A study of relationship between performance with internal and external factors

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TELEKOM MALAYSIA BERHAD: A STUDY OF RELATIONSHIP BETWEEN PERFORMANCE (ROA) AND INTERNAL AND EXTERNAL FACTORS

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ABSTRACT

The study's aim is an attempt to determine the altogether performance of Telekom Malaysia Berhad which involved two main factors of internal (firm-specific) and external (macroeconomics) factors of Telekom Malaysia. This data was interpreted and collected Telekom Malaysia annual reports of five year period from 2014 to 2018. There are four risks involved which are liquidity risk, credit risk, operational risk, and market risk. Measurement of current ratio, quick ratio, average-collection period, debt to income ratio, operational ratio, and operating margin are used to examine the overall five years performance of Telekom Malaysia. Hence, to determine the relationship of these risk factors to the company's performance, this study used liquidity risk, credit risk, operational risk, market risk, gross domestic products (GDP), inflation, interest rate, exchange rate, BETA, and corporate governance index. SPSS system is used to do data analysis in which by implementing stepwise method which applies the descriptive statistics, correlation, and model summary. Based on the data analysis, we can conclude that operational risk is the most significant to ROA since it gives the highest impact on performance of the company. Nonetheless, the other variables give low impact on the ROA and there is no significant related with.

Keywords: Performance, operational risk,

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The beginning of this chapter comprises of overview of Telekom Malaysia Berhad. Later, discussing the problem statement, objectives of research, the study's scope, and final research organization.

1.2 Overview of the company

Telekom Malaysia Berhad (TM) is engaged in the establishment, maintenance, and provision of telecommunications and related services. The company goes way back to its first establishment Telecommunications Department of Malaya in 1946. In 1968, it merged with Telecommunications Department of Sabah and Sarawak and then form Telecommunications Department of Malaysia. During this period, the company has achieved a lot of achievements such as the first international standard satellite earth station was commissioned in Kuantan, marking the advent of live telecasts in Malaysia in 1970, introduction of data communications in 1983, introduction of packet switch technology in 1984, introduction of Corporate Information Superhighway (COINS), and many other outstanding achievements. In 2001, TM started to introduce to people and provide the broadband services, and then making itself as the largest internet provider in South East Asia and they also launched BlueHyppo.com, an internet portal. TM started as a company that provides fixed-line, radio, and television broadcasting services then keeps evolving and now becomes the largest broadband services provider and also provides data, fixed-line, pay television and network services.

TM is highly exposed to operational risks and therefore TM risk management department has its own strategies on managing operational risks. Firstly, TM strengthens their business resilience and thus introduced the Business Continuity Management (BCM) program which enhances service assurance readiness and to ensure strong operational backbone for Network and IT operations. Second, managing competition. Third, security threat management. Fourth, reputation risk management. Fifth, ethical and integrity risk management. Lastly, managing occupational Health, Safety, and Environment. TM is also exposed to credit risk and to ensure that they manage their credit risk, TM has Credit Management Policy (CMP) to mitigate credit

risk which is an aggressive collection program and the implementation of credit limit for mass-market products. This has resulted TM to have a decreasing number of total bad debts. The Credit Management Assessment System has helped to monitor credit rating, allocate credit limit, monitors usage against credit limit, and monitor the customer payment behavior which then allows TM to do further analysis. TM is also exposed to market risk and to mitigate this risk TM established risk management policies, guidelines, and procedures. Therefore, hedging strategies are used to mitigate these exposures which are foreign exchange risk, price risk and interest rate risk. Tm is exposed to liquidity risk hence they actively monitor and control these exposures. TM ensures that they have adequate deposits with financial institutions and cash and bank balances that are always readily available and can liquidate easily to meet any payment obligation when it is due.

Instead of eliminating risk completely, TM ensures that they managed their risks at its best by establishing and introducing effective short term and long term programs, policies, and systems which then help them to reduce all of those risks they faced.

1.3 Problem Statement

It is very important for a company in the management of their performance to prevent themselves from bankruptcy. Because of risks like liquidity risks, credit risks, operational risks, and market risks, risk often occurs to company. The problem here is when company's performance decrease, it will affect the company badly and worst case is bankruptcy. The bad performance indicates that management is not efficient and this will give a signal for investors and shareholders from investing in the company. Hence, the identification of factors with performance as necessary actions can be taken.

1.4 Research objectives

In general, this study was designed in determining Telekom Malaysia's performance and its determinants. The objectives of this study are:

1. To investigate the firm-specific (internal) factors towards performance
2. To investigate the macroeconomic (external) factors towards performance
3. To investigate both internal and external factors towards performance

1.5 Research Questions

1. Does any relationship exist between internal factors and performance?

2. Does any relationship exist between external factors and performance?

3. Does any relationship exist between both factors and performance?

1.6 Scope of Study

The study sample is from Telekom Malaysia Berhad. In calculating the financial ratios, data are taken from five years of annual reports from 2014 to 2018 of Telekom Malaysia Berhad.

1.7 Organization of the Study

This study is made up of five chapters. The first chapter is about the background of the research, which consists of research overview, problem statement, goals of research, the research scope, and research organization. Chapter two comprise of performance of the company and the determinants of it. Chapter three contains a theoretical framework, measurement of variables, methods of research, and analysis of data. Chapter four is about study's findings. Finally, chapter five is about the summary and the study's conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter allocates the review of the literature associated with the research. Consisting of two parts which are the determinants of internal factors and external factors.

2.2 Credit Risk

Credit risk is a risk that happened because of the increase or decrease of a borrower's creditworthiness (Tapiero, 2004). Daniela Cristina SOLOMON (2012) defined credit risk as a risk when one party to a financial instrument does not adhere to the obligations and hence causing the other party to carry economic losses.

D. Nelson (2018) explained that frameworks of credit risk that are successful were performing different key or crucial volume. Given that the procedure is clear and dependable then clients can maintain and follow. These frameworks are important to set up a credit risk domain that complies with the given situations.

2.3 Operational Risk

G. Cruz (2002) defines operational risk is the risk of losses due to problems from internal controls, people, systems, and external events. Hence, operational risk is losses that are because of operational errors. Rouse (2013) defined operational risk as the risk that resulted due to inadequate or failed procedures, policies, or systems. Measures to handle operational risk are scenario analysis, internal control factors, and business environments, establish causal relations and risk control and self-assessment (Hull, 2018).

2.4 Liquidity Risk

According to Banks (2005), liquidity risk is the risk of loss due to cash deficiency or equivalents or, specifically defined as the risk of loss due to incapability or fail in obtaining enough funding at acceptable economic levels, or pledge or sell an asset at carrying prices, use to cover an expected or unexpected obligation. Liquidity risk is the risk of not able to liquidate a position in a timely manner at a price that is reasonable (Muranaga and Ohsawa, 2009).

