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Abstract

The aim of this study is to exam the relationship between the return on asset (ROA) and the internal, external factors of the companies. Kupiec, P. , & Lee, Y. (2012), stated that ROA is very useful statistic for comparing the profitability of banks. The companies I had chosen for this study are Bank of China. I collected this bank's data from 2014 to 2018. The independent variables used for this study are current ratio, credit risk, operating margin, CGI, GDP, inflation, interest rate, and exchange rate, while the dependent variable is ROA. We used SPSS to analyse the statistics and the relationship between the dependent variable and the independent variables.

1.0 INTRODUCTION

This part of introduction consists a background of Bank of China's Corp's scandals. Its will discuss in details about the problem statement, research objective, scope and the organization of the study.

1.1 Background of Bank of China.

The main office of Bank of China is located in Beijing, China. Bank of China is set up in February 1912. This bank was set up 107 years ago. Drawing strength from their rich history, they will be the best, most admired and innovative financial services institution, partnering with their customers, employees and shareholders in wealth and value creation become the vision of Bank of China. Bank of China have a mission of become the leading provider of quality services consistently delivered to institutions, entrepreneurs and individuals here and abroad to meet their financial needs and exceed their rising expectations. (Annual Report 2018 Bank of China, 2019).

In 1939, Bank of China established first branch in Malaysia and ceased in 1959. Throughout the years of rapid economic and trade development between Malaysia and China, Bank of China (Malaysia) officially reestablish as a full-fledged commercial bank on 23rd February 2001. Bank of China (Hong Kong) Limited ("BOCHK") wholly-owned BOC Malaysia Branch. More than 100 years being established, Bank of China ("BOC") becomes the most internationalized and diversified bank in China. As part of the BOC Group's overseas development strategy, BOCHK expedites its regional development into a top-class, full-service and internationalized regional bank. In 2012, BOC Malaysia become partner bank for "Malaysia My Second Home" program and signed a Memorandum of Understanding (MOU) with Ministry of Tourism Malaysia. In year 2015, BOC Malaysia officially appointed by Central Bank of Malaysia as Renminbi Clearing Bank in Malaysia. BOC Malaysia playing a crucial role in business development and trade between Malaysia and China where it provides a wide range of Renminbi financial products, services, currency exchange, trade settlements, deposit and loan and more. BOC has strong market positions and enjoy leading edges in cross-border between 2 countries.

1.2 Problem Statement

The research will determine the importance of complying corporate governance principles in order to ensure an ethical and stable growing business. The performance of business which reflected directly from the stock value and financial statements is inseparable with the attitude of the management toward corporate governance principles. This study is to find out how important the corporate governance principles is and what are the effects of fail to comply with it.

Corporate governance is the framework which is the organization are directed and controlled. Companies who were practiced adequate and strong corporate governance practices tend to have better company performance and greater company value. A good corporate governance will make the interest of shareholder same with the board of directors which no conflict of interest. If the company did not follow the corporate governance with the principle, it can cause the company to fall in scandal. So that, it is important to conduct the research in order to determine how significant is the company specific factors and economic factors which is their macroeconomic will affect the CGI of Bank of China Corp.

Good corporate governance facilitates the transparent operation of the banking sector, while an orderly performing banking sector can greatly promote good corporate practice in listed companies in China. The global financial crisis of 2008-2009 severely changed the banking and financial services industry, causing the dominance of capital markets to shift geographically from the West to the East. While China's Big Four state-owned banks are not only too big to fail, they are too important to fail, as these banks have created an alchemy of politics and finance by underwriting huge infrastructure projects that control millions of jobs in China and have a substantial effect on foreign direct investment. Chinese banks are experiencing mercurial growth and are being forced to improve their corporate governance standards in order to be more aligned with their Western counterparts. While the U.S. is allowing Chinese banks to open branches in America and acquire ownership in existing banks there, London is clamping down on the presence of the Big Four banks in the United Kingdom by enforcing firm standards on transparency and other critical governance mechanisms. Essentially, the governments of most nations want a banking culture that promotes transparency, business efficiency, fair competition and managerial accountability. In order to develop a sustainable economy, corporate governance must be an integral part of a

