performance of Kuala Lumpur Shariah Index (KLSI)..

## 2. Literature Review

The existent of shariah compliant securities listed in Bursa Malaysia proved that there is an increased demand for shariah compliant investment product in the market. The Shariah Approved companies must show to the public that they are serious in managing their companies following the shariah principle and careful in deciding the debt equity choices of the company. Financial performances of companies are sensitive to capital structure movement and therefore management must make wise decisions in organizing the debt equity rate of changes.

The utilization of different level of debt and equity in company capital structure is part of manager's strategy to improve company performance (Zuraidah, 2009). Therefore the management must make the right decision in selecting the ideal capital structure of the company because the level of company debt and equity are correlated to the company overall financial position and performance. Hagel. J. Brown. J. S and Davison. L. (2010) claimed that the way to distinguishing the effectiveness of the companies' capabilities is by looking at the overall financial performance. Most of the investors are demanding nearly perfect information to analyze the performance of the companies so as to make sure their investment can accumulate wealth accordance to shariah law (Mohd and Abdul, 2008).

In Malaysia several researches have been done on capital structure and performance. Most of the researchers used ROA and ROE as an indicator or proxy to represent performance of the company. Zuraida (2009) performed an empirical study on the impact of capital structure on operating performance of 240 companies in Malaysia in the year 2002-2007 and found that ROA had significant positive relationship with capital structure consistent with Philips and Sipahioglu (2004) and Grossman and Hart (1986) findings. She conclude that the higher the level of debt in the company capital structure, the higher the company performance.

Another performance indicator that commonly used to measure company performance is Profitability (PROF). Pandey (2004) provides a new insight of interrelationship between capital structure and market power and between capital structures with profitability by using the data of companies listed on the Kuala Lumpur Stock Exchange from the year 1994-2000. He found the existent of saucer-shaped relation between capital structure and profitability proxy by EBIT/TA, due to the effect of agency theory, cost of external financing and debt tax shield. This showed that performance proxy by profitability have a significant effect on the capital structure.

Myers (1984) is the one who introduced the pecking order theory clarified that in the world of information asymmetry, corporate managers tend to use internal financing as the main sources for firm growth opportunities follow by debt financing and lastly the equity to cover any remaining (Zuraidah, 2009). According to the pecking order hypothesis, company with high profitability or high earning are expected to use less debt financing than those company with low earning. How strong the effect of profitability toward the capital structure based on this theory will be tested on the shariah compliant companies later in this study.

The relative size of individual firms is associated with the capital structure. Hence, a number of research found that there is a significant positive relationship between leverage ratio and firm's size (Huang & Song, 2006; Ozkan, 2001). Large firms more often than not prefer long-term debt while small firms usually go for short-term debt. This is because large firms could benefit from economies of large scale in issuing long-term debt, and may even have bargaining power over creditors.

Beside that Chandran (2003) investigates the relationship between capital structure and corporate performance of industrial product sectors of 53 companies listed from 1996-2001 concluded that capital structure have significant negative relationship with corporate performance. Foo (2002) focus on trading/services sector and Plantation sectors for the period 1996-2000 found that capital structure have significant negative relationship with corporate performance. Both sectors have very low debt ratio and low level of common equity Trading & services have large proportion of long term debt. However Plantation has low liability excluding debt usage in maximizing their corporate performance. This implied that the nature of the industry or sectors effect the debt financing decision and the company performance. As a conclusion, the right decision in selecting the capital structure of the company somehow correlated to the company overall financial position and performance

# 3. Data and Methodology

This study uses the financial data from shariah compliant company listed on Bursa Malaysia Kuala Lumpur Index (KLSI) and covering various market sectors excluding finance, hotel and mining from the financial year 2006 to 2010. The five years of observation was taken because to ensure the robustness of data collected for the study. Companies with missing data are excluded from the study. After eliminating the outliers, the sample size is 583 companies for each year are analyzed. This study utilized regression analysis to test the hypotheses formulated using financial data collected from Datastream. Regression analysis using the Ordinary Least Square (OLS) regression will also be utilized to confirm the hypotheses which had been developed from overall analysis from all industries listed under the shariah compliant companies of Bursa Malaysia.

## 4. Determinants of the Variables

The variables selected for this research are taken from past literature. These variables are represented by proxies as in Table 2 below.

Variables	Proxies	
Performance (Dependent)	Profitability	PROF
	(EBIT to Total Assets)	
Leverage ratio (Independent)	Debt Ratio	DTA
	(Debt to Total Assets)	
	Short Term Ratio	STD
	(Short Term Debt to	
	Total Assets)	
	Log Total Assets	LGTA

Table 2:	Variable and	Proxies
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The expected direction of the relationships between dependent and independent variable are described under the hypotheses developed below.

