



Munich Personal RePEc Archive

An Analysis of the External and Internal Factors Affecting Subaru Corporation's Performance

Ng, Soon Siang

Universiti Utara Malaysia

18 November 2019

Online at <https://mpra.ub.uni-muenchen.de/97200/>

MPRA Paper No. 97200, posted 04 Dec 2019 14:01 UTC

An Analysis of the External and Internal Factors Affecting Subaru Corporation's Performance

Ng Soon Siang

Universiti Utara Malaysia

ABSTRACT

The objective of a company to maximize the profit and minimize the cost. The aim of this study is to investigate the relationship between the internal and external factors and the performance of Subaru Corporation in Japan. The data analysis shows that the operating margin and the exchange rate are affected the profitability of the Subaru the most. The study used the annual report of Subaru Corporation from year 2014 until year 2018. The analysis will help the investor to invest smartly because all the data of the company is shown. In the end of the study, there are few suggestions for Subaru Corporation for them to improve the performance of the company.

Keywords: Profitability, Insolvency risk, Macroeconomic

1.0 INTRODUCTION

1.1 Introduction

The section begins with the background of Subaru automobile sector. It is included discussion of the problem statement, research objectives, research questions, scope of study and the organisation of the report.

1.2 Overview of Subaru Corporation

In 1958, Fuji Heavy Industries have changed its company structure from Aircraft Research Laboratory to automobile manufacturer, which is Subaru Corporation.

Subaru never satisfied with the performance in the market. One of the management's top priorities are the enhancement of corporate governance. Subaru operates based on the "Customer First" principle which means that they get the fulfilment and the trustworthy from the investors in encourage the growth of the company and increase the corporate value of the company. Subaru separates corporate management into two parts, which is decision making and the execution of business operations. Rushing decision making will lead to the more efficiency to the corporate management.

Subaru monitors of its management and operations as the risk management technique and outside officers will provide the advices to them. Subaru carry out a proper disclosure of info in order to improve the transparency of management. Subaru seek to form progressive technology on a continuing foundation and give clients with extraordinary products which is quality and will satisfy consumers. Subaru look forward to the future and aim to build an energetic, developmental company. The company also had the outside director who are independent from the company. They are giving their opinion and took part in decisions at Board of Director's meeting. They are being supposed to give an advice to the top management since they have lots of experience on how to management the company and provide the views on risk prevention.

1.3 Problem Statement

The company also faced a lot of obstacles like operation risk, credit risk and market risk. For example, the impact of the increase in SG&A expenses contingent increases the interest rates in United States and the increases Research and Development cost causes the operating income of Subaru decreased by 7.6% to 379.4 billion yen.

On the other hands, Subaru involved in liquidity risk. This is due to the auto loan crisis. This incident makes Subaru difficult to operate the company smoothly and lack of cash on hand.

Besides, the company also involved in credit risk. In addition to concern about the payment due dates and balances of each customer, credit control function identifies and reduces the potential risk of unable to collect due to deterioration in financial status or other factors of customers.

Other than that, Subaru involves in market risk. In China, Subaru has no enough sales for the vehicles and this made Subaru difficult to survive in China market although China market in the largest market in the world.

1.4 Research Objectives

Overall, this study is to investigate the relationship between Subaru performances and the factor-factor such as external factor and internal factor in Japan. Objectives of this study are:

1. To investigate the internal factors of company toward company performances.
2. To investigate the external factors toward company performances.
3. To investigate the internal factors and the external factors toward company performances.

1.5 Research Questions

1. Is there any relationship between internal factors and company performances?
2. Is there any relationship between external factors and company performances?
3. Is there any relationship between internal and external factors and company performances?

1.6 Scope of study

The model of study is Subaru in Japan which came from the automobile industry. The accounting and financial ratios was founded on 5 year companies' annual report starting from year 2014 to year 2018.

1.7 Organisation of the study

The study involves five main section. The first section is about introduction which included overview of the study, problem statement, research objectives, research questions, scope of study, and organisation of study. Chapter two is about the literature review which discussed about the liquidity risk, market risk, operational risk and credit risk. Chapter three is about the theoretical framework, measurement of variables, research methodology and the data analysis. Chapter four is about the descriptive statistical analysis, correlation and diagnosis test. The last chapter is about the summary and conclusion of the study, implication of the study, limitation of the study and the suggestions.

2.0 LITERATURE REVIEW

2.1 Introduction

The objective of this section is to analysis the related literature. This chapter includes two parts, which is introduce to this chapter, gives the definition and concept of those risk.

2.2 Financial Risk

2.2.1 Corporate governance

Elizabeth Johnstone (2019) said that corporate governance describes the background of rules, associations, structures and procedures is regulated and trained by experts within the company. The mechanism that control by the company and experts are required to interpret it. To list on the stock exchange such as ASX, the confidence of the investor toward the corporate governance of a company is very important for the company to strive the capital.

Corporate governance also very important in the economic area of the company social responsibility mainly in relation to shareholders and employees (Ching KW, Tan JS, Chi Ching RG (2006)). Besides that, corporate governance has become a significant factor to manage the company. It creates the rules which manages the relationships between management, stakeholders and shareholders. In Japan, corporate governance has improved slowly and the recent revision of the code will add momentum for the relaxing of cross-shareholdings (Junichi Takayama, 2018).

2.2.2 Credit Risk

Credit risk includes failure of a customer to meet commitments in relation to loaning, exchange, hedging, and payments. The credit risk is generally made up of transaction risk and portfolio risk. The portfolio risk separate into two which are economic risk and psychology risk. The credit risk of a bank's portfolio depends on both external and internal factors such as the economic, politics and so on. (Erika Spuchl'áková*a ,2015).

According to Ken Brown and Peter Moles (2014), credit risk separates into two which is concentration risk and settlement risk. Concentration risk will increase when the parties that share similar characteristics exposures. Settlement risk increase when third party procedures trades for other person.

Natsuki Yamamoto and Masahisa Yuzawa (2018) said that Subaru had faced a risk that they use employed unqualified inspectors to perform final vehicle safety checks Subaru holds the dubious distinction of getting caught on both fronts. This issue causes their share decrease.

2.2.3 Liquidity Risk

Liquidity is flows of the cash in the company. Liquidity risk will happen when the company unable to convert the assets into the cash. When the investors cannot meet their short term obligations, liquidity risk will occur. (Williamson's (2008)).