country's banking system. At the 13th China Development Forum, CBRC Chairman, Shang Fulin offered to "help banking institutions to improve corporate governance, strengthen internal controls and improve forward looking and effectiveness of risk management" (Metcalf, 2012,p.8). To achieve these goals, China's Big Four banks will have to glean itself of concentrated ownership from the central government and start making decisions based on financial acumen as opposed to addressing political agendas and directives. Moreover, the central government should wholly separate the role of regulator of the banks while it is the concentrated owner. In order to have ethical and unbiased regulation, there must be a separate regulatory body whose interests do not coincide with the primary shareholder. Finally, the directors should be seasoned bankers capable of addressing the long term goals of the banks. The practical applications of opening up the ownership of the Big Four banks to both non-state and minority shareholders will allow the banks to see an increase in productivity and profitability that is not hindered by deception and graft. Also, more qualified bankers, as opposed to relationship-driven bureaucrats, will be drawn to joining the Big Four banks, allowing China to compete more vigorously in the arena of world banking and capital markets.

1.3 Research Objectives

The aims of this study is to specify the company's specific factors and economy factors which affecting the CGI of Bank of China Corp. The objectives are:

- i. To investigate the company's specific factors towards corporate governance index of Bank of China Corp.
- ii. To investigate the macroeconomic factors towards corporate governance index of Bank of China Corp.

1.4 Research Questions

- i. What does the impact of the company specific factors towards the corporate governance index of the Bank of China Corp.
- ii. What does the impact of the macroeconomic factors towards the corporate governance index of Bank of China Corp.

2.0 LITERATURE REVIEW

2.1 Credit risk

Credit risk is a measure of the creditworthiness of a borrower. In calculating credit risk, lenders are gauging the likelihood they will recover all of their principal and interest when making a loan. Borrowers considered to be a low credit risk are charged lower interest rates. Lenders, investors, and other counterparties consult ratings agencies to assess the credit risk of doing business with companies.

The principal benefit of included, quantitative credit score chance management is to lessen sales losses. Monitoring your credit risk lets in your executive management team to recognize which capability clients may come at too excessive a danger and above your pre-diagnosed chance tolerance. Credit hazard, if effectively recognized and controlled, may be leveraged as a strategic possibility. Through effective credit hazard control your business is capable of substantially improve general performance and cozy a aggressive benefit. This become confirmed through South African banks being less affected by the worldwide financial disaster than their global opposite numbers. This become due to rigorous and incredibly powerful credit score danger identification, assessment and control.

The association that exists between CRM and company governance can be stated to be complementary as it is thru exercising exact governance practices in which credit chance can be eliminated in business banks. Proponents of stakeholder principle opine that the most effective manner to obtain sustainability is by addressing the common interest of all stakeholders, which consist of stockholders, clients, employees and the society.

2.2 Operation risk

Operational risk is a very vast idea and it's far very difficult to agree on one commonplace definition that fits anyone's wishes. Operational risk frequently specializes in risks springing up from failures in tactics, systems, and people, and can also include things consisting of fraud, felony chance, and so forth.

You will find that most all large companies, practices, and nonprofits have a risk management department, in addition, to a Security Director, General Counsel, HR Director, and a Safety Director. They have all of this because they realize the importance of risk management in protecting the company from losses, liabilities, and negative brand