## **5. Hypotheses**

Fauzias and Shamshubaridah (2009) had statistically found that leverage proxy by total debt had a significant negative relationship with financial performance. Those companies consumed high debt to finance their investment will face a low performance. It can be concluded that the performance of the companies is influence by the level of debt financing they consumed. Therefore the first hypothesis proposed..

Ho: Leverage has no significant effect on shariah compliant companies' performance

H1a: Leverage has significant effect on shariah compliant companies' performance

According to Myers (1984) on the pecking order hypothesis, company with high profitability or high earning are expected to use less debt financing than those company with low earning. Therefore the third hypotheses is developed to test the existent of pecking order theory in Shariah compliant companies in Bursa Malaysia.

H2: Leverage proxy by debt ratio and short term debt has a negative relationship with Profitability

Huang & Song (2006) and Ozkan (2001) claimed that size of individual firms is associated with the capital structure. Hence, a number of research found that there is a significant positive relationship between leverage ratio and firm's size. Therefore the second hypothesis is developed:

H2: Companies Size proxy by total assets has a positive relationship with Profitability

## 6. Variable measure

The financial performance known as a dependent variable is proxy by Profitability (PROF). The influences of the three independent variables will be tested to financial performance mentioned above by using the following equation:

 $PROF = \alpha + \beta o^* DTA + \beta 1^*STD + \beta 2^*LGTA + \epsilon$ 

Where PROF r	epresents the performance:
PROF	- Earning before Interest & Tax over Total Assets
α	- Intercept
3	- Error term
DTA	- Total Debt over Total Assets
STD	- Short Term Debt over Total Assets
LGTA	- Log Total Assets

## 7. Empirical Result

## 7.1 Descriptive Statistics

The following Table 3 captures the descriptive statistics for of dependent variable which is PROF and independent variables are DTA, STD and LGTA. The profitability (PROF) showed a mean of 0.014 at the lowers value of - 14.688 and a higher value of 0.414. The standard deviation of PROF is 0.617. The statistics shows an average of Debt ratio (TDEBT) proxy of total debt by total assets at 23.687 which the minimum range is at 0.02 to 215.77. The standard deviation of total debt (DTA) is 18.119. The short term debt (STD) measure by short term debt over total assets started with a minimum range of zero to a maximum of 2.211. The mean is at 0.145 and a standard deviation of 0.161. Total Assets represents by Log total assets (LGTA) showed a range of a minimum value 2.908 to a maximum value of 7.842 and at an average of 5.418. The standard deviation of LGTA is 0.609.

 Table 3: Descriptive Statistics of Shariah Compliant Securities Leverage and Financial Performance from the year

 2006-2010

	Ν	Minimum	Maximum	Mean	Std. Deviation
PROF	583	-14.688	0.414	0.014	0.617
DTA	583	0.020	215.770	23.687	18.119
STD	583	0.000	2.211	0.145	0.161
LGTA	583	2.908	7.842	5.418	0.609

## 7.2 Pearson Correlation Analysis

The following Table 4 discusses the correlation among dependent variable and independent variable. It is important to ensure those independent variables are not significantly correlated among them. High Corrections among independent variables may distort the standard error of estimation. This may lead to incorrect conclusion of the independent variable. There are known as multicollinearity. Thus, Pearson correlation was employed to test whether the multicollinearity of the independent variable selected in this study would be an issue. Before doing the multiple regression analysis, normality plots and detrended normal plots were used to examine whether the data are normally distributed.

From Table 4 the Pearson Correlation matrix shows that DTA and STD (0.753), DTA and LGTA (0.138) and STD and LGTA (0.111) are significant correlated with each other. However the coefficients of correlation are relatively low and not highly correlated with each other. Field (2005) suggested that multicollinearity would only be major issues when the coefficient of correlation is more than 0.80. The result indicated below showed that most of the independent variables are less than 0.8. There is no problem of multicollinearity in this study and this will increase the level of credibility of the study.

#### **Table 4** : Pearson Correlations Matrix

	PROF	DTA	LTD	LGTA
PROF	1			
DTA	-0.460(**)	1		
STD	-0.563(**)	0.753(**)	1	
LGTA	0.222(**)	0.138(**)	-0.111(**)	1

\*\* significant at the 0.01 level (2-tailed).

#### 7.3 Coefficient of the Regression Model

The F test shown in Table 6 indicate the model used in this research are significant in explaining the PROF however the explanatory power of the model as shown by R-square value are at 35.6%. The main finding of this research shown in Table 7 where there is a significant negative impact of Debt ratio (DTA) and short term debt (STD) on PROF. The negative coefficients sign indicate that total debt and short term have significant influence on reduction of companies' performance. The higher the leverage (total debt and short term), the lower the company's performance level. So, in order to maintain or increase the level of companies performance the managers need to reduced the level of debt financing so that the company will not a suffer a high financial risk which can jeopardize the companies performance in the future. This finding strongly supports hypothesis H1a and H2. The null hypothesis (Ho) is reject. Therefore, it can be concluded that the Shariah Compliant Companies performance are influence by leverage ratio like Loh (2009) Chandran(2003) and Foo (2002) finding.

