# The Analysis of Profitabilityand its Implications for Stock Return: A Learning and Education Perspective

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**ABSTRACT-** This study aims to analyze some factors that can affect Return on Assets (ROA) which have implications for Stock Return. The analysis model of this study uses panel data regression with samples from each countrysuch as Indonesia and Malaysia as many as 10 banks that have large total assets of the banking companies' population listed in the capital markets of each country in the period of 2013-2017. The results of research on exogenous variables in the first research model of the banking industry in Indonesia, Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (LDR), Non Performing Loans (NPL) hadno partially significant effecton ROA. Net Interest Margin (NIM), Operational Costs on Operational Revenues (BOPO), Interest Rate, Exchange Rate (Rate)had a significant effect on ROA. In the second research model in Indonesia, the Capital Adequacy Ratio (CAR), Loan ToDeposit Ratio (LDR) had no partially significant effect on Stock Returns. NonPerforming Loan (NPL), Net Interest Margin (NIM), Operational Costs on Operational Revenues (BOPO), Interest Rate, Exchange Rate (Rate), had a partially significant effect on Stock Return, and Intervening Variable ROA had a significant effect or mediating on Stock Return.
The research results on exogenous variables in the first research model of the banking industry in Malaysia, CAR, BOPO, Interest Rate, and Exchange Rate did not have a partially significant effect on ROA. In the second research model in Malaysia, CAR, LDR, NIM, BOPO, Interest Rate, and Exchange Rate had a partially significant effect on Stock Return, whilst NPL had no significant effect on Stock Returns as well as Intervening Variable ROA did not mediate on Stock Returns.

**Keywords: Capital Adequacy Ratio (CAR), LoanTo Deposit Ratio (LDR), Non Performing Loan (NPL), Net InterestMargin (NIM), Operational Costs on Operational Revenues (BOPO), Interest Rate, Exchange Rate (Rate),Return on Assets (ROA), Return Saham (Stock Return), Learning and Education Perspective.**

## I. INTRODUCTION

Since mid-2013, Bank Indonesia (BI) began to raise the benchmark interest rate (BI rate). One of the goals of raising the BI rate is controlling the rate of bank credit. In the last three years, the level of banking profitability has a continually decline, one of the causes of decreased bank profitability is due to the high ratio of non-performing loans and strict regulations from the Financial Services Authority (OJK) and Bank Indonesia. As quoted from Antara, the return on assets (ROA) iscontinually declining. Another cause is the tighter banking competition, plus the entry of players in the financial services sector, such as the financial technology industry.
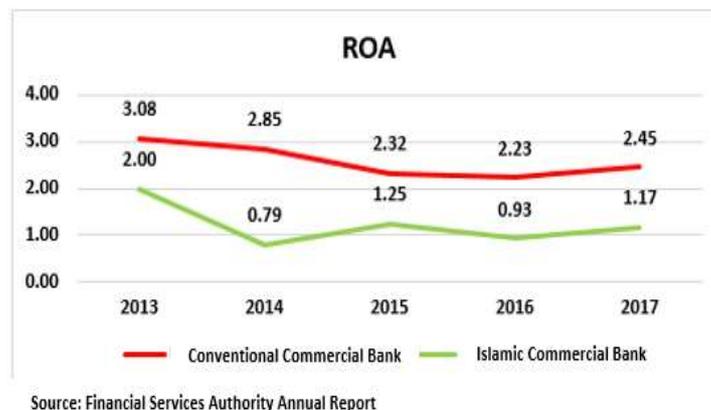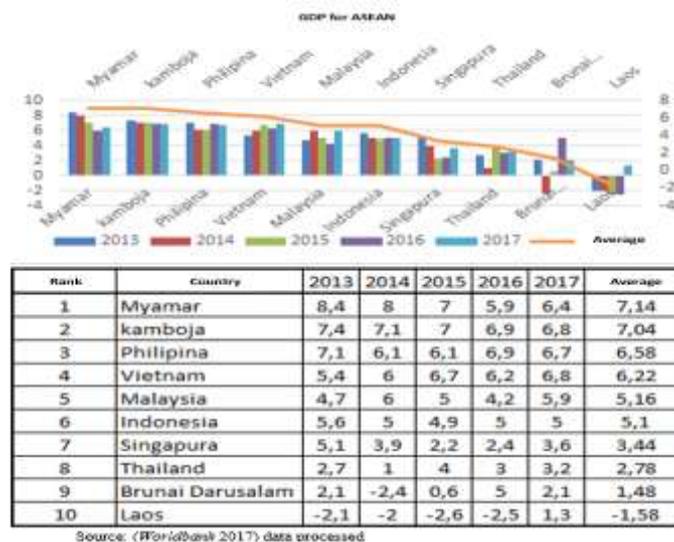