According to Tamara Gomes, Natasha Khan, (2011), the liquidity risk management is very important for bank to reduce the probability of future financial crisis. Subaru had faced a liquidity risk due to auto loan crimes. The relationship between United State revenue exposure and debt collection issues is not consistent across all companies. Subaru generates significant portions of their sales in the United State. 63% of Subaru's revenue comes from the U.S. (Tyler Chaia, 2018).

2.2.4 Market Risk

Market risk is the risk of instability of market prices. Therefore, the market risk management is to measure and control risk in a combined method. This requires the collection of market risks across all categories of assets and results in a firm's trading book. (John Frain & Conor Meegan, 1996).

The importance of market risks is to defend the bank from unexpected losses and make sure the stability of the income through independent identification, assessment and understanding of business market risks. Besides, to ensure that the bank's organizational structure and management process same as the benchmark in international, market risk control is needed. (Emilia Milanova, 2010). Subaru had faced a market risk like it market share had drop for 3% since NHK said that Subaru had do a fake report on the car mileage date. (Mengran, 2018).

2.2.5 Operation Risk

According to Rodney Coleman, (2011), operational risk is the loss resulting from insufficient or failed internal processes such as fraud, accounting errors, equipment failure and so on. Serious operational risk events such as war and natural disaster will also happen outside a purely business setting. The bank and the insurance will illustrate with data and monitoring the operational risk.

According to Peter Boller, Caroline Grégoire, Toshihiro Kawano, (2016), it must be recognized that the required capital for operational risk should not be determine by using quantitative methods. Lack of accountability and unclear direction from top management was one of the reason of operational risk occurs. A good operational risk management will avoid the cost using to settle the risk in operations.

There are many reasons of operational risks. Usually, operational risks occur from unknown and unexpected sources. Broadly, most operational risks arise from one of three sources, such as individual risk, information technology risk and process related risk. Subaru had involves in operational risk such as their employees improperly recording fuel economy and emissions data for 1,551 vehicles far more than the 903 autos reported in April and Subaru employed unqualified inspectors to perform final vehicle safety checks.

2.2.6 Performance

According to Bartoli and Blatrix (2015), performance is the result of a company after they try the best to produce in a company and it should be reached through items such as showing, calculation, efficiency, and quality.

R. Morck, A. Shleifer, R.W. Vishny (1988) said that the value of the company will increases when company run in a good way. The good performance of a company can as a measurement for the investor to invest in the company.

According to Subaru Business Performance, operating income of Subaru decreases 48.5% to 195.5 billion yen. Ordinary income also decreased 48.3% to 196.2 billion yen. Net income attributable to owners of parent fell 32.9% to 147.8 billion yen.

3.0 METHODOLOGY

3.1 Introduction

This chapter is discussing study applied in data collection. It is also cover on sampling technique, statistical analysis, data analysis and statistical package for social science (SPSS).

3.2 Sampling Technique

The unit of analysis is the real element that is being analysed in a study. A unit of analysis can be analysed in individual, groups, organisation and many more. In this study, the organisation will be the unit of analysis. All companies in automobile industry in Japan are the population in this study. In order to conduct the study, Subaru Corporation is chosen. The data are collected from the annual report from year 2014 to 2018 to measure the dependent variable and the independent variables.

3.3 Statistical Analysis

There are two type of method to collect the data which is primary data and secondary data. In this study, primary data is from the annual report of Subaru. The data were gathered from 5 years which is from 2014 until 2018. From the annual report, we know that the credit risk, operational risk, market risk, liquidity risk of the company. We can calculate the performance of the company by using those data. Besides that, we also get the information of Subaru from the journal, magazines, newspaper, and so on.

3.4 Data Analysis

The frame to determine those variables are shown as below:

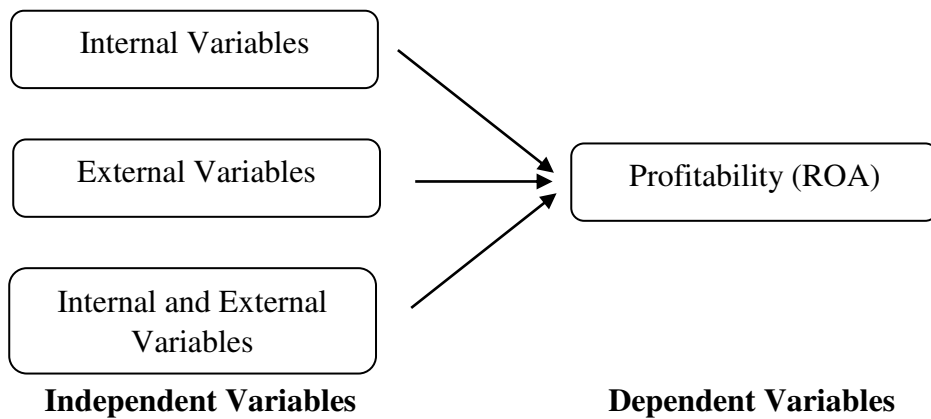


Figure 1: Research Frame

Multiple regression analysis was used to determine the dependent variables and independent variables.

$$\text{ROA} = \alpha_1 + \alpha_2\text{CR} + \alpha_3\text{QR} + \alpha_4\text{ACP} + \alpha_5\text{DTI} + \alpha_6\text{OR} + \alpha_7\text{OM} + \alpha_8\text{INDEX} + e \dots \dots \dots \text{Equation 1}$$

$$\text{ROA} = \alpha_1 + \alpha_2\text{GDP} + \alpha_3\text{INFLA} + \alpha_4\text{IR} + \alpha_5\text{EXCR} + e \dots \dots \dots \text{Equation 2}$$

$$\text{ROA} = \alpha_1 + \alpha_2\text{CR} + \alpha_3\text{QR} + \alpha_4\text{ACP} + \alpha_5\text{DTI} + \alpha_6\text{OR} + \alpha_7\text{OM} + \alpha_8\text{INDEX} + \alpha_9\text{GDP} + \alpha_{10}\text{INFLA} + \alpha_{11}\text{IR} + \alpha_{12}\text{EXCR} + e \dots \dots \dots \text{Equation 3}$$

Variables	Formula	Measurement
Return on Assets	$\frac{\text{Net Income}}{\text{Total Assets}}$	Profitability
Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liability}}$	Liquidity Risk
Quick Ratio	$\frac{\text{Current Assets} - \text{Inventory} - \text{Prepaid Expenses}}{\text{Current Liability}}$	Liquidity Risk
Average-collection Period	$\frac{\text{Account Receivable}}{\text{Average Receivable Turnover}}$	Insolvency Risk
Debt to income	$\frac{\text{Total Liability}}{\text{Total Income}}$	Insolvency Risk
Operational Ratio	$\frac{\text{Operating Expenses}}{\text{Net Sale}}$	Operational Risk
Operational Margin	$\frac{\text{Earnings before Interest and Taxes}}{\text{Revenue}}$	Operational Risk

Table 3.1: Measurement of Variables

4.0 FINDINGS AND ANALYSIS

4.1 Introduction

This chapter will present the data after the interpretation from regression analysis and analysis of company performances toward external factors and internal factors of Subaru Corporation.