Liquidity risk comprised of two which is funding liquidity risk and market liquidity risk. Funding liquidity risk happens when a trader cannot trade or not able to fund his position due to fund deficiency while market liquidity risk is a risk that happens when it is not easy for a market participant to do trading and with little cost (Jamal and Ali, 2014).

2.5 Market Risk

Tapiero (2004) explained that market risk is associated with the movements of market indices. Changes in stock prices, unforeseeable interest rate variations or market liquidity can be the reasons why. Market risk comprised of four types which are interest rate risk,exchange rate risk, commodity price risk, and equity price risk (IG, 2019). Crouhy, Galai, and Mark (2001) define there is some course of action to measure market risk which is the factor sensitivity measures, other price sensitivity measures, and value at risk.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter is presenting a framework that is employed in data collection. To achieve the study's goals, this method is used, and hence obtaining perfect results by the end of the study. This study aims to further understand the mobility of Telekom Malaysia Berhad and its determinants. The method used to collect data is the 25th edition of the Social Science Statistics Package (SPSS). It also used population/sampling technique, statistical technique, and data analysis.

3.2 Population/Sampling Technique

The analysis unit is the major entity being analyzed in the study. For example, individuals, groups, organizations, and many more can be the units of analytical in this study. Hence, in this study, organizations are the analysis unit. Meanwhile, this study's population is a company in the telecommunication industry in Malaysia. To conduct the study, a sample was chosen which is Telekom Malaysia Berhad. The company's data are taken from the 5-year of annual reports from 2014 to 2018 to measure the dependent variable (profitability) and the independent variables (external factors).

3.3 Statistical Technique

In conducting this research, we chose Malaysia and focus on telecommunication industry. Telekom Malaysia Berhad is the choice. I have collected the company's annual reports for five years from 2014 until 2018. The detailed specific information in the income statement and balance sheet in these annual reports is used in calculating all aspects of the company from profitability, liquidity, operational and many more, also in analyzing the impact of each factor on each company, and credit. For information on non-financial performance, information regarding the audit committee, remuneration committee, board size, board meetings, experience, and total

compensation are used in calculating corporate governance index scores. In order to determine the macroeconomic factors, we acquired the five years of historical prices of the company (from 2014 to 2018), from Yahoo Finance for calculation of the beta. Moreover, GDP, exchange rates, inflation rates, and five-year interest rates were also gathered for the review of the economic trends from 2014 to 2018 and all of this information was collected from various sources such as World Bank, Bank Negara Malaysia, and International Monetary Fund.

The major and most common technique used in this study is the ordinary least squares (OLS) regression. By using this, it can do data analysis and hence form the basis of other technologies. In order for the stimulation of the specific response variables that have been recorded, OLS is basically an integrated modeling technique that is being used. As stated by Hutcheson (2011), this application of this technique can be applied to single or multiple explanatory variables and coding classification explanatory variables. Through the sample data, by using the principle of least squares, a pre-set regression function is fitted (Pedace, n.d). This principle specifies that the squared distance between the dependent variable observations and the SRF estimates are minimized and to do that we should construct a sample regression function (SRF). Therefore, even if we need an alternative method, OLS is still the most preferred technique to estimate regression due to OLS is more easy to understand than other alternative technologies and will show the desirable characteristics in the results.

3.4 Data Analysis

In accord with the conceptual framework for future research, it consists of a dependent variable and two independent variables in the study. The framework of research is as follow:

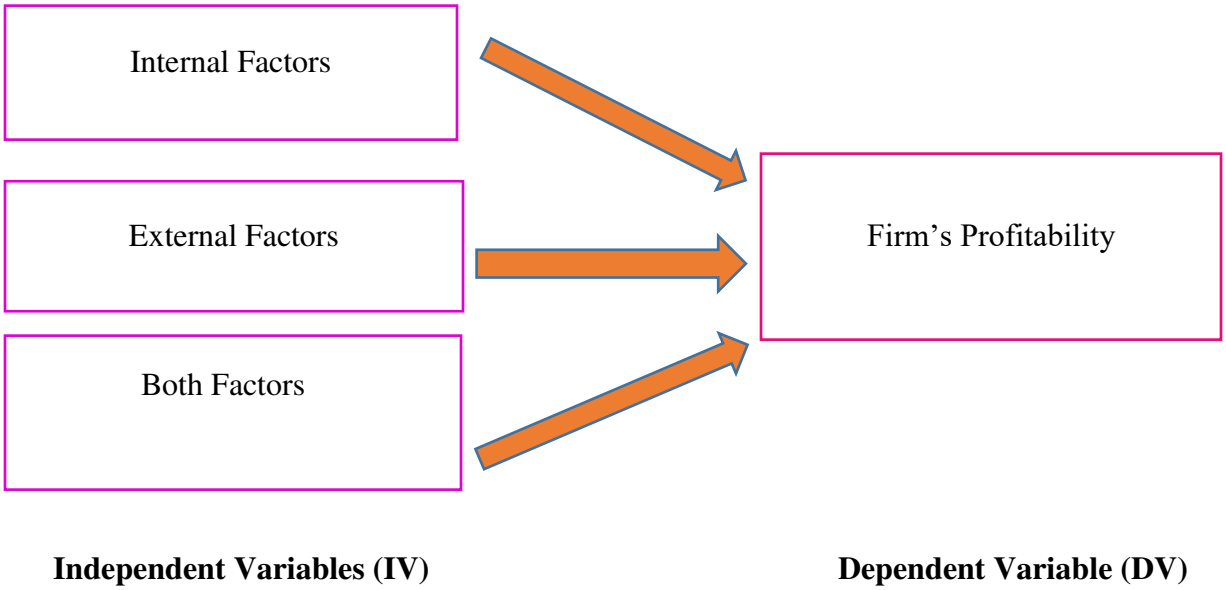


Figure 3.1 Framework of Research

To determination of the impact of independent variables on the dependent variables, is by using the multiple regression analysis. By using this type of regression technique, the influence of independent variables on the dependent variable can be described. Multiple regression formula is expressed as follow:

$$ROA = \beta 0 + \beta 1CR + \beta 2ACP + \beta 3OR + \beta 4OM + \beta 5QR + \beta 6DIR + \beta 7INDXS + e \quad \text{..... Equation 1}$$

$$ROA = \beta 0 + \beta 1INFLA + \beta 2BETA + \beta 3INTR + \beta 4EXCGR + \beta 5GDP \quad e \text{..... Equation 2}$$

$$ROA = \beta 0 + + \beta 1CR + \beta 2ACP + \beta 3OR + \beta 4OM + \beta 5QR + \beta 6DIR + \beta 7INDXS + \beta 8NFLA + \beta 9BETA + \beta 10INTR + \beta 11EXCGR + \beta 12GDP\ e \quad \text{..... Equation 3}$$

