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Ling, Coco Siu Yin

Universiti Utara Malaysia

8 November 2019

Online at <https://mpra.ub.uni-muenchen.de/97889/>

MPRA Paper No. 97889, posted 05 Jan 2020 05:12 UTC

# **Financial Risk and its Performance: A Study on Apollo Food Holdings Berhad in Malaysia**

Coco Ling Siu Yin

Universiti Utara Malaysia

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## **ABSTRACT**

The performance of a company can be affected by the financial risks associated with it. It is important for a company to manage financial risks efficiently. The purpose of this study is to identify the impact of financial risks on the performance of Apollo Food Holdings Berhad which is a food and beverages company for the period of 2014-2018. This study develops multiple linear regression models to analyse the impact of financial risk on company performance. The findings show that operating margin is the most significant variable that positively influence the performance of the company. This study suggests that Apollo Food Holdings Berhad should deal with their operating margin in order to increase the performance and profitability of the company. This can be done by increasing the revenue or reducing its cost.

**Keywords:** *Performance, Financial Risks, Operating Margin.*

## CHAPTER 1 INTRODUCTION

### 1.1 Introduction

Risk is the “effect of uncertainty on objectives” and an effect is a positive or negative deviation from what is expected, according to ISO 31000 (ISO 31000 2018 Plain English Definition, 2018). Financial risk management is referred to understanding and managing various financial risks such as credit risk, market risk and others risk that the company could face either now or in the future (Thompson, 2019). Risks cannot be eliminated but it could be manageable and mitigated. If risks are not well managed, the performance of the company will be very badly affected and the worse, the company can go to liquidation or bankruptcy. Not all of the risk can be prevented from the firm thru financial risk management, but it can help to prevent huge losses in transaction. The purpose of this study is to identify and understand the financial risk of the company and how it affects the company.

### 1.2 Company Profile

Apollo Food Holdings Berhad is listed a company in Bursa Saham Malaysia under the sector of Consumers Products and Services and the sub-sector of Food and Beverages. Apollo Food Holdings Berhad was incorporated in 1994 and is located at Johor Bahru, Malaysia (APOLLO FOOD HOLDINGS BERHAD (MALAYSIA), 2019). Apollo Food Holdings Berhad is a holding company that operates in two segment which is manufacturing, marketing and distribution and investment holding that provides its subsidiaries with management services (Apollo Food Holdings Bhd, n.d.). The subsidiaries are Apollo Food Industries (M) Sdn Bhd that manufacture and distribute compound chocolates, chocolate confectionery products and cakes, and the investment holding company are Hap Huat Food Industries Sdn. Bhd.

There are two main categories of products offers by Apollo Food Industries (M) Sdn Bhd, the Chocolate Wafer products, and Layer cake, Chocolate Layer Cake and Swiss roll products. These products are sold in Malaysia and to overseas market such as Singapore, Indonesia, Thailand, Philippines, Vietnam, China, Middle East, Mauritius, Maldives and others. Keynote Capital Sdn. Bhd. are its ultimate holding company (Apollo Food Holdings Bhd (AFHB), n.d.).

### 1.3 Corporate Governance of Apollo Food Holdings Bhd

A good corporate governance is important to ensure the Group's continual growth and success as recognizes by the board. The Group's is committed in enhancing and improving to ensure that the best practices and principles in corporate governance recommended in Malaysia Code on Corporate Governance 2017 ("The code") are applied within the Group's to protect and enhance its shareholder's value. Most of the recommendation prescribes by the Code has been adopted by the Group's to effectively lead the Group and retains full and effective control of the Group's, such as the responsibility to determine the Group's overall strategic direction, development and control. The Group's has authorized the Audit Committee, the Nomination Committee and the Remuneration Committee certain responsibilities in examine specific issues and forward their recommendation the Board to make the final decision.

As at the end of financial year 2018, the Board has seven directors, two executive directors, one non-independent non-executive director and four independent non-executive directors. The Board defined the term of independence as in tandem with the definition of an Independent Director in the listing requirement. Whereby, they are not a member of management and is free of any relationship that could hinder with the exercise of independent judgement or the capacity to perform in the best interests of the company and shareholders. In the case of during any prospective conflict of interest could occur, Director would assert its

interest and refrain from the decision-making process and stay in a position to fulfil its duty of providing a check and balance.

In accordance with the Code's Practice 1.3, The Board is directed by an Executive Chairman who is accountable for leading the Board in its collective oversight of management while the managing director are in charge of implementing the Board's decisions and supervise the business of the Group's and its day-to-day management. In order to pursuant with the recommendation provided by Malaysian Code on Corporate Governance 2017 ("MCCG 2017"), where this policy is set up to provide a framework for the Group to increase women participation either in board or senior management position. The Group is now ensuring that at least one female director is appointed and served on the Board. The Group are aiming to have more female directors (30% women participation) on the board if there is any opportunity arises. The Nomination and Remuneration Committee is responsible on supervise the performance of female directors and ensure appropriate women participation on the Board annually.

The remuneration and other entitlements of the Executive Directors and Senior Management are reviews and recommended to the Board by the Remuneration Committee, to ensure they are rewarded appropriately according to their contribution on the Group's profitability and growth. Non-Executive Directors remuneration and entitlements is depending on their level of responsibilities whereby it will be decided by the Board with the Director and on a voting decision in respect of the remuneration. Executive Directors will not take part in the deliberations and decisions on their remuneration. On the Annual General Meeting, the Directors' fee and remuneration as well as other benefits are subject to the shareholders' approval.

The Directors is liable to present a balanced and accurate annual finance statements and quarterly announcement of result to the shareholders. The Directors will be assisted by the Audit Committee to ensure accuracy and transparency. The Directors is subject to the

responsible of maintaining a sound system of internal controls, not only on financial controls but also operational and compliance controls as well as risk assessments. This system is to manage risk to achieve business objectives. To ensure effectiveness, adequacy and integrity of the risk management framework and internal control systems, ongoing review are continuously carried out to protect the Group's assets and shareholders' investment in the Group.

#### 1.4 Problem Statement

Every companies are exposed to financial risk, and it is necessary for those companies to have a good financial risk management if they want their business to be success. A company's management has different levels in control the financial risk. Some of the risks can be directly controlled while some of the risks couldn't be controlled by company's management. Without a proper financial risk management, the performance of a company will be affected.

Apollo Food Holdings Berhad is exposed to liquidity risk when it cannot meet its short-term financial demands, and this affect the brand and performance of its company badly. Liquidity risk arises is due to Apollo Food Holdings Berhad's management of working capital. It is the risk that Apollo Food Holdings Berhad would face difficulty in meeting its financial obligations when due. Apollo Food Holdings Berhad is also exposed to credit risk, this is mainly due to the amounts owing by subsidiaries. The amounts owing by subsidiaries are unsecured, interest-free and receivable upon demand in cash and cash equivalents. If Apollo Food Holdings Berhad's subsidiaries couldn't meet the demand of cash or cash equivalents, this will make Apollo greatly expose to credit risk.

Apollo Food Holdings Berhad is exposed to operational risk such as operating system failure, dishonest staff and inefficient back office support when it is performing its daily business transaction. Apollo Food Holding Berhad is exposed to market risk which are the foreign exchange risk. A sudden appreciate in ringgit Malaysia may causes Apollo Food

Holdings Berhad income to depreciate as Apollo Food Holdings Berhad distribute its product to overseas market. The overseas market will pay Apollo Food Holdings Berhad for its product in foreign currency and Apollo Food Holdings Berhad will need to convert the foreign currency to local currency. This may also affect Apollo Food Holding Berhad product sales in overseas market as importer from overseas will need to pay higher cost due to the appreciation in RM. All these risks should be managed wisely by Apollo Food Holdings Berhad in order to have a good company performance.

### 1.5 Research Objectives

The aim of this study is to learn about the company's financial risk and to know how the performance of the company is affected. The objectives of this study are:

1. To examine the relationship between internal factors and the performance.
2. To examine the relationship between external factors and the performance.
3. To examine the relationship between internal factors and external factors towards the performance.

### 1.6 Research Questions

1. How do internal factors affect the performance?
2. How do external factors affect the performance?
3. How do internal and external factors affect the performance?

### 1.7 Scope of Study

For the purpose of this study, a food & beverages company named Apollo Food Holdings Berhad has been selected by the researcher. The raw data of this company are collected from 5 years annual reports which are from year 2014 to year 2018.



## CHAPTER 2 LITERATURE REVIEW

### 2.1 Introduction

The performance and the four financial risks which are liquidity risk, credit risk, operational risk and market risk will be discussed in this chapter. Corporate governance is also discussed in this chapter.

### 2.2 Performance

According to Smith & Reece (1999), a company performance is directly influence by its business strategy, external fit, and productivity; and indirectly influence by business approach and external fit through productivity. Zulkiffli & Perera (2011) defined company performance as the organization capacity to satisfy the expectation of the company's major shareholders and it must be assessed to evaluate an organisation's achievement. The performance of an organization is greatly influence by financial risks (Noor & Abdalla, 2014). In predicting the future performance, the record of past performance record of a company is arguably the key indicator (Naser, Karbhari, & Mokhtar, 2004).

### 2.3 Liquidity Risk

Liquidity risk is the result in a situation where a party is interested in trading an asset, however it cannot do it because no one in the market wants to trade that asset. Financial market participant who are planning to hold or currently holding an asset is vitally related to liquidity risk as it will affects their ability to trade the assets or unwind the trading position. Due to financial institutions fail to trade their holdings effectively, and thus the liquidation value of assets may vary dramatically from their current mark-to-market values and result in insolvencies. Financial institutions that are ignoring liquidity risk can causes underestimation

of overall market risk and wrongly apply of capital cushion for the safety and soundness (Al Janabi & A.M., 2011).

Liquidity risk is defined as to the uncertainty in the bank's inability to meet its payment obligations. Funding liquidity risk is also considered as a potential risk where the bank is unable to acquire funds as needed by less cost and efficiency. Liquidity risk play an important role where it contributes to the view of support stable funding. The liquidity risk is measured by loans to core deposits. Fully insured time deposits and transaction deposits are used to generate core deposits, but non-brokered time deposits are excluded. Liquidity risk has a negative relationship with bank risk-taking (Dahir, Mahat, & Ali, 2018).

The nature of banks exposes them to liquidity risk. The risk that a bank unable to meet the obligations when the depositors withdrawing a huge sum of money at an inconvenient time and causing fire sale of assets and it will negatively affect the profitability of the bank. The performance and the reputation of a bank can be affected by liquidity risk. The depositors of the bank may lose confidence and trust toward the bank if the funds are not timely provided to them and in this situation the reputation of the bank can be at stake. A poor liquidity position also causes penalties from the regulator. Therefore, a sound liquidity arrangement is crucial for a bank (Arif & Nauman Anees, 2012).

## 2.4 Credit Risk

Credit risk is the probability of losing an outstanding loan either in a portion or in full, due to the default in repayment. A dynamic credit risk framework is crucial for banks to maximize their profitability and prevent forceful mergers and acquisition. The propensity of the bank to experience financial crisis is higher if the acquaintance of a bank to credit risk is high and vice-versa. Since the revenue of the bank is mostly derived from the interest of loan, this credit risk play an important role compared to the other risks. However, credit risk is related

to interest rate risk directly which the increment in interest rate will increase the probability of loan default. The viability and profitability of the banks can be supported and committed to systemic stability and growth of the economy through an effective credit risk management (Gadzo, Kportorgbi, & Gatsi, 2019).