4.2 Descriptive Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
ROA	.1152	.0335	5
CURRENT RATIO	1.7399	.13401	5
QUICK RATIO	1.4395	.1414	5
AVERAGE-COLLECTION PERIOD	19.6551	4.8025	5
DEBT TO INCOME	4.6537	1.1835	5
OPERATIONAL RATIO	.155466	.00999	5
OPERATING MARGIN	.13484	.03801	5
INDEX	.8000	0	5
GDP	.980	.5933	5
Inflation	1.040	1.0407	5
Interest Rate	.100	0	5
Exchange Rate	115.8520	4.5816	5

Table 1: Descriptive Statistics

Table 1 shows that the descriptive analysis of dependent (ROA) and independent variables from year 2014 until year 2018. The return on assets is also an internal variable in this study of Subaru. For ROA, in within 5 years (2014 to 2018), the means is 11.52% and it can be expected that the ROA for the company is good to create revenue in the company. The standard deviation for 5 years is 3.35%. Based on the data, it shows that the percentage of standard deviation is lower than the mean. The different between the mean and standard deviation is 3.17%.

Besides that, the mean for current ratio is 1.74 and the standard deviation is 1.34. This shows the company is able to increase the percentage of liquidity. The mean for quick ratio is 1.44 and the standard deviation is 1.41. The mean average-collection period is 19.66 days and the standard deviation is 4.80 days. It means that Subaru will collect the receivables every 19.66 which is 20 days.

The mean of debt to income is 4.65 and the standard deviation is 1.18. It means that the ratio of debt of Subaru is 4.65 times compare to the income of Subaru. The mean of operational ratio is 15.55% and the standard deviation is 0.1%. The mean of operational margin is 13.48 and the standard deviation is 3.8.

The index is 0.8 for the 5 years for Subaru and the mean of inflation rate is 1.04 while its standard deviation is 1.04. Then, the mean for gross domestic product (GDP) is 0.98 and the standard deviation is 0.59. For the interest rate, average mean is 0.1 and its standard deviation is 0. Lastly, the mean of the exchange rate is 115.85% and the standard deviation is 4.58%.

4.3 Descriptive Analysis

4.3.1 Return on assets ROA

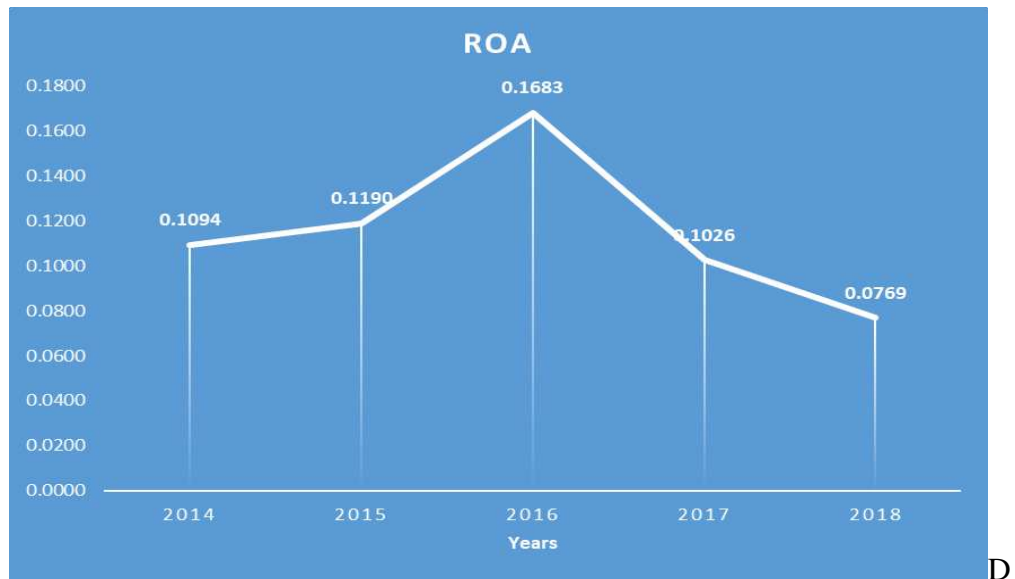


Diagram 1: Return on assets of Subaru

Return on assets is talk about how the profitable of a company is related to its total assets. ROA gives an idea to investor, or analyst on how efficient a company's management is at using its assets to make profits. Diagram 1 shows the ROA of Subaru from year 2014 until year 2018. From the diagram, we know that the ROA increases from 0.1094 to 0.1190 from year 2014 to 2015 and increase sudden to 0.1683 at year 2016. However, the ROA decrease slightly to 0.1026 at year 2017 and continue drop to 0.0769 at year 2018. From the graph, we can conclude that the ROA of Subaru is the highest in year 2016 and cause the company gains the most profit in that year. (Stiroh, K, J& Strahan, P.E. 2003)

4.3.2 Current Ratio

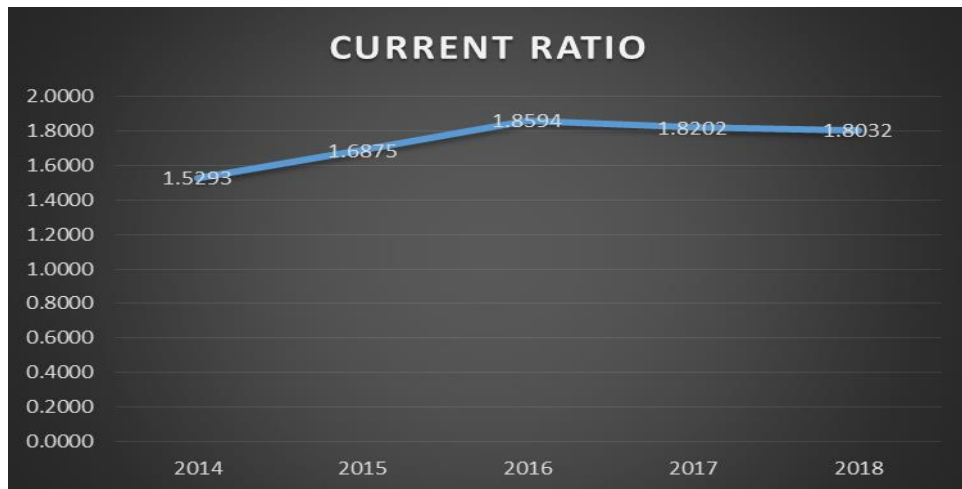


Diagram 2: Current Ratio of Subaru

Current ratio measures the ability of a company to pay short-term debts. Through current ratio, investors can know that how a company can use the current assets to settle the current debts. From diagram 2, we know that the current ratio of Subaru increases from 1.5293 to 1.6875 and continue to rise to 1.8594 in year 2014 to year 2016. However, the current ratio decreases to 1.8202 at year 2017 and continue to decline to 1.8032 at year 2018. We can conclude that the current ratio in year 2016 is the highest means that the company has the most ability to pay short term debts in that year. (Wu, C. L., Hsu, W. C., Shieh, H. M., & Tsai, M. S. (1995))

4.3.3 Quick Ratio

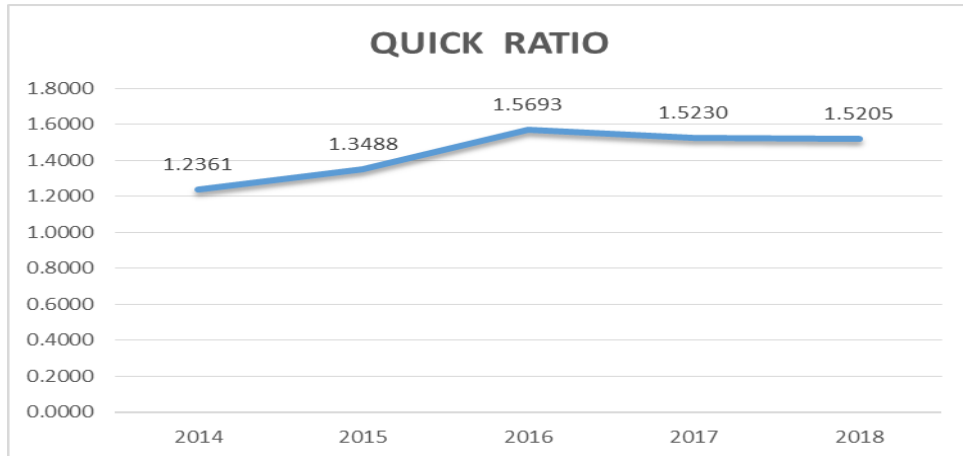


Diagram 3: Quick Ratio of Subaru

The quick ratio measures the ability of a company to meet its short-term duties with its most liquid assets. From diagram 3, we know that the quick ratio of Subaru increases from 1.2361 to 1.3488 and continue rise to 1.5693 from year 2014 to year 2016. However, the quick ratio decrease to 1.5230 at year 2017 and keep on drop to 1.5205 at year 2018. We can say that the quick ratio in year 2016 is the highest which means that the company has a best liquidity and financial health in that year. (Alshatti, A. S. (2015))

4.3.4 Average- Collection Period

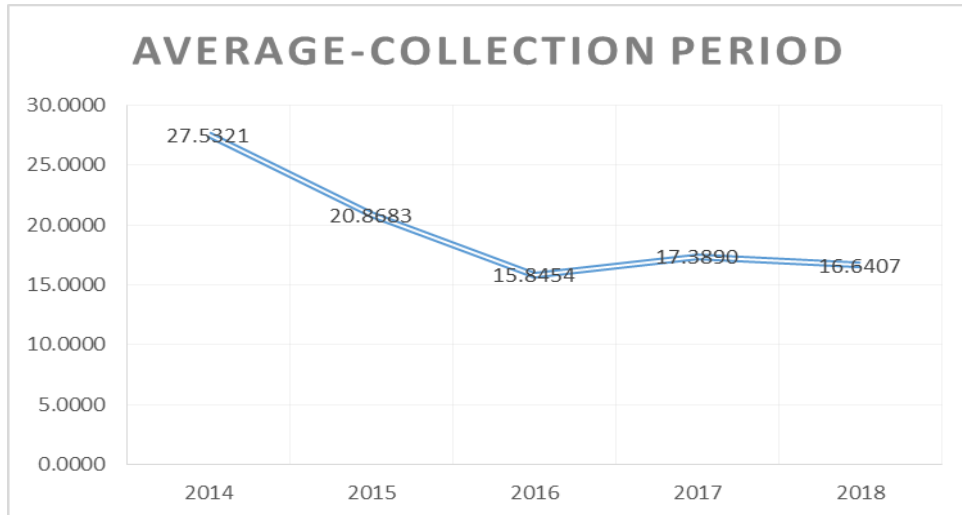


Diagram 4: Average- Collection Period of Subaru

The average collection period is the average number of days between the sales made in credit and the days for the company to collect the money back. From the diagram 4, we know that the average- collection period of Subaru decrease sharply from 27.5321 days to 20.8693 days and continue drop to 15.8454 days from year 2014 to year 2016. However, the average- collection period increase again to 17.3890 at year 2017 and drop to 16.6407 at year 2018. From the graph, we know that the average collection period of Subaru is decreasing almost every year which means that the company is profitable. (Brigham, Eugene F. 1995)

4.3.5 Debt to Income Ratio

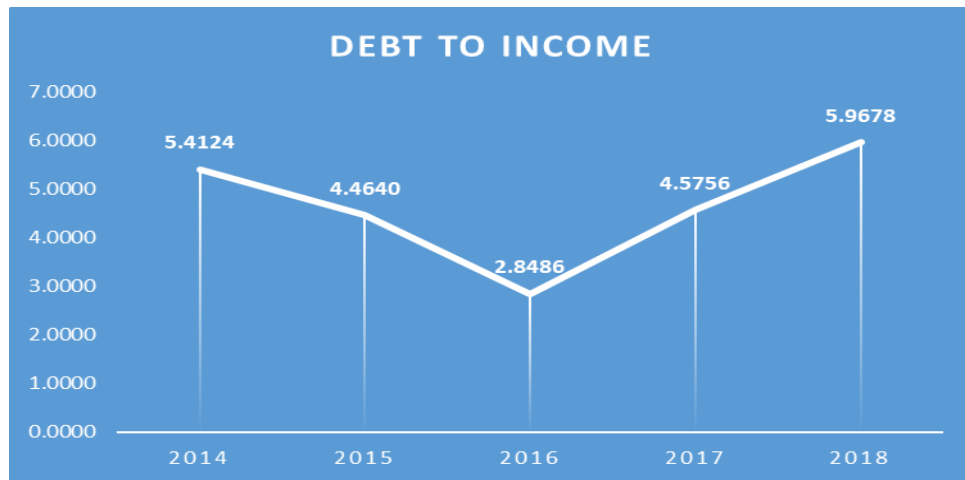


Diagram 5: Debt to Income Ratio of Subaru

The debt to income ratio is the ratio of a consumer's monthly gross income that goes toward paying debts. From the diagram 5, we know that Subaru need to pay 5.4124% from it income for the debt purposes at year 2014. In 2015, Subaru paid 4.4640% from it income for the debt purposes. Subaru paid the lowest debt which is 2.8486% to the debt collector in year 2016. In 2017 and 2018, Subaru paid for the debt purposes 4.5756% and 5.9678% from it income respectively. The lower the debt to income ratio, the higher the profit of a company. (Marco Muscettola Francesco Naccarato,2014)

4.3.6 Operational Ratio

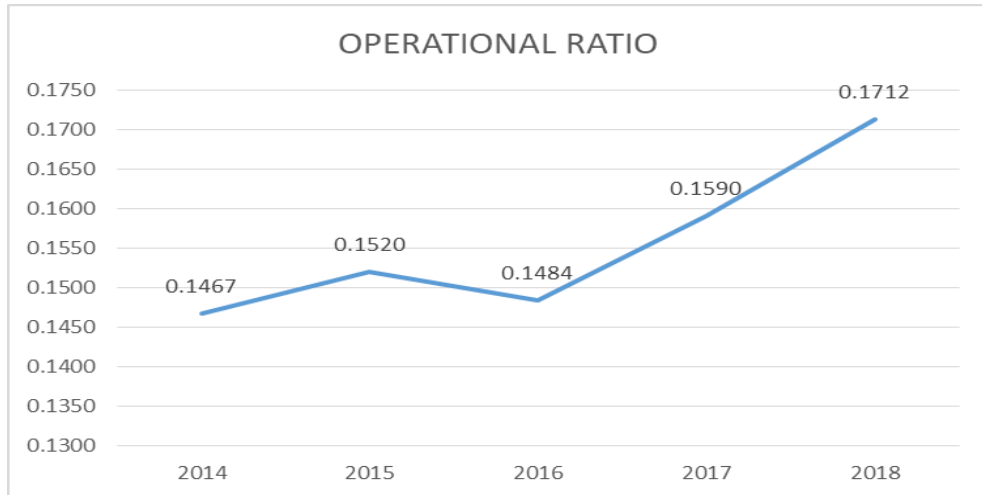


Diagram 6: Operational Ratio of Subaru

The operating ratio is comparing the production and executive expenses to net sales. From the diagram 6, we know that the operational ratio of Subaru increase from 0.1467 to 0.1520 from year 2014 to year 2015. In year 2016, the operational ratio for Subaru is 0.1484 and continue rising to 0.1590 and 0.1712 at year 2017 and 2018 respectively. The smaller the operating ratio, the higher the profit of a company. (Simon.L.J, 1959)

4.3.7 Operating Margin



Diagram 7: Operating Margin of Subaru

Operating margin measures the profitability of a company. It shows how much of each dollar of revenues is available after pay the both costs of goods sold and operating expenses. From the diagram 7, we know that the operating margin of Subaru decreases from 0.1377 to 0.1373 from year 2014 to year 2015. However, operating margin of Subaru increase rapidly to 0.1923 in year 2016. In year 2017, the operating margin of Subaru decrease again to 0.1192 and continue drop to 0.0877 at year 2018. The higher the operating margin, the higher the profit of a company. (Joshua Kennon 2019)

4.3.8 Index of company

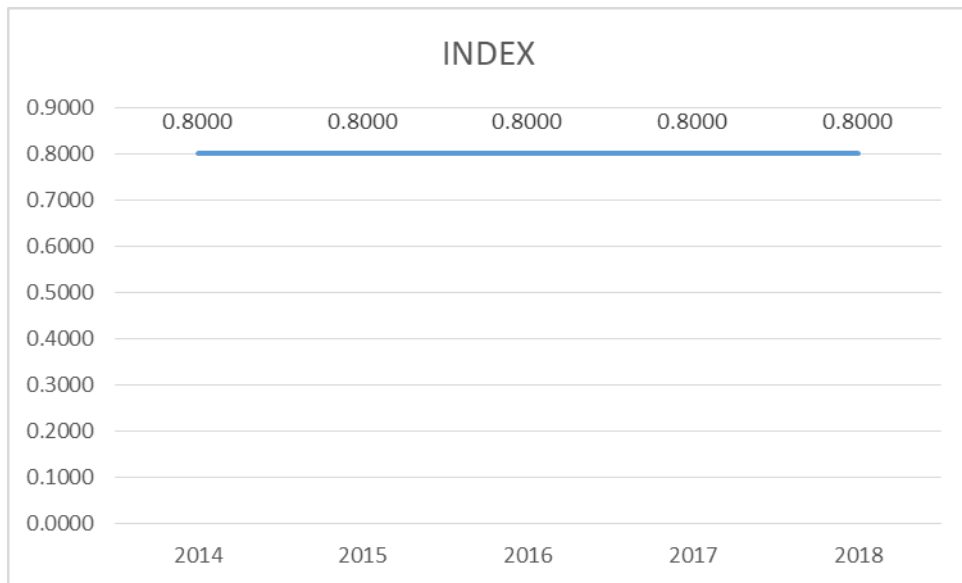


Diagram 8: Index of Subaru

Index is the record of the Subaru. Index record the accountability, transparency, independent, fairness and the sustainability of Subaru. In diagram 8 show that, Subaru get 80% of the Index means that Subaru has done a good job in year 2014. However, Subaru does not involve female director in the top executive management, thus, Subaru get 80% in the index. From year 2015 until year 2018, Subaru still did not involve female director in the top executive management part, thus Index of Subaru still remain the same at 80%.

4.4 Correlation

Pearson Correlation	ROA	1.000
	CURRENT RATIO	.219
	QUICK RATIO	.189
	AVERAGE-COLLECTION PERIOD	-.154
	DEBT TO INCOME	-.947
	OPERATIONAL RATIO	-.736
	OPERATING MARGIN	.990
	INDEX	.
	GDP	-.260
	Inflation	-.378
	Interest Rate	.
	Exchange Rate	.533
Sig.(1-tailed)	ROA	.
	CURRENT RATIO	.362
	QUICK RATIO	.381
	AVERAGE-COLLECTION PERIOD	.402
	DEBT TO INCOME	.007
	OPERATIONAL RATIO	.078
	OPERATING MARGIN	.001
	INDEX	.000
	GDP	.336
	Inflation	.265
	Interest Rate	.000
	Exchange Rate	.178

Table 2: Pearson Correlation Result for internal and external variables

Pearson correlation measures the relationship between the performance which is return on asset (ROA) and the internal and external factors such as current ratio, quick ratio, average -collection period, debt to income, operational ratio, operating margin, index, gross domestic product (GDP), inflation and exchange rate. The positive value of the result will representative the positive relationship and reversely.

Current ratio shows a positive value which is 0.219 on average while quick ratio also shows a positive value which is 0.189. This means that the company is in good condition. Subaru has RM1 of current assets for every RM0.219 of current liabilities. Besides, the quick ratio of Subaru is 0.189. This means that Subaru may not be able to fully pay off its current ratio in the short term. For instance, a quick ratio of 0.189 indicates that Subaru has RM 0.189 of liquid assets available to cover each RM 1 of its current liabilities.

Average collection periods shows a negative value which is -0.154. Low average collection periods indicate company collection payments faster. It indicates that when profitability increases, average collection period which decreases. Debt to income with a ratio of -0.947. Lower debt to income ratio will ensure the company operations smoothly.

Operational ratio shows a negative value which is -0.736. It indicates that when the operational ratio decreases, the profitability will increase. Meanwhile, the operating margin of positive value is 0.990. The operating profit margin ratio tells us the profit a company after paying for variable cost of production. In this case, Subaru gains RM0.99 before interest and taxes for every RM 1 of sales.

Gross domestic product (GDP) shows a negative value of -0.260. The inflation shows a negative value of -0.378 and the exchange rate is 0.533.

4.5 Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.002	.010		-.247	.821	-.034	.029
	OPERATING MARGIN	.873	.072	.990	12.162	.001	.644	1.101

a. Dependent Variable: ROA

Table 3: Coefficient Result for internal variables

Based on the table above, the operating margin has the highest impact with t value, 12.162 to profitability compared to others internal variables such as current ratio, quick ratio, average- collection period, operating margin, operational ratio and index score. It also shows a coefficient of Subaru from year 2014 until 2018. The operating margin influence company very much. In the findings, the beta of operating margin indicates that is a positive relationship to the company. The higher the operating margin, the higher the company gains the profit. (Joshua Kennon, 2019)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.410	.417		-.983	.505	-5.705	4.885
	GDP	-.026	.030	-.453	-.865	.546	-.402	.350
	Inflation	-.027	.017	-.838	-1.579	.359	-.244	.190
	Exchange Rate	.005	.004	.682	1.398	.395	-.040	.050

a. Dependent Variable: ROA

Table 4: Coefficient Result for external variables

Based on the table above, the exchange rate variables have the highest impact with t value of 1.398 to profitability compared to GDP, inflation and interest rate. It also shows a coefficient of Subaru from year 2014 until year 2018. The exchange rate shows a big influence to the company. The beta of exchange rate indicates that it is positive relationship to the company. (Okika Christian E.M., Udeh, Francis N.P, Okoye Greg. O,2018)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
		1	(Constant)	-.002			.010		-.247	.821	-.034	.029
	OPERATING MARGIN	.873	.072	.990	12.162	.001	.644	1.101
2	(Constant)	.006	.003		1.849	.206	-.009	.021
	OPERATING MARGIN	.842	.023	.955	37.018	.001	.744	.940
	Inflation	-.005	.001	-.141	-5.461	.032	-.008	-.001

a. Dependent Variable: ROA

Table 5: Coefficient Result for internal and external variables

Based on the table above, the operating margin has the highest impact with t value, 37.018 to profitability compared to others internal variables such as current ratio, quick ratio, average- collection period, operating margin, operational ratio, index score and others external factors such as GDP, inflation, interest rate and exchange rate. It also shows a coefficient of Subaru from year 2014 until 2018. The operating margin influence company very much. In the findings, the beta of operating margin indicates that is a positive relationship to the company. (Dr. Monica Tulsian, 2014)

4.6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.990 ^a	.980	.973	.0054566	1.202

a. Predictors: (Constant), OPERATING MARGIN

b. Dependent Variable: ROA

Table 6: Model Summary for internal variables

Based on the table above, it can conclude that Adjusted R Square is equal to 97.3%. This implies that by using all the internal variables in the model to explain 97.3% of the variance in the profitability of Subaru. While the remaining 2.7% of the Adjusted R Square remain unknown. This indicates that the variance in the profitability of Subaru is unable to explain by the internal variables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.893 ^a	.798	.190	.0301627	2.619

a. Predictors: (Constant), Exchange Rate, GDP, Inflation

b. Dependent Variable: ROA

Table 7: Model Summary for external variables

Based on the table above, it can conclude that Adjusted R Square is equal to 19%. This implies that by using all the external variables in the model to explain 19% of the variance in the profitability of Subaru. While the remaining 81% of the Adjusted R Square remain unknown. This indicates that the variance in the profitability of Subaru is unable to explain by the external variables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.990 ^a	.980	.973	.0054566	
2	.999 ^b	.999	.998	.0016754	2.789

a. Predictors: (Constant), OPERATING MARGIN

b. Predictors: (Constant), OPERATING MARGIN , Inflation

c. Dependent Variable: ROA

Table 8: Model Summary for internal and external variables

Based on the table above, it can conclude that Adjusted R Square is equal to 99.8%. This implies that by using all the internal and external variables in the model to explain 99.8% of the variance in the profitability of Subaru. While the remaining 0.02% of the Adjusted R Square remain unknown. This indicates that the variance in the profitability of Subaru is unable to explain by the internal and external variables.

4.7 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	147.915	.001 ^b
	Residual	.000	3	.000		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

Table 9: ANOVA for internal variables

The table above shows a significant value of 0.001 which is below the alpha value ($p < 0.05$). It shows that the variable is perfectly significant to represent the model. Thus, the value is an acceptable value that shows the model of study are acceptable.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	3	.001	1.313	.553 ^b
	Residual	.001	1	.001		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), Exchange Rate, GDP, Inflation

Table 10: ANOVA for external variables

The table above shows a significant value of 0.553 which is above the alpha value ($p < 0.05$). It shows that the variable is not significant to represent the model. Thus, the value is not an acceptable value that shows the model of study are not acceptable.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	147.915	.001 ^b
	Residual	.000	3	.000		
	Total	.004	4			
2	Regression	.004	2	.002	799.372	.001 ^c
	Residual	.000	2	.000		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

c. Predictors: (Constant), OPERATING MARGIN , Inflation

Table 11: ANOVA for internal and external variables

The table above shows a significant value of 0.001 which is below the alpha value ($p < 0.05$). It shows that the variable is perfectly significant to represent the model. Thus, the value is an acceptable value that shows the model of study are acceptable.

5.0 CONCLUSION

5.1 Introduction

The objective of this study is to investigate the relationship between the internal factors of a company and the external factors and the performance of Subaru Corporation in Japan. In this section, it separates into 4 parts which is introduction, summary of this study, limitation, and suggestions.

5.2 Summary of this study

The objective of this study is to investigate the relationship between the internal factors of a company and the external factors and the performance of Subaru Corporation in Japan. The study has been completed to achieve the research objectives as shown below:

1. To investigate the internal factors of company toward company performances.
2. To investigate the external factors toward company performances.
3. To investigate the internal factors and the external factors toward company performances.

Based on the result in chapter 4, we can know that the profitability of Subaru has been affected by the operating margin which is internal factor of the company. The correlation shows that there is a strong positive relationship between the operating margin and profitability of the company. We can conclude that the higher the operating margin, the higher the profitability of a company. Besides that, we also know that the external factor such as exchange rate is the factor which can affect the profitability the most. There is a strong positive relationship between the exchange rate and the profitability. We can say that the higher the exchange rate, the higher the profitability of the company. Besides that, when we investigate the both ratios with the performance of the company, we can know that the operating margin is the ratio which will strongly affect the company performance. Therefore, we can conclude that performance of Subaru Corporation was strongly influenced by the internal factor such as operating margin and less influenced by the exchange rate when compare to operating margin.

5.3 Limitation

The study has only referred to the 5 year annual reports of Subaru Corporation from year 2014 until year 2018. Thus, we only get the limited information since we only referred to 5 year financial statements.

5.4 Suggestions

Based on the findings, the return on assets of Subaru was decreasing yearly. Return on assets is very important for the company to make profit by using the assets. Hence, Subaru need to use their assets with more effectively to make more profit. Besides that, the operational ratio of Subaru is getting higher in these few years. Subaru need to reduce the operational ratio to get more profit. Subaru can reduce the useless operational costs such as the loss due to the careless of labour. The labour need to work carefully to avoid such losses. Finally, Subaru did a good job in corporate government where they are following the pillars of corporate government. They have the transparency, accountability, sustainability and independent. Hence, Subaru need to hire some female director in the top management department to achieve the fairness part. This can increase the index of company to reach the bench mark of sound governance.

Acknowledgement

I wished to thank to my Corporate Governance lecturer, Dr. Waeibrorheem Waemustafa. Dr. helps me and guide me along the way to complete this assignment. He is very patient to answer all my questions and taught me on how to complete this extremely hard assignment. In his encouragement and supports, I finish the assignment successfully.

Besides that, I want to thank my parents who always be myside to support me and love me. Lastly, I wish to thank all my friend who give me a hand during the process of doing this assignment. Without their help, I would able to finish this assignment. Thank you.

REFERENCES

- Alshatti, A. S. (2015). *The effect of the liquidity management on profitability in the Jordanian commercial banks*. International Journal of Business and Management, 10(1), 62.
- Bartoli and Blatrix (2015), *Management dans les organisations publiques 4th edition*. Dunod, Paris.
- Brigham, Eugene F. 1995. *Fundamentals of Financial Management*. Florida: The Dryden Press.
- Ching KW, Tan JS, Chi Ching RG (2006), *Corporate Governance in East Asia: The Road Ahead*. Singapore. Prentice Hall/Pearson Education South Asia.
- Dr. Monica Tulsian, 2014, *Profitability Analysis*, IOSR Journal of Economics and Finance.
- Elizabeth Johnstone (2019), *Corporate Governance Principles and Recommendations 4th edition*. ASX Corporate Governance Council.
- Emilia Milanova, 2010, *Market Risk management in banks*. University of National and World Economy Sofia, Bulgaria.
- Erika Spuchl'áková*a, Katarína Valaškováb, Peter Adamkoc, (2015), *The Credit Risk and its Measurement, Hedging and Monitoring*, Procedia Economics and Finance.
- John Frain and Conor Meegan, 1996. *Market Risk: An introduction to the concept & analytics of Value-at-risk*. Economic Analysis Research & Publications Department, Central Bank of Ireland.
- Joshua Kennon, 2019, *The Complete Idiot's Guide to Investing*, The Balance.
- Junichi Takayama (2018), *Where are we with corporate Governance in Japan?* Nikko am Nikko Asset Management.
- Ken Brown, Peter Moles, (2014), *Credit Risk Management*. Edinburgh Business School Heriot-Watt University.
- Marco Muscettola Francesco Naccarato, *The Casual Relationship Between Debt and Mengran*, 2018. *Sina Finance*. Sina.

Natsuki Yamamoto, Masahisa Yuzawa, (2018), *Subaru's new CEO faces challenges beyond corporate scandals*. Nikkei Asian Review.

Okika Christian E.M., Udeh, Francis N.P, Okoye Greg. O,2018, *Effect of Exchange Rate Fluctuation on Firm Profitability*, International Journal of Academic Research in Business and Social Sciences.

Peter Boller, Caroline Grégoire, Toshihiro Kawano (2016), *Operational Risk*. International Actuarial Association.

Profitability: The Case of Italy, Athens Journal of Business and Economics.

R. Morck, A. Shleifer, R.W. Vishny, (1988), *Management ownership and market valuation: an empirical analysis*. Journal of Financial Economic.

Rodney Coleman, (2011), *Operational Risk*. John Wiley & Sons, Inc.

Simon, L. J. (1959). *Size, strength and profit*. Journal of Insurance, 25, 1-16.

Stiroh, K. J., & Strahan, P. E. (2003). *Competitive dynamics of deregulation: Evidence from US banking*. Journal of Money, Credit, and Banking, 35(5), 801-828.

Tamara Gomes and Natasha Khan, (2011), *Strengthening Bank Management of Liquidity Risk: The Basel III Liquidity Standards*. Bank of Canada,

Tyler Chaia, 2018, *Car companies face liquidity risks due to rising auto loan delinquencies*. Companies and Market.

Williamsonís (2008), *Discussion of liquidity constraints*. European Central Bank.

Wu, C. L., Hsu, W. C., Shieh, H. M., & Tsai, M. S. (1995). *A novel δ -doped GaAs/InGaAs real-space transfer transistor with high peak-to-valley ratio and high current driving capability*. IEEE electron device letters, 16(3), 112-114.

APPENDICES

A. SPSS result

Descriptive Statistics			
	Mean	Std. Deviation	N
ROA	.115240	.0335162	5
CURRENT RATIO	1.739926846925707	.134012762146181	5
QUICK RATIO	1.439533411455310	.141398372323020	5
AVERAGE-COLLECTION PERIOD	19.655093768704000	4.802468160669138	5
DEBT TO INCOME	4.653676388366503	1.183523209221387	5
OPERATIONAL RATIO	.155465530613138	.009996288439485	5
OPERATING MARGIN	.134844764348628	.038014558198265	5
INDEX	.800000	.0000000	5
GDP	.980	.5933	5
Inflation	1.040	1.0407	5
InterestRate	.100	.0000	5
ExchangeRate	115.8520	4.58165	5

Table A.1 Descriptive Statistics for internal and external variables.

Correlations

	ROA	CURRENT RATIO	QUICK RATIO	AVERAGE-COLLECTION PERIOD	DEBT TO INCOME	OPERATIONAL RATIO	OPERATING MARGIN	INDEX	GDP	Inflation	InterestRate	ExchangeRate	
Pearson Correlation	ROA	1.000	.219	.189	-.154	-.947	-.736	.990	.	-.260	-.378	.	.533
	CURRENT RATIO	.219	1.000	.989	-.991	-.455	.460	.093	.	.401	-.926	.	-.637
	QUICK RATIO	.189	.989	1.000	-.972	-.406	.487	.071	.	.331	-.861	.	-.700
	AVERAGE-COLLECTION PERIOD	-.154	-.991	-.972	1.000	.389	-.530	-.022	.	-.386	.925	.	.654
	DEBT TO INCOME	-.947	-.455	-.406	.389	1.000	.575	-.904	.	-.037	.623	.	-.355
	OPERATIONAL RATIO	-.736	.460	.487	-.530	.575	1.000	-.814	.	.313	-.252	.	-.902
	OPERATING MARGIN	.990	.093	.071	-.022	-.904	-.814	1.000	.	-.320	-.248	.	.607
	INDEX	.	.	.	.	.	.	.	1.000	.	.	.	.
	GDP	-.260	.401	.331	-.386	-.037	.313	-.320	.	1.000	-.488	.	-.316
	Inflation	-.378	-.926	-.861	.925	.623	-.252	-.248	.	-.488	1.000	.	.350
	InterestRate	.	.	.	.	.	.	.	.	.	.	1.000	.
	ExchangeRate	.533	-.637	-.700	.654	-.355	-.902	.607	.	-.316	.350	.	1.000
Sig. (1-tailed)	ROA	.	.362	.381	.402	.007	.078	.001	.000	.336	.265	.000	.178
	CURRENT RATIO	.362	.	.001	.001	.221	.218	.441	.000	.251	.012	.000	.124
	QUICK RATIO	.381	.001	.	.003	.249	.203	.455	.000	.293	.031	.000	.094
	AVERAGE-COLLECTION PERIOD	.402	.001	.003	.	.259	.179	.486	.000	.261	.012	.000	.116
	DEBT TO INCOME	.007	.221	.249	.259	.	.155	.018	.000	.476	.131	.000	.279
	OPERATIONAL RATIO	.078	.218	.203	.179	.155	.	.047	.000	.304	.341	.000	.018
	OPERATING MARGIN	.001	.441	.455	.486	.018	.047	.	.000	.300	.344	.000	.139
	INDEX	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000
	GDP	.336	.251	.293	.261	.476	.304	.300	.000	.	.202	.000	.302
	Inflation	.265	.012	.031	.012	.131	.341	.344	.000	.202	.	.000	.282
	InterestRate	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.	.000
	ExchangeRate	.178	.124	.094	.116	.279	.018	.139	.000	.302	.282	.000	.
N	ROA	5	5	5	5	5	5	5	5	5	5	5	5
	CURRENT RATIO	5	5	5	5	5	5	5	5	5	5	5	5
	QUICK RATIO	5	5	5	5	5	5	5	5	5	5	5	5

Table A.2 Correlation for internal and external variables

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.990 ^a	.980	.973	.0054566	1.202

a. Predictors: (Constant), OPERATING MARGIN

b. Dependent Variable: ROA

Table A3. Model Summary for internal factor

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	147.915	.001 ^b
	Residual	.000	3	.000		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

Table A4. Anova for internal factor

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.002	.010		-.247	.821	-.034	.029
	OPERATING MARGIN	.873	.072	.990	12.162	.001	.644	1.101

a. Dependent Variable: ROA

Table A 5. Coefficients for internal factor.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.893 ^a	.798	.190	.0301627	2.619

a. Predictors: (Constant), ExchangeRate, GDP, Inflation

b. Dependent Variable: ROA

Table A 6. Model Summary for external factor

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	3	.001	1.313	.553 ^b
	Residual	.001	1	.001		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ExchangeRate, GDP, Inflation

Table A 7. Anova for external factor

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.410	.417		-.983	.505	-5.705	4.885
	GDP	-.026	.030	-.453	-.865	.546	-.402	.350
	Inflation	-.027	.017	-.838	-1.579	.359	-.244	.190
	ExchangeRate	.005	.004	.682	1.398	.395	-.040	.050

a. Dependent Variable: ROA

Table A 8. Coefficients for external factor

Model Summary^c

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.990 ^a	.980	.973	.0054566	
2	.999 ^b	.999	.998	.0016754	2.789

a. Predictors: (Constant), OPERATING MARGIN

b. Predictors: (Constant), OPERATING MARGIN , Inflation

c. Dependent Variable: ROA

Table A 9. Model Summary for internal and external factors

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	147.915	.001 ^b
	Residual	.000	3	.000		
	Total	.004	4			
2	Regression	.004	2	.002	799.372	.001 ^c
	Residual	.000	2	.000		
	Total	.004	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

c. Predictors: (Constant), OPERATING MARGIN , Inflation

Table A 10. Anova for internal and external factors

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-.002	.010		-.247	.821	-.034	.029
	OPERATING MARGIN	.873	.072	.990	12.162	.001	.644	1.101
2	(Constant)	.006	.003		1.849	.206	-.009	.021
	OPERATING MARGIN	.842	.023	.955	37.018	.001	.744	.940
	Inflation	-.005	.001	-.141	-5.461	.032	-.008	-.001

a. Dependent Variable: ROA

Table A 11. Coefficients for internal and external factors