Source: Financial Services Authority Annual Report

**Figure 1 TheComparison of ROA for Conventional and Islamic Commercial Banks in Indonesia**

This study chooses banking companies inasmuch as they are different to other companies, in which they collect funds from the public in the form of savings and redistributing them in the form of credit, Apart

from those reasons, they are often a concern of the government in the banking restructuring program in term of improving the national economies of Indonesia and Malaysia due to the impact of the monetary crisis in 1997 and the global financial crisis in 2008. Banks listed on the capital market, both the Indonesia Stock Exchange and the Malaysia Stock Exchange were used as objects of research for some reasons. Firstly, a bank is a reflection of investor confidence in the stability of a country's financial system and banking system. Secondly, many banks have gone public in order to make it easier. The banking measurement used in this research is financial performance which can be seen from the financial statements of companies listed on the capital market. ROA is used as a performance measure to measure the effectiveness of a company in generating profits by utilizing its assets. In term of determining the soundness level of a bank, Bank Indonesia prioritizes ROA assessment rather than ROE prioritizing the value of a bank's profitability as measured by assets whose funds mostly are earned from public deposits so that ROA is more representative in measuring the level of bank profitability (Dendawijaya, 2009: 119). A strong impetus for this research is due to the gap between theory and response to empirical data, such as CAR, LDR, NPL, NIM, BOPO, Rate and Exchange rate towards ROA movements in commercial banks in Indonesia and Malaysia which are listed in the capital market for the period of 2013-2017. GDP growth in Indonesia and Malaysia has very slight differences compared to other ASEAN countries.

**Table 1.GDP Growth for ASEAN from 2013 to 2017**



| Rank | Country | 2013 | 2014 | 2015 | 2016 | 2017 | Average |
|------|---------|------|------|------|------|------|---------|
| 1 | Myamar | 8,4 | 8 | 7 | 5,9 | 6,4 | 7,14 |
| 2 | kamboja | 7,4 | 7,1 | 7 | 6,9 | 6,8 | 7,04 |
| 3 | Philipina | 7,1 | 6,1 | 6,1 | 6,9 | 6,7 | 6,58 |
| 4 | Vietnam | 5,4 | 6 | 6,7 | 6,2 | 6,8 | 6,22 |
| 5 | Malaysia | 4,7 | 6 | 5 | 4,2 | 5,9 | 5,16 |
| 6 | Indonesia | 5,6 | 5 | 4,9 | 5 | 5 | 5,1 |
| 7 | Singapura | 5,1 | 3,9 | 2,2 | 2,4 | 3,6 | 3,44 |
| 8 | Thailand | 2,7 | 1 | 4 | 3 | 3,2 | 2,78 |
| 9 | Brunai Darusalam | 2,1 | -2,4 | 0,6 | 5 | 2,1 | 1,48 |
| 10 | Laos | -2,1 | -2 | -2,6 | -2,5 | 1,3 | -1,58 |

Source: (WorldBank 2017) data processed

This research model will examine the effect of CAR, NPL, LDR, NIM, BOPO, Rate and Exchange Rate on Profitability and CAR, NPL, LDR, NIM, BOPO, Rate and Exchange Rate on Stock Returns. Briefly, profitability acts as an intervening in the causal relationship between CAR, NPL, LDR, NIM, BOPO, Rate, Exchange Rate and Stock Returns. Unlike the previous researchers. In general, it focuses more on the causality relationship between CAR, NPL, LDR, NIM, BOPO, Rate, Exchange Rate and Profitability, and the causality relationship on CAR, NPL, LDR, NIM, BOPO, Rate, Exchange Rate and Stock Return. Researchers will conduct research in Indonesia and Malaysia by adhering to Signal theory, Stock Return theory, Profitability Theory that profit information or changes in stock returns received by investors, whether good or bad, on those information will directly or indirectly influence investors' assessment on the bank's performance and it could also influence the investment which will be made by investors by having some alternatives that may occur from the investment side, such as firstly to move their investment to other companies or other sectors as a whole, secondly to move their investment to other sectors. The problem in this study is due to a research gap and a phenomenon explained in the introduction, in which the ratio of CAR, LDR, NIM and BOPO tends to increase accompanied by a continuously increasing NPL and decreasing profitability while the rate has decreased. So, it needs to conduct a test to see how the effect of CAR, LDR, NPL, NIM, BOPO, Rate and Exchange rate on the profitability in commercial banks in Indonesia and Malaysia that are listed on the capital market, the bank's performance that go public is more attractive to the market because they have included open financial reports so that investors can transparently know the performance of commercial banks in Indonesia and Malaysia and can make

decisions to invest their funds. However, whether this affects ROA and whether it affects stock returns, further research is needed.

