

# THE DETERMINANTS OF FINANCIAL INDUSTRY PROFITABILITY IN MALAYSIA

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## Abstract

Profitability is one of the important roles that gauge the growth of financial organization. Using a data set period 2001 to 2011, this paper evaluates the impacts of internal and external determinants conditions towards the profitability of financial institution by using static panel data analysis that consist of 21 organization that listed in Bursa Malaysia. The specific determinants of profitability include equity management, asset management, size of organization and inflation. This study employs regression model in order to investigate the relation of explanatory variables towards profitability. This study supports strong recommendations that internal factors should be taken into account when determining profitability of a firm but external factor should have more evaluation and analysis because there is positive insignificant result appear. This study suggests that equity management is the most eligible factor that the variation of profitability. The highest of equity management, the risk in obtain the profitability will reduced as the larger financial services.

**Keywords:** Financial Institution, Profitability, Accounting Indicator, Economic Indicator, Firm Performance

## 1.0 INTRODUCTION

In recent year, the condition of economy can be considered in steadily growth through the growing of various sectors in country. Profitability is the indication to the organization's performance which highlight the importance of financial stability and good management. In Malaysia, among all the sectors within an economy, the financial institution can be one of the sectors that contribute to the growth of economy and the most closely supervised and regulated by Bank Negara Malaysia (BNM). Therefore, it is commonly agreed that financial and non-financial institutions are necessary in ensuring the sustainability of profitability within all the time services and committing in promoting financial stability as a progressive financial sector. Today, financial institution is one of the industries that has been accepted as the central financial service. The government has established the development of financial industry as the financial institution by providing the specialized products and financial services to suit the needs of various sectors. Basically, the operation of organization is one of the indicators in indicating the profitability through the utilization of resources in creating the values of revenue with the profit maximization. From the profitability by the operation and activities, their performance will be supervised by central bank in order to ensure the organizations are well performed and best practiced. By this action, the organization always be analysed through the performance over the year and best resolution will be

adapted in order to achieve the requirement of profit's budgeting. Financial Institution in Malaysia has been facing various challenges from the aspect of economies, regulation and also the financial position of organization itself.

The involvement of bank management which is internal determinant in the side of decision and policy will be influenced by the profitability as well as the effect on bank's operating activities (Asma' Rashidah et. al., 2011). Financial institution has been supported by Bank Negara Malaysia, and it can be predicted that the growth of bank's performance and profitability will achieve the target of their objective. However, it is seen that the situation not as predicted. The profitability of bank is not only influenced by the internal side of the bank. Sometimes, over the years, there are always some changes of regulation like deregulation on interest rate and inflation rate which will increase the competition among local banks. Through the increasing of population, it will give an opportunity for the financial organization to offer their products and services in order to increase the demands and profitability for organization. Consequently, this research will be employed in order to analyse the significant relationships between equity management, asset management, size of organization and inflation towards profitability. Through this study, all those variables will analyse the sensitivity and gauge the important of those factors towards the profitability. The study will assist Financial Institution in Malaysia to improve and enhance their profitability performance in the future and to be used by public as their guideline in making decision on investment.

This paper is organised as follows; Section 2 discusses the relevant literature. Section 3 presents the data and method used. Section 4 reports the empirical results. Finally, section 5 contains the concluding remarks.

## **2.0 LITERATURE REVIEW**

Numerous recent studies have employed internal and external factors in determining the profitability of a firm. (Jiang et al., 2003; Sudin, 2004; and Husni et.al. 2011). The financial industry at different countries has been demonstrated in a number of studies. The findings from banking sector of Jordan, UAE, Hong Kong, Ukraine, Pakistan and Philippines could be explained by internal factors including equity management, asset management, size of bank, growth of asset, price earnings ratio and external factors such as inflation, interest rate, exchange rate, gross domestic product (GDP) and others.

Existing empirical evidence shows the importance of equity management in meeting the customers' trusts thus influences the profitability in positive direction. The result is consistent with Husni et.al (2011), Kahf (2004) and Bashir (2003) and they further explain that equity management is important in business support. This is safer safety for bank in running the operation and development of bank through the operation on production which generate cash, sale and profit for the bank. However, Asma' Rashidah et al., (2011) argue that capital adequacy will go for negative influence of bank's profitability hence capital will fall further than interest rate.

According to Muhammad et al. (2011), there is a significant and positive relationship between asset management of operating income against total asset. Husni et Al. (2011) agree with Sudin (2004) that total operating income against total asset is used to capture the effect of internal determinants towards profitability. The findings suggest a significant positive relationship between asset management and profitability. Besides that, the operating income from the asset which generated from loan and deposits value from customer is also one of the activities that increases the revenue for organization in order to improve their profit but this is contradict with the study by Toni (2008). Bashir (2003) was expended

panel data model suggested that return on total asset is significant with profitability which is controllable factors through the management of financial.

