A RELATIONSHIP ANALYSIS BETWEEN LIQUIDITY AND FIRM PERFORMANCE OF TNB SDN. BHD., PETRONAS GAS BHD, AND YTL CORP. BHD.

(MGT 666)

TENAGA NASIONAL BERHAD (TNB) POWER GENERATION DIVISION SDN. BHD.

(1ST MARCH 2023 – 15TH AUGUST 2023)

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EXECUTIVE SUMMARY

This report outlines the experiences and tasks completed during my internship at TNB Power Generation Sdn. Bhd. Kenyir Station, an innovative business solution for you to go ahead in the market.

During my 24-week internship, I was assigned to the Business Support Services (BSS) where I worked closely with my supervisor to provide support on several projects and prepare the budget for FY 2024. My responsibilities included assisting my supervisor, preparing proposal documents, and updating any missing data. Additionally, I shadowed client meetings and assisted in delivering presentations.

One of my key accomplishments during my internship was assisting in the preparation of a budget for FY 2024. This project involved collecting data from every department, analysing the budget, combining them as one and producing a detailed budget that was presented to the senior management.

Furthermore, I had the opportunity to assist in the secretarial affairs at the Kenyir Management Conference (KMC). From that, I had experienced a big meeting conference among the high management. The project involved conducting market research to identify new investment opportunities and creating customized portfolio recommendations based on client risk profiles.

Overall, my internship experience at TNB Kenyir Station has been invaluable to my personal and professional growth in the finance and business administration industry. It has provided me with a deeper understanding of the wealth management and financial landscape, and the skills and knowledge I have gained will undoubtedly benefit me in my future career endeavours.

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2.0 COMPANY’S PROFILE

TNB started as the electricity supply company for Malaysia and the initial source of electricity that found in Malaysia is at Rawang, Selangor with a mining power generation. In 1894, Loke Yew and Thamboosamy Pillai installed their own power generation from mining to operate an electric supply. Based on this history, it became the sole beginning of electric source in Malaysia. As for maintaining the nation’s impor and anizationnd orgaadvantage, Tenaga Nasional Berhad (TNB) introduced to replace the old Electricity Act in Malaysia. This is because, with TNB, Malaysia will be established a new corporation and create more opportunities for Malaysia to grow