Table 3.1 Measurement of Variables

No	Variables	Notation	Measurement
1	Current Ratio	CR	Current Asset / Current Liability
2	Average Collection-Period	ACP	Account Receivables / (Revenue / 360 days)
3	Operating Ratio	OR	Operating Expense / Net Sale
4	Return On Assets	ROA	Net Income / Total Assets

5	Beta	BETA	5-year daily stock price
6	Quick Ratio	QR	(Current Asset – Current Ratio – Prepaid Expenses) / Current Liability
7	Debt to Income Ratio	DIR	Total Liability / Total Income
8	Operating Margin	OM	Earning Interest Before Income and Interest / Revenue
9	Gross Domestic Products	GDP	5-year gross domestic product rate
10	Inflation	INFLA	5-year inflation rate
11	Interest Rate	INTR	5-year interest rate
12	Exchange Rate	XR	5-year exchange rate
13	Corporate Governance Index	INDXS	5-year of corporate governance index

3.5 Statistical Package for Social Sciences (SPSS)

For this study, we used IBM SPSS Version 25 in calculating data to get the results. SPSS or known as Social Sciences Statistical Package is indeed a great software among those who are doing research as it helps to carry out statistical data analysis (Landau & Everitt, 2004). This is due to IBM SPSS Statistics are able carry out descriptive statistics, bivariate statistics, numerical result prediction, and recognition group prediction (Techopedia, n.d). But, for this study, we only used IBM SPSS Statistics in calculating the correlation between linear regression and variables according to the quantitative data that were obtained. Quantitative data is obtained from Telekom Malaysia 5 years of annual reports and it is data about numerical variables.

CHAPTER FOUR

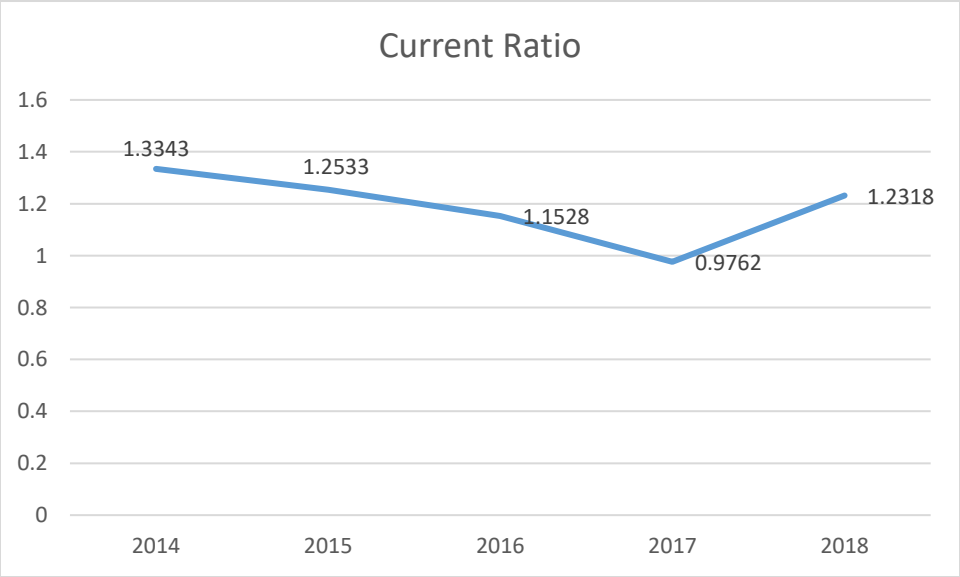
FINDINGS AND ANALYSIS

4.1 Introduction

Researchers are allowed to pinpoint the companies' trends through financial statement analysis by the ratios that are being compared across a five year period. Financial statements consist of three major components which are income statement, cash flow statement, and balance sheet, Through these statements, researchers can identify and do the measurement of profitability, liquidity, operational, leverage, and company wide-efficiency.

4.2 Liquidity Risk

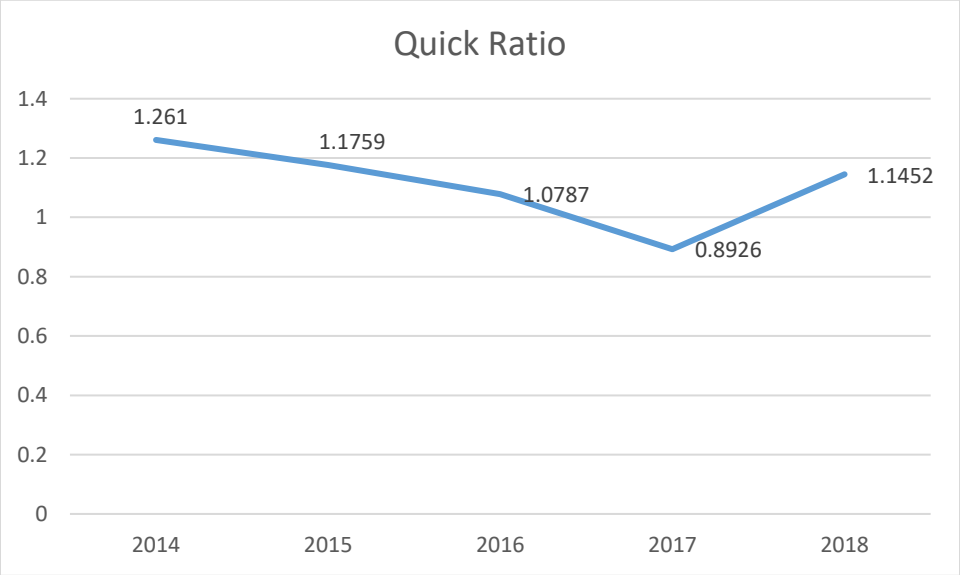
Figure 4.1 Current ratio for each years



The current ratio is indicating how the company's management is able to meet its current liabilities like account payable with the current assets. Hence, when the ratio increase, the company's ability to pay its short term financial obligations increase, the higher the liquidity is. A current ratio that has less than one indicates that the company might have problems. According to

Figure 4.1, TM has shown a steady decrease in current ratio over the years of 2014 to 2016 but still considered to be in safe position. However, in 2017 TM's current ratio decrease drastically to 0.9762 which is less than 1, indicating TM has problems paying short term financial obligations this year as it was shown that TM has more current liabilities (RM6.3B) than current assets (RM 6.1B). This statement is backed up by research by Welsh and White (1981), stated that a current ratio less than 1 implying insolvency. The increased amount of current liabilities might due to an increase in purchased inventory in 2017. According to Table C.1, the average current ratio is 1.1897 and 0.1357 which means that RM1.1897 to bear RM1 of current liabilities. The current ratio has changed 0.1357 times. It indicates that the annual flow rate of TM does not change much in significant.