recognition. However, small companies, practices, and nonprofits need this type of protection the most but are the ones who can't afford to staff such positions. That leaves them exposed to the most six common operational risks. Many owners have suffered losses that forced them to close down but had they taken the initiative to get an operational risk assessment done and prepared a risk management plan that may not have been the case. Don't be that owner who has the mindset that risks happen to others, or that they can handle any risks that should happen. Also, don't wait until an unexpected risk event happens to examine your operations. You need to know what your risks are so that you can mitigate them and/or prepare for them. Firm performance is measured by changes in earnings. When credit risk is increased attributable to higher financial effect of operational risk incidents, we postulate that this would have a negative impact on firm performance. We use four surrogate variables to measure corporate governance. We find that corporate governance does in fact influence this association. The negative influence of credit risk on firm performance is reduced in the presence of higher levels of corporate governance. Although there is a plethora of research on the beneficial aspects of good corporate governance, there is only limited research in the niche of how corporate governance could influence firm performance in different risk associated settings. We examine the impact of corporate governance on the association between credit risk and firm performance. We find that good corporate governance does mitigate the negative effect of credit risk on firm performance.

2.3 Liquidity risk

Liquidity risk refers to how a bank's incapacity to fulfill its obligations (whether real or perceived) threatens its financial position or existence.

Banks across the globe are facing problems with the liquidity crisis because of poor liquidity management. As every transaction or commitment has implications for a bank's liquidity, managing liquidity risks are of paramount importance. Liquidity risk has become one of the most important elements in enterprise-wide risk management framework. A bank's liquidity framework should maintain sufficient liquidity to withstand all kinds of stress events that will be faced. Constant assessment of liquidity risk management framework and liquidity position is an important supervisory action that will ensure the proper functioning of the bank.

The effective liquidity risk management requires more independent directors in the board, complete separation between the position of CEO and the Chairman and a lower ownership ratio held by institutional investors.

2.4 Market risk

Market risk is a type of risk associated with the market as a whole rather than with individual stocks or business sectors. In other words, it is the risk that the market overall will lose value, rather than that one or more stocks or sector will go out of favour to be replaced by those upon whom investors are smiling.

Market risk, or systematic risk, affects the performance of the entire market simultaneously. Because it affects the whole market, it is difficult to hedge as diversification will not help. Market risk may involve changes to interest rates, exchange rates, geopolitical events, or recessions.

Our examine additionally highlights the importance of corporate governance on changes in both overall and idiosyncratic danger at some point of the global monetary disaster. Since an growth in overall chance reduces an fairness holder's price and inhibits corporations' strategic management, being capable of identify characteristics that motive higher susceptibility of stock costs to wider versions in the course of intervals of accelerated uncertainty might help managers and regulators improve corporate governance mechanics and prevent agencies from struggling constraints springing up from the businesses' overall performance within the capital markets. Additionally, the identification of company-specific characteristics can be used as extra data within the analysis of danger, regarding the decision of which securities ought to be included in a portfolio, or be used to display and forecast an existing portfolio.

3.0 METHODOLOGY

Introduction of Methodology

Methodology is the systematic, theoretical analysis of the techniques applied to a area of take a look at. It contains the theoretical analysis of the body of methods and principles related to a department of knowledge. Typically, it encompasses standards consisting of paradigm , theoretical model, phases and quantitative or qualitative approach. The motive of this studies is to understand approximately the organization particular elements and the financial system issue that's macroeconomic toward the company governance index of the Bank of China Corporation. The method this is used to collect and analyse records is IBM Statistical Package for the Social Sciences (SPSS) Statistics version 25. The methodology of the research is a way to investigate the various steps in systematically analyzing the research problems along with the logic, hypotheses and reason. An analysis of the internal and external factors towards the performance of the bank industry is carried out in this paper.

3.1 Sampling Technique

The sample to be studied in this research is the Bank of China Corporation which is origin in China from the year 2014 to 2018. The main source of the study is the annual report of Bank of China Corporation from the year 2014 to 2018.

3.2 Statistical technique

Statistical technique is implemented in this research where data are obtained from the annual report of Bank of China from the year 2014 to 2018.

3.3 Independent variables and Dependent variable

Independent Variables: Independent variables are variables that can affect a change in the dependent variable and has a positive or negative relationship for the other dependent variables . Independent variables used in this study is return on assets (ROA), current ratio, credit risk and operating margin.