<center>II. LITERATURE REVIEW</center>

## 1. Efficient Market Hypothesis (EMH)

A theory that the price of a secutity reflects all currently available information about its economic value. A market in which prices fully reflect all available information is said to be efficient, Elton, at.all(2014).

The concept of an efficient capital market was first put forward by Fama (1970). The capital market is said to be efficient if no one, either individual investors or institutional investors, will be able to obtain an abnormal return, after adjusting for risk, using existing trading strategies. The three forms of efficient capital markets are:

(a)       The Efficient Market Hypothesis with a weak form, a condition in which prices reflect all the information available on past price notes.

(b)       The Efficient Market Hypothesis with semi strong form, in which prices not only reflect past prices, but all published information.

(c)       The Efficient market hypothesis with strong form, which reflects not only all published information, but also information that can be obtained from fundamental analysis about firms and the economy.

## 2. Signalling Theory

Spence (1973) revealed that asymmetric information occurs in the labormarket, therefore, a signal criterion is made in order to add strength to decision making.

Signal is an action taken by a company to provide guidance to investors about how management views the company's prospects (Brigham and Hauston). This signal is in the form of information such as description, note or a goodoverview. The information presented is complete, relevant, accurate and timely in informing past circumstances regarding what management has done to realize the owner's wishes.

The information released by the company is an important term, because it affects investment decisions outside the company. This information is important for investors and business people since information essentially provides description, notes or overview, both for the past, present and future conditions for the survival of the company and how it will affect the company.

Information can be provided through financial reports. Companies in submitting financial statements apply conservatism accounting policies that result in higher quality profits because this principle prevents companies from exaggerating profits and helps users of financial statements by presenting non-overstated earnings and assets. Information received by investors is interpreted as a good signal (good news) or a bad signal (bad news).

Profitability is the information received by investors that will provide an assessment on the company's value. Announcement of information is as a good signal for investors who make changes in stock prices, stock prices have an increase so that stock returns have increased or information is as a bad signal for investors who make changes in stock prices, stock prices have a decrease so that stock returns decline.

Muwardi (2010),signaling theory was developed in economics and finance to take into account the fact that company insiders generally have better and faster information regarding the condition and prospects of the company compared to people outside the company, for instance investors. The main assumption in this theory is that management has accurate information about firm value unknown to outside investors and management is a person who always tries to maximize the expected incentives.

Butarbutar (2011), pooling equilibrium would certainly be very detrimental for companies that have good quality. To solve this problem of asymmetric information, the company provides information to the market which in general can be responded to by the market as a signal.

Jogiyanto (2000),information provided as an announcement wouldgive a signal for investors in making investment decisions. If the announcement contains a positive value, it is expected that market players will react at the time of the announcement and be accepted by market players. The signal can be in the form of information or other information that states that the company is better than other companies.

Wolk, et al., (2001),signal theory explained the reasons offirms present information for the capital market. Maria Immaculatta, (2006),information in the form of a published corporate bond rating was expected to signal the financial condition of a particular company and described the possibilities that occur related to its debt.

Sharpe (1997),announcement of accounting information provided a signal that the company has good prospects in the future (good news) so that investors are interested in trading stocks, thus the market will react as reflected by changes in the volume of stock trading.

Husnan (2006), for companies that had not gone public yet, the value of the company was a number of costs that are willing to be incurred by prospective buyers if the company is sold, while for companies that had gone public, the value of the company can be seen from the value of the shares in the capital market.

### 3 Agency Theory

Much of the literature on corporate governance stems from the relationship between principals and agents which then raises agency problems. Agency problems are commonly influenced by "ownership structures". When ownership is scattered, as occuring in the US and UK, agency problems arise from conflicts of interest between managers and shareholders (Jensen and Meckling, 1976). First introduced by: Jensen and Meckling (1976): separating the problem of "Ownership and Control". Agency theory development leads to compensation, such as the existence of an incentive policy between top management and company employees.

### 4 Stock Return

Return is the profit earned by companies, individuals and institutions from the results of their investment policies (Fahmi, 2009: 151). According to Tandelilin (2010: 48), one of the factors that motivates investors to invest was return. Return is the result obtained from investment activities. According to Jogiyanto (2010: 205), stock returns were the results obtained from investments. Commonly, investing is to get a return (rate of return) as reward for the funds that have been invested as well as willingness to bear the risks involved in the investment.