Figure 4.2 Quick ratio for each year

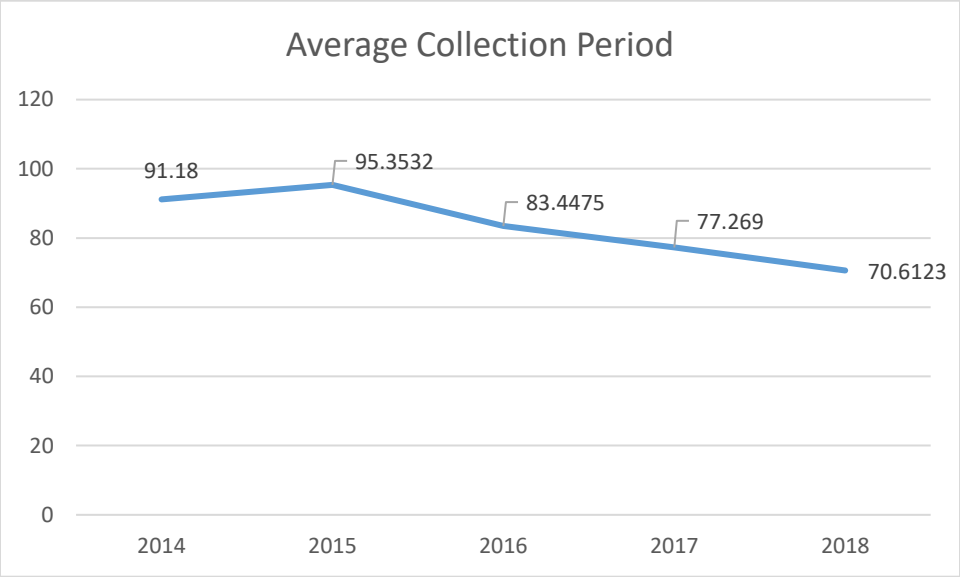


Quick ratio indicates the efficiency of the management of the company able to meet its current liabilities with the quick assets. When quick ratio increases, the higher the company's liquidity is. According to Figure 4.2, TM has shown decrease of quick ratio from year 2014 to 2016 (1.261 to 1.0787) but it is still acceptable as a ratio of higher than 1 indicates that TM can still pay its current liabilities. According to O.Edmister (1972), quick ratio more than 1 indicating that the company has adequate assets in paying current liabilities. However in 2017, TM quick ratio dropped to 0.8926 which less than 1, indicating that TM has problems settling its current liabilities in 2017. This is due to increasing number of current liabilities bigger than the quick

assets. According to Table C.1, the mean of quick ratio is 1.1107 and 0.1384 for standard deviation. The mean of 1.1107 indicating that the company is able to meet its obligations through quick assets such as cash and marketable securities. Meanwhile, the company quick ratio changed 0.1384 which is the TM's annual flow rate does not change significantly.

4.3 Credit Risk

Figure 4.3 Average collection period for each year

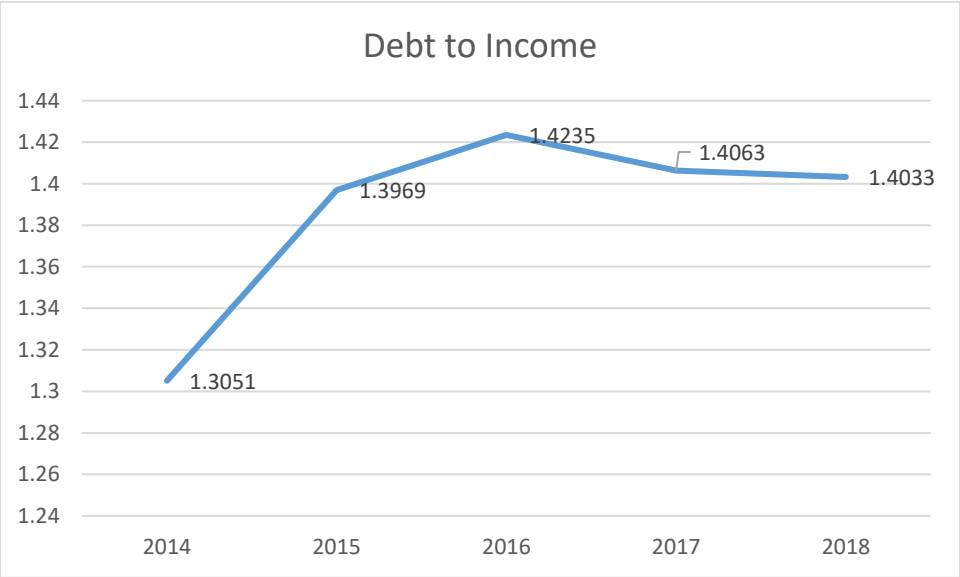


Average collection period indicates how effective is the company's management on its account receivables. When ACP decrease, the credit risk decrease. According to Figure 4.3, 2015 shows the highest number of ACP of 95 days. This indicating that the company collects payments slower. From 2015 to 2018, TM has shown the decreasing number of average collection period (from 95 days to 70 days) but it is still considered to have high average collection periods. According to Table C.1, on average for average collection period is 84 days with standard deviation of 10.0528. Considering most companies collect within 30 days, the average-collection period can be assumed as bad and this is not good for company's financial health.

In fact, to reduce and mitigate company credit risk can be done through tracking the new customers' credit records, or simply read through their financial statements (Melanie Carter, 2014). The company can hold a discussion of credit terms with its new customers before decided to extend

the credit line for establishing relationships with customers. In the sales agreement in the credit terms part, it should be clear in order to ensure the minimization of credit risk and pay in timely manner and also full. Moreover, in minimizing credit risk, company can do by factoring and selling their accounts receivables to factoring companies without recourse. Hence, the company does not have to wait for the amount that needs to be paid and quickly obtaining funds due to customers will pay in direct to the factoring company and even if the customers back out, it does not need to take the responsibility.