Dependent variable: The dependent variable is “dependent” on the independent variable. As the experimenter changes the independent variable , the effect on the dependent variable is observed and recorded. In this study we will focus on the external factors which is GDP, Inflation rate, exchange rate and so on.

3.4 Descriptive Statistics Analysis:

According Nurgiyantoro (2004), descriptive statistical analysis is a technique that provides descriptive information about the data held and does not intend to test the hypothesis. This analysis is only used to present and analyze the data with the calculations in order to clarify the circumstances or characteristics of the data in question. The measurements used in this study is the mean, standard deviation, maximum, and minimum. Mean is used to determine the average data is concerned. Standard deviation is used to determine how much data is concerned vary from the average. Used to determine the maximum amount of data that is most relevant. The minimum is used to determine the smallest amount of data is concerned.

Linear Regression Analysis:

The analytical method used is multiple linear regression analysis. In this study there are only five independent variables are return on assets (ROA), current ratio, credit risk and operating margin and there is one dependent variable is the growth earnings have a relationship of mutual influence of these variables.

4.0 FINDINGS AND ANALYSIS

Introduction of Findings and Analysis

Data analysis is that the method of evaluating data using analytical and logical reasoning to examine every element of the information provided. Data from numerous sources is gathered, reviewed, and then analyzed to make some type of finding or conclusion. There are a variety of specific data analysis method such as data mining, text analytics, business intelligence, and data visualizations. (Data Analysis, 2019)

In this research, correlation is used to determine the data correlation between the dependent variables (ROA) and independent variables (CGI, Current Ratio, Credit Risk, Operating Margin, GDP, Inflation rate, Interest Rate, Exchange Rate, STDV).

4.1 Relationship between ROA, the internal and external factors of Bank of China.

4.1.1 Descriptive Statistics

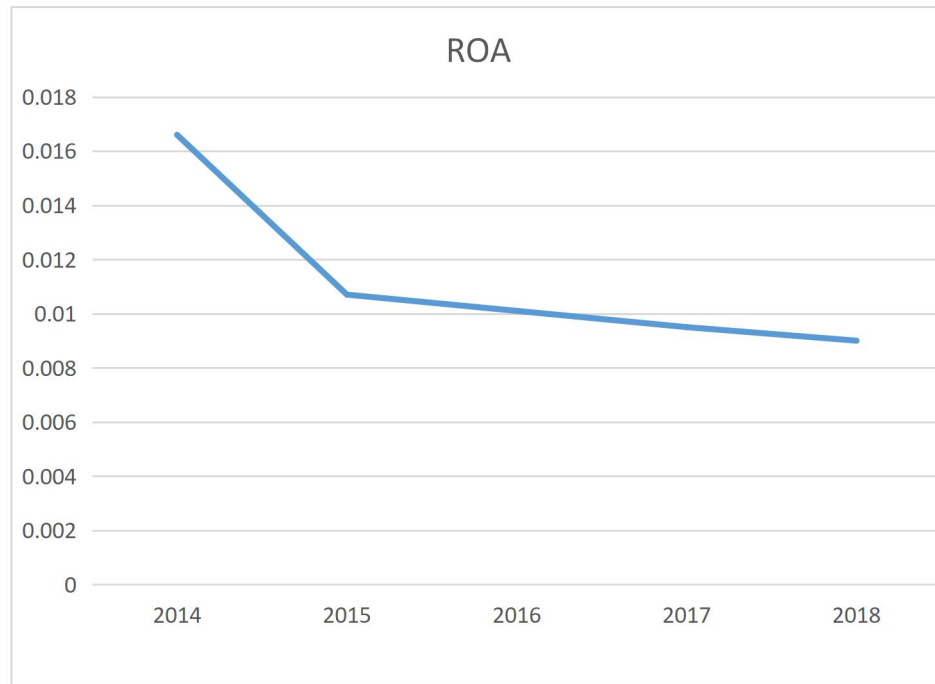
| | Mean | Std. Deviation | N |
|------------------|--------------|----------------|---|
| ROA | .011180 | .0030963 | 5 |
| CURRENT RATIO | .421660 | .0502371 | 5 |
| CREDIT RISK | .496160 | .0436526 | 5 |
| OPERATING MARGIN | 1.240760 | .0532879 | 5 |
| CGI | .800 | .0000 | 5 |
| GDP | 6.860 | .2702 | 5 |
| Inflation | 1.820 | .3033 | 5 |
| Interest Rate | 2.840 | 1.8474 | 5 |
| Exchange Rate | 6.6080 | .30532 | 5 |
| STDV | .11301029660 | .142066169892 | 5 |