However size of the companies proxy by log total assets (LGTA) show a significant positives relationship with performance proxy by PROF. This finding shows that the bigger the shariah compliant companies the higher the companies' performance. Therefore H3 are accepted and this finding supported by Huang & Song (2006) and Ozkan (2001) studied.

#### Table 5 : ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.845	3	26.282	106.690	0.000
	Residual	142.628	579	0.246		
	Total	221.473	582			

a Predictors: (Constant), DTA, STD, LGTA

b Dependent Variable: PROF

Table 6 : Model Summary of Shariah Compliant Companie	Table 6 : Mo	del Summary	of Shariah	Compliant	Companies
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Model	ĸ	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.597	0.356	0.353	0.496	1.843

a Predictors: (Constant), DTA,LGTA,STD

b Dependent Variable: PROF

#### **Table 7**: Coefficient of the Regression Model of Debt Ratio

Model		Unstandardiz Coefficients	zed	Standardized Coefficients	Т	Sig.	Collinearity S	tatistics
		в	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-0.735	0.194		-3.792	0.000		
	DTA	-0.006	0.002	-0.188	-3.487	0.001	0.383	2.612
	STD	-1.524	0.205	-0.398	-7.418	0.000	0.386	2.594
	LGTA	0.207	0.036	0.204	5.728	0.000	0.875	1.143

Dependent Variable: PROF

\*\* significant at the 0.01 level (2-tailed).

\* significant at the 0.05 level (2-tailed).

# 6. Trend Analysis of Shariah Compliant Securities Level of Debt Financing by Sectors from the year 2006-2010

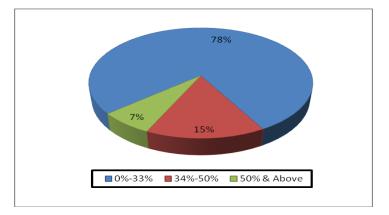
Dow Jones Index set the norm for level of debt financing to be less than 33% of market capitalization or debt capital ratio for the companies that want to be listed under their shariah compliant securities. However in Bursa Malaysia there is no restriction on the level of debt for the shariah Approved companies to be listed under KLSI. Therefore based on Dow Jones Index rules, this study will used 34% debt ratio as the benchmark to investigate the level of debt among the shariah compliant companies listed in Bursa Malaysia as Khatkhatay and Nisar (2008) claimed that using debt ratio would be more rational than using the ratio of debt capital market because debt ratio are more reliable in measuring the actual value of debt used by the companies.

Based on the above empirical result, we can conclude that the shariah compliant securities performances are affected by the leverage level proxy by debt ratio so we analyse further the effect of leverage by examining the level of debt ratio of 583 Syariah Compliant companies and found that about 78% of the shariah compliant securities have 0% -33% level of debt ratio which is an ideal level of debt recommended by Dow Jones Index as a syariah compliant companies. However we found that 129 companies have debt ratio more than 34% as shown in Table 8 and

Diagram 2. This is not a healthy way for syariah compliant companies to finance their debt although the percentage of companies having 34% and above debt ratio is quite low (22%).Bursa Malaysia should take several preventive action to avoid this matter from getting worst in the future in order to make KLSI competitive with other Islamic market.

<b>TABLE 8</b> : The Level of Debt Ratio of Shariah Compliant Securities Listed under Bursa
Malaysia from the year 2006-2010

Debt Ratio (%)	No. of Companies	Percentage
0%-33%	454	78%
34%-50%	89	15%
50% & Above	40	7%
Total	583	100%

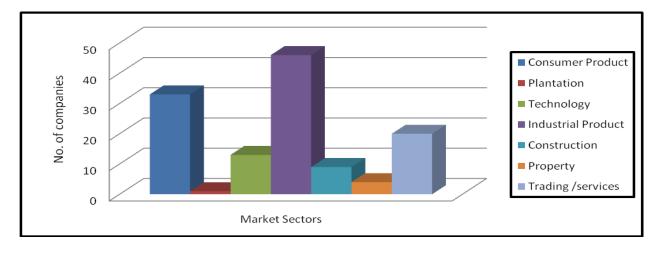


**Digram 2**: The Level of Debt Ratio of 583 Shariah Compliant Securities Listed under Bursa Malaysia from the year 2006-2010

Table 9 and Diagram 3 clarified that the highest percentage of market sectors enquire more than 34% leverage level of Debt ratio are the industrial product (37%) of and consumer product (26%). Followed by trading /services (16%), technology (10%), construction (7%), property (35%) and plantation (1%). Industrial product and consumer product are the highest market sectors that contribute to the highest level of debt in syariah compliant companies since there are possibilities that different market sectors of companies listed in KLSI have different financial background that would affect the pattern of capital structure of the companies' performance based on Chandran (2003) and Foo(2002) studied.