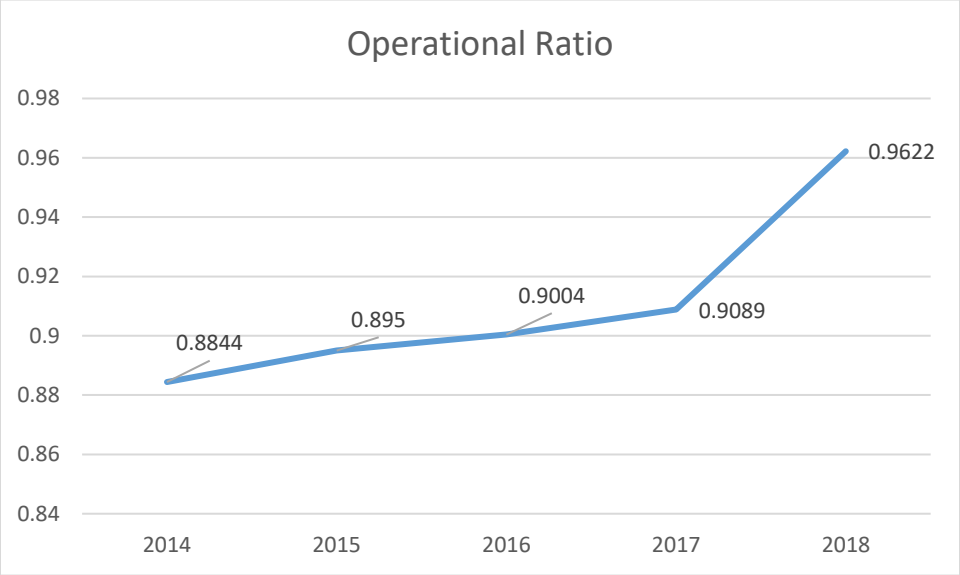
Figure 4.4 Debt to income ratio for each years



Debt to income ratio reveals about the company has loans or not and if they do then how its credit financing is when we compare it to its assets. In fact according to Fargo (2019), debt to income ratio functions as an indicator for overall financial health. When the ratio increase, the credit risk increase. According to Figure 4.4, from 2014 to 2016, TM showed an increase of debt to income ratio (1.3051 to 1.4235). The higher this ratio is, then it's getting more difficult for the company to borrow money as lenders might consider them as overleveraged. However, big companies like TM can have negotiable relationships with their lenders and then tend to push their liabilities side. According to Table C.1, the mean for the ratio is 1.39 which considered very high to investors. The greater the ratio is, the harder it is to borrow money. Meanwhile the standard deviation is 0.0468.

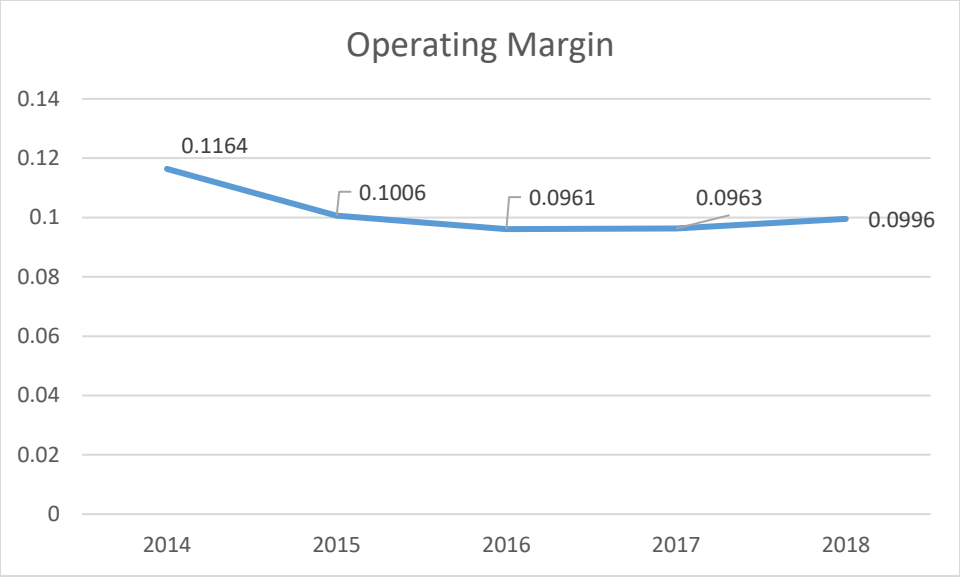
4.4 Operational Risk

Figure 4.5 Operational ratio for each years



Operational ratio indicates how efficient is the management of a company by comparing the operating expenses to a net sale (Murphy, 2019). Hence, the lower the operational ratio is, the lower the operational risk is. According to Figure 4.5, TM has shown an increase of operational ratio of five years but the most significant increase was 2018 as it increases from 0.9089 to 0.9622, higher than the average operational ratio (0.91). This means that TM has spent a lot of money on operating expenses in 2018 and not being efficient. According to Table C.1, the mean of operational ratio is 0.91 and 0.03 of standard deviation. The lower the operational ratio is, it indicates that the company has efficiency to generate the revenue while keeping the expenses cost low.

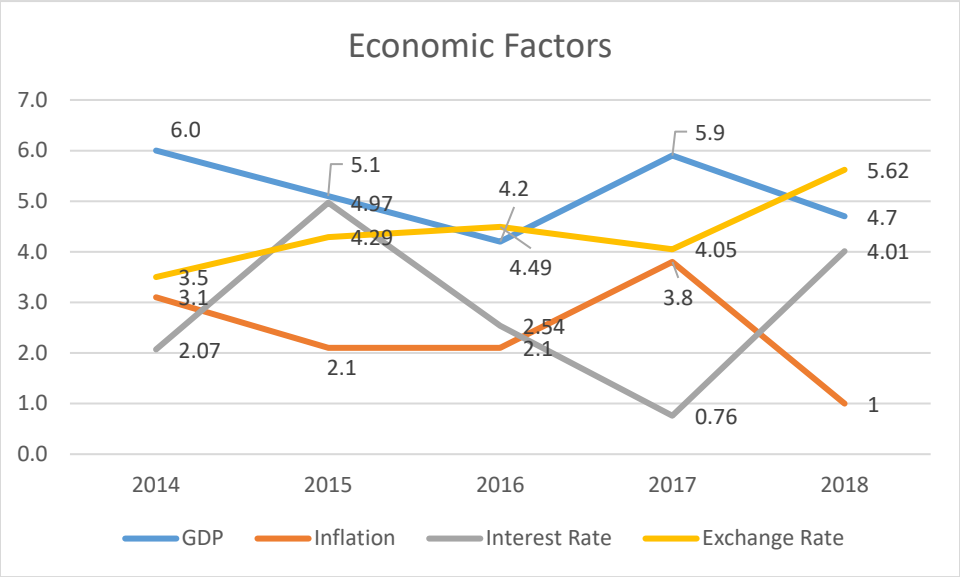
Figure 4.6 Operating margin for each years



Operating margin is indicating how much for each Ringgit of revenues is left over after considering both costs of goods sold and operating expenses as this measures the company's efficiency (Kenton, 2019). When operating margin increases, the lower the operational risk is. According to Figure 4.6, TM has shown a decrease in operating margin from 2014 to 2016 (0.1164 to 0.0961). But steadily increase from 2016 to 2018 (0.0961 to 0.0996). The decrease in operating margin might due to the decrease in sales. According to Table C.1, the mean operating margin is 0.1 which means that for every one ringgit earned in revenue brings 1% of profit.