The data collected has been run in SPSS System using regression analysis with only 5 samples (from year 2014 to 2018). The mean and standard deviation of dependent and variables ratio are recorded.

Descriptive analysis is the foundation of all data insight. It is the simplest and most common use of data in business today. Descriptive analysis answers the “what happened” by

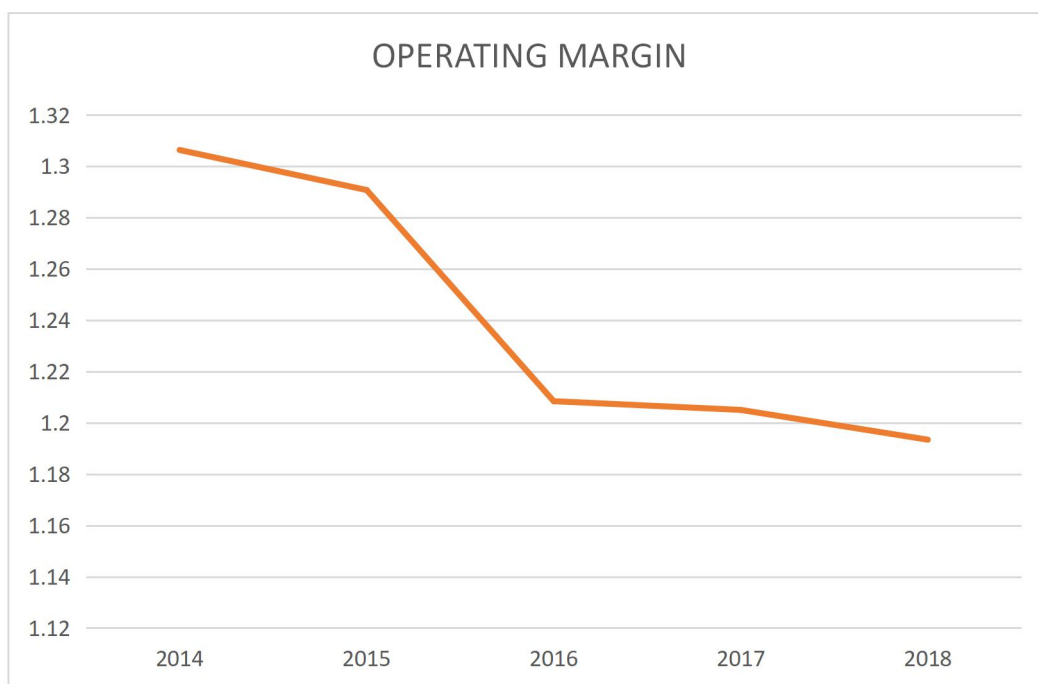
summarizing past data typically within the style of dashboards. (Types of Data Analysis, 2019)

Based on table 4.1, the mean and standard deviation for the dependent variable such as ROA are 0.0112 and 0.0031 respectively which is the least volatile among the variable. The most volatile variable is interest rate with the standard deviation of 1.8474. It shows that the changing of its interest rate is vigorous.



