The impact of Return on Assets (ROA) in relation with internal factors and external factors towards Casio Computer Co.,Ltd.'s performance

Chew, Hui Yen

Universiti Utara Malaysia

18 November 2019

THE IMPACT OF RETURN ON ASSETS (ROA) IN RELATION WITH INTERNAL FACTORS AND EXTERNAL FACTORS TOWARDS CASIO COMPUTER CO., LTD.'S PERFORMANCE

CHEW HUI YEN

UNIVERSITI UTARA MALAYSIA (UUM)

ABSTRACT

Corporate governance is considered as a significant implication for the growth of company. Good corporate governance plays an important role in enhancing the performance of company. Hence, this study targets to determine the impact of Return on Assets (ROA) in relation with determinants towards the selected company's performance and the name of the selected company in this study is Casio Computer Co., Ltd. (Casio) which is under the electronic industry in Japan. This analysis shows that firm-specific factors (current ratio, quick ratio, average-collection period, debt to income ratio, operational ratio, operating margin and corporate governance index CGI) and the macroeconomic factors (Gross Domestic Product (GDP), inflation rate, interest rate, exchange rate and STDV of price change in the stock market) each has its significant, small significant or insignificant on return on assets (ROA) of Casio. This study suggests that Casio can perform well management and good corporate governance practices to maximize its revenue or profits for enhancing its corporate performance.

Keywords: Corporate Governance, Return on Assets, firm-specific factors, macroeconomic factors, revenue, corporate performance, management and corporate governance practices.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Chapter one consists of an overview of Casio Computer Co., Ltd. (Casio). This chapter highlights the main risks associated with Casio named market risk, credit risk, operation risk and liquidity risk against the company's performance in problem statement. This chapter also discuss in details research objectives, research questions, scope of study and outline of study.

1.2 Overview of Casio Computer Co., Ltd. (Casio)

Casio Computer Co., Ltd. is a Japanese multinational consumer electronics and commercial electronics manufacturing company headquartered in Shibuya, Tokyo, Japan. It is most commonly known for making durable and reliable electronic products. Its products include calculators, mobile phones, digital cameras, electronic musical instruments, analogue and digital watches.

1.3 Problem statement

The main risk associated with the Casio is market risk such as foreign exchange and interest rate risk. Secondly, by doing transactions with major customers would let Casio exposed to credit risk. Thirdly, most of the companies around the world exposed to operational risk in their business operation respectively. Off course, Casio also too. Again, Casio explored to liquidity risk by the factor of rapidly changing technologies and market needs in its business could unexpectedly hasten product obsolescence and cause a sharp drop in sales. It would make Casio faces financial problems on investment in latest technologies for immediately improving

the sales. Thereby, the main reason to fulfil this study is for determining the impact of Return on Assets (ROA) in relation with determinants (internal factors and external factors) towards Casio Computer Co., Ltd.'s performance.

1.4 Research Objectives

This study targets to determine the impact of Return on Assets (ROA) in relation with determinants towards the selected company's performance.

The objectives of the study are:

1. To investigate the impact of ROA in relation with firm-specific factors towards the selected company's performance.

2. To investigate the impact of ROA in relation with macroeconomics factors towards the selected company's performance.

3. To investigate the impact of ROA in relation with firm-specific factors and macroeconomics factors towards the selected company's performance.

1.5 Research Questions

1) Is there any impact of ROA in relation with firm-specific factors towards the selected company's performance?

2) Is there any impact of ROA in relation with macroeconomics factors towards the selected company's performance?

3) Is there any impact of ROA in relation with firm-specific factors and macroeconomics factors towards the selected company's performance?

1.6 Scope of study

The company of Casio Computer Co., Ltd. be selected in this study. Therefore, the annual reports from year of 2014 to 2018 and the official website of Casio would be used and accessed to gain some important financial information and non-financial information.

1.7 Outline of Study

This study consists of five main chapters. Chapter one is introduction, it discusses about the background of the study, which consist of an overview of the selected company, problem statement, research objectives, research questions, scope of study and outline of study. Chapter two is about the review of literature which is related to this study. Chapter three suggests the research methodology such as sampling techniques, statistical technique, data analysis and SPSS Statistics. Chapter four discusses the results and findings of the study, which includes the descriptive statistical analysis, correlation, model summary, anova and coefficient. Lastly, chapter five suggests about the discussion of results, the limitation of the study and conclusion.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter is about the review of literature which is related to this study. This chapter has 3 sections, Section 2.1 is introduction. Section 2.2 exposes the definition, concept and importance of the key words which are related to this study. While, section 2.3 shows the importance of risk management and which risks are related to company.

2.2 Corporate governance

The Ministry of Finance, Singapore defined corporate governance as "the processes and structure by which the business and affairs of the company are directed and managed, in order to enhance long term shareholder value through enhancing corporate performance and accountability, whilst taking into account the interests of other stakeholders (Corporate Governance, 2001). According to (Yeh, Lee, and Ko, 2002), the relationship between corporate governance and firm performance shows that corporate governance has contributed to the company in enhancing operating performance and preventing fraud. Another study had demonstrated that the likelihood of bankruptcy is related to poor corporate governance characteristics (Daily and Dalton, 1994).

2.2.1 Company Performance

(Škerlavaj et al., 2007), noted that the indicators measuring company performance should be much more than just the profit, value added or some other financial measure. They are of the

opinion that the aspects of all the stakeholders (employees, buyers, suppliers) should be taken into consideration as well. Besides, company performance can be evaluated either on the basis of objectively measured data or on the basis of subjective perceptions of managers or some external experts (Venkatraman & Ramanujam, 1987), and also by the means of making comparison with similar companies, or comparisons within specific time intervals. According to (Bhagat and Bolton, 2008), the most common proxies for firm performance can be summarized are Return on Assets (ROA), Tobin's Q, Stock Return, Leverage and Industry Performance.

2.2.2 Return on Assets (ROA)

Lyn and Aileen (2008) stated that return on assets shows the number of profits earned relative to the level of investment in total assets. The higher this ratio means the company is more effective in utilizing the assets to generate net income. Thus, the higher ROA means the company's performance more effective because the rate of return will be greater. This will further increase the company's attractiveness to investors. Increased attractiveness of the company causes the company increasingly in demand by investors because it can provide great benefits (return) for investors. In other words, ROA will have an effect on stock returns that will be accepted by investors.

2.3 Risk Management

Risk management is the set of processes through which management identifies, analyses, and where necessary responds appropriately to risks that might adversely affect realization

of the organization's business objectives. The response to risks typically depends on their perceived gravity, and involves controlling, avoiding, accepting or transferring them to a third party. According to (Mardsen A., Prevost A., 2005), at the last decade, there is an extensively growing literature on the contribution of risk management strategies to the increase of company value.

2.3.1 Credit Risk

(The Basel Committee on Banking Supervision, 1999) defined credit risk as the probability that a counterparty or borrower will fail to meet their commitments as per the agreement. Kirkpatrick (2009) conducted a commissioned World Bank survey for and found that the international financial crises that happened recently could to a larger extent, be as a result of the weak governance structures. He further noted weak corporate governance practices which were inadequate for safeguarding extreme taking of risk which resulted in vast sums of non-performing loans.

2.3.2 Operational Risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk. According to (Margaret Rouse, 2013), in evaluating operational risk, practical remedial steps should be emphasized in order to eliminate exposures and ensure successful responses. Poor operational risk management can hurt an organization's reputation and cause financial damage.

2.3.3 Liquidity Risk

According to (Holmström and Tirole, 1998), liquidity risk arises because revenues and outlays are not synchronised. Liquidity risk often arises from other forms of financial risk such as credit and market risks. Real or perceived problems in any business area may hinder an institution's ability to raise funds at reasonable prices, thereby increasing liquidity risk. For example, large credit losses due to loan defaults could cause liquidity problems for an institution if providers of funding were to become concerned about the impact of the losses on the institution's creditworthiness (Monetary Authority of Singapore, March 2013).

2.3.4 Market Risk

Based on (the Global Financial Markets Series book, 2014), market risk is the risk of loss due to adverse changes in the market prices or variables of a transaction or business. According to the Board of Governors of the Federal Reserve System (America's central bank), market risk encompasses the risk of financial loss resulting from movements in market prices.

CHAPTER 3: METHODOLOGY

3.1 Introduction

According to (L.R.Gay, 1996), the purpose of the methodology is to enable a broader understanding of the application of the method by providing a description of the research process. Research methodology defines as systematic way to overcome or solve any problem. The objective of fulfilling this study is to determine the impact of Return on Assets (ROA) in relation with determinants towards the selected company's performance. The method that be used to collect and analyse data is IBM Statistical Package for the Social Sciences (SPSS) Statistics version 25.

3.2 Sampling Technique

For executing this study, Casio Computer Co.,Ltd. (Casio) which is operating in Japan be selected as a sample. Therefore, the annual report of Casio from year of 2014 to year of 2018 be used to identify the relationship between dependent variable (return on asset (ROA)) and independent variables (firm-specific factors and macroeconomic factors).

3.3 Statistical Technique

To conduct this research, the five-years data from annual report of Casio Computer Co.,Ltd. have been extracted start from year 2014 to 2018. From the annual report which contains the financial information and non- financial information be used to evaluate or determine the company's performance by computing its return on assets (ROA), current ratio, quick ratio,

average-collection period, debt to income ratio, operational ratio, operating margin and corporate governance index (CGI). While, the data of macroeconomics factors such as Gross Domestic Product (GDP), inflation rate, interest rate, exchange rate and STDV of price change can be collected from the related official websites such as " The World Bank, Yahoo Finance and Focus Economics" for identifying the economic condition from year 2014 to 2018. In fact, Ordinary Least-Square (OLS) regression or more commonly known as linear regression is the main technique that be used to complete this study. Researcher has used this technique to seek for a line of best fit that explains the potential relationship between dependent variable and independent variables.

3.4 Data Analysis

We have known that the purpose of regression analysis (OLS) is conducted to identify the relationship of dependent variable (ROA) and independent variables (firm-specific factors and macroeconomic factors). So that, the multiple regression analysis method would be executed to determine what and how the independent variables influence the dependent variable in this study. The OLS multiple regression models can be presented in the equation form as below:

Multivariate Regression Model

Equation 1 (Modal 1)

$ROA = \beta_0 + \beta_1 CR + \beta_2 QR + \beta_3 ACP + \beta_4 DTI + \beta_5 OR + \beta_6 OM + \beta_7 CGI + \varepsilon$

Equation 2 (Modal 2)

$ROA = \beta_0 + \beta_1 GDP + \beta_2 INFLA + \beta_3 IR + \beta_4 ER + \beta_5 STDV + \varepsilon$

Equation 3 (Modal 3)

$ROA = \beta_0 + \beta_1 CR + \beta_2 QR + \beta_3 ACP + \beta_4 DTI + \beta_5 OR + \beta_6 OM + \beta_7 CGI + \beta_8 GDP + \beta_9 INFLA + \beta_{10} IR + \beta_{11} ER + \beta_{12} STDV + \varepsilon$

No	Variables	Measurement
1	Return on Assets (ROA)	Net income / Total assets
2	Current Ratio (CR)	Current Assets / Current Liabilities
3	Quick Ratio (QR)	(Current Assets – Inventory) / Current Liabilities
4	Average Collection Periods (ACP)	Accounts Receivable / (Revenue / 360)
5	Debt to Income Ratio (DTI)	Total Liability / Total Income
6	Operational Ratio (OR)	Total Operating Expenses / Net Sales
7	Operating Margin (OM)	EBIT / Revenue
8	Corporate Governance Index (CGI)	Based on the 5 principles: Accountability, Transparency, Independence, Fairness and Sustainability.
9	Gross Domestic Products (GDP)	5-years gross domestic products
10	Inflation Rate (INFLA)	5-years inflation rate
11	Interest Rate (IR)	5-years interest Rate
12	Exchange Rate (ER)	5-years exchange Rate
13	Standard deviation of price change (STDV)	5-years Standard deviation of company's price change in stock market

Table 3.4 : Measurement of Variables
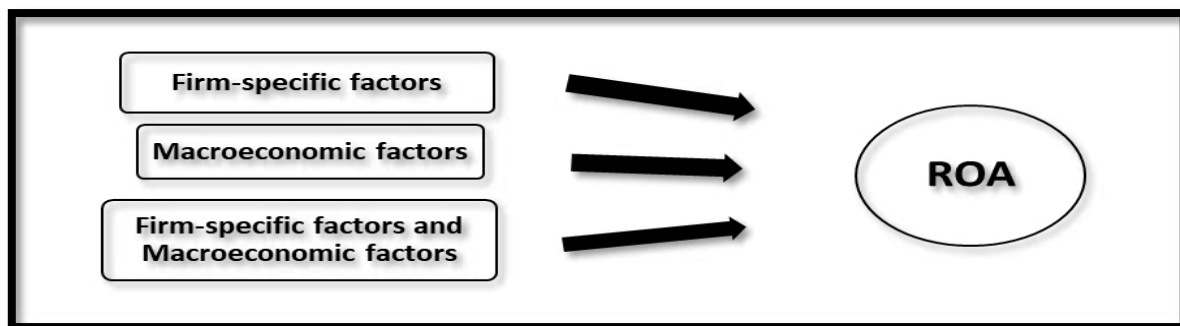
Figure 3.4 : Research Framework

To study this research, one dependent variable (Return on Assets (ROA)) and three categories of independent variables (firm-specific factors, macroeconomic factors and firm-specific factors and macroeconomic factors) would be used. The research framework (based on the three objectives) is shown as above.

3.5 IBM Statistical Package for Social Sciences (SPSS Statistics)

In this study, IBM SPSS Statistics be used to compute descriptive statistics, correlation, model summary, anova and coefficient between independent variables with dependent variable based on quantitative data that has been extracted from annual report and official website of the company.

CHAPTER 4: FINDING AND ANALYSIS

4.1   Introduction

For this research, the correlation benchmark be used to determine the relationship between the dependent variable which is Return on Assets (ROA) and independent variables that consist of current ratio, quick ratio, average-collection period, debt to income ratio, operational ratio, operating margin, Corporate Governance Index (CGI), Gross Domestic Product (GDP), inflation rate, interest rate, exchange rate and STDV. In addition, the financial statement analysis has been performed for reviewing and evaluating the company's performances.

4.2   Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.060953	.0164391	5
CURRENT RATIO	2.761874	.4763020	5
QUICK RATIO	2.157463	.3382297	5
AVERAGE-COLLECTION PERIOD	51.897916	3.3090277	5
DEBT TO INCOME RATIO	.504942	.0358718	5
OPERATIONAL RATIO	.303776	.0069210	5
OPERATING MARGIN	.089784	.0192955	5
CGI	.560	.1673	5
GDP	.985	.6123	5
INFLATION RATE	1.000	1.0886	5
INTEREST RATE	.279	.9662	5
EXCHANGE RATE	115.852	4.5817	5
STDV	2.2740	.74019	5

Table 4.2 Descriptive Statistics

Table 4.2 shows that the mean and standard deviation for dependent which is Return on Assets (ROA), internal variables (current ratio, quick ratio, average-collection period, debt

to income ratio, operational ratio, operating margin and CGI) and external variables (Gross Domestic Product (GDP), inflation rate, interest rate, exchange rate and STDV). From the table, we could know that the ROA is on average about 6.10 % with low standard deviation of 1.64%. This shows that the company (Casio) has a low ROA (which is < 10%) during that 5 years (2014 until 2018). On the other hand, the average-collection period is the only one of the internal variables which its standard deviation is more than 1 with 3.3090 as the highest compared to the rest internal variables which have recorded low standard deviation with not even reach 1 respectively. Especially to the percentages of debt to income ratio, operational ratio and operating margin in that five years which their percentages are almost similar from year of 2014 until year of 2018 respectively due to the standard deviation of each of them is no more than 5% (0.0359, 0.0069 and 0.0193 respectively). It means that the lower the standard deviation, the lower the fluctuation occurs. In fact, investors prefer to choose company which its financial report has lower fluctuation because it will ease them to make accurate decision making. However, for external variables, the inflation rate and exchange rate showed their means are fluctuated very highly within the five years. The inflation rate recorded 1.0886 standard deviation meanwhile the exchange rate recorded 4.5817 standard deviation which is the highest percentage (458.17%) of fluctuation compared to GDP, inflation rate, interest rate and STDV. The highest the fluctuation, the lower the accuracy of estimation. Therefore, the investors would face high risk of loss when they decide to invest the company which its ratio of internal factors and external factors are fluctuated high annually.
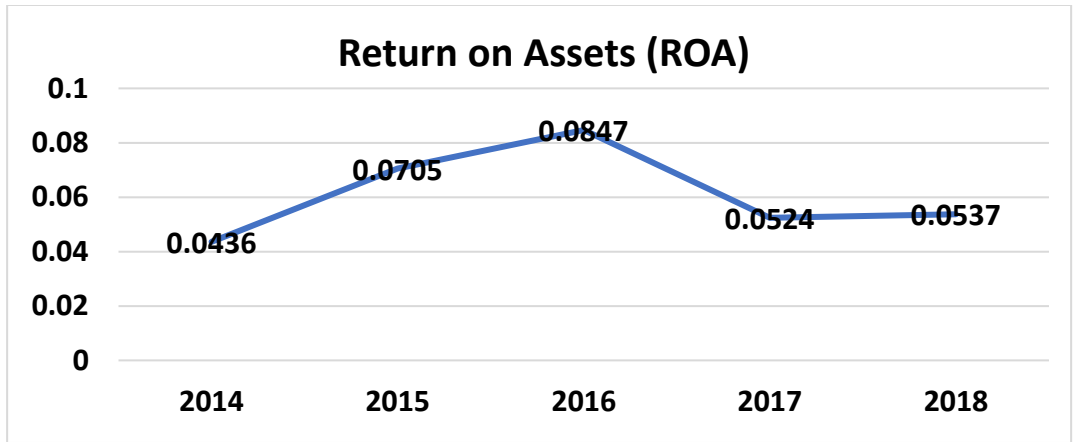
Graph 1: Return on Assets (ROA)

Based on the graph 1, Casio has a up and down trend of ROA where increases slightly from the year of 2014 to 2016 but it decreases dramatically from 0.0847 (2016) to 0.0524 in year of 2017 and it increases a little back to 0.0537 in 2018. The increasing of ROA in the year of 2014 to 2016 is benefit to Casio due to it indicates that the company has earned more income by effectively using assets to generate profits. Therefore, the highest percentage of return on assets is in 2016 which is 8.47% shows the profitability of Casio relative to its total assets be improved well.
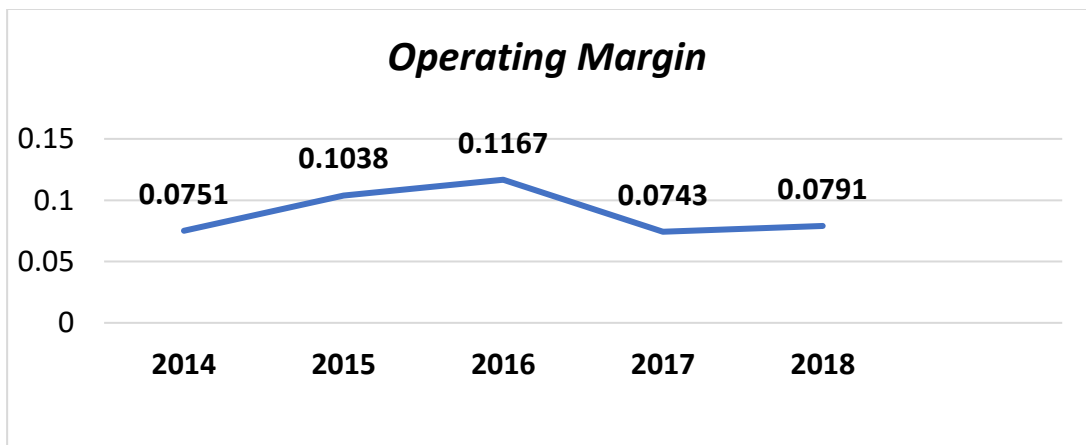
Graph 2: Operating Margin

From the year of 2014 to 2018, we can know that the operating margin of Casio increases from 2014 to 2016 with 0.0751, 0.1038 and 0.1167 respectively. One of the main reasons for this increasing is Kazuo Kashio became the Chairman and CEO of the company in 2015. Mr Kashio was one of the four brothers who founded Casio Computer in 1957 and who devoted his life to the creation of new products that help improve people's lives and learning. Therefore, through his image, experiences, responsibility, accountability and successes, the interest of the shareholders and stakeholders in Casio and the market price of shares of Casio had been improved to better by the well management and corporate governance that been performed and directed by him. However, in the year of 2017, the operating margin seriously decreases to 0.0743 and this result as the lowest of the five years. While, it slightly increases from 0.0743 (2017) to 0.0791 in year of 2018. In June 2018, Casio suffered the loss of Chairman Kazuo Kashio (1929 – 2018). From this line graph, we can define that the trend of operating margin in these 5 years is same with the trend of ROA. It means that the operating margin of Casio is positive significant relationship with its return on assets (ROA).
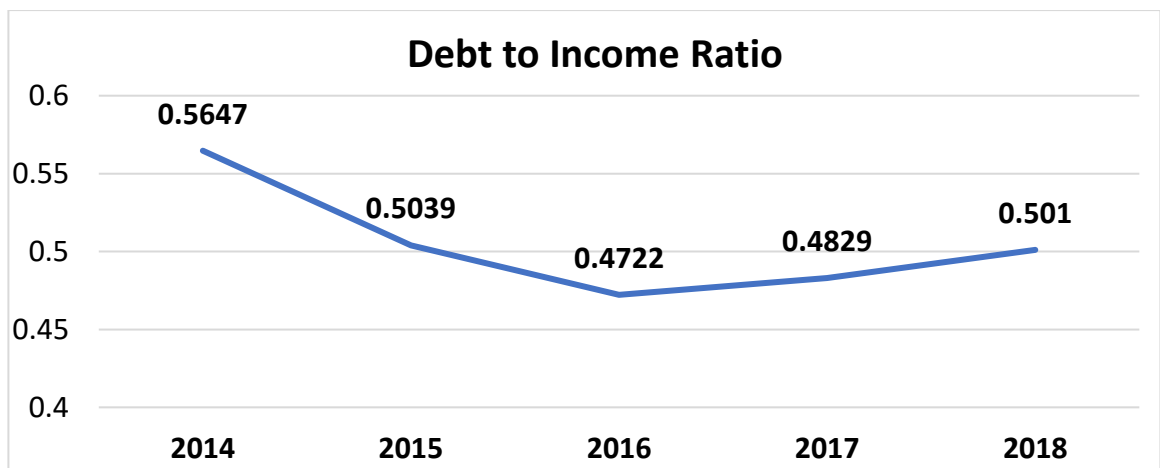
From graph 3 above, it shows a down and up trend of debt to income ratio. In 2014, the

ratio is 0.5647 as the highest of the five years and it decreases 6.08% in 2015 and to 0.4722

in 2016. After that, the debt to income ratio starts to increase again in the year of 2017 and

2018 with each 0.4829 and 0.5010. Normally, the lenders or bankers will use this type of

ratio to determine the effectiveness of company in managing payments and the ability of

repaying the money back to the payables.
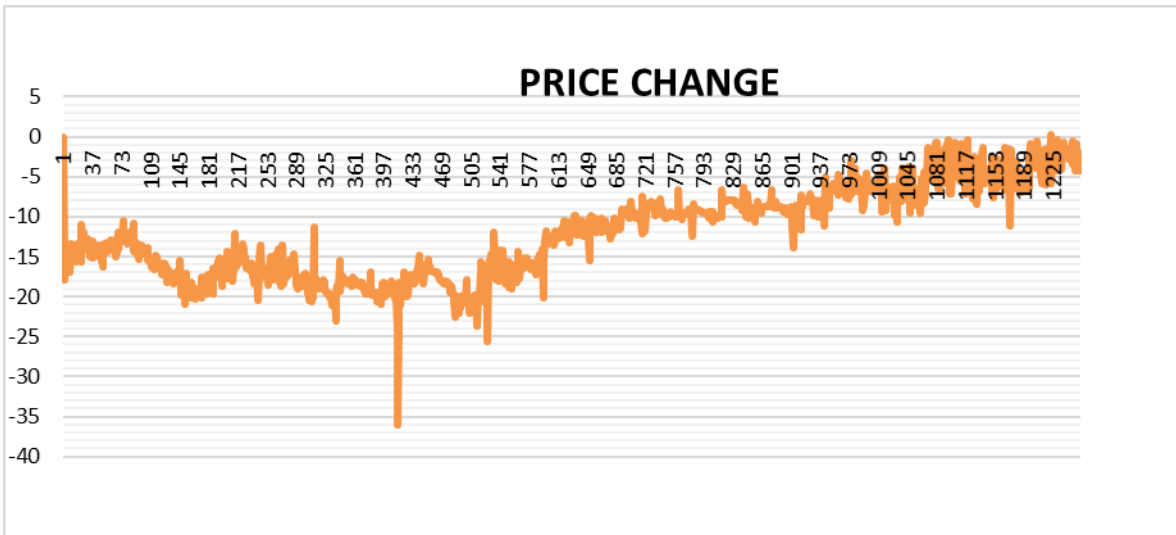
Graph 4: Casio's daily price change in stock market (5years) (USD currency)

	2014	2015	2016	2017	2018
Mean	-15.77	-18.50	-13.04	-8.35	-4.48
STDV	2.186589731	2.015054004	3.481890322	1.456536281	2.222204
Maximum	-10.47	-11.33	-7.43	-3.02	0.32
Minimum	-20.90	-36.05	-25.56	-13.90	-11.09

Table 4.2.1

Stock prices would be changed by market forces. If more people prefer to buy a stock than

sell it the price will arise and vise versa. From the graph and table above, the highest price

change is 0.32 in year of 2018 (05/11/2018). On that day, The Prime Minister of Malaysia Tun Dr Mahathir arrived there for a three-day visit and it was his third working trip to Japan since he became Prime Minister in May. The main purpose of his visit is to request Japan extends its yen credit in the form of soft loans to help resolve the Malaysian government's huge debt for the reason of he believes that Japan has strong economic strength. On that time, The Prime Minister of Malaysia Tun Dr Mahathir was scheduled to hold bilateral talks with his Japanese counterpart Shinzo Abe and he received "The Grand Cordon of the Order of the Paulownia Flowers" award from Emperor Akihito in recognition for his contributions towards strengthening bilateral relations and promoting friendship between Japan and Malaysia. Thereby, through these events it shows that Japan well in enhancing its economic growth and good in building or maintaining the relationship with other countries.

However, from the table 4.2.1 the lowest price change is -36.05 (negative means that the Adj close price less than the open price in the market). The price dropped more due to on 24/8/2015, China's market crash that affect the world's stock market especially in Asia. Yet the plunge that started in Asia (and which followed a nasty drop in American markets on Friday) has continued to gather momentum. Therefore, we can conclude that the positive news of Japan would increase the demand of investors for Casio's stock (the price increases) while the negative news would lead the Casio's stock price drop. The global market factors would affect the company performance because it would influence the macroeconomic factors of company.

4.3 Correlations

Correlations

		ROA	CURRENT RATIO	QUICK RATIO	AVERAGE-COLLECTION PERIOD	DEBT TO INCOME RATIO	OPERA-TIONAL RATIO	OPERA-TING MARGIN	CGI	GDP	INFLATION RATE	INTEREST RATE	EXCHANGE RATE	STDV
Pearson Correlation	ROA	1.000	.724	.703	-.897	-.682	-.404	.975	-.407	-.067	-.768	.017	.240	.719
Sig. (1-tailed)	ROA	.	.083	.093	.020	.102	.250	.002	.248	.457	.065	.489	.349	.085

Table 4.3: Correlations

Size of correlation	Interpretation
0.90 to 1.00 (-0.90 to -1.00)	Very high positive (negative) correlation
0.70 to 0.90 (-0.70 to -0.90)	High positive (negative) correlation
0.50 to 0.70 (-0.50 to -0.70)	Moderate positive (negative) correlation
0.30 to 0.50 (-0.30 to -0.50)	Low positive (negative) correlation
0.00 to 0.30 (-0.00 to -0.30)	Negligible correlation

Table 4.3.1: Correlation Benchmark

Pearson correlation is used to determine the relationship between dependent variable (ROA) and independent variables (firm-specific variables and macroeconomic variables). This research shows that operating margin is very high positive correlation with ROA where the size of correlation of 0.975 almost approaching to 1 and it is moderate significant related to the ROA with 0.002 (p-value < 0.1 & < 0.05). It indicates that Casio Computer Co., Ltd. (Casio) can arrives at a high ROA by boosting its revenue with its assets either efficient use or more invest on assets to increase the profit. Moreover, this finding shows that the low ROA would get due to the low revenue as indicated by operating margin. So that, the ROA of company gives investors a reliable picture of management's ability to pull profits from the assets and projects into which it chooses to invest. However, from the table,

current ratio, quick ratio, interest rate, exchange rate and STDV which are positive correlation with ROA. Current ratio, quick ratio and STDV are small significant related with ROA because each of them has p-value <0.1 (0.083, 0.093 and 0.085 respectively) but interest rate and exchange rate show that they are insignificant related with ROA (p-value more than 0.1). On the other hand, the table 4.3 shows that debt to income ratio, operational ratio, CGI and GDP is negative insignificant correlation with ROA (p-value of them >= 0.1). Debt to income ratio is an important ratio to monitor when applying for credit. In addition, inflation rate is negative small significant correlation with ROA with 0.065 (p-value < 0.1). While, the average collection period is high negative correlation with ROA (-0.897) and it is moderate significant related to ROA where its p-value is < 0.1 & < 0.05 (0.02). It means that when the average collection period increases the ROA will decrease significantly and vice versa.

4.4   Model Summary

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.975[a]	.950	.933	.0042518	

a. Predictors: (Constant), OPERATING MARGIN
b. Dependent Variable: ROA

Table 4.4: Model Summary

Based on the model summary above, the adjusted R-Squared is equal to 0.933. This indicates that by using the independent variable which is operating margin can able to

explain the 93.3 % of the variance in the Return on assets (ROA) of Casio Computer Co.,

Ltd.. While the remaining of 0.067 of the adjusted R-Squared remains unknown and this

means that 6.7% of the variance in the ROA of Casio Computer Co., Ltd. is unable to be

explained by operating margin. In addition, the rest firm-specific factors and

macroeconomic factors are unable to explain it.

4.5   Anova

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	56.795	.005^b
	Residual	.000	3	.000		
	Total	.001	4			

a. Dependent Variable: ROA
b. Predictors: (Constant), OPERATING MARGIN

Table 4.5: Anova

The ANOVA model is used to indicate the either model of the study is reliable and

acceptable or not. Therefore, the P-value (Sig.) in the ANOVA model will show the

reliability of this study. From the table above, the P-value of 0.005 (<0.05) means that

operating margin is significant to represent this model. This acceptable value shows that

the model of the study is reliable and acceptable.

4.6   Coefficients

Coefficients^a

Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
1	(Constant)	-.014	.010		-1.350	.270	-.046	.018		
	OPERATING MARGIN	.830	.110	.975	7.536	.005	.480	1.181	1.000	1.000

a. Dependent Variable: ROA

Table 4.6: Coefficients

Based on the table 4.6, Casio Computer Co., Ltd.'s independent variable which is operating margin is moderate influence the ROA with p value < 0.05 (0.005) and t = 7.536. It indicates that any changes in operating margin will influence the dependent variable (ROA) moderately. In addition, the beta of operating margin is 0.975. It means that the operating margin gives positive impact or influence the ROA of Casio Computer Co., Ltd.. In fact, operating margin is a key indicator for creditors and investors to define how businesses are supporting their operations. A higher operating margin is more favorable compared with a lower ratio due to this shows that the company is making enough or more money from its ongoing operations and able to pay for its fixed costs and variable costs.

CHAPTER 5: CONCLUSION

5.1 Introduction

This study aims to determine the impact of Return on Assets (ROA) in relation with determinants towards the selected company's performance. To achieve the objective of this study, the firm-specific factors which consist of current ratio, quick ratio, average-collection period, debt to income ratio, operational ratio, operating margin , corporate governance index (CGI) and the macroeconomic factors that consist of Gross Domestic Product (GDP), inflation rate, interest rate, exchange rate and STDV are used to fulfil this study. This chapter will discuss about discussion of result (the findings in previous chapter), limitations and conclusion.

5.2 Discussion of Result

The aims of this study conducted is to determine the impact of Return on Assets (ROA) in relation with determinants towards the selected company's performance.

The study has been conducted to achieves the objectives are:

1. To investigate the impact of ROA in relation with firm-specific factors towards the selected company's performance.

2. To investigate the impact of ROA in relation with macroeconomics factors towards the selected company's performance.

3. To investigate the impact of ROA in relation with firm-specific factors and macroeconomics factors towards the selected company's performance.

Based on the Table 4.3 (Correlations) and Table 4.6 (Coefficient), there have evidences to show that the return on assets (ROA) has been influenced by operating margin (one of the firms- specific factors). From the table 4.3, we can know that the operating margin is high positive significant correlation with ROA. It means that Casio Computer Co., Ltd. (Casio) can improve its corporate performance (ROA) by increasing its profitability. Without profitability, the company cannot to grow and if the company doesn't grow, the company's stock will trend downward means that the stock price in the market will drop. Therefore, Casio can increase its ROA by boosting its revenue through executing the good management and corporate governance practices in company. Besides that, from the Table 4.6, we can identify that the operating margin is moderate significant related to the ROA and it gives positive impact or influence on ROA. While, the macroeconomic factors ; GDP, inflation rate, interest rate, exchange rate and STDV of price change in stock market are play a nearly insignificant or insignificant role in influencing and giving impact to the performance (ROA) of Casio Computer Co., Ltd. with the significant value (P-value) in table 4.3 (Correlations) 0.457, 0.065, 0.489, 0.349 and 0.085 respectively. Therefore, we can conclude that one of the independence variables which is operating margin (firm-specific factor) plays a main role in giving impact or influence on Casio's performance.

5.3 Limitations

The limitations of this study are time constraint, limited information and only focus on one company from the year of 2014 to 2018.

5.4 Conclusion

Based on the finding of this study, operating margin is very high positive significant correlation with return on assets (ROA) of Casio Computer Co., Ltd.. Every change in operating margin will influence the performance (ROA) of Casio and vice versa. Therefore, the corporate governance of Casio plays the most important role in enhancing operating performance. A better operating margin is very needed by every company because it indicates how much of revenues is left over after both costs of goods sold and operating expenses. When company has better operating margin, it will attract more investors to invest, increase the price of market and the most important advantage is maximize the shareholders interest. While, as to generate a better operating margin, the effectiveness of management of company in generating profits with the available assets is the first step. Therefore, the leader of Casio can provide new value through Casio's products to benefit the social and strive to rapidly reach a market valuation of 1 trillion yen by performing well performances in management and corporate governance.

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APPENDICES

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	OPERATING MARGIN	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	DEBT TO INCOME RATIO	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: ROA

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		Minimum Tolerance
						Tolerance	VIF	
1	CURRENT RATIO	.247[b]	3.001	.095	.905	.672	1.487	.672
	QUICK RATIO	.245[b]	3.306	.081	.919	.705	1.419	.705
	AVERAGE-COLLECTION PERIOD	-.256[b]	-1.088	.390	-.610	.285	3.509	.285
	DEBT TO INCOME RATIO	-.257[b]	-12.049	.007	-.993	.748	1.337	.748
	OPERATIONAL RATIO	-.036[b]	-.212	.852	-.148	.853	1.172	.853
	CGI	-.083[b]	-.528	.650	-.350	.883	1.133	.883
	GDP	.154[b]	1.276	.330	.670	.952	1.050	.952
	INFLATION RATE	-.279[b]	-9.055	.012	-.988	.631	1.586	.631
	INTEREST RATE	.203[b]	2.785	.108	.892	.966	1.035	.966
	EXCHANGE RATE	-.207[b]	-2.181	.161	-.839	.823	1.216	.823
	STDV	-.047[b]	-.195	.863	-.137	.425	2.354	.425
2	CURRENT RATIO	-.055[c]	-.761	.586	-.605	.084	11.972	.084
	QUICK RATIO	-.065[c]	-.872	.543	-.657	.069	14.511	.069
	AVERAGE-COLLECTION PERIOD	.056[c]	1.489	.376	.830	.151	6.611	.151
	OPERATIONAL RATIO	-.016[c]	-.664	.627	-.553	.847	1.180	.679
	CGI	-.011[c]	-.416	.749	-.384	.798	1.253	.676
	GDP	-.027[c]	-.949	.517	-.688	.445	2.247	.350
	INFLATION RATE	.740[c]	2.267	.264	.915	.001	958.727	.001
	INTEREST RATE	.047[c]	4.156	.150	.972	.293	3.418	.227
	EXCHANGE RATE	-.017[c]	-.367	.776	-.345	.267	3.744	.243
	STDV	.037[c]	2.044	.290	.898	.400	2.498	.319

a. Dependent Variable: ROA

b. Predictors in the Model: (Constant), OPERATING MARGIN

c. Predictors in the Model: (Constant), OPERATING MARGIN , DEBT TO INCOME RATIO

Correlations

		ROA	CURRENT RATIO	QUICK RATIO	AVERAGE-COLLECTION PERIOD	DEBT TO INCOME RATIO	OPERATIONA L RATIO	OPERATING MARGIN	CGI	GDP	INFLATION RATE	INTEREST RATE	EXCHANGE RATE	STDV
Pearson Correlation	ROA	1.000	.724	.703	-.897	-.682	-.404	.975	-.407	-.067	-.768	.017	.240	.719
	CURRENT RATIO	.724	1.000	.999	-.771	-.951	-.366	.572	-.549	.613	-.965	.403	-.188	.151
	QUICK RATIO	.703	.999	1.000	-.764	-.962	-.334	.543	-.522	.624	-.971	.438	-.239	.134
	AVERAGE-COLLECTION PERIOD	-.897	-.771	-.764	1.000	.741	.022	-.846	.106	-.119	.811	-.002	-.036	-.461
	DEBT TO INCOME RATIO	-.682	-.951	-.962	.741	1.000	.260	-.502	.423	-.506	.991	-.617	.433	-.245
	OPERATIONAL RATIO	-.404	-.366	-.334	.022	.260	1.000	-.383	.961	-.109	.290	-.164	-.384	-.355
	OPERATING MARGIN	.975	.572	.543	-.846	-.502	-.383	1.000	-.342	-.219	-.608	-.184	.421	.758
	CGI	-.407	-.549	-.522	.106	.423	.961	-.342	1.000	-.373	.439	-.252	-.267	-.180
	GDP	-.067	.613	.624	-.119	-.506	-.109	-.219	-.373	1.000	-.452	.322	-.306	-.673
	INFLATION RATE	-.768	-.965	-.971	.811	.991	.290	-.608	.439	-.452	1.000	-.522	.324	-.316
	INTEREST RATE	.017	.403	.438	-.002	-.617	-.164	-.184	-.252	.322	-.522	1.000	-.844	.066
	EXCHANGE RATE	.240	-.188	-.239	-.036	.433	-.384	.421	-.267	-.306	.324	-.844	1.000	.200
	STDV	.719	.151	.134	-.461	-.245	-.355	.758	-.180	-.673	-.316	.066	.200	1.000
Sig. (1-tailed)	ROA		.083	.093	.020	.102	.250	.002	.248	.457	.065	.489	.349	.085
	CURRENT RATIO	.083		.000	.063	.006	.272	.157	.169	.136	.004	.250	.381	.404
	QUICK RATIO	.093	.000		.066	.004	.291	.172	.184	.130	.003	.230	.349	.415
	AVERAGE-COLLECTION PERIOD	.020	.063	.066		.076	.486	.036	.433	.425	.048	.499	.477	.217
	DEBT TO INCOME RATIO	.102	.006	.004	.076		.337	.194	.239	.192	.000	.134	.233	.345
	OPERATIONAL RATIO	.250	.272	.291	.486	.337		.262	.005	.431	.318	.396	.261	.279
	OPERATING MARGIN	.002	.157	.172	.036	.194	.262		.286	.362	.138	.383	.240	.069
	CGI	.248	.169	.184	.433	.239	.005	.286		.268	.230	.342	.332	.386
	GDP	.457	.136	.130	.425	.192	.431	.362	.268		.223	.299	.308	.107
	INFLATION RATE	.065	.004	.003	.048	.000	.318	.138	.230	.223		.184	.298	.302
	INTEREST RATE	.489	.250	.230	.499	.134	.396	.383	.342	.299	.184		.036	.458
	EXCHANGE RATE	.349	.381	.349	.477	.233	.261	.240	.332	.308	.298	.036		.374
	STDV	.085	.404	.415	.217	.345	.279	.069	.386	.107	.302	.458	.374	
N	ROA	5	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	5
	QUICK RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5
	AVERAGE-COLLECTION PERIOD	5	5	5	5	5	5	5	5	5	5	5	5	5
	DEBT TO INCOME RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5
	OPERATIONAL RATIO	5	5	5	5	5	5	5	5	5	5	5	5	5
	OPERATING MARGIN	5	5	5	5	5	5	5	5	5	5	5	5	5
	CGI	5	5	5	5	5	5	5	5	5	5	5	5	5
	GDP	5	5	5	5	5	5	5	5	5	5	5	5	5
	INFLATION RATE	5	5	5	5	5	5	5	5	5	5	5	5	5
	INTEREST RATE	5	5	5	5	5	5	5	5	5	5	5	5	5
	EXCHANGE RATE	5	5	5	5	5	5	5	5	5	5	5	5	5
	STDV	5	5	5	5	5	5	5	5	5	5	5	5	5

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	OPERATING MARGIN	DEBT TO INCOME RATIO
1	1	1.982	1.000	.01	.01	
	2	.018	10.500	.99	.99	
2	1	2.969	1.000	.00	.00	.00
	2	.029	10.054	.01	.59	.03
	3	.001	49.160	.99	.41	.97

a. Dependent Variable: ROA

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.043330	.084193	.060953	.0164335	5
Residual	-.0006770	.0004689	.0000000	.0004293	5
Std. Predicted Value	-1.072	1.414	.000	1.000	5
Std. Residual	-1.115	.773	.000	.707	5

a. Dependent Variable: ROA

Histogram

Dependent Variable: ROA

Mean = -1.84E-14
Std. Dev. = 0.707
N = 5
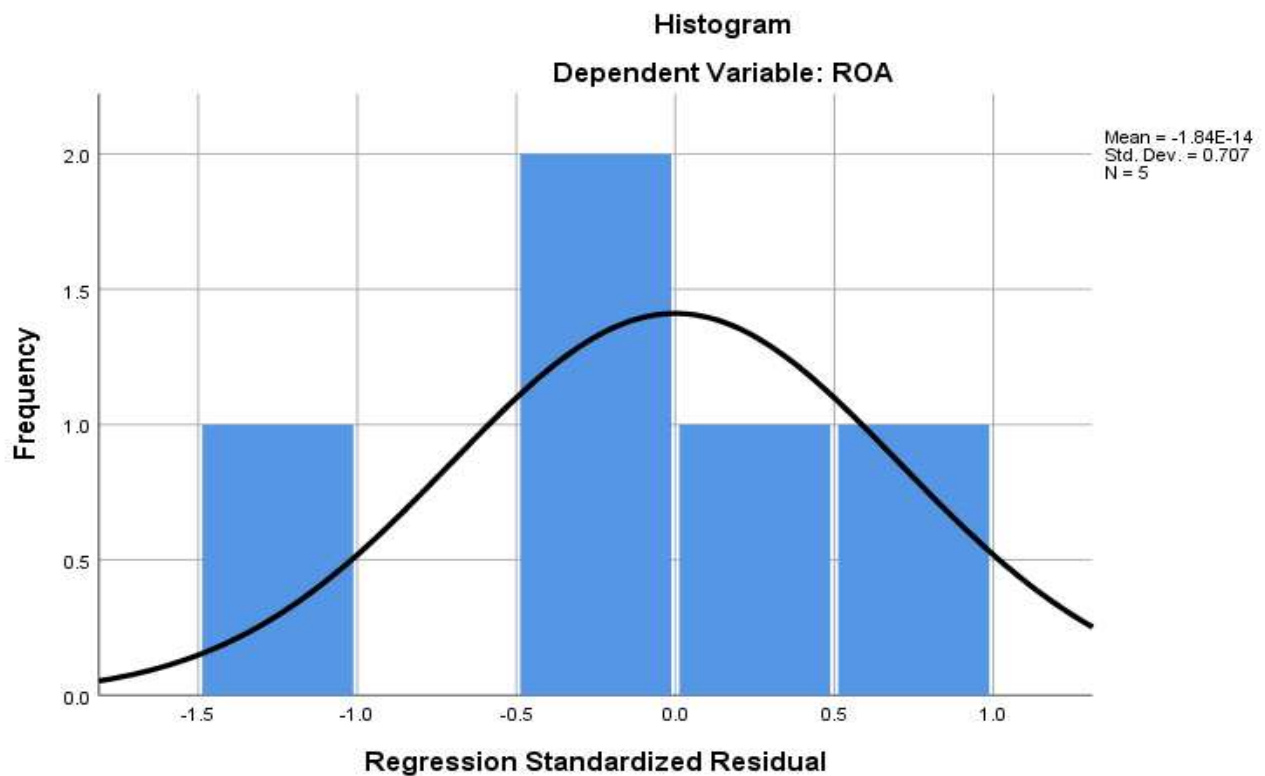
Normal P-P Plot of Regression Standardized Residual
Dependent Variable: ROA
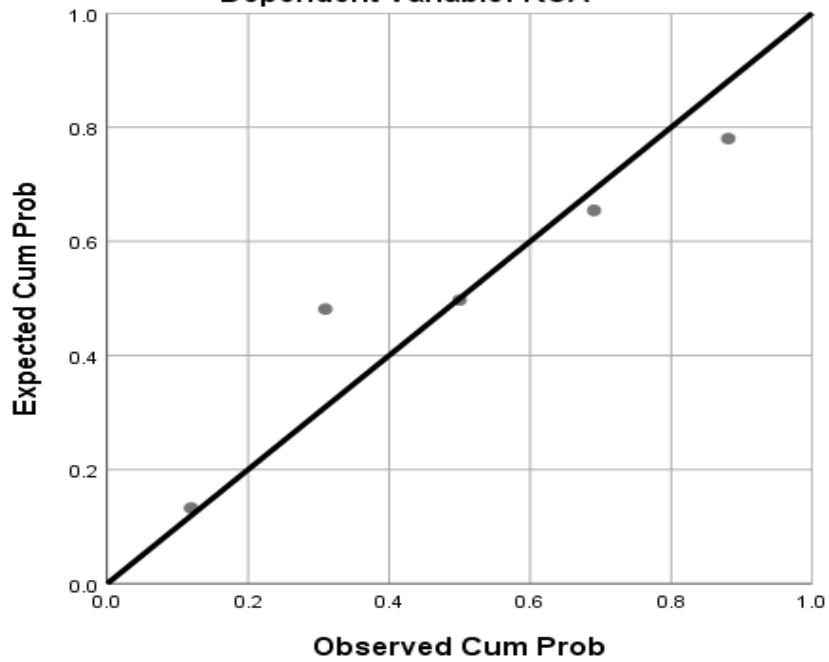
Scatterplot
Dependent Variable: ROA

AVERAGE-COLLECTION PERIOD

	2014	2015	2016	2017	2018
Value	56.6504	48.7984	48.8945	53.4879	51.6584

Other Internal Factors

	2014	2015	2016	2017	2018
CURRENT RATIO	1.9993	2.972	3.1449	3.0922	2.6009
QUICK RATIO	1.6054	2.2922	2.4188	2.4	2.0709
OPERATIONAL RATIO	0.3029	0.3065	0.2959	0.2996	0.3139
CGI	0.6	0.6	0.4	0.4	0.8

— CURRENT RATIO — QUICK RATIO — OPERATIONAL RATIO — CGI

EXCHANGE RATE

	2014	2015	2016	2017	2018
Exchange Rate	119.7	120.3	116.9	112.7	109.7

Other External Factors

Year	INTEREST RATE	INFLATION RATE	GDP	STDV
2018	0.9	1	0.8	2.22
2017	1.2	0.5	1.9	1.46
2016	0.8	-0.1	0.6	3.48
2015	-1	0.8	1.2	2.02
2014	-0.5	2.8	0.4	2.19

■ INTEREST RATE ■ INFLATION RATE ■ GDP ■ STDV