4.5 Market Risk

Figure 4.7 Economic factors for each years



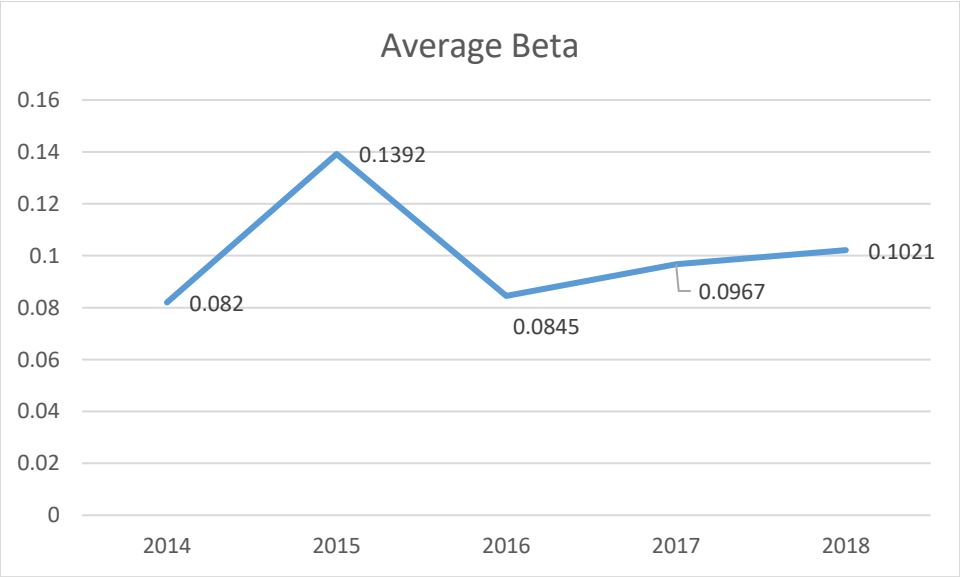
Market risk is the possibility of a company experienced loss because of factors that affect the whole performance of the financial market. The determinants of market risk are Gross Domestic Products (GDP), Inflation rate, Interest rate, Exchange rate, and many more. The chart above shows the determinants of the movement over the past five years. GDP is total market value of all finished goods and services that were produced in a country in detailed time of period. According to Figure 4.7, Malaysia's GDP can be said to be stable over five years from 2014 to 2018. In 2017, Malaysia had the highest GDP which is 5.9% which is higher than the overall average of GDP (5.19%), indicating that on that year Malaysia's economy was at its highest. Larger GDP is better because it's signaling that the country's economy is growing. According to Table C.1, the mean for GDP is 5.19 while the standard deviation for GDP is 0.76 making a huge difference of 4.43.

The inflation rate is the rate of quantitative measure at which the average of goods and services' prices in an economy increases over a period of time. Inflation can show upward and downward trends. According to Figure 4.7, Malaysia's inflation had its highest in 2018 with 3.8%. The number rose significantly from 2.1 in 2017 to 3.8 in 2018. The higher the inflation is, the lower the currency value of the country and this is not good except if the interest rate is larger than the inflation rate on that specific year. This statement is backed up by research by Mundell (1963),

inflation is likely to lower the value of money. According to Table C.1, the mean of inflation is 2.42 while 1.07 of standard deviation.

According to Figure 4.7, the interest rate has shown an unstable movement. In 2014, the interest rate was 2.07% but in 2015 it shows a significant increase to 4.97% in 2015 making it the highest interest rate in the period of five years. But then decrease to 2.54% in 2016. Then it decreases significantly to 0.76% in 2017. However, the interest increased significantly in 2018 to 4.015%. According to Table C.1, the mean interest rate is 2.87 while 1.65 of standard deviation. The interest rate affected the country's inflation rate directly and may leading companies in issuing more bonds for expansion of business. This has been proven (Carter, 2014)by Mundell (1963), stated that inflation will raise the money of interest rate than the inflation rate itself. Next, according to Figure 4.7, exchange rate shows an unstable increase and decrease over the five years period. According to Table C.1, the mean of exchange rate is 4.39 while 0.78 of standard deviation. Hence, currencies' appreciation led to a rise in the national exchange rate. Overall, these external factors variables have slightly small in difference between mean and standard deviation except for GDP.

Figure 4.8 Average Beta for each years



Average Beta is used as one of the determinants of the market risk as it helps in measuring the corporate securities' volatility with the market. Beta is a slope coefficient obtained by doing regression analysis of company stock returns and market returns. It is showing that the company's

stock market is changing as the whole market is changing. Figure 4.8 above displayed the company's average beta for period of five years from 2014 to 2018. The beta calculation is by calculating the standard deviation of daily price changes for each company for five consecutive years. According to figure 4.8, we can that the five-year company beta is positive. 2015 shows the highest beta with 0.1392. According to Table C.1, the mean of beta is 0.1009 and standard deviation is 0.0230.

4.6 Profitability

Figure 4.9 Return on assets for each year

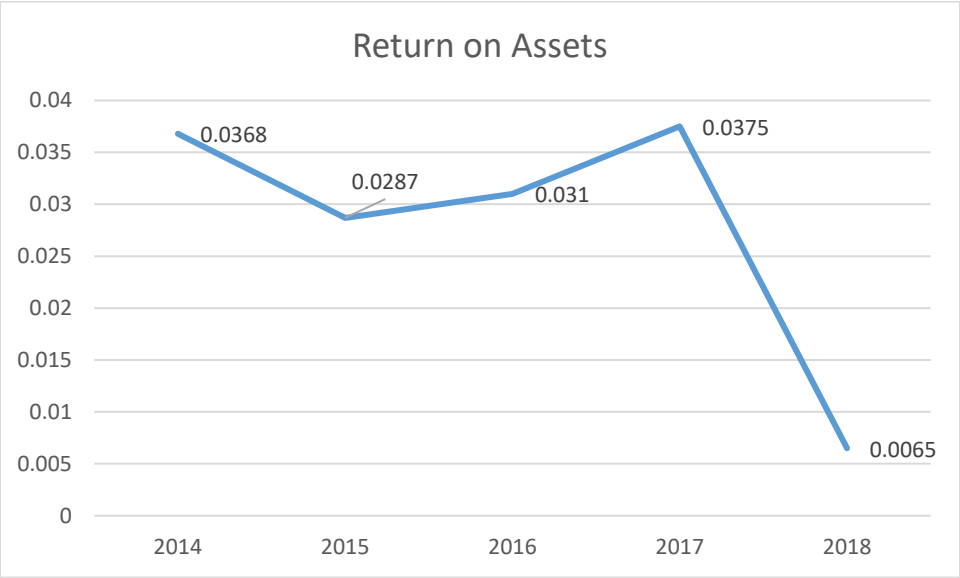
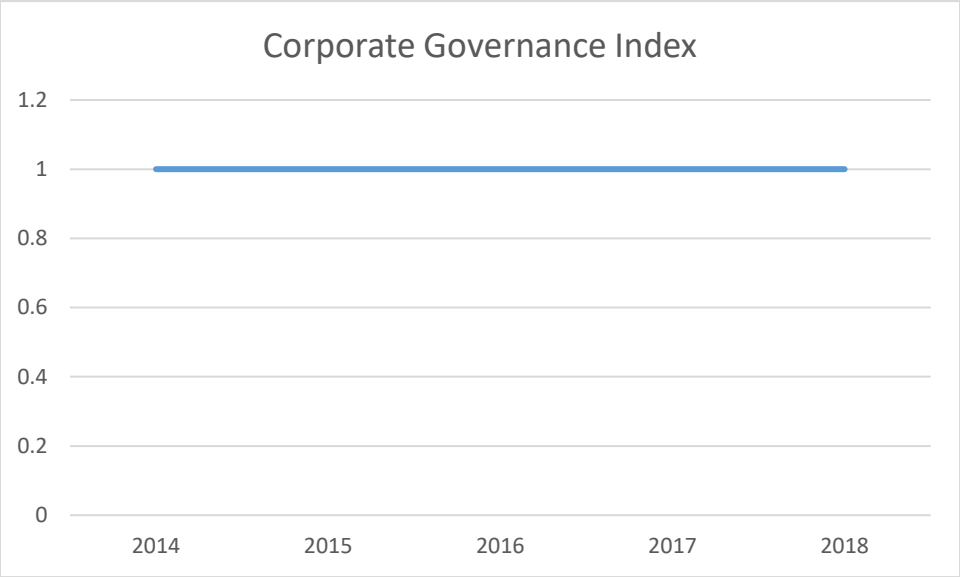