Trend Analysis is a statistical tool that helps to investigate the future movements of a variable on the premise of its historical trends. In simple words, it predicts future behaviour on the basis of past data. (Trend Analysis – What It Means, Uses, Types And More, 2019)

ROA is the return on asset that has been used to measure company performance. As we can see from the graph above, the ROA of Bank of China fluctuated over the years. The ROA of Bank of China was decrease consecutively from 2014 (0.0166) to 2018 (0.009).



Operating margin shows us that the profit a company can make on a dollar of sales after deducting production's variable costs, such as employee salary and raw materials cost, before paying interest or tax. It can be calculated by dividing a company's operating profit by its net sales. The graph shows a fluctuating trend. Bank of China's lowest operating margin was in 2018 (1.1934), while the highest was in 2014 (1.3063).

4.1.2 Correlations

| | | ROA | CURRENT RATIO | CREDIT RISK | OPERATING MARGIN | CGI | GDP | Inflation | InterestRate | ExchangeRate | STDV |
|---------------------|------------------|-------|---------------|-------------|------------------|-------|-------|-----------|--------------|--------------|-------|
| Pearson Correlation | ROA | 1.000 | .617 | -.578 | .802 | . | .958 | .198 | .726 | -.766 | .017 |
| | CURRENT RATIO | .617 | 1.000 | -.781 | .247 | . | .370 | .810 | .550 | .024 | .269 |
| | CREDIT RISK | -.578 | -.781 | 1.000 | -.104 | . | -.371 | -.832 | -.149 | .166 | -.055 |
| | OPERATING MARGIN | .802 | .247 | -.104 | 1.000 | . | .876 | -.315 | .867 | -.806 | .346 |
| | CGI | . | . | . | . | 1.000 | . | . | . | . | . |
| | GDP | .958 | .370 | -.371 | .876 | . | 1.000 | -.079 | .690 | -.907 | -.058 |
| | Inflation | .198 | .810 | -.832 | -.315 | . | -.079 | 1.000 | -.037 | .370 | .035 |
| | InterestRate | .726 | .550 | -.149 | .867 | . | .690 | -.037 | 1.000 | -.439 | .528 |
| | ExchangeRate | -.766 | .024 | .166 | -.806 | . | -.907 | .370 | -.439 | 1.000 | .163 |
| | STDV | .017 | .269 | -.055 | .346 | . | -.058 | .035 | .528 | .163 | 1.000 |
| | Sig. (1-tailed) | ROA | . | .134 | .154 | .051 | .000 | .005 | .375 | .083 | .065 |
| CURRENT RATIO | | .134 | . | .059 | .344 | .000 | .270 | .048 | .168 | .485 | .331 |
| CREDIT RISK | | .154 | .059 | . | .434 | .000 | .270 | .040 | .406 | .395 | .465 |
| OPERATING MARGIN | | .051 | .344 | .434 | . | .000 | .026 | .303 | .028 | .050 | .284 |
| CGI | | .000 | .000 | .000 | .000 | . | .000 | .000 | .000 | .000 | .000 |
| GDP | | .005 | .270 | .270 | .026 | .000 | . | .450 | .099 | .017 | .463 |
| Inflation | | .375 | .048 | .040 | .303 | .000 | .450 | . | .476 | .270 | .478 |
| InterestRate | | .083 | .168 | .406 | .028 | .000 | .099 | .476 | . | .229 | .180 |
| ExchangeRate | | .065 | .485 | .395 | .050 | .000 | .017 | .270 | .229 | . | .397 |
| STDV | | .489 | .331 | .465 | .284 | .000 | .463 | .478 | .180 | .397 | . |

Correlation is a bivariate analysis that measures the strength of association between 2 of the variables and the direction of the connection. In terms of the strength of relationship, the worth of the correlation coefficient varies between positive 1 and negative 1. The sign of the coefficient indicates the orientation of the relationship; a + sign indicates a positive relationship and a – sign indicates a negative relationship. (Correlation (Pearson, Kendall, Spearman), 2019)

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|--------------------|----------|-------------------|----------------------------|---------------|
| 1 | 1.000 ^a | 1.000 | . | . | 2.141 |

a. Predictors: (Constant), STDV, Inflation, GDP, InterestRate

b. Dependent Variable: ROA

“ R - squared is a statistical data measure of how close the data to the fitted regression line. R squared is always between 0 and 100%. 100% indicates that the model explains all the variability of the response data around its mean, vice versa.” (The Minitab Blog, 30 May 2013). R-squared explains to what extent the variance of one variable explains the variance of the second variable.