Market Sectors	Shariah Compliant Companies	Percentages
Consumer Product	33	26%
Plantation	1	1%
Technology	13	10%
Industrial Product	46	37%
Construction	9	7%
Property	4	3%
Trading /services	20	16%
TOTAL	126	100%

**Table 9**: The Trend Analysis of 126 Shariah Compliant Securities with More than 34% Debt Ratio by Sectors from<br/>the year 2006-2010



# **Diagram 3**: The Analysis of 126 Shariah Compliant Securities with More than 34% Debt Ratio by Sectors from the year 2006-2010

#### Table 10: Summary of Hypothesis Testing

Hypothesis	Statement	Remarks
H0	Leverage has no significant effect on shariah compliant companies' performance	Rejected
H1a	Leverage has significant effect on shariah compliant companies' performance	Accepted
H2	Leverage proxy by debt ratio and short term debt has a negative relationship with PROF	Accepted
H3	Companies Size proxy by total assets has a positive relationship with PROF	Accepted

# 8. Summary Conclusion

Shariah Compliant securities listed in KLSI are companies that follow the shariah principle stated by the Shariah Advisory Council (SAC) of Security Commission (SC) of Bursa Malaysia. There are several Shariah Compliance criteria that need to be fulfill by the listed Shariah Approved companies in KLSI and one of the criteria is total interest bearing debt of the investee company should not exceed 40% of the total assets. Based on our observation there are some companies listed in KLSI fail to follow the criteria. High debt financing can influence the companies' performance. Therefore this paper examines the performance of shariah compliant securities listed under KLSI by looking deeply on the level of leverage of 573 shariah compliant securities listed in KLSI from the year 2006-2010. We found that leverage ratio proxies by total debt ratio and short term debt ratio, influence the of shariah compliant securities performance (PROF) when the empirical result show that there is a significant negative relationship between leverage (DTA and STD) and the performance (PROF). The negative coefficient sign indicate that the higher the debt level the lower the companies performance. This result also consistent with the pecking order theory prove by Myers(1984) which explain that most of shariah compliant companies prefer to used their earning as the main financial sources to generate fund rather than debt or equity. Therefore in order to maintain or increase the level of companies performance the managers need to reduced the level of debt financing so that the company will not suffer a high financial risk which can jeopardize the companies performance in the future. This finding strongly supports hypothesis H1a and H2 and rejected the null hypothesis.

Size of the companies' proxy by log total assets (LGTA) shows a significant positives relationship with performance proxy by PROF. This finding shows that size of the companies also play an important roles in determining the companies' performance. The bigger the shariah compliant companies the higher the companies' performance.

A deeper analysis is done to analyze the level of debt financing that shariah compliant securities have in each market sectors. Our finding show that 129 of 583 companies listed in KLSI have more than 34% of debt ratio in their debt financing which is not healthy for the companies. Industrial product have the highest percentage of Debt ratio at 37% follow by consumer product at 26% and trading and services(16%). Based on this finding, it can be concluded that 22% of the shariah compliant securities in KLSI have more than 34% leverage level proxy by debt ratio. This is because there are possibilities that different market sectors of companies listed in KLSI have different financial background that would affect the pattern of capital structure of the companies' performance based on Chandran (2003) and Foo(2002) studied.

In order to maintain or increase the level of companies performance, Bursa Malaysia need to set a benchmark for the level of debt financing for those companies want to be listed in KLSI like what Dow Jones Index did where they set the norm for level of debt financing to be less than 33% of market capitalization or debt capital ratio for the shariah compliant securities to be list in their global market (Khatkhatay & Nisar ,2008). So that the company will not suffer a high financial risk which can jeopardize the companies performance in the future. Therefore it is advisable for shariah compliant securities listed under KLSI to monitor their level of debt financing in order to achieve better performance and competitive in the global market.

## 9. Limitation and Recommendations

In assessing the findings of this study, it is important to interpret the results in the scope of this research's limitations. The numbers of industries and companies listed under shariah compliant securities under KLSI bursa are limited. Unavailability of data from Datastream reduced the number of sample gathered to 846 companies to 583 companies for over five years started from 2006 until 2010. The result may not represent the result of all the securities because of the missing data. For future research, it is recommended that more and new variable of performance and leverage ratio to use in order to obtain more comprehensive result.

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