Figure 4.9 displays the average return on assets (ROA) for TELEKOM MALAYSIA BERHAD of five years. The five years ROA was 2.81% (refer Table C.1). This ROA is used in indicating the profitability of the company. TM showed a higher ROA compared to the average (0.0281) from 2014 to 2017 except in 2018 (0.0065). When ROA is increased, the more efficiency is the company has in using its assets to generate revenue. Therefore, in 2014, 2016, 2015, and 2017 it can be said that the company makes its full use of assets to generate income. However in 2018, the company's ROA is at its lowest 0.0065. This value is smaller than the overall ROA and indicating that the company does not has efficiency in using its assets to generate revenue that year. The ROA's standard deviation (see Table C.1) shows that the company's payout rate is only 1.27% for five years. According to Samiloglu et.al (2017), there is existence of a relationship between ROA and company's performance as we measure the performance on the basis of ROA.

4.7 Corporate Governance Index

Figure 4.10 Corporate Governance Index for each year



Corporate governance index is a score indicating the total corporate governance index for a company by considering the five principles of corporate governance which are accountability, independence, fairness, sustainability, and transparency. According to Figure 4.10, for five years, the company has shown a score of 1 consistently which implying that the company meets every principle in corporate governance. According to Table C.1, the mean for corporate governance index is 1.00 while 0.00 for standard deviation.

4.8 Correlation Analysis

The determination of the company's performance is by using variables of current ratio, quick ratio, average -collection period, debt to income ratio, operational ratio, operating margin, gross domestic product, inflation, interest rate, exchange rate, and standard deviation (STDV). The dependent variable is ROA and also the main indicator for the performance evaluation of Telekom Malaysia Berhad. The method used to produce the result is Statistical Product and Service Solutions (SPSS). Table 4.1 is used for reference and in determination of the relationship between dependent variables and independent variables.

Table 4.1 Table Benchmark for Correlation

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

Source: Hinkle, Wiersma, & Jurs as cited in Mukaka (2012)

4.8.1 Internal Factors

Based on Table 4.2, Pearson Correlation for Telekom Malaysia Berhad shows that current ratio is -0.25 which has a negative relationship with ROA. The increase of the current ratio, the lower the performance of the company is. Higher current ratio which is more than 1 is better and a very desirable situation to be in for the company. But it also means that the company possessed many current assets than current liabilities. Meaning that the company is not efficient when it comes to turning current assets to produce profit despite having many current assets. Quick ratio shown -0.22 which is a negative relationship with ROA. When quick ratio increases, performance company decrease. Quick ratio more than 1 indicating that the company is equipped fully with enough assets to liquidate to pay current liabilities. TM shows a quick ratio less than 1, meaning that it may not be able to pay its current liabilities. Average collection period shown 0.58 which indicates a moderate positive relationship with ROA. The higher the average collection period is, the higher the company's performance is.

In leverage aspect, the debt to income ratio shown -0.32 which has a negative relationship with ROA, illustrating an increase of debt to income ratio means a decrease of in the performance. This is due, even though the company used the money borrowed to finance the operating cost, it does not result in much profit. Meanwhile, operational ratio shown -0.91 which is a very high negative relationship with ROA. The lower the operational ratio is, the higher the company's performance is. Operating ratio indicates how efficient company manage to keep costs low while generating revenue. The lower the operating ratio, it indicates the company's

management is efficient hence lead to better performance of the company. Next, operating margin shown 0.25 which is a positive relationship with ROA. Higher operating margin is, higher the company's performance is which indicates that TM is profitable. The high or low of operating margin is different for each industry, but the average for telecommunication industry is around 17%.

4.8.2 External Factors

According to Table 4.2, for the external variables, GDP shown 0.54 which is a moderate positive relationship with ROA. When GDP increase, the higher the performance of the company is as more consumer spending contributing to company's profit. Meanwhile, inflation shown 0.89 a high positive relationship with ROA. It indicates that higher inflation leads to higher company's performance. Despite the price of goods and services increase, consumer still buy it and lead to higher profit as telecommunication services is vital and TM monopolize the industry.

Interest rate shown -0.61 which is a moderate negative relationship with ROA. The higher the interest rate is, the lower the performance is. This is because when interest rate increase, this means the cost of borrowing become more expensive. Consumer will not spend their money on telecommunication services and goods as they are trying to save. Next, exchange rate shown -0.94 which is a very high positive relationship with ROA. Higher exchange rate indicate higher company's performance. Higher exchange rate is indicating that the value of Ringgit is decreasing.

Table 4.2 Correlation table

		ROA
Pearson Correlation	ROA	1.000
	CURRENT RATIO	-.254
	QUICK RATIO	-.222
	AVERAGE-COLLECTION PERIOD	.576
	DEBT TO INCOME	-.323
	OPERATIONAL RATIO	-.908
	OPERATING MARGIN	.246
	INDXS	.
	GDP	.542
	Inflation	.894

	InterestRate	-.613
	ExchangeRate	-.943
	STDV	-.219

4.9 Model Summary

The adjusted R square is equals to 98% (refer to Table C.2). This indicates that by using all internal and external variables in Equation 3, exchange rate and operating margin display, the model is in explaining the profitability of the company 98% include the Telekom Malaysia Berhad for five years. Even though the balance of 2% of the adjusted R square shows that changes in ROA of the Telekom Malaysia Berhad cannot be explain by the internal and external of Equation 3 (refer to Table C.1) variables, which providing the researchers and chance to conduct future research about the factors that are unknown. The model summary (Table A.1), is the result obtained from the company-specific factors or can be called as internal factors as independent variables of Formula 1 (Model 1) and macroeconomic factors or can be called as external factors as independent variables of Formula 2 (Table B.1).