4.1.4 ANOVA

ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|---|--------------|
| 1 | Regression | .000 | 4 | .000 | . | ^b |
| | Residual | .000 | 0 | . | . | |
| | Total | .000 | 4 | . | . | |

a. Dependent Variable: ROA

b. Predictors: (Constant), STDV, Inflation, GDP, InterestRate

ANOVA table are used to determine the model of the study is acceptable and reliable or not. The significant value that will show in the ANOVA table is the reliability of the study with the corporate governance.

4.1.5 Coefficients

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | | Collinearity Statistics | |
|-------|--------------|-----------------------------|------------|---------------------------|---|------|---------------------------------|-------------|-------------------------|-------|
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound | Tolerance | VIF |
| 1 | (Constant) | -.065 | .000 | | . | . | -.065 | -.065 | | |
| | GDP | .010 | .000 | .901 | . | . | .010 | .010 | .276 | 3.621 |
| | Inflation | .003 | .000 | .273 | . | . | .003 | .003 | .993 | 1.007 |
| | InterestRate | .000 | .000 | .115 | . | . | .000 | .000 | .200 | 4.994 |
| | STDV | -1.022E-5 | .000 | .000 | . | . | .000 | .000 | .381 | 2.625 |

a. Dependent Variable: ROA

The use of coefficient table is to make us clear whether there is a positive or negative correlation between each independent variables and dependent variable. A positive coefficient indicates that as the value of the independent variables increase, the mean of the dependent variable will also increase, vice versa.

5.0 DISCUSSION AND CONCLUSION

Introduction of Discussion and Conclusion

This study aims to determine the corporate governance index and its internal and external determinants. In order to achieve the objective, the company specific and macroeconomic factors were investigated in this case. This part will discuss about the findings in previous part and make the conclusion.

Based on trend analysis, both of the ROA and GDP shows that it is a decreasing trend from year 2014 to 2018. This indicates that there is a positively correlated relationship between ROA and GDP. On the other side, the inflation is showing an increasing trend which is negatively correlated relationship with ROA.

5.1 Discuss of Results

The study aims to investigate the corporate governance index and the determinants. This study is done to achieve the objectives of the study:

- i. To investigate the company's specific factors towards corporate governance index .
- ii. To investigate the macroeconomic factors towards corporate governance index .

5.2 Limitations

This research also focuses only five years (2014-2018) financial statement which is from the company's annual report. Therefore, due to time constraints, only a limited amount of information can be collected and analyzed.

5.3 Conclusion

In conclusion, GDP, inflation and current ratio give the most impact to ROA. The P value of these 3 variables is quite low. The lower the P value, the higher the significant to the ROA. GDP and current ratio are positively related to ROA while inflation is negatively related to ROA.

ROA of bank is influenced by the current ratio. ROA will increase when current ratio increased. In order to increase current ratio, current assets should be increased. Banks can buy more securities to earn some profit. Thus, ROA of bank will increase.

To increase ROA, bank can also increase the interest rate. When interest rate increase, the aggregate demand will decrease. In this way, we can control the inflation, the price of the goods will decrease and demand will increase. When demand increase, the supply of goods will also increase to meet the demand of goods. GDP will also increase when institution produce more goods. In this case, they need money to expand their business to produce the goods. When the institutions borrow from bank, bank will generate income from the loan. Thus, the ROA of bank will increase. This is because loan is the asset of the bank.

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