### 5. Profitability

According to Weston and Brigham (2010: 89): "Profitability ratios measured the effectiveness of management as a whole as seen from the returns generated by sales and investment. Profitability, according to Gitman and Zutter (2012), could be measured in many ways. Return on assets (ROA) measure the effectiveness of management in general in generating profits through existing assets. The higher the profit (return)obtained from total assets is, the better the company's performance is.

### 6. Theory of Basel II According tothe Basel Committee on Banking Supervision

Pillar 1. Minimum Capital Requirements set up the minimum capital requirements associated with credit risk, market risk and operational risk. Pillar 2. Supervisory Review process requires a review process carried out by supervisors to ensure that bank capital is sufficient to cover bank risks as a whole. Pillar 3. Market Disclipine is to complete all previous pillar, pillar 3 Basel II sets updisclosure requirements that enable to market players assess key information regarding risk exposure, risk measurement process and bank capital adequacy.

a. Capital Adequacy Ratio (CAR).

Bank capital is important in modern banking because it is a tool to reduce crises and diminish the risk of failure. Strong bank capital also serves as a lure for depositors to save as they believe their funds are in a safe place and for investors because they believe they will have better investment opportunities. Especially for banks that have gone public, if the CAR is sufficient and even high enough, it will give confidence to investors to buy banking shares. Capital Adequacy Ratio (CAR) is a ratio that measures capital adequacy against the risk of bank assets. Dendawijaya (2009) stated that CAR is a ratio that shows how far all risky bank assets (investment credit, securities, claims on other banks) are to be financed from their own capital funds, in addition to earning funds from outside sources, such as public funds, loans (debt) and others.

b. Loan Deposit Ratio (LDR).

LDR is a ratio used to see the amount of credit and liquidity of a bank. This ratio measures the composition of the amount of credit extended compared to the amount of thirdparty funds received by the bank. Fitch (2006) defined liquidity as the ability of a company to meet its obligations. In the banking world, this definition is the ability of a bank to reconcile the interests of depositors when withdrawing their deposits with the interests of credit debtors / borrowers. Hamonangan and Siregar (2009) stated that the Loan to Deposit Ratio (LDR) is used to measure the extent to which a bank is able to pay all public funds as well as its own capital by relying on loans that have been distributed to the public.

c. Operational Costs on Operational Revenues (BOPO).

In this study, BOPO (Operational Costs on Operating Revenues) is used as an independent variable that affects ROA based on its relationship with the level of bank risk which leads to bank profitability (ROA). According to Rivai et.al (2013: 482): Operational costs Ratio on Operational revenues(BOPO) was a comparison between operational costs in measuring the level of efficiency and the ability of a bank to carry out its operations. In this case, it should be noted that the main business of a bank is to collect funds from the public and then redistribute it to the public in the form of credit, so that interest expense and interest yields constitute the largest portion of the bank.

d. Net Interest Margin (NIM).

In running a business or every activity, of course, the first desired is to gain profit. Banks as a financial business in seeking profit also have their own way. According to Dendawijaya (2009), Net Interest Margin (NIM) was: "The ratio used to measure the ability of bank management to manage its productive assets to generate net interest income. The greater the ratio, the higher the interest income on productive assets managed well by the bank, so that the possibility of a bank in a problematic condition is getting smaller".

e. Non Performing Loan (NPL).

Non Performing Loans (NPL) are one of the key indicators for assessing the performance of bank functions. One of the functions of a bank is as an intermediary institution or liaison between parties who have excess funds and those who need funds. Credit risk (default risk) can also occur due to the failure or inability of customers to repay the loan amount received from the bank and its interest according to a predetermined or scheduled period (Idroes: 2008).

f. Interest Rate

According to DahlanSiamat, it can be concluded that the Bi Rate is used as a reference in monetary operations to direct the weighted average SBI-1month interest rate resulting from the OPT (Open Market Operation) auction to be around the BI Rate. Furthermore, the 1-month SBI interest rate is expected to affect the interbank money market (PUAB) interest rate, deposit and credit interest rates as well as longer term interest rates.

g. Exchange Rate

According to Mankiw (2007), the currency exchange rate between two countries was the price of the currency used by residents of that country to trade with each other. Abhimanyu (2004) stated that currency exchange rates on the prices of currencies relative to the currencies of other countries, and because this exchange rate includes two currencies, the point of balance is determined by the supply and demand of the two currencies.