Based on the adjusted R-squared values obtained from Model 1 and Model 2, it shows that the macroeconomic factors has more capability in explaining the changes in company's profitability than the firm-specific factors. This indicates that the macroeconomic factors are the primary factors in explaining the company's profitability and has close relationship with profitability. Moreover, ANOVA table (refer Table C.3) shows a significant value of 0.010 which means that it is lower than the alpha value ($p<0.05$). It means that this variable is very important for the representation model. Hence, the above significant value is an acceptable value, which indicates that we can accept and rely on the research.

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

The study's aim is to study the performance of the company and its determinants of Telekom Malaysia Berhad. In achieving this goal, the study used firm-specific factors (liquidity risk, credit risk, operational risk, market risk, and corporate governance index) and macroeconomic factors (GDP, inflation, interest rate, exchange rate, and BETA). Hence, in this chapter, the discussion is in the basis of the finding in chapter four. This chapter consist of conclusions and recommendations for research in the future.

5.2 Discussion of Result

In general, this study was designed in determining Telekom Malaysia's performance and its determinants. The objectives of this study are:

4. To investigate the firm-specific (internal) factors towards performance
5. To investigate the macroeconomic (external) factors towards performance
6. To investigate both internal and external factors towards performance

According to the correlation table (Table 4.2), there is existence of proof that performance is affected by the company-specific (internal) factors and macroeconomics (external) factors. The correlation table shows that operational ratio has very high negative relationship with ROA and significantly associated with performance, with a p<value of 0.001. This indicates that when operational ratio increase, the ROA decrease. According to the coefficient table (Table 4.2), operational ratio is negative and mainly affects ROA. Operational ratio represents operational risk. Hence, these two value means that when operational risk increases, then the performance of the company decreases. This is because when company experience network failure or system failure, incorrectly applied rates in billing systems, fraud, and many more lead to weaken the performance of the company as company spend more money on recovering this and decrease the revenue.

At the same time, the correlation table also shows that average-collection period has moderate positive relationship with ROA and is significantly associated with ROA. This indicates that when ACP increase, then the ROA also moderately increase. We can come to the conclusion

that higher ACP leads to higher performance as customers might find the company to be lenient in paying their bills. Longer time might lead customer be able to find money comfortably to pay their bills. Moreover, the correlation table is showing that the corporate governance index is 0.00 which is indicating no correlation with TM's performance. Meaning that any reduction or increase of factors in corporate governance will not affect the company's performance.

In general, we can conclude that company-specific factors and macroeconomics factors will affect the company's performance. The model summary (refer Table C.2), shows that 98% of the models can be explained by company-firm specific variables and macroeconomics variables. Moreover, the ANOVA table (Table C.3) shows a significance of 0.010 which indicates that the model can be rely on and acceptable. However, the macroeconomics factors have greater impact to company's performance while company-specific factors have lower impact on the company's performance.

5.3 Limitations

This study has limitation to Telekom Malaysia Berhad. It is also has limitations to companies that listed in Bursa Malaysia. This study also only covers five years of company's financial statements which is from 2014 to 2018. Hence, because of time shortage, only limited amount of information can be found and collected.

5.4 Recommendations

In accordance to the results, operational ratio is very significantly related to the company performance. Hence, to increase the company performance, it is very important in managing the operating risk of the company with high efficiency. If operating expense of the company such as service maintenance increase then the performance of the company decrease as the company need to pay more from their revenue. There are a few ways or strategies that company can apply to manage their operating expenses. One of the ways is operational saving measures which involved low benefit and low effort such as changing the maintenance service level and apply the Quality of Service (QoS) concept to optimize the bandwidth management. This QoS concept will help

company to reduce packet loss and jitter on the network. Next, company should start introduce the cost conscious company culture to their employees where the employees will develop a culture where they consistently challenging the existing cost basis. (Arthur D.Little, 2010).

In addition, average collection period is also significantly related with company performance. As ACP increase, the company performance increase, due to having lenient collection policy and customers find this is not troublesome. But, company need to be careful as the longer the average collection period is then the less amount of money on hand to meet their liabilities. One way is tighten the collection policy from customers. Next, company should start introduce the cost conscious company culture to their employees where the employees will develop a culture where they consistently challenging the existing cost basis. (Arthur D.Little, 2010).

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APPENDICES

A. SPSS Model 1 Output

Table A.1 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.908[a]	.825	.766	.006123618320000	2.220

a. Predictors: (Constant), OPERATIONAL RATIO

b. Dependent Variable: ROA

Table A.2 ANOVA Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	14.107	.033[b]
	Residual	.000	3	.000		
	Total	.001	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), OPERATIONAL RATIO

B. SPSS Model 2 Output

Table B.1 Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.943[a]	.889	.852	.004875197320000	1.339

a. Predictors: (Constant), ExchangeRate

b. Dependent Variable: ROA

Table B.2 ANOVA Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	23.990	.016[b]
	Residual	.000	3	.000		
	Total	.001	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ExchangeRate

C. SPSS Model 3 Output

Table C.1 Descriptive Statistics Table

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.028099928400000	.012663797000000	5
CURRENT RATIO	1.1896820	.13571262	5
QUICK RATIO	1.110680	.1384043	5
AVERAGE-COLLECTION PERIOD	83.570600	10.0528429	5
DEBT TO INCOME	1.387020	.0468403	5
OPERATIONAL RATIO	.910180	.0304073	5
OPERATING MARGIN	.101800	.0083991	5
INDXS	1.00	.000	5
GDP	5.188458165000000	.762951106000000	5
INFLATION	2.420	1.0710	5
INTEREST RATE	2.870151672000000	1.651078102000000	5
EXCHANGE RATE	4.3900	.78112	5
BETA	.100888111000000	.022986392900000	5

Table C.2 Model Summary

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.943[a]	.889	.852	.004875197320000	
2	.995[b]	.990	.980	.001792222960000	3.194

a. Predictors: (Constant), ExchangeRate

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

c. Dependent Variable: ROA

Table C.3 ANOVA Table

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	1	.001	23.990	.016[b]
	Residual	.000	3	.000		
	Total	.001	4			
2	Regression	.001	2	.000	98.856	.010[c]
	Residual	.000	2	.000		
	Total	.001	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ExchangeRate

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