Recently, in banking system, the size of bank will be considered as the main subject to public in measuring the profit earns by banks. According to Husni et al., (2011), there is significant and positive relationship between total assets with the profitability. Asma' Rashidah et al., (2011) and Athanasoglou et. al. (2008) supports that larger asset is beneficial towards the customer regarding the ability in enhancing the funds, and providing large financial services. The size of organization can be controlled by the bank as it is the internal management of organization. So, the cost on operation can be negotiated in order to increase the profit. However, Muhammad et al. (2011) and Fadzlan & Rayfaizal (2008) strongly believe that the size of bank is negative and insignificant in relating between both variables which explained by the performance of bank for the recent years. They conclude that total size or growth of asset is not a guarantor to the return of organization's size will be negative due to several factor like the increasing of product diversification which leads lower return. Otherwise, efficiency of bank will be influenced by the size of bank (Nor Hayati & Mohamad Akbar Noor, 2011).

Most of the previous studies agree with the fact on the implication of inflation rate regarding the boom economic and weak economic condition which reflects the financial institution. Sudin (2004) in his study on the profits of conventional banks and similarly affect towards Islamic Banking found that inflation will affect the bank's profitability in a positive way. However, Fadzlan and Rayfaizal (2008) reveal that when there is higher inflation their study has covers the commercial banks in Philippines over the period of 1990-2005 which is reported that bank's profitability has relationship with the inflation, the firm will has proper performance studying the commercial banks in Philippines during 1990-2005 due to increasing cost and labour's wages. Husni et al., (2011), concludes that there is a significant and negative relationship between ROA and inflation. Overall results are mixed. Therefore, it is important to investigate further the profitability of financial institution in Malaysia.

### 3.0 DATA AND METHODS

This research used panel data set which collected on yearly basis that consist data from 2001 until 2011. The sample was collected and computed based on their historical accounting from annual reports includes of balance sheet and income statement through DataStream using the panel data for this study, the data collection is annual observation that taken eleven years within 2001 until 2011 which are 21 organizations as the sample that selected from 39 financial industries in Malaysia, consisting one dependent variable and four independent variables. All the data has been derived into natural logarithm to determine the elasticity in intention to estimate the coefficient of independent variables towards dependent variable. Large value of coefficient will show most elastic variable. As the data represented in numerical, the data is processes and regressed by using Stata program.

The log-log equation is written as follows in equation 1.

$$\ln Y = \alpha + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 \ln X_4 + \varepsilon$$

$$\ln PROF = \alpha + \beta_1 \ln(EQUITYMGT) + \beta_2 \ln(ASSETMGT) + \beta_3 \ln(SIZE) + \beta_4 \ln(INF) + \varepsilon$$

(Equation 1)

Where:

PROF = Return on Asset  
EQUITYMGT = Equity Management  
ASSETMGT = Asset Management  
SIZE = Size of Organization  
INF = Inflation Rate  
 $\alpha$  = Constant value  
 $\beta$  = Coefficient Value  
 $\varepsilon$  = Random Error Term

## Hypothesis

### Equity Management and Profitability

Ho: There is no significant relationship between Equity Management and Profitability.

H1: There is a significant relationship between Equity Management and Profitability.

### Asset Management and Profitability

Ho: There is no significant relationship between Asset Management and Profitability.

H1: There is a significant relationship between Asset Management and Profitability.

### Size of organization and Profitability

Ho: There is no significant relationship between Size of Organization and profitability.

H1: There is a significant relationship between Size of Organization and Profitability.

### Inflation rate and Profitability

Ho: There is no significant relationship between Inflation Rate and Profitability.

H1: There is a significant relationship between Inflation Rate and Profitability.

Table 1 presents the descriptive statistic related to the Return on Asset (ROA) with determinants of the profitability which includes the Equity Management Asset Management, Size of Organization and Inflation.

**Table 1 Descriptive Statistics**

	Profitability	Equity Management	Asset Management	Size of Organization	Inflation
<b>Mean</b>	.0193237	.3289943	.0168587	7123132	.039669
<b>Maximum</b>	.7641399	.8368685	.1628958	1.56e+08	.1033637
<b>Minimum</b>	-.1754954	-.100074	-.1381777	214103	-.0689906
<b>Variance</b>	.0050067	.0791389	.0017467	3.10e+14	.0018829
<b>Coefficient</b>	3.661728	.08550797	2.479039	2.472943	1.093862
<b>Standard Deviation</b>	.0707581	.02813163	.0417935	1.76e+07	.0433924

## 4.0 RESULTS AND ANALYSIS

### 4.1 Correlation Analysis

Correlation test is applied in order to investigate the relationship among the variables. The results of the correlation analysis are shown in Table 2. Generally there are significantly positive correlation between profitability and all variables except for size of bank which also significant but negatively correlated.