## III. HYPOTHESIS DEVELOPMENT

To look at the review of the various literature above, research hypothesis can be formulated both in Indonesia and in Malaysia as follows:

1. The first research model, Profitability Analysis, ROA

a. Exogenous Variables (CAR, LDR, NPL, NIM, BOPO, Interest Rate, Exchange Rate) partially affect to ROA in both Indonesia andMalaysia.

b. Exogenous Variables partiallyaffectto ROAin both Indonesia and Malaysia.

2. The second research model, Implications for Stock Return

a.      Exogenous Variables (CAR, LDR, NPL, NIM, BOPO, Interest Rate, Exchange Rate, ROA) partially affect to Stock Return in bothIndonesia and Malaysia.

b. Exogenous Variables partially affect to Stock Return in both Indonesia and Malaysia.

## IV. RESEARCH METHODS

Research is a series of observations conducted over a period of time towards a phenomenon that requires answers and explanations. According to Sugiyono (2014), a causal relationship wascausality. So, there are

the independent variables which influence and the dependent variable which is influenced. In this study, the independent variables consist of CAR, LDR, NPL, NIM and BOPO, Interest Rate and Exchange Rate with Profitability as the dependent variable, ROA and Stock Return. The sampling technique was carried out by means of a purposive sampling method in order to obtain representative research results. Purposive sampling according to Sugiyono, (2014), was a sampling method based on certain considerations or criteria. The criteria in this study used 10 commercial banks in Indonesia and Malaysia, each of which had a large total asset value and was recorded in their respective capital markets for the period of 2013 - 2017.

## Panel Data Regression Model

This study uses panel data regression analysis with the Eviews application. The model built in this study is based on the effect of the bank's external indicators in the form of Interest Rate (Rate) and Exchange Rate (Kurs), while the internal indicators of the bank itself are CAR, LDR, NPL, NIM, and BOPO. The object of this research is using commercial banks in Indonesia and Malaysia which are listed in the capital market of each country in the 2013-2017 period on profitability. This model is similar to model of Maria (2015), Hutagalung, Djumahir, and Ratmawati (2011).
Structural Equation of Profitability determinant Regression:

$$ROA_{it} = a + \beta_1 (CAR_{it}) + \beta_2 (LDR_{it}) + \beta_3 (NPL_{it}) + \beta_4(NIM_{it}) + \beta_5(BOPO_{it}) + \beta_6(Rate_{it}) + \beta_7(Kurs_{it}) + \epsilon_{it}$$

(ROA) Return On Assets, ($\beta1$) Capital Adequacy Ratio, ($\beta2$) Loan Deposit Ratio, ($\beta3$) Net Performing Loan, ($\beta4$) Net Income Margin, ($\beta5$)Operasional costs on operasional revenues, ($\beta6$) Interest Rate (rate), ($\beta7$) Exchange Rate (kurs). ($it$)variable of internal and external condition for bank at time $t$ year on bank i (in which refers to CAR, LDR, BOPO, NIM, $Rate$ dan $Kurs$),($\epsilon_{it}$) is $error\ term$ of each bank $i$ (where $i$ = 1,2, ... $N$) is observed in Period of $t$ = 1,2, ... $T$.
Structural Equations of Implication regression for Stock Returns:

$$RS_{it} = \alpha + \beta_1(CAR_{it}) + \beta_2(LDR_{it}) + \beta_3(NPL_{it}) + \beta_4(NIM_{it}) + \beta_5(BOPO_{it}) + \beta_6 (Rate_{it}) + \beta_7(Kurs_{it}) + \beta_8(ROA_{it)} + \epsilon_{it}$$

Dimana: (RS)Stock Return, ($\beta1$) Capital Adequacy Ratio, ($\beta2$) Loan Deposit Ratio, ($\beta3$) Net Performing Loan, ($\beta4$) Net Income Margin, ($\beta5$) Operational costs on operational revenues/BOPO, ($\beta6$) Interest Rate/Rate, ($\beta7$) Exchange Rate/Kurs, ($\beta8$) ReturnOn Assets. ($it$)variable of internal and external conditions of the bank at time t year on bank i (which refers to CAR, LDR, BOPO, NIM, ROA, $Rate\ and\ Kurs$), ($\epsilon_{it}$) is the $error\ term$ for each bank i (where i = 1,2, ... N) is observed at Period t = 1,2, ... T.
There are three approaches in making panel data regression: (1) Common effect which is model combining cross section data and times series data (OLS method). (2) Fixed Effect Approach, where in this approach, the panel data model has an intercept that may change for each individual and time, in which each unit of cross section is time series fixed. (3) Random Effect Approach, in which in this approach, the differences between time and individuals are accommodated through errors. This study uses the Generalized Least Square (GLS) method.
Model suitability testing is carried out by three procedures to determine the appropriate panel data regression model: (1) Chew Test (F-statistic), which is used to determine the appropriate panel data regression model between common effect & fixed effect. (2) The Hausman Test is used to determine the appropriate panel data regression model between fixed effect & random effect. (3) Lagrange Multiplier Test (LM), is used to determine the appropriate panel data regression model between common effect & random effect.
The intended model suitability testing can be simplified as follows:

Figure 2
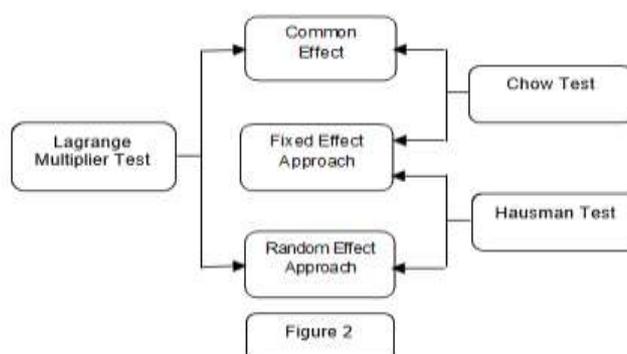
#### Table 2 The Results of Model Suitability Testing on ROA (Research Model I) in Indonesia

| No. | Method | Testing | Result |
|---|---|---|---|
| 1 | *Chow - Test* | *Common Effect Vs Fixed Effect* | ***Fixed Effect*** |
| 2 | *Hausman Test* | *Fixed Effect vs Random Effect* | ***Fixed Effect*** |
| 3 | *Langrange Multiplier* | *Common Effect vs Random Effect* | *Random Effect* |

**Table 3**
**The Results of Model Suitability Testing on Stock Returns (Research Model II) in Indonesia**

| No. | Method | Testing | Result |
|---|---|---|---|
| 1 | *Chow - Test* | *Common Effect Vs Fixed Effect* | ***Fixed Effect*** |
| 2 | *Hausman Test* | *Fixed Effect vs Random Effect* | ***Fixed Effect*** |
| 3 | *Langrange Multiplier* | *Common Effect vs Random Effect* | *Common Effect* |

**Table 4**
**The Results of Model Suitability Testing on ROA (Research Model I) in Malaysia**

| No. | Method | Testing | Result | Coefficient of Determination ($R^2$) |
|---|---|---|---|---|
| 1 | *Chow - Test* | *Common Effect Vs Fixed Effect* | ***Fixed Effect*\*>** | **0.918938** |
| 2 | *Hausman Test* | *Fixed Effect vs Random Effect* | *Random Effect* | 0.515484 |
| 3 | *Langrange Multiplier* | *Common Effect vs Random Effect* | *Common Effect* | 0.732041 |

**\*>**Suitability of the selected model

**Table 5**
**The Results of Model Suitability Testing on Stock Returns (Research Model II) in Malaysia**

| No. | Method | Testing | Result |
|---|---|---|---|
| 1 | *Chow - Test* | *Common Effect Vs Fixed Effect* | ***Common Effect*** |
| 2 | *Hausman Test* | *Fixed Effect vs Random Effect* | *Random Effect* |
| 3 | *Langrange Multiplier* | *Common Effect vs Random Effect* | ***Common Effect*** |

## V. HYPOTHESIS TESTING AND DISCUSSION

**Profitability Analysis in Fixed Effect Model in Indonesia and Malaysia with Dependent Variable ROA, Table 6.**

Hypothesis test results for Capital Adequacy Ratio (CAR) both in Indonesia and in Malaysia do not provide a significant effect on profitability. This result can be explained that CAR in both countries is a variable that has been determined by the banking authority or the central bank where the relative value of each banking company is resemble.

There is a difference between the hypothesis test results for the Loan to Deposit Ratio (LDR) in Indonesia and in Malaysia. This variable has an insignificant effect on profitability in the banking industry in Indonesia, while in Malaysia it has a significant effect on profitability which means that it is more supportive of theoretical rationality.

The theoretical rationality isagain resulted from the Non Performing Loan (NPL) variable in the Malaysian banking industry with a significant effect, while in Indonesia it has an insignificant effect. This variable in Malaysia provides a level of influence with a relatively high sensitivity which is negatively correlated. Another thing that can be explained in Malaysia is that the high level of bad credit will lead to a decrease in profitability, in which it is in line with theoretical rationality, whereas in Indonesia it does not happen.