The study of the macroeconomic determinants of credit risk in the banking systems of Sub-Saharan African (SSA) countries is an important issue because most banks in Sub-Saharan African economies still operate in risky financial environments with weak legal institutions. Following that the risks still remain in Sub-Saharan Africa due to the fluctuations of commodity price, reversal of capital flows and spill overs from external shocks, and also other factors. Furthermore, according to IMF (2017) SSA's recovery from the 2008/2009 global financial crisis is not yet complete. The dependent variable of credit risk is non-performing loans (NPL) which is measured as the ratio of non-performing loans to total gross loans in percentages. Independent variables of credit risk are the GDP growth rate (GDPGR) which is the annual percentage growth rate of real GDP based on local currency (Mpofu & Nikolaidou, 2018).

Borrowers are required to maintain a threshold level of a specified accounting ratio based on the financial ratio covenants. Lender has the right to take action if the borrower fails to maintain the threshold level as agreed in the contract. This right is useful to the lender as they can evaluate the credit condition of the borrower and act consistently. There are a few ratios to measure the credit risk. The first ratio is Minimum Coverage which are measured by ratio of earnings to periodic debt-related expense. Borrower who had high levels of coverage will have lower credit risk. The second ratio is Maximum Leverage which are measured by total debt to total assets. The overall indebtedness of the firm is measured by leverage. Leverage is often used during evaluating credit quality, where high leverage firms are having higher credit risk and vice-versa (Demerjian, 2007).

## 2.5 Operational Risk

Operational risk is the measure related between the difference of a firm's business activities and its business results. Shareholder value of a firm can be improved thru reducing the amount of operational risk relative to the earnings of the firm. In the financial industry many high-profile losses are due to operational risk. Before Basel II reforms to banking supervision, operational risk was largely a residual category for risks and uncertainties and not taken seriously (Ko, Lee, & Anandarajan, 2019).

According to Basel Committee there is three methods of calculating operational risk capital charges which are Basic Indicator Approach (BIA), Traditional Standardized Approach (TSA), and Advanced Measurement Approaches (AMA). Banks are required to provision a fixed percentage of 15% of their average gross income over the previous three years to meet future operational risk losses under BIA. On the other hand, TSA sets regulatory capital to at least the three-year average of the summation of various regulatory capital charges (as a prescribed percentage of gross income that varies by business activity) across business lines in each year. However, under AMA the required data are generated by the bank's internal operational risk measurement system (Jobst, 2007).

According to the Basel Committee on Banking Supervision operational risk is the risk of loss resulting from people, deficient or failed internal systems, processes or from external events. In this definition legal risk are includes however, strategic and reputational risk are excluded. Operational losses are considered a significant factor of bankruptcy in bank and it is an essential of holding minimum capital to protect against these losses. There are seven different event types of operational loss. Internal fraud, External fraud, Employment practices and the safety in the working place, Clients, products and business practices, Damage to physical assets, Business disruption and system failures, Execution, delivery and process

management. Operational losses happen in US firms is mainly due to the failure of internal control (Sharifi, Haldar, & Rao, 2016).

## 2.6 Corporate Governance

Corporate governance is referring to the set of processes, customs, policies, laws, and institutions that affect the way a corporation or company is managed or controlled. The relationship between the many stakeholders involved and goals for which the corporation is governed is also included in corporate governance (Raut , 2003). According to the Cadbury committee Corporate Governance are defines as a system whereby companies are operated and managed, focusing specifically on the establishment of a framework in which the interests of stakeholders are balanced (Cadbury, 1992).

Due to the inefficient and ineffective corporate governance and accounting malpractices, it has result in corporate failure in several multinational organisations such as Enron, WorldCom, Nortel, Parmalat and Tyco (Sorensen & Miller, 2017). Since then corporate governance has placed a great deal of attention on disclosure, transparency and accountability. The concept of corporate governance now covers as well as the major issues of an organizations ranging from its ownership structure to the process and procedures of the firm (Gyamerah & Agyei, 2016).

## 2.7 Market Risk

Market risk is the probability that arises due to changes in market price and affected the fair value or future cash flow of the financial instrument. Market comprises four types of risk. The first risk is exchange risk; it is the consequence of difference in exchange rate for companies engaging in oversea market. The second risk is interest risk where it results in the variance in the interest rate, especially company that carries out operations related to fixed

interest assets in the financial markets. The third risk is risk of price variations in financial assets other than fixed income assets. The fourth risk is the largest category of market risk because it affects all types of companies regardless of their performance in financial market and the transactions in various currencies where they carry out. It is the risk of commodity price variations; this occur when a loss happens due to the unforeseen variation in commodity. “VAR” is the common standard market risk measure in financial institutions. Banks use different confidence intervals and different models to calculate the VAR (e.g. Monte Carlo, variance-covariance), and this has causes difficulty in accurate comparison between bank (Savvides & Savvidou, 2012).

Market risk is related to equity prices which are known as Beta in the capital asset pricing model (CAPM). Beta is defined as the stock return for company, including capital gains/losses and dividends. In this few years, academicians and financial practitioners are actively engaging in re-examination of the usefulness of the capital asset pricing model (CAPM) and also the role of the Beta measure of market risk. The Beta variable is the coefficient resulting from the regression of the return on a stock including both capital gains/losses and dividend on the comparable return measure for the Standard & Poor’s 500 index (Elmoatasem Abdelghany, 2005).

In the bank holding companies' regulatory reports where the market risk capital figures are disclosed it is considered as an important source of new information about risks handle by huge banking organizations subject to the market risk capital standards. The innovative side of market risk capital standard is that the output of banks' internal risk measurement models that determine the minimum capital requirements. These models play a significant role in risk management processes and is broadly used by banks and other financial institutions. It is an important feature from the perspective of capital. It also is important in term of the ability of supervisors and for others to monitor the risk profiles the institutions (Hirtle, 2003).

## **CHAPTER 3 METHODOLOGY**

### **3.1 Introduction**

Research methodology are defined as the common approach the researcher takes in order to accomplish the research project. According to Williams (2007), research is the procedure of accumulating, analysing, and interpreting data in order to understand a phenomenon. The procedure of collecting, analysing and interpreting data that is used by the researched will be reveal in this chapter.

### **3.2 Sampling Method**

Sampling method refers to the way that observations are selected from a population to be in the sample for the objective of research. There are approximately 38 listed companies under the sub-sector of food and beverages (Bursa Malaysia Food & Beverages Companies, n.d.). To achieve the objective of this study, the researcher has selected Apollo Food Holdings Berhad as the sample of this study.

### **3.3 Statistical Method**

Statistical methods are referring to the statistical analysis of raw research data where the mathematical formulas, models, and techniques is used. In statistical method information are to be extracts from the research data and different way of assessing the robustness of research outputs are provides. To achieve the objective of this study, the researcher uses external factors such as exchange rate, interest rate and others as the data of this study. Five years of raw data are also collected by the researcher from the annual reports, from year 2014 to year 2018. The use of this data is to calculate the financial ratio to measure the financial risks.

Ordinary least squares (OLS) regression is used to analyse the data in order to achieve the objective of this study. OLS regression is a statistical analysis tool used to measure the

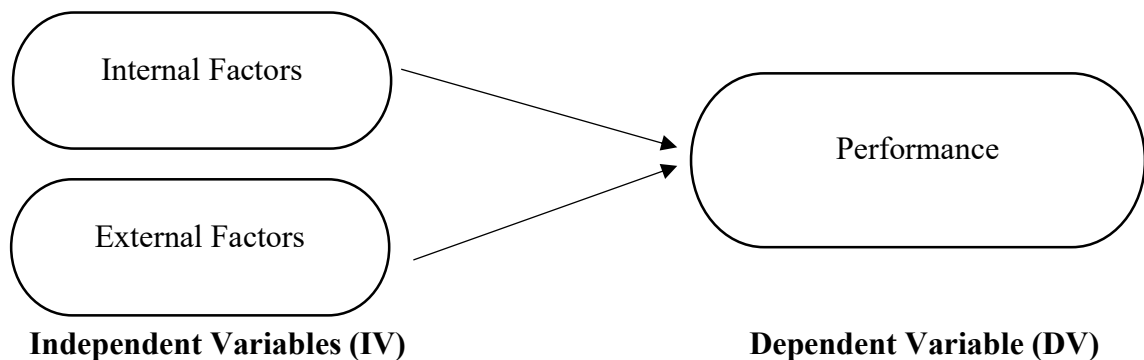
correlation between the independent variables and the dependent variable. This model measures the correlation by minimizing the sum of the squares in the difference between the observed and the projected values of the dependent variable modelled as a straight line. (Ordinary Least Squares Regression, 2019).

### 3.4 Statistical Package for the Social Sciences (SPSS)

To achieve the objective of this study, SPSS software version 25 has been used to generate data for the uses of this study. The IBM SPSS are used in this study to compute the linear regression. The IBM SPSS are also used to compute the correlation, ANOVA, Model Summary and coefficient between the variables according to the quantitative data that had been collected earlier.

### 3.5 Conceptual Framework

The conceptual framework of this study consists of one dependent variable (DV) and two independent variables (IV). The research framework is as follow:



*Figure 1.* Research Framework

Multiple regression analysis was used to determine the impact of independent variables on the dependent variable. Multiple regression analysis consists of three model. The model 1 is how internal factors such as current ratio, average collection period and others affected the



performance of the company. The model 2 is how external factors such as standard deviation, inflation rate, interest rate and others affected the performance of the company. The model 3 is how internal and external factors affected the performance of the company. The multiple linear regression can be presented in the equation form as follows:

$$\text{Equation 1: ROA} = \beta_0 + \beta_1\text{CR} + \beta_2\text{QR} + \beta_3\text{ACP} + \beta_4\text{DTI} + \beta_5\text{OR} + \beta_6\text{OM} + \beta_7\text{CGI} + e$$

$$\text{Equation 2: ROA} = \beta_0 + \beta_1\text{GDP} + \beta_2\text{INF} + \beta_3\text{IR} + \beta_4\text{ER} + \beta_5\text{STD} + e$$

$$\text{Equation 3: ROA} = \beta_0 + \beta_1\text{CR} + \beta_2\text{QR} + \beta_3\text{ACP} + \beta_4\text{DTI} + \beta_5\text{OR} + \beta_6\text{OM} + \beta_7\text{CGI} + \beta_8\text{GDP} + \beta_9\text{INF} + \beta_{10}\text{IR} + \beta_{11}\text{ER} + \beta_{12}\text{STD} + e$$

Table 1

*Measurement of Variables*

No	Variables	Notation	Measurement
1	Return on Asset	ROA	Net Income / Total Assets
2	Current Ratio	CR	Current Assets / Current Liabilities
3	Quick Ratio	QR	(Current Assets – Inventories – Prepaid Expenses) / Current Liabilities
4	Average Collection Period	ACP	Account receivable / (Revenue / 360 Days)
5	Debt to Income	DTI	Total Liabilities / Total Income
6	Operational Ratio	OR	Operating Expenses / Net Sales
7	Operating Margin	OM	EBIT / Revenues
8	Corporate Governance Index	CGI	Corporate Governance Elements
9	Gross Domestic Product	GDP	5-years GDP Growth Rate
10	Inflation	INF	5-years Inflation Rate
11	Interest Rate	IR	5-years Interest Rate
12	Exchange Rate	ER	5-years Exchange Rate
13	Standard Deviation	STD	5-years Daily Share Price Change

## CHAPTER 4 FINDINGS AND ANALYSIS

### 4.1 Introduction

This chapter presents the findings and analysis of this study, which were obtained from the various analysis. Analysis of the company's performance, corporate governance and its financial risks would be discussed in this chapter.

### 4.2 Descriptive Statistics

Table 2

*Descriptive Statistics*

	Mean	Std. Deviation	N
ROA	.0856	.0326	5
CURRENT RATIO	14.6499	2.1029	5
QUICK RATIO	12.9257	2.0696	5
AVERAGE-COLLECTION PERIOD	58.9435	3.7916	5
DEBT TO INCOME	.1126	.0078	5
OPERATIONAL RATIO	.1232	.0151	5
OPERATING MARGIN	.1491	.0512	5
CORPORATE GOVERNANCE INDEX	1.0000	.0000	5
GDP	5.1800	.7727	5
INFLATION	2.4200	1.0710	5
INTEREST RATE	2.8800	1.6453	5
EXCHANGE RATE	4.3680	.7382	5
STDV	.0452	.0157	5

Table 2 shows the descriptive statistic based on Model 3. According to Table 2, it shows that the mean of ROA is 0.0856. On average Apollo profit RM 0.0856 cent per every ringgit invested in asset. The standard deviation is 0.0326, it shows that the ROA is less volatile as it is lower than 1. Less volatility indicate that the amount of profit generated from every ringgit of assets is stable.

The mean of current ratio is 14.6499 with standard deviation of 2.1029. This indicate that every 1 ringgit of liability, Apollo cover with RM14.6499 of asset, however standard deviation of 2.1029 is volatile as it is more than 1. The mean of quick ratio is 12.9257 with standard deviation of 2.0696. This indicate that every 1 ringgit of liability, Apollo cover with RM 12.9257 of its most liquid assets, however it is volatile as the standard deviation is 2.0696. A volatile standard deviation indicate that the liquidity of Apollo is not stable, the amount can be different from time to time.

On average the time taken for Apollo to collect back its payment is 59 days with standard deviation of 3.7916. This indicate a high volatile meaning that the time taken for Apollo to collect back its payment is unstable. The mean of debt to income ratio is 0.1126 with standard deviation at 0.0078. On average 11.26% of Apollo's total income goes to debt payment. Debt to income ratio of Apollo is very less volatile as the standard deviation is only at 0.0078, indicate that the percentage of total income that goes to debt payment are very stable.

The average of operational ratio within 5 years is 0.1232 with standard deviation less volatile at 0.0151. The efficient of company generating revenue against its expenses is stable within the 5 years as the standard deviation is less volatile. The mean of operating margin is 0.1491 with standard deviation at 0.0512. The profit of Apollo made within the 5 years after paying for variable cost is stable as the standard deviation is less volatile.

The mean for CGI is 1.0000 and the standard deviation is 0.000. This indicate that the CGI of Apollo is totally no volatile at all. Since Apollo has remained the same CGI of 1.0000

over the 5 years. The mean of GDP growth rate is 5.1800% with standard deviation 0.7727. On average the GDP growth rate of Malaysia is at 5.18% and is less volatile because standard deviation is less than 1. This indicate that the changes of GDP growth rate among the 5 years is stable.

The mean of inflation rate is 2.42% with standard deviation 1.0710. The rate of inflation among these 5 years is volatile as the standard deviation is above 1. This indicate that the changes of inflation rate among these 5 years are not stable. The mean of interest rate is 2.88% with standard deviation of 1.6453. This indicate that the rate of interest rate is volatile and are not stable among these 5 years as the standard deviation is more than 1.

The mean of exchange rate was 4.3680 with standard deviation 0.7382. This indicate that on average 1 USD is equivalent to RM 4.3680. The standard deviation show that the exchange rate is less volatile as the standard deviation is less than 1. This also mean that the exchange rate among these 5 years are stable.

#### 4.3 Performance

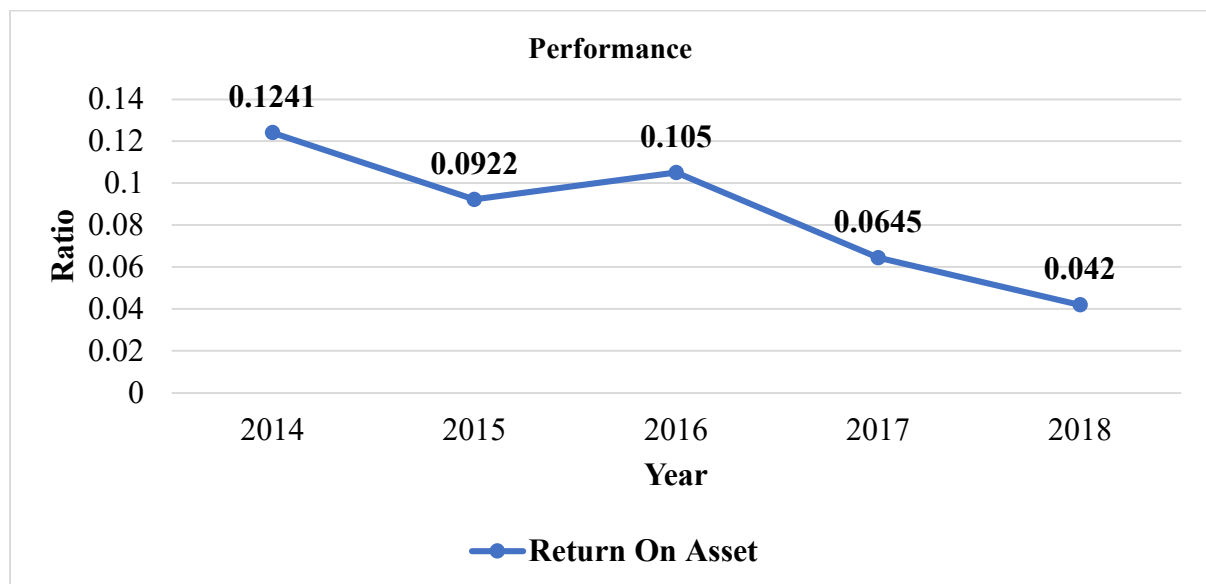


Figure 2. Apollo's Return on Asset from 2014 to 2018

Figure 2 shows the return on asset for Apollo from 2014 to 2018. Return on assets (ROA) is a financial ratio that shows how much a company profit relative to its total assets (Hargrave, 2019). The higher the ROA the more efficient is that company in using its resources to generate profit. In 2014, every ringgit Apollo invest in its assets, it generates profit of RM 0.1241, the highest among the 5 years. During 2018 it only generates profit of RM 0.042 from every ringgit Apollo invest in its assets, the lowest among the 5 years. According to (Akers, 2019) a low ROA may indicate that the company has purchase an expensive machinery and the ROA may be low for the first few years. If the ROA still remain low after the first few years it indicates an unwise investment on the part of management. In 2018, the lowest ROA among the 5 years could indicate that Apollo have purchase a new asset.

#### 4.4 Liquidity Risk

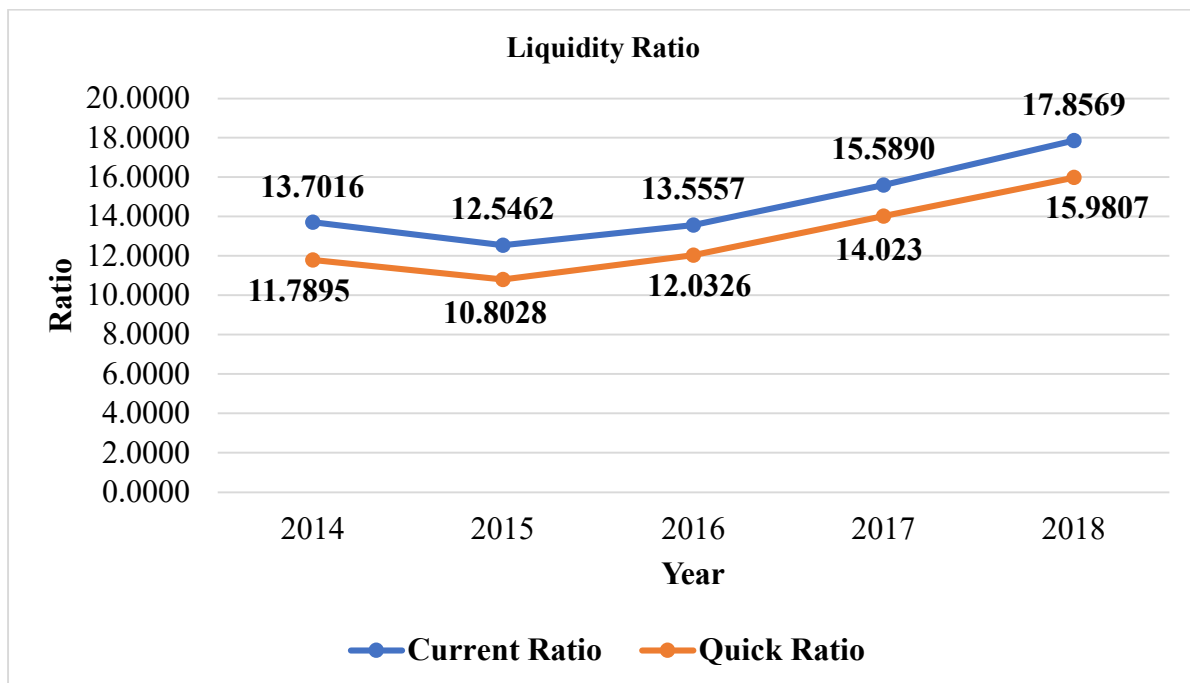


Figure 3. Apollo's Liquidity Ratio from 2014 to 2018

Figure 3 shows the current ratio and quick ratio of Apollo from 2014 to 2018. Current ratio and quick ratio measure the ability of company to meet its short-term obligation. However

current ratio is measures by current assets and quick ratio by the most liquid assets. The lowest of current ratio and quick ratio was in 2015 with 12.5462 and 10.8028 respectively. The highest of current ratio and quick ratio was in 2018 with 17.8569 and 15.9807 respectively. Based on the Figure 3, it indicates that Apollo has a high ability to meet its short-term obligation however it also indicates that Apollo is not efficient in using its current assets. From the annual report 2018 of Apollo show that Apollo keeps many cash in hand and in banks. Overall the liquidity risk of Apollo is low.

#### 4.5 Credit Risk

##### 4.5.1 Average Collection Period

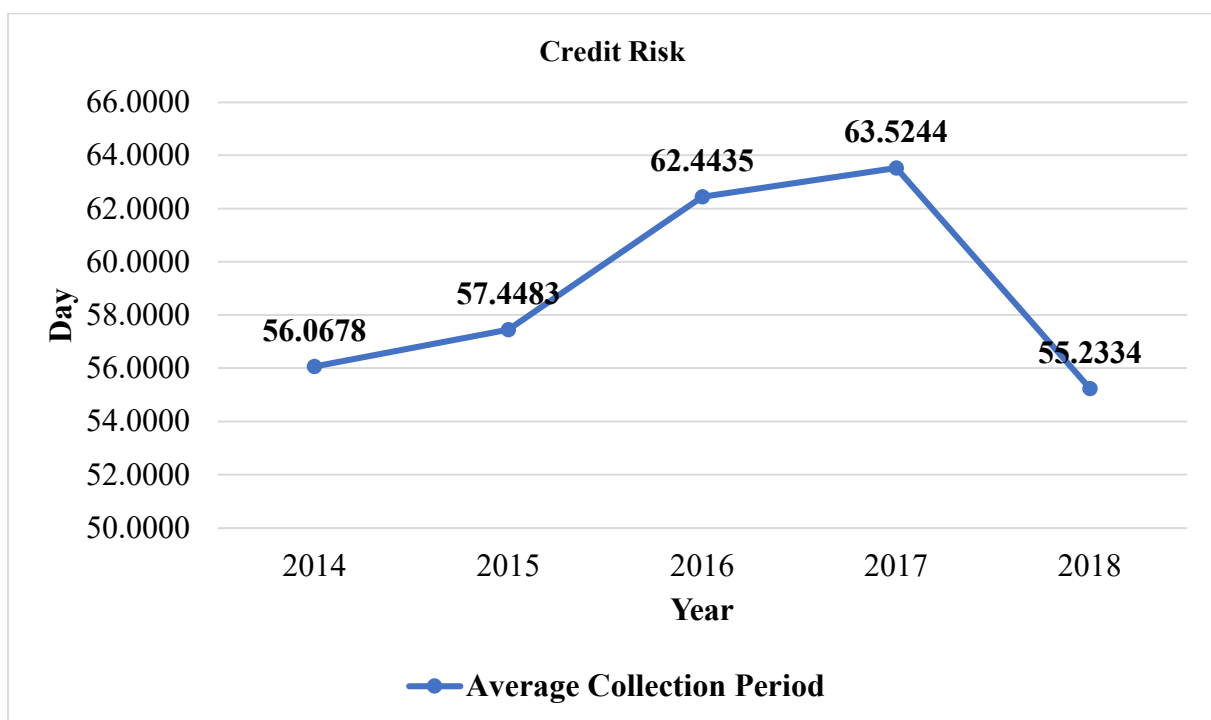


Figure 4. Apollo's Average Collection Period from 2014 to 2018

Figure 4 shows the average collection period of Apollo from 2014 to 2018. The average collection period is the duration taken for a company to recover back the payments owed by its clients (Kenton, 2019). The longest amount of time Apollo taken to collect back its payment was 63 days in 2017 and the shortest amount of time was 55 days in 2018. The longer the

duration taken to recover back the payment, the higher is the company exposes to credit risk. Credit risk is the risk of default where the clients fail to make its payment upon the due time.

#### 4.5.2 Debt to Income

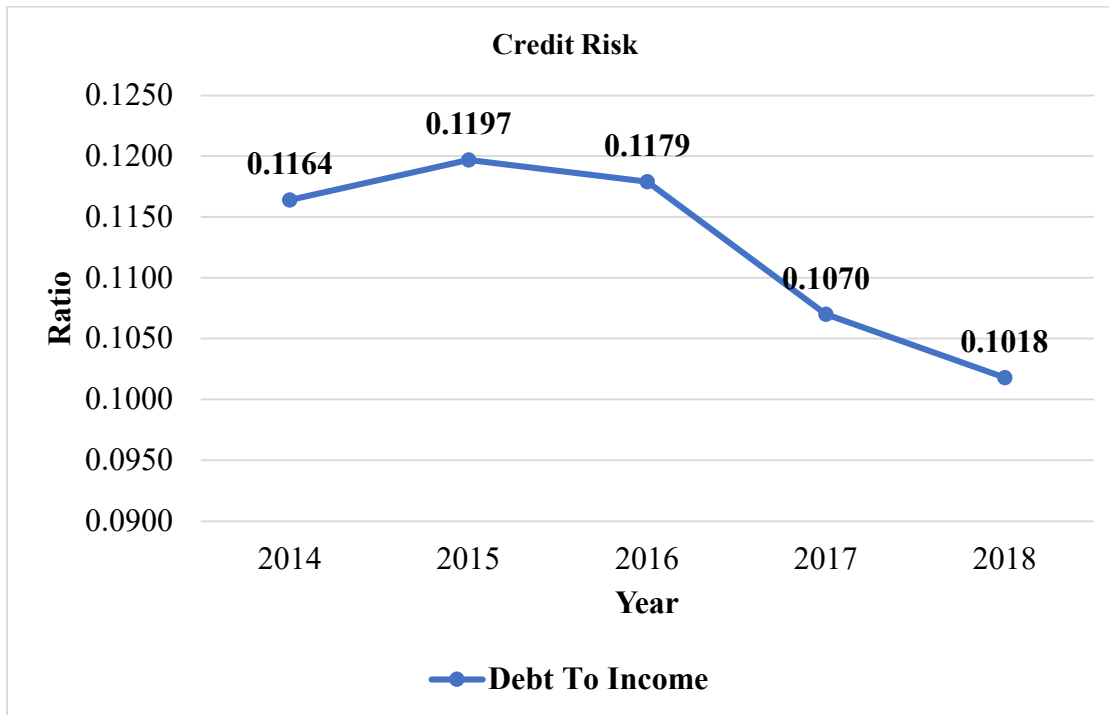


Figure 5. Apollo's Debt to Income from 2014 to 2018

Figure 5 shows the debt to income (DTI) ratio of Apollo from 2014 to 2018. The DTI ratio is the measurement of the percentage of income that goes to paying debt payments (Murphy, 2019). The highest DTI was in 2015 at 0.1197 and the lowest DTI was in 2018 at 0.1018. This indicates that in 2015, 11.97% of income goes to debt payments while in 2018 only 10.18% of income goes to debt payment. This shows that the amount of debt payments of Apollo has reduced since 2016 as the line in the graph is sloping downward. It also means that Apollo has been managing their debt payment effectively since 2016.

#### 4.6 Operational Risk

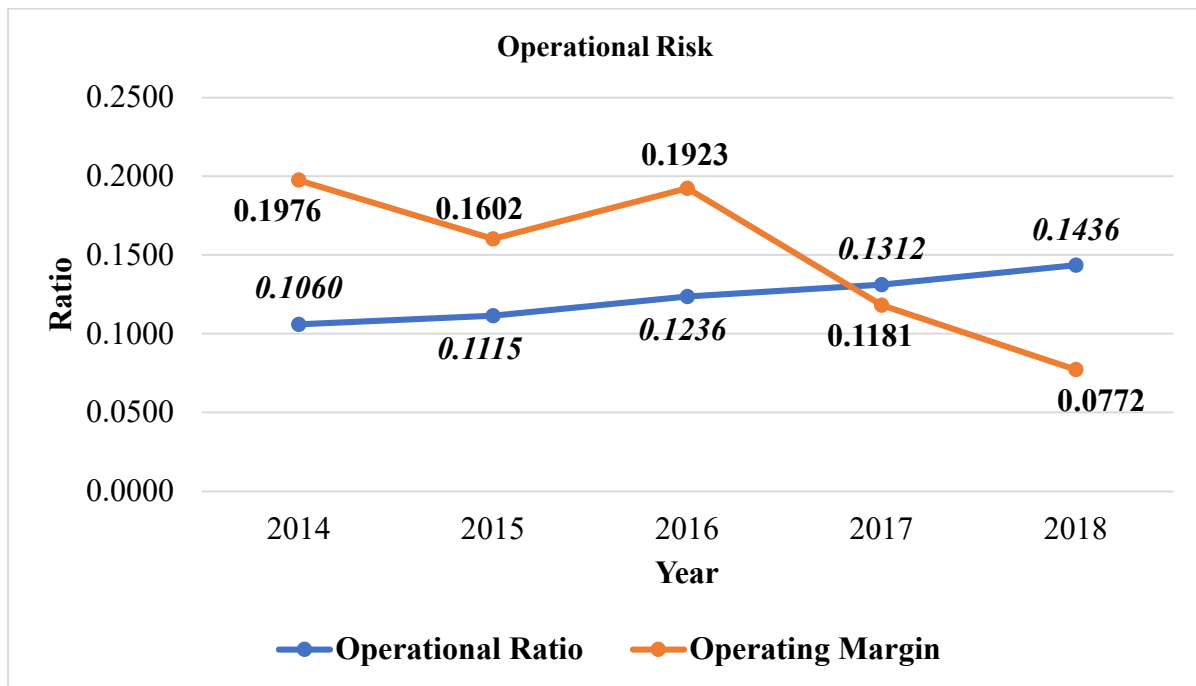


Figure 6. Apollo's Operational Risk Ratio from 2014 to 2018

Figure 6 shows the operational ratio and operational margin of Apollo from 2014 to 2018. Operational ratio measures the company efficiency in its management by comparing the total operating expense of the company to its net sales. Smaller operational ratio indicates that the more efficient the company in generating revenue against its total expenses (Kenton & Murphy, 2019). Apollo operational ratio is somehow increasing since 2015. The most efficient of Apollo management is in 2014 with lowest operational ratio at 0.1060. Since the operational ratio of Apollo is somehow increasing since 2015 to 2018 compare to 2014 the company may need to implement cost controls for margin improvement.

According to Kenton (2019), operating margin measures the profit a company makes on a ringgit of sales, after deducted the variable costs of production but before paying interest or tax. Company with high operating margin is a good sign that the company is being well managed and is potentially less risky than a company with a lower operating margin. (Harman, 2019). Apollo is most well managed in 2014 with 0.1976 compared to the other years. This



mean that for every ringgit of sales generated in 2014 RM 0.1976 was remained to cover non-operating expenses. However operating margin of Apollo has fall dramatically since 2017 with the lowest fall at 0.0772 in 2018. This indicate that Apollo is exposes to operational risk. To improve its operating margin Apollo will need to increase its sales or reduce its spending or production cost.

#### 4.7 Corporate Governance

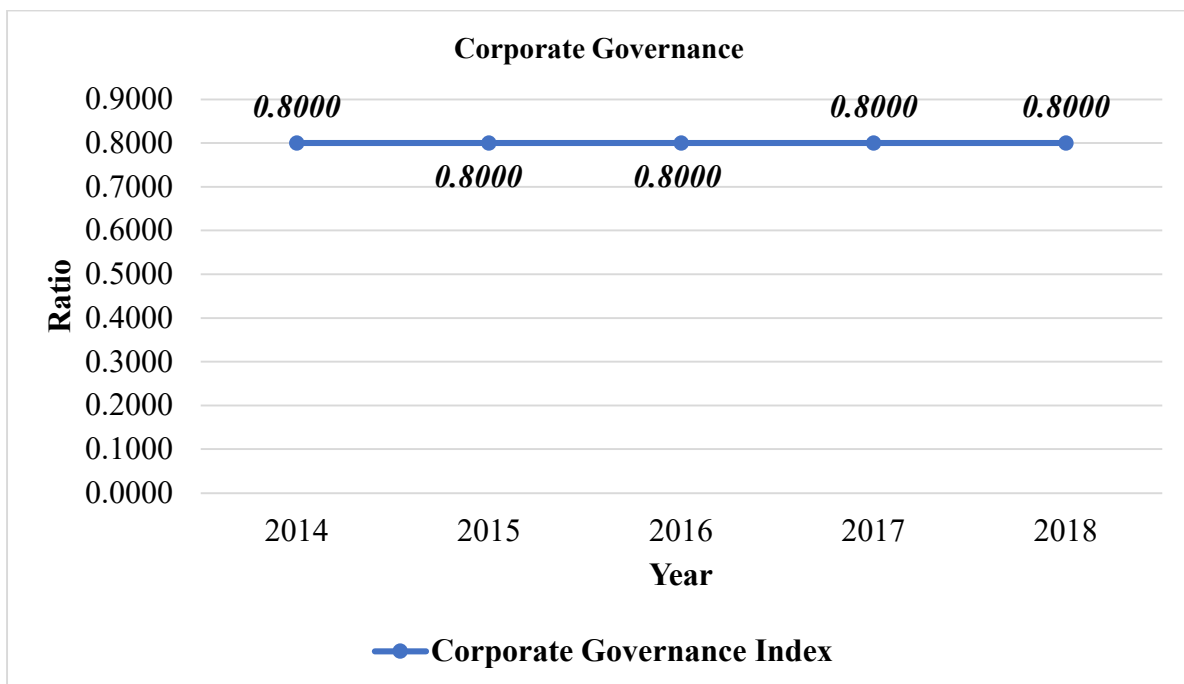


Figure 7. Apollo’s Corporate Governance Index from 2014 to 2018

Figure 7 shows the corporate governance index (CGI) of Apollo from 2014 to 2018. Corporate governance is the structure of regulations, policies and procedures which guide and manage an organization (Chen, 2019). CGI are measured based on the 5 pillars which are accountability, transparency, independence, fairness and sustainability. Based on Figure 7, CGI is at 0.8000 from 2014 to 2018. In terms of accountable, Apollo had their board meeting every year from 2014 to 2018. In terms of transparency the directors of Apollo are to be assist by the audit committee to ensure accuracy and full disclosure. In terms of independence, Apollo is

weak since Apollo did not exceed 50 non-executive directors. In term of fairness, Apollo has female director to serve on the board and Apollo is aiming to have more female director on the board. Lastly in term of sustainable, Apollo has been involving in Corporate Social Responsibilities (CSR) activities among these 5 years.

#### 4.8 Market Risk

##### 4.8.1 Price Change

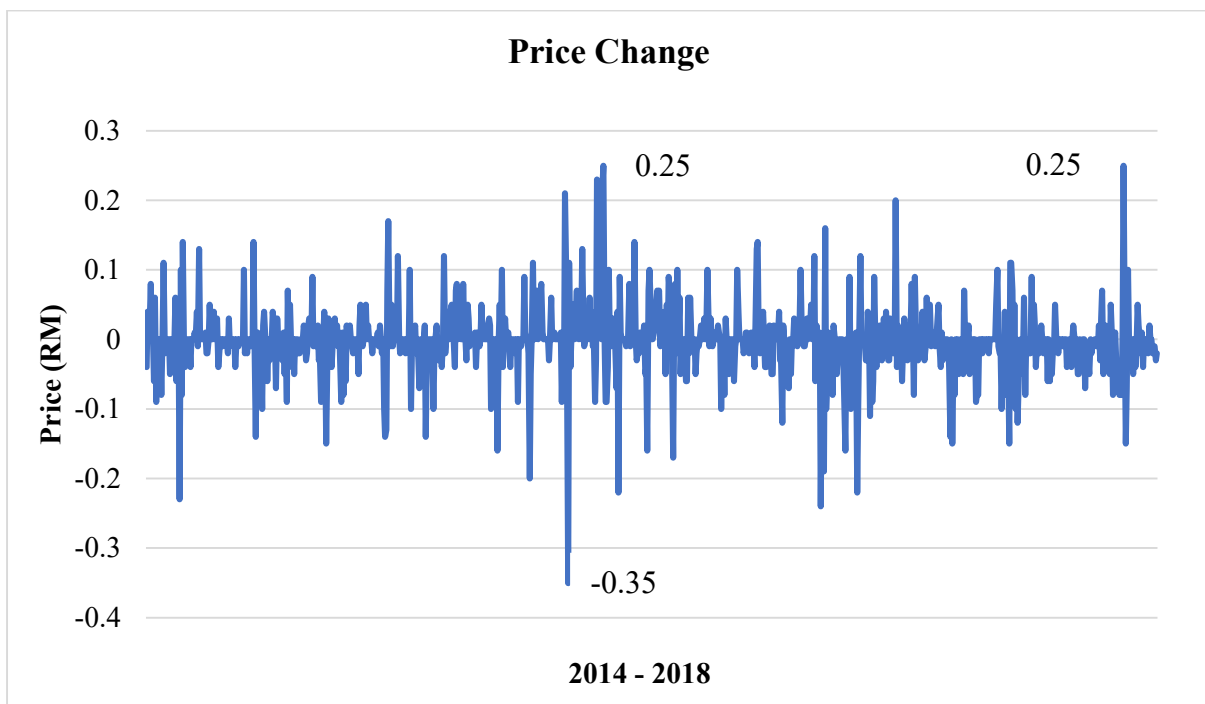


Figure 8. Apollo's 5 years Price Change from 2014 to 2018

Figure 8 shows the average price change of Apollo from 2014 to 2018. Price change is to determine the volatility or fluctuated of the share price. Apollo's share price in 6<sup>th</sup> November 2015 was experiencing maximum loss among these 5 years with a loss of RM 0.35. Conversely in 28<sup>th</sup> December 2015 and 14<sup>th</sup> December 2017 Apollo experienced a gain of RM 0.25 which was the maximum gain among these 5 years. The maximum gain of Apollo RM 0.25 in 2017 can be due to the increase in GDP in 2017 at 5.9% from 4.2% in 2016. Since a good economy will increase the company earning and thus increases the share price. On 5 years average, the

mean for the price change is -0.0028 with standard deviation of 0.0511 (refer Appendix E, Table A.10). This indicate that on average, Apollo’s share price is experiencing a loss of RM 0.0028 with standard deviation of 0.0511 which are less than 1. This show that Apollo share price change is less volatile, and the share price is stable among these 5 years.

#### 4.8.2 Gross Domestic Product (GDP)

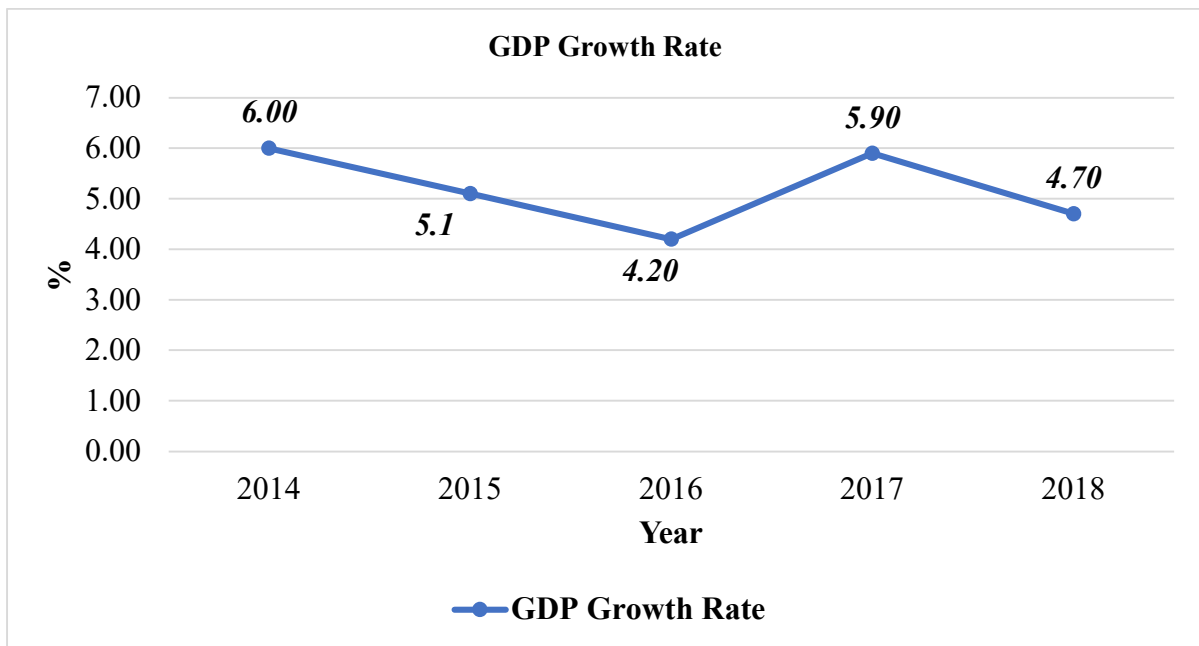


Figure 9. Malaysia GDP Growth Rate from 2014 to 2018

Figure 9 shows Malaysia GDP growth rate from 2014 to 2018. GDP represents the value of all goods and services that are produced over a certain time period within a country’s borders (Kramer, 2019). The GDP growth rate of Malaysia has fluctuated from 2014 to 2018. The highest GDP growth rate of Malaysia is 6% at 2014 and 5.9% at 2017, shows that economy of Malaysia is at its best among the five years. This indicate greater human progress as more valuable goods and services have been created (Smith L. , 2019). The economy condition of Malaysia will affect the share price of Apollo. A bad economy usually means lower earnings for the companies and it causes lower stock prices (Kramer, 2019). According to Figure 9, the lowest GDP growth rate of Malaysia was 4.2% in 2016. In year 2015 and 2016, Malaysia export

has been slowing down from 3.5% in 2015 to 3.3% in 2016 and the ringgit is weaker during that time (Modest slowdown in Malaysia's 2016 GDP growth seen, 2015).

#### 4.8.3 Inflation

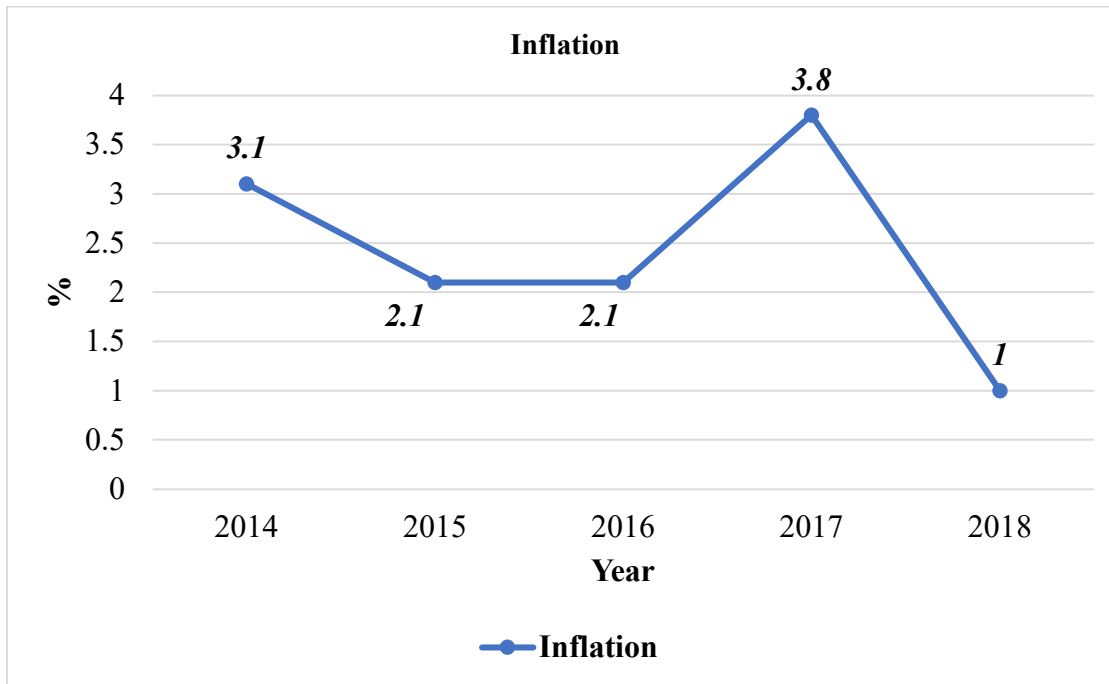


Figure 10. Malaysia Inflation Rate from 2014 to 2018

Figure 10 shows Malaysia inflation rate from 2014 to 2018. Inflation is referring to an environment where the prices of goods and services are generally increasing within a particular economy (Thune, 2019). Based on Figure 10, the inflation rate of Malaysia is fluctuated. The highest inflation rate is 3.8% in 2017 and the lowest is 1% in 2018. A low inflation rate in 2018 according to Finance Minister Lim Guan Eng is due to the abolishment of Goods and Services Tax and the country also recorded a total export of close to RM 1 Trillion 2018 (Malaysia's inflation to average between 1.6% to 2% in 2019, 2019). The high inflation rate in 2017 is due to the transport costs climbed on higher fuel prices (Chin, 2018). A high inflation rate will affect the profit of a company as the company is not sure what are the cost and price likely to

be (Riley, n.d.). A low inflation rate, where inflation fall from 3% to 0% could indicate a depressed economy (Pettinger, 2017).

#### 4.8.4 Interest Rate

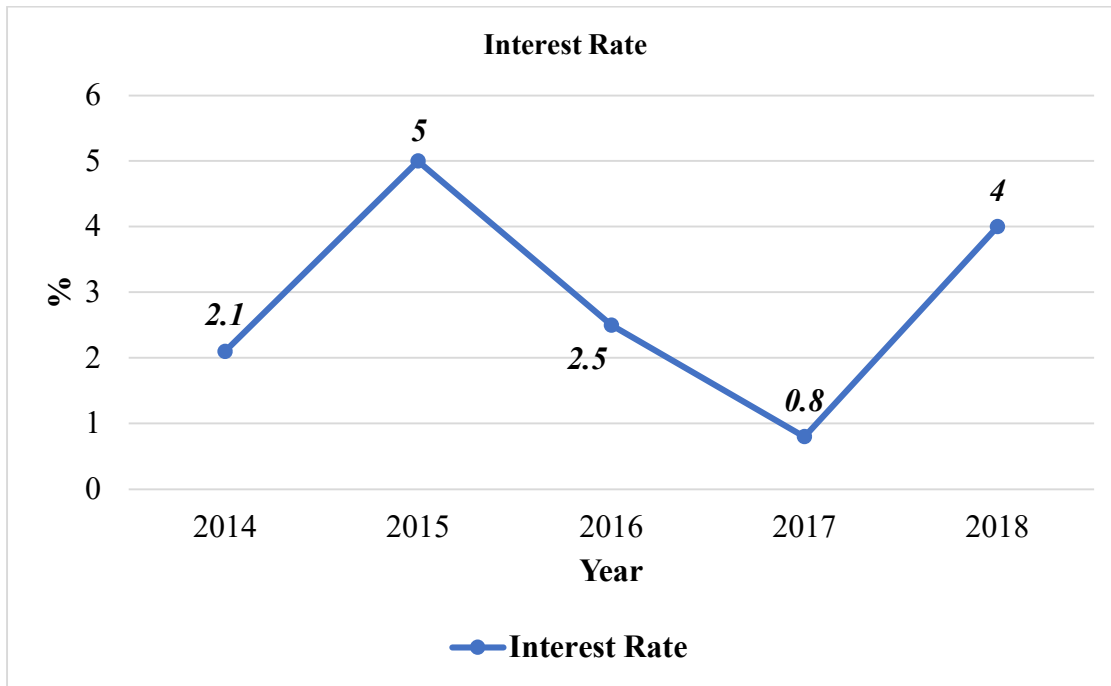


Figure 11. Malaysia Interest Rate from 2014 to 2018

Figure 11 shows Malaysia interest rate from 2014 to 2018. An interest rate is the rate at which interest is paid by borrowers (debtors) for the use of money that they borrow from lenders (creditors) (Ramlan & Suhaimi, 2017). Based on Figure 11, the highest interest rate is 5% in 2015 and it continuously fall to 2.5% in 2016 and to the lowest 0.8% in 2017. The increase in interest rate will causes inflation rate to decrease. This is because consumers will start to save their money to get return and causes economy to slow down. Conversely, if interest rate decreases, inflation rate would increase this is because that consumers would start to spend more money and this will lead to growth of economy (Folger, 2019). Thus, it can be said that the inflation rate increase when Malaysia interest rate decrease in 2017.

#### 4.8.5 Exchange Rate

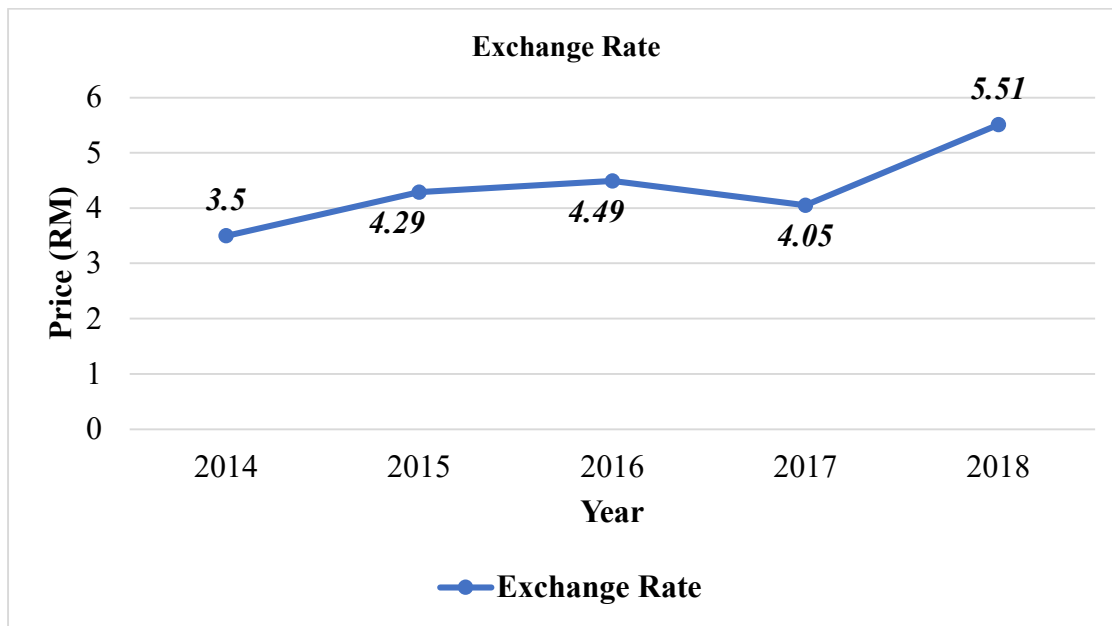


Figure 12. Malaysia Exchange Rate from 2014 to 2018

Figure 12 shows Malaysia exchange rate from 2014 to 2018. Exchange rates are the amount of one country's currency you can exchange for another currency of another country (Amadeo, 2019). The highest exchange rate of Malaysia was RM 5.51 for 1 USD in 2018. This indicate that Malaysia currency (RM) has depreciates against USD in year 2018 as more RM is needed to exchange for 1 USD. As in 2014, only RM 3.50 is needed to exchange for 1 USD. Among these 5 years, the value of RM in 2014 is the strongest.

## 4.9 Correlation

Table 3

### *Correlations*

		ROA	CR	QR	ACP	DTI	OR	OM	CGI	GDP	INF	IR	ER	STD
Pearson	ROA	1.000	-.844	-.858	.025	.876	-.908	.985	.	.175	.362	-.132	-.775	.648
Correlation	CR	-.844**	1.000	.997	-.174	-.983	.893	-.874	.	-.062	-.320	-.120	.679	-.935
	QR	-.858**	.997	1.000	-.095	-.984	.921	-.876	.	-.088	-.297	-.157	.684	-.907
	ACP	.025	-.174	-.095	1.000	.094	.128	.155	.	-.050	.554	-.639	-.237	.448
	DTI	.876**	-.983	-.984	.094	1.000	-.878	.908	.	-.063	.185	.190	-.599	.879
	OR	-.908**	.893	.921	.128	-.878	1.000	-.860	.	-.376	-.401	-.055	.821	-.713
	OM	.985**	-.874	-.876	.155	.908	-.860	1.000	.	.055	.341	-.139	-.727	.720
	CGI	.***	.	.	.	.	.	.	1.000	.	.	.	.	.
	GDP	.175	-.062	-.088	-.050	-.063	-.376	.055	.	1.000	.777	-.486	-.702	.022
	INF	.362	-.320	-.297	.554	.185	-.401	.341	.	.777	1.000	-.787	-.843	.407
	IR	-.132	-.120	-.157	-.639	.190	-.055	-.139	.	-.486	-.787	1.000	.495	.029

ER	-.775*	.679	.684	-.237	-.599	.821	-.727	.	-.702	-.843	.495	1.000	-.603
STD	.648	-.935	-.907	.448	.879	-.713	.720	.	.022	.407	.029	-.603	1.000

*Note.* ROA = Return on Asset, CR = Current Ratio, QR = Quick Ratio, ACP = Average Collection Period, DTI = Debt to Income, OR = Operational Ratio, OM = Operating Margin, CGI= Corporate Governance Index, GDP = Gross Domestic Product, INF = Inflation, IR = Interest Rate, ER = Exchange Rate, STD = Standard Deviation, \* = p-value < 0.10, \*\* = p-value < 0.05, \*\*\* = p-value < 0.001



Table 3 shows correlation between the independent variables and dependent variable. It shows which one of the independent variables are more related to the dependent variable and how significant are the independent variable to the dependent variable. When p-value is less than 0.10 then it is 1 star significant (lower significant), when it is less than 0.05 then it is 2 stars significant (significant) and when it less than 0.001 then it is 3 stars significant (very significant). In this case, the dependent variable is Return on Assets (ROA) where it is related to the performance or profitability of Apollo.

Current ratio is negatively correlated to ROA. This mean that when current ratio is decreasing, the profitability or the ROA will increase. Apollo can reduce its current assets (such as inventory) to decreases current ratio and it will increase the profitability. In terms of significant, its p-value is less than 0.05. Quick ratio is negatively correlated to ROA. This indicate that when quick ratio decreases, the ROA will increase. If Apollo want to increase its profitability, then it should reduce its liquidity. The p-value is less than 0.05.

Average collection period (ACP) is positively correlated to ROA, indicate that the rise in ACP will rises the ROA. However, it is not significant because the p-value is more than 0.10. Debt to income (DTI) is positively correlated to ROA, meaning that the increase in DTI will increase ROA. For instance, if Apollo borrow money for business expansion then its profit will increase. DTI is significant to ROA as its p-value is less than 0.05. Operational ratio is negatively correlated to ROA, the decrease in operational ratio will increases ROA. Apollo should reduce its operating expenses such as selling & administrative expenses to increase its profitability. The significant of operational ratio to ROA is significant with p-value less than 0.05.

Operating margin is positively correlated to ROA, an increase in operating margin will increases the ROA. If Apollo want to increase its profitability, then should increase its operating margin (e.g. EBIT). Operating margin is significant to ROA where its p-value is

0.001. Corporate Governance Index is very significant correlated to ROA. However, the relationship whether it is positively or negatively correlated is unknown where it is static. GDP and inflation rate are positively correlated to ROA. Interest rate is negatively correlated to ROA. GDP, inflation rate and interest rate are not significant to ROA as their p-value is more than 0.10.

Exchange rate is negatively correlated to ROA. When exchange rate decreases, ROA will increase. When the currency of RM is strong, the profitability of Apollo will increase. Exchange rate is less significant to ROA where its p-value is less than 0.10. Standard deviation is positively correlated to ROA. When standard deviation increase, ROA would also increase. However standard deviation is not significant to ROA where its p-value is more than 0.10.

#### 4.10 Model Summary

Table 4

*Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.985 <sup>a</sup>	.970	.959	.0066	1.320

*Note.* a. Predictors: (Constant), OPERATING MARGIN

b. Dependent Variable: ROA

Table 4 shows the result of Model Summary based on Model 3. The independent variables used in Model 3 are vary with Model 1 but the outcome from both Model is the same. Based on Table 4, the Adjusted R Square is equivalent to 95.9%. This indicate that the variables used in both Model are able to explain or predict 95.9% of return on assets. Where the remaining 4.1% of Adjusted R Square remained unknown, meaning that 4.1% of the variable

are not able to be explain or predict of return on assets. Durbin-Watson of model 1 is 1.320 where it is not more than 3 or less than 1.

#### 4.11 ANOVA

Table 5

*ANOVA<sup>a</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	95.650	.002 <sup>b</sup>
	Residual	.000	3	.000		
	Total	.004	4			

*Note.* a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

Table 5 shows the result of ANOVA based on Model 3. The independent variables used in Model 3 are vary with Model 1 but the outcome from both Model is the same. Table 5 shows the F value is 95.650, the higher the F value, the better it is. This indicate that the impact of independent variable on dependent variable is 95.650. This model is significant as the p-value is 0.002 which is less than 0.10.

4.12 Coefficient

Table 6

*Coefficients<sup>a</sup>*

Model		Unstandardized		Standardized	t	Sig.	95.0% Confidence		Tolerance	VIF		
		Coefficients		Coefficients			Interval for B				Collinearity Statistics	
		B	Std. Error	Beta			Lower	Upper				
1	(Constant)	-.008	.010		-.790	.487	-.040	.024				
	OPERATING MARGIN	.627	.064	.985	9.780	.002**	.423	.831	1.000	1.000		

*Note.* a. Dependent Variable: ROA, \*\* = p-value < 0.05

Table 6 shows the Coefficient based on Model 3. The independent variables used in Model 3 are vary with Model 1 but the outcome from both Model is the same. Based on Table 6, operating margin is the most important independent variable and it is very significant to return on assets as its p-value is 0.002. To manage the return on assets or the profitability, Apollo should pay attention to its operating margin. According to the standardized coefficients beta, its value is positive 0.985. This indicate that operating margin is positively influence the return on assets of Apollo. An increase in operating margin will increases return on assets and thus profitability of Apollo will increase. Apollo will need to manage its sales by increasing the sales and the revenue will increases, then the operating margin will increase which will then influence the profit of Apollo. This can be proved by House & Benefield (1995) that stated the increase in revenue is the most significant variable that affect financial performance.

According to Kenton (2019), operating margin measures the profit a company makes on a ringgit of sales, after deducted the variable costs of production but before paying interest or tax. Thus, Apollo can also try to reduce its variable costs such as utility cost or raw material cost so that the profit of Apollo can increase. This can be supported by Beers (2019) that stated reducing the cost of goods sold by using cheaper materials in production can help to increase profit. According to Maverick (2018), reducing costs can help to increase profit of a company if sales and price remained the same. He added that to increase profit through the increase of revenue, a company may sell the product at a higher price.

## CHAPTER 5 DISCUSSION AND CONCLUSION

### 5.1 Introduction

The purpose of this study is to learn about company's financial risk and to know how the performance of the company is affected. To arrival to the purpose of this study, 3 method were used in this study. The first method uses internal factor (e.g. credit risk, liquidity risk), the second method uses external factor (e.g. GDP growth rate, Interest rate) and the third method uses both internal and external factor. This chapter will tell about the discussion and recommendations of this study based on chapter four finding and analysis.

### 5.2 Discussion of Result

The purpose of this study is to determine Apollo's company performance and its determinants. This study is done to achieve its research objectives which are: To examine the relationship between internal factors and the performance; To examine the relationship between external factors and the performance; and To examine the relationship between internal factors and external factors towards the performance.

Based on Table 3, the most significant independent variable is corporate governance index with p-value less than 0.001. This indicate that corporate governance index is the most significant related to the return on assets. However, the relationship whether it is positively correlated or negatively correlated is remained unknown where it is static. Adjusted R Square for Model 1 and 3 is 95.9% which indicate that the internal and external variable that are used in the model is able to explain or predict 95.9% of return on assets. Durbin-Watson is at 1.320 where it is not more than 3 and not less than 1.

Based on Table 5 (ANOVA), the F value is at 95.650, indicate that the impact is 95.650. The higher is the F value the better it is. The model is significant also as the p-value is 0.002 less than 0.10. By referring to Table 6 (Coefficients) the most related or influence variable to the dependent variable (Return on Assets) is operating margin. Operating margin t-value 9.780,

the higher the t-value the more significant it is. The p-value of operating margin is at 0.002 which are lesser than 0.05, indicate that operating margin is significant to return on assets.

Based on Table 6 (Coefficients), it shows that the standardized coefficients beta its value is positive 0.985. This mean that operating margin is positively influence the return on assets of Apollo. When operating margin increases, the return on assets will increases and the profitability will also increase. To manage operating margin, Apollo will need to manage its sales by increasing the sales and then the revenue will increase, and operating margin increases which will then influence the profit of Apollo. (Kenton, 2019) stated that operating margin measures the profit a company makes on a ringgit of sales, after deducted the variable costs of production but before paying interest or tax. Therefore, Apollo can as well increase its profit by reducing its variable costs such as utility cost or raw material cost.

### 5.3 Limitations

This study is limited to only one Malaysia company under the sector of Consumers Products and Services and the sub-sector of Food and Beverages. This study only uses five years data of that one company from 2014 to 2018. Therefore, the data or amount of information is very limited as only five years data has been used. The scope of sector is very small as only one company is used in this study.

### 5.4 Recommendations

Based on this study, the variable that is most influence on Apollo's return on assets are operating margin. Hence, Apollo should manage its operating margin well in order to improve its return on assets. One of the ways to manage operating margin is bring in more money to the company. Apollo should increase its sales revenue, so that more money will flow into the

company and the operating margin may increase. If the operating expenses of Apollo remain and the sales revenue increases.

Apollo can also reduce its cost such as the cost of goods sold and the labour cost. In terms of cost of goods, Apollo can try to negotiate a lower cost, a volume discount or other cost-saving deal with its supplier to reduce the expense. In respect of reducing the labour cost Apollo can either by eliminating positions or reducing shifts. As the salaries that is pay to the employees and the associated employer taxes, are an additional expense that will reduce the net operating income (Kimball, n.d.). By reducing the cost with maintaining the same pricing level of the products, the operating income would increase, and operating margin increase and thus, the return on assets would increase.

The other way is by reducing the operating expenses. Apollo can evaluate all the operating expenses that incurs and see which areas that Apollo can reduce its spending on. Apollo may try to avoid unnecessary spending or pick a less expensive options whenever possible (Kimball, n.d.). The lesser the expenses of Apollo, the more money or income the company will have. Hence, the operating income would increase, and operating margin increase and the return on assets of the company will increase.

Overall, when Apollo increases its operating margin, its return on assets will also increase. This indicate that when the operating margin is well-managed, the profitability of Apollo would also rise.



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## APPENDICES

## A. Financial Risk Data

Table A. 1

*Apollo's Return on Asset from 2014 to 2018*

Year	Net Income (RM)	Total Assets (RM)	ROA
2014	33,470,740	269,784,563	0.1241
2015	25,293,936	274,292,370	0.0922
2016	29,742,425	283,136,909	0.1050
2017	17,833,017	276,657,841	0.0645
2018	11,071,841	263,534,358	0.0420

Table A. 2

*Apollo's Current Ratio from 2014 to 2018*

Year	Current Asset (RM)	Current Liability (RM)	Current Ratio
2014	135,431,569	9,884,329	13.7016
2015	144,619,971	11,527,039	12.5462
2016	162,364,323	11,977,532	13.5557
2017	159,304,907	10,219,036	15.5890
2018	142,915,465	8,003,356	17.8569

Table A. 3

*Apollo's Quick Ratio from 2014 to 2018*

Year	Inventory (RM)	Prepaid Expenses (RM)	Quick Ratio
2014	18,790,244	109,959	11.7895
2015	19,362,334	732,790	10.8028
2016	18,148,402	94,883	12.0326
2017	15,847,951	155,673	14.0230
2018	14,902,914	113,187	15.9807

Table A. 4

*Apollo's Average Collection Period from 2014 to 2018*

Year	Account Receivable (RM)	Revenue/360 Days (RM)	Average Collection Period (Days)
2014	34374735	613093	56.0678
2015	33930671	590630	57.4483
2016	36110665	578294	62.4435
2017	36865024	580329	63.5244
2018	29276518	530051	55.2334



Table A. 5

*Apollo's Debt to Income from 2014 to 2018*

Year	Total Liability (RM)	Total Income (RM)	Debt to Income
2014	26,110,138	224,275,351	0.1164
2015	25,860,039	216,066,441	0.1197
2016	25,576,327	216,927,195	0.1179
2017	23,407,417	218,831,762	0.1070
2018	19,918,536	195,598,747	0.1018

Table A. 6

*Apollo's Operational Ratio from 2014 to 2018*

Year	Operating Expenses (RM)	Net Sale (RM)	Operational Ratio
2014	23,397,185	220,713,333	0.1060
2015	23,697,953	212,626,773	0.1115
2016	25,729,159	208,185,792	0.1236
2017	27,409,916	208,918,294	0.1312
2018	27,400,657	190,818,447	0.1436

Table A. 7

*Apollo's Operating Margin from 2014 to 2018*

Year	EBIT (RM)	Revenue (RM)	Operating Margin
2014	43,605,431	220,713,333	0.1976
2015	34,056,071	212,626,773	0.1602
2016	40,042,605	208,185,792	0.1923
2017	24,663,555	208,918,294	0.1181
2018	14,725,879	190,818,447	0.0772

Table A. 8

*Apollo's Corporate Governance Index (CGI) from 2014 to 2018*

Year	Accountability	Transparency	Independence	Fairness	Sustainability	CGI
2014	1	1	1	1	1	1.0000
2015	1	1	1	1	1	1.0000
2016	1	1	1	1	1	1.0000
2017	1	1	1	1	1	1.0000
2018	1	1	1	1	1	1.0000

Table A. 9

*Malaysia External (Macroeconomic) Factors from 2014 to 2018*

Year	GDP (%)	Inflation (%)	Interest Rate (%)	Exchange Rate (%)
2014	6.00	3.1	2.1	3.5
2015	5.1	2.1	5	4.29
2016	4.20	2.1	2.5	4.49
2017	5.90	3.8	0.8	4.05
2018	4.70	1	4	5.51

Table A. 10

*Apollo's Price Change from 2014 to 2018*

Year	Mean	Standard Deviation	Maximum	Minimum
2014	-0.0028	0.0441	0.17	-0.23
2015	0.0048	0.0617	0.25	-0.35
2016	-0.0030	0.0545	0.16	-0.24
2017	-0.0083	0.0458	0.25	-0.15
2018	-0.0050	0.0201	0.05	-0.04
5 years average	-0.0028	0.0511	0.25	-0.35

## B. SPSS Output Model 1

Table B. 1

*Descriptive Statistics*

	Mean	Std. Deviation	N
ROA	.0856	.0326	5
CURRENT RATIO	14.6499	2.1029	5
QUICK RATIO	12.9257	2.0696	5
AVERAGE-COLLECTION PERIOD	58.9435	3.7916	5
DEBT TO INCOME	.1126	.0078	5
OPERATIONAL RATIO	.1232	.0151	5
OPERATING MARGIN	.1491	.0512	5
CORPORATE GOVERNANCE INDEX	1.0000	.0000	5

Table B. 2

*Correlations*

		ROA	CR	QR	ACP	DTI	OR	OM	CGI
Pearson	ROA	1.000	-.844	-.858	.025	.876	-.908	.985	.
Correlation	CR	-.844**	1.000	.997	-.174	-.983	.893	-.874	.
	QR	-.858**	.997	1.000	-.095	-.984	.921	-.876	.
	ACP	.025	-.174	-.095	1.000	.094	.128	.155	.
	DTI	.876**	-.983	-.984	.094	1.000	-.878	.908	.
	OR	-.908**	.893	.921	.128	-.878	1.000	-.860	.
	OM	.985**	-.874	-.876	.155	.908	-.860	1.000	.

	CGI	.***	.	.	.	.	.	.	1.000
Sig. (1-tailed)	ROA	.	.036	.031	.484	.026	.016	.001	.000
	CR	.036	.	.000	.390	.001	.021	.026	.000
	QR	.031	.000	.	.439	.001	.013	.026	.000
	ACP	.484	.390	.439	.	.440	.419	.402	.000
	DTI	.026	.001	.001	.440	.	.025	.016	.000
	OR	.016	.021	.013	.419	.025	.	.031	.000
	OM	.001	.026	.026	.402	.016	.031	.	.000
	CGI	.000	.000	.000	.000	.000	.000	.000	.
N	ROA	5	5	5	5	5	5	5	5
	CR	5	5	5	5	5	5	5	5
	QR	5	5	5	5	5	5	5	5
	ACP	5	5	5	5	5	5	5	5
	DTI	5	5	5	5	5	5	5	5
	OR	5	5	5	5	5	5	5	5
	OM	5	5	5	5	5	5	5	5
	CGI	5	5	5	5	5	5	5	5

*Note.* ROA = Return on Asset, CR = Current Ratio, QR = Quick Ratio, ACP = Average Collection Period, DTI = Debt to Income, OR = Operational Ratio, OM = Operating Margin, CGI= Corporate Governance Index, \*\* = p-value < 0.05, \*\*\* = p-value < 0.001

Table B. 3

*Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.985 <sup>a</sup>	.970	.959	.0066	1.320

*Note.* a. Predictors: (Constant), OPERATING MARGIN

b. Dependent Variable: ROA

Table B. 4

*ANOVA<sup>a</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	95.650	.002 <sup>b</sup>
	Residual	.000	3	.000		
	Total	.004	4			

*Note.* a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATING MARGIN

Table B. 5

*Coefficients<sup>a</sup>*

Model		Unstandardized		Standardized	t	Sig.	95.0% Confidence		Collinearity Statistics	
		Coefficients		Coefficients			Interval for B			
		B	Std. Error	Beta			Lower	Upper	Tolerance	VIF
1	(Constant)	-.008	.010		-.790	.487	-.040	.024		
	OPERATING MARGIN	.627	.064	.985	9.780	.002**	.423	.831	1.000	1.000

*Note.* a. Dependent Variable: ROA, \*\* = p-value < 0.05

## C. SPSS Output Model 2

Table C. 1

*Descriptive Statistics*

	Mean	Std. Deviation	N
ROA	.0856	.0326	5
GDP	5.1800	.7727	5
INFLATION	2.4200	1.0710	5
INTEREST RATE	2.8800	1.6453	5
EXCHANGE RATE	4.3680	.7382	5
STDV	.0452	.0157	5

Table C. 2

*Correlations*

		ROA	GDP	INF	IR	ER	STD
Pearson Correlation	ROA	1.000	.175	.381	-.132	-.775	.648
	GDP	.175	1.000	.767	-.486	-.702	.022
	INF	.381	.767	1.000	-.779	-.852	.430
	IR	-.132	-.486	-.779	1.000	.495	.029
	ER	-.775*	-.702	-.852	.495	1.000	-.603
	STD	.648	.022	.430	.029	-.603	1.000
Sig. (1-tailed)	ROA	.	.389	.263	.417	.062	.118
	GDP	.389	.	.065	.203	.093	.486
	INF	.263	.065	.	.060	.033	.235



	IR	.417	.203	.060	.	.198	.482
	ER	.062	.093	.033	.198	.	.141
	STD	.118	.486	.235	.482	.141	.
<hr/>							
N	ROA	5	5	5	5	5	5
	GDP	5	5	5	5	5	5
	INF	5	5	5	5	5	5
	IR	5	5	5	5	5	5
	ER	5	5	5	5	5	5
	STD	5	5	5	5	5	5

*Note.* ROA = Return on Asset, GDP = Gross Domestic Product, INF = Inflation, IR = Interest

Rate, ER = Exchange Rate, STD = Standard Deviation, \* = p-value < 0.10

## D. SPSS Output Model 3

Table D. 1

*Descriptive Statistics*

	Mean	Std. Deviation	N
ROA	.0856	.0326	5
CURRENT RATIO	14.6499	2.1029	5
QUICK RATIO	12.9257	2.0696	5
AVERAGE-COLLECTION PERIOD	58.9435	3.7916	5
DEBT TO INCOME	.1126	.0078	5
OPERATIONAL RATIO	.1232	.0151	5
OPERATING MARGIN	.1491	.0512	5
CORPORATE GOVERNANCE INDEX	1.0000	.0000	5
GDP	5.1800	.7727	5
INFLATION	2.4200	1.0710	5
INTEREST RATE	2.8800	1.6453	5
EXCHANGE RATE	4.3680	.7382	5
STDV	.0452	.0157	5

Table D. 2

*Correlations*

	ROA	CR	QR	ACP	DTI	OR	OM	CGI	GDP	INF	IR	ER	STD	
Pearson	ROA	1.000	-.844	-.858	.025	.876	-.908	.985	.	.175	.362	-.132	-.775	.648
Correlation	CR	-.844**	1.000	.997	-.174	-.983	.893	-.874	.	-.062	-.320	-.120	.679	-.935
	QR	-.858**	.997	1.000	-.095	-.984	.921	-.876	.	-.088	-.297	-.157	.684	-.907
	ACP	.025	-.174	-.095	1.000	.094	.128	.155	.	-.050	.554	-.639	-.237	.448
	DTI	.876**	-.983	-.984	.094	1.000	-.878	.908	.	-.063	.185	.190	-.599	.879
	OR	-.908**	.893	.921	.128	-.878	1.000	-.860	.	-.376	-.401	-.055	.821	-.713
	OM	.985**	-.874	-.876	.155	.908	-.860	1.000	.	.055	.341	-.139	-.727	.720
	CGI	.***	.	.	.	.	.	.	1.000	.	.	.	.	.
	GDP	.175	-.062	-.088	-.050	-.063	-.376	.055	.	1.000	.777	-.486	-.702	.022
	INF	.362	-.320	-.297	.554	.185	-.401	.341	.	.777	1.000	-.787	-.843	.407
	IR	-.132	-.120	-.157	-.639	.190	-.055	-.139	.	-.486	-.787	1.000	.495	.029
	ER	-.775*	.679	.684	-.237	-.599	.821	-.727	.	-.702	-.843	.495	1.000	-.603

	STD	.648	-.935	-.907	.448	.879	-.713	.720	.	.022	.407	.029	-.603	1.000
Sig. (1-tailed)	ROA	.	.036	.031	.484	.026	.016	.001	.000	.389	.275	.417	.062	.118
	CR	.036	.	.000	.390	.001	.021	.026	.000	.461	.300	.424	.104	.010
	QR	.031	.000	.	.439	.001	.013	.026	.000	.444	.314	.401	.101	.017
	ACP	.484	.390	.439	.	.440	.419	.402	.000	.468	.166	.123	.351	.225
	DTI	.026	.001	.001	.440	.	.025	.016	.000	.460	.383	.380	.143	.025
	OR	.016	.021	.013	.419	.025	.	.031	.000	.266	.252	.465	.044	.088
	OM	.001	.026	.026	.402	.016	.031	.	.000	.465	.287	.412	.082	.085
	CGI	.000	.000	.000	.000	.000	.000	.000	.	.000	.000	.000	.000	.000
	GDP	.389	.461	.444	.468	.460	.266	.465	.000	.	.061	.203	.093	.486
	INF	.275	.300	.314	.166	.383	.252	.287	.000	.061	.	.057	.037	.249
	IR	.417	.424	.401	.123	.380	.465	.412	.000	.203	.057	.	.198	.482
	ER	.062	.104	.101	.351	.143	.044	.082	.000	.093	.037	.198	.	.141
	STD	.118	.010	.017	.225	.025	.088	.085	.000	.486	.249	.482	.141	.
N	ROA	5	5	5	5	5	5	5	5	5	5	5	5	5

CR	5	5	5	5	5	5	5	5	5	5	5	5	5
QR	5	5	5	5	5	5	5	5	5	5	5	5	5
ACP	5	5	5	5	5	5	5	5	5	5	5	5	5
DTI	5	5	5	5	5	5	5	5	5	5	5	5	5
OR	5	5	5	5	5	5	5	5	5	5	5	5	5
OM	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
INF	5	5	5	5	5	5	5	5	5	5	5	5	5
IR	5	5	5	5	5	5	5	5	5	5	5	5	5
ER	5	5	5	5	5	5	5	5	5	5	5	5	5
STD	5	5	5	5	5	5	5	5	5	5	5	5	5

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*Note.* ROA = Return on Asset, CR = Current Ratio, QR = Quick Ratio, ACP = Average Collection Period, DTI = Debt to Income, OR = Operational Ratio, OM = Operating Margin, CGI = Corporate Governance Index, GDP = Gross Domestic Product, INF = Inflation, IR = Interest Rate, ER = Exchange Rate, STD = Standard Deviation, \* = p-value < 0.10, \*\* = p-value < 0.05, \*\*\* = p-value < 0.001

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*ANOVA<sup>a</sup>*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.004	1	.004	95.650	.002 <sup>b</sup>
	Residual	.000	3	.000		
	Total	.004	4			

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*Coefficients<sup>a</sup>*

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		Coefficients		d			Interval for B			
		B	Std. Error	Beta			Lower	Upper	Tolerance	VIF
1	(Constant)	-.008	.010		-.790	.487	-.040	.024		
	OPERATING MARGIN	.627	.064	.985	9.780	.002**	.423	.831	1.000	1.000

Note. a. Dependent Variable: ROA, \*\* = p-value < 0.05