**Table 2 Correlation Matrix**

	Profitability	Equity Management	Asset Management	Size of Organization	Inflation
Profitability	1.0000				
Equity management	0.2227	1.0000			
Asset Management	0.4442	0.0740	1.0000		
Size of organization	-0.0577	-0.2879	-0.0307	1.0000	
Inflation	0.0451	-0.0004	0.1350	0.0047	1.0000

### 4.2 Regression Analysis

To determine the most appropriate model to use, Breusch and Pagan multiplier test is conducted. As the result, panel data will be used in this study since the statistics ( $p\text{-value} < 0.05$ ) as shown in Table 3.

**Table 3 Breusch and Pagan Multiplier Test for Random Effects**

	VAR	sd = sqrt (Var)
Lgprof	1.011028	1.005499
e	.3935275	.6273175
u	.1128797	.3359757
Test: Var(u) = 0		
Chi2(1) = 16.06		
Prob>chi2 = 0.0001		

Next, the Hausman Test was used to decide whether to employ Fixed Effect Model (FEM) or Random Effect Model (REM) in the regression analysis. In Table 4 shows, Hausman Test statistics with a p-value of more than 0.05 suggests the use of REM specification.

**Table 4 Hausman Fixed Asset**

	<b>Coefficient</b>			
	<b>(b)</b>	<b>(B)</b>	<b>(b-B)</b>	<b>sqrt(diag (V_b-V_B))</b>
	<b>Fixed</b>	<b>.</b>	<b>difference</b>	
Lgequitymgt	.2672287	.4119231	-.1446944	.1662149
Lgassetmgt	.1268107	.1405972	-.0137865	.0369874
Lgsize	-.2864585	-.232803	-.0536554	.1232473
Lginf	.0343553	.0090121	.0253432	.0316372
Chi2 =	2.48			
Prob>chi2 =	0.6845			

Table 5 shows, the p-value of the z-test indicates overall significance of the models at 5 percent significance level. The evidences depict a significantly positive relationship between independent and dependent variables except for inflation. 1 percent increase in equity management will influence the profitability to increase by 41.19 percent while 1 percent increases in asset management will influence to the profitability to increase by 14.06 percent. Through the large size of equity management, the organization will meet their obligation in providing and mobilizing the funds for consumers that lead to increasing of profitability as the large of menu in services offered by financial organization. Its direction effects of relationship are also found from empirical studies by Kahf (2004), Akhigbe & McNulty (2005), Sufian & Habibullah (2009) and Husni et al. (2011). Whereby, for the other two variables, asset management and size of organization show significant at 5% and 1% respectively which are positive and negative effects to profitability. The relationship of Asset Management and profitability has been found consistent with previous study done by Husni et al. (2011), Muhammad et. al. (2011), Sudin (2004) and Bashir (2003).

**Table 5 Random-Effect GLS Regression**

R-squared : within =	0.1488	Number of obs =	152			
between =	0.7310	Number of groups =	21			
overall =	0.5254	Obs per group: min =	3			
avg =	7.2					
max =	10					
Lgprof	Coef	std. Err.	z	p>  z	(95% conf. Interval)	
Lgequitymgt	.4119231	.126878	3.25	0.001	1.632468	.6605994
Lgassetmgt	.1405972	.0625417	2.25	0.025	.0180176	.2631767
Lgsize	-.232803	.0757461	-3.07	0.002	-.3812627	-.0843434
Lginf	.0090121	.1504198	0.06	0.952	-2.858053	.3038296
_cons	.720944	1.109242	0.65	0.516	-1.45313	2.895018
Sigma_u				.33597567		
Sigma_e				.62731749		
Rho				.22290308		

When the size of organization increases by 1 percent, it will affect the profit level to decrease by 23.28 percent at 1 percent significant level. The result on size of organization has been supported by empirical studies from Husni et al. (2011), Asma Rashidah et al. (2011) and Al-Tamimi (2005). However, the Inflation results on p-value of z-test are not significant as the value is 0.952 which is not the absolute

determinant of profitability of Financial Institution in Malaysia. This result is similar with Syed et al. (2012). As known, basically, inflation will give benefits for financial organization as the increase of interest rate on loan. However, it will reduce the customer demands which discourage them in choosing product offered as the price increases. Besides, inflation is unpredictable which gives - insignificant impact with profitability.

## 5.0 CONCLUSION

This article illustrates the importance of internal and external determinants conditions towards the profitability of financial institution in Malaysia. Therefore, there is an urge to apply panel data analysis to determine the performance of this industry. The results suggest that equity management is the most eligible factors that explain the variation of profitability. The highest of equity management, the risk in obtain the profitability will reduced as the larger financial services. Besides, revenue of organization that give an income for them is involves of services from deposits, loan and other operating revenue. Through the asset, the organization will spend for the investment in order to increase the profitability besides income earned by customers deposit. Moreover, the study findings show that profit is related significantly with asset management, equity management and size of organization. A potential for future study, it is recommended that the scope of study should be exposed to large numbers of organization and longer duration for the year of data taken and other explanatory variables in analyzing the profitability like liquidity management, expenses management and also other economic variables like interest rate and exchange rate stability included.

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