Hypothesis testing on the exogenous variable, Net Interest Margin (NIM) between the Indonesian and Malaysian capital markets found that each issuer in managing the business has the similar pattern. Both have good bank management skills, especially in terms of managing productive assets so that they can generate net income. They also assess that the exogenous variable is a vital consideration in business management which is proven to significantly influence the endogenous variable, profitability.However, the level of management sensitivity is more sensitive in Malaysia than in Indonesia.

The exogenous variable, Operating Costs on Operating Revenues (BOPO) is the next hypothesis test. Thehypothesis testing results of this variable had a negative correlation with profitability as the case in theory. This was achieved by the banking industry in Indonesia where the results of the hypothesis test affected significanly to profitavility, but this did not occur in Malaysia.

The management of the banking industry in Indonesia in using interest rate variable as a source of income is more obvious than in Malaysia. This variable significantly affects the profitability of banks in Indonesia but it does not occur in Malaysia. It is very possible that the banking profitability in Malaysia is supported other investment returns and it is more dominant than interest rate spreads. Another thing that can be explained is that the interest rate reference from each central bank is more of a concern to the banking industry in Indonesia than in Malaysia.

The final hypothesis testing in this first research model is the domestic currency exchange rate against the world strong currency, the U.S. dollar. The profitability of the banking industry in Indonesia was partially more significantly influenced by the rupiah exchange rate to the U.S. dollar. It did not occur in Malaysia, that the exchange rate of the domestic ringgit currency against the world strong currency, the U.S. dollar, did not significantly affect the level of profitability in the banking industry.

Hypothesis testing of the first model in this study using the F test is significant. It shows that this model is valid to use to answer the partial test of exogenous variables.

**Table 6**
**Profitability Analysis**

| Hypothesis | Variable | Indonesia (*Fixed Effect*) | | | | Malaysia(*Fixed Effect*) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Coefficient | Std.Error | t.Statistic | Prob. | Coefficient | Std.Error | t.Statistic | Prob. |
| | C | 9.014180 | 0.687661 | 13.10846 | 0.0000 | 5.106920 | 0.976080 | 5.232069 | 0.0000 |
| $H_1$ | CAR | -0.020616 | 0.011663 | -1.767676 | 0.0864 | -0.001517 | 0.014449 | -0.104983 | 0.9170 |
| $H_2$ | LDR | 0.0004996 | 0.007233 | 0.068602 | 0.9457 | -0.0409899 | 0.008099 | -5.060725 | 0.0000 |
| $H_3$ | NPL | -0.0376688 | 0.038265 | -0.984404 | 0.3321 | -0.1723115 | 0.066728 | -2.582352 | 0.0144 |
| $H_4$ | NIM | 0.1613299 | 0.045866 | 3.517396 | 0.0013 | 0.2537033 | 0.109451 | 2.317958 | 0.0268 |
| $H_5$ | BOPO | -0.0954558 | 0.004773 | -19.99890 | 0.0000 | -0.0059193 | 0.004982 | -1.186954 | 0.2437 |
| $H_6$ | RATE | 0.0465700 | 0.018361 | 2.536433 | 0.0161 | -0.1124661 | 0.126862 | -0.886478 | 0.3818 |
| $H_7$ | Exch.Rate | -0.6950661 | 0.198366 | -3.503930 | 0.0013 | -0.0023477 | 0.002448 | -0.959041 | 0.3445 |
| $H_8$ F-statistic | 393.3959 | | | 0.0000 | F-statistic | 23.38104 | | 0.0000 |

**Implications for Stock Return in Fixed Effect Model in Indonesia and Common Effect in Malaysia with Dependent Variable Stock Return, Table 7.**

Hypothesis test results for Capital Adequacy Ratio (CAR) both directly and indirectly to stock returns found that there is a difference between Indonesia and Malaysia. Exogenous variables in the conditions of the banking industry in Indonesia cannot explain stock returns. Capital market players in Indonesia do not make real considerations to invest in this exogenous variable, but it is different with the conditions that occur in the Malaysian capital market that this variable directly without going through the intervening variable is considered by capital market players.

The exogenous variable Loan to Deposit Ratio (LDR) in the hypothesis test results is very different from one another between Indonesia and Malaysia. The consideration of using this variable in investing is that the level of rationality is more evidently carried out by capital market players in Malaysia than in Indonesia, however the results of hypothesis testing in Malaysia have a negative correlation. It is not entirely that this variable is an absolute consideration for investment but still closely related to other variables in this study. The results of this variable hypothesis test, either directly or indirectly, have the same results that in Malaysia can actually explain profitability and stock returns, while the opposite results occur in Indonesia.

Non-Performing Loan (NPL) as one of the exogenous variables in this study shows the real hypothesis test results can directly explain stock returns, but it does not occur in the hypothesis test results indirectly. On the other hand, what happened in Malaysia, this variable cannot explain directly but can explain indirectly.

The exogenous variable Net Interest Margin (NIM) is as a variable that is considered by capital market players in both countries with a significant effect, either directly or indirectly. Capital market players in Indonesia make this variable with a higher level of sensitivity than in Malaysia.

Operational Cost on Operating Income (BOPO) as an exogenous variable can directly explain market reactions or in other words directly it can explain its effect on the reaction of capital market players both in Indonesia and in Malaysia. The level of sensitivity between the two countries to this variable occurs in the Malaysian capital market. On the other hand, the indirect effect occurs on capital market players in Indonesia, while in Malaysia it does not. It can be explained that capital market players in Malaysia no longer see whether this variable influences the creation of business profitability.

Variable Interest Rate as an exogenous variable, either directly or indirectly, can significantly explain the stock return or capital market reaction in Indonesia, but this is not the case in Malaysia which can only explain directly the stock return or capital market reaction. Thesensitivity level of the direct effect occurs on the capital market in Indonesia rather than in Malaysia.

The Exchange Rate variable as an exogenous variable has almost the silimar results as the interest rate variable. This variable in Indonesia, either directly or indirectly, shows a significant effect or can explain the effect on stock returns, whereas in Malaysia it can only explain the effect directly. Another thing that is different in Malaysia is its negative correlation, while in Indonesia it has a positive correlation with a higher sensitivity level than Malaysia.

Hypothesis test results for Return on Assets (ROA) as an intervening variable, significantly mediate Stock Return in the Indonesian capital market, but this is not the case in Malaysia. The negative correlation generated by hypothesis testing in the Indonesian capital market shows that capital market players value the money market as having a higher return than in the capital market. This can be seen from the test results on the interest rate which has a negative correlation and has a significant effect on stock returns.

**Table 7**
**Implications for Stock Return**

| Hypothesis | Variable | Indonesia (*Fixed Effect*) | | | | Malaysia (*Common Effect*) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Coefficient | Std.Error | t.Statistic | Prob. | Coefficient | Std.Error | t.Statistic | Prob. |
| | C | 7.534947 | 3.623351 | 2.079552 | 0.0457 | 3.606492 | 1.322490 | 2.727046 | 0.0094 |

| H₉ | CAR | 0.841744 | 0.701251 | 1.200345 | 0.2388 | 0.444096 | 0.122743 | 3.618094 | 0.0008 |
|---|---|---|---|---|---|---|---|---|---|
| $H_{10}$ | LDR | -0.016538 | 0.022429 | -0.737382 | 0.4663 | -0.577637 | 0.238767 | -2.419255 | 0.02001 |
| $H_{11}$ | NPL | -0.804602 | 0.268369 | -2.998122 | 0.0052 | 0.039393 | 0.030508 | 1.291229 | 0.2039 |
| $H_{12}$ | NIM | 0.831179 | 0.151328 | 5.492563 | 0.0000 | 0.286406 | 0.121486 | 2.357524 | 0.0233 |
| $H_{13}$ | BOPO | -0.073349 | 0.035112 | -2.088960 | 0.0447 | -0.300018 | 0.096934 | -3.095058 | 0.0035 |
| $H_{14}$ | RATE | -3.060718 | 0.558788 | -5.477426 | 0.0000 | -1.086624 | 0.373490 | -2.909380 | 0.0058 |
| $H_{15}$ | Exch.Rate | 0.065941 | 0.018227 | 3.617798 | 0.0010 | -0.050013 | 0.022391 | -2.233648 | 0.0310 |
| $H_{16}$ | ROA | -0.749864 | 0.312301 | -2.401096 | 0.0223 | 0.119416 | 0.068906 | 1.733030 | 0.0906 |
| $H_{17}$ F-statistic | 5.901372 | | | 0.0000 | F-statistic | 9.809809 | | 0.0000 |

## VI. CONCLUSION

Return on Asset (ROA) as an intervening variable could mediate the effect of exogenous variables on endogenous variables of Stock Return in the Indonesian Capital Market, whilst in the Malaysian capital market in learnimg and education perspective, this does not occur.

The variables that could explain its significantly effect both direct and indirect on Stock Return were Net Interest Margin (NIM), Operational Costs on Operating Revenues (BOPO), Interest Rate, Exchange Rate. This only happens in the capital market in Indonesia in learning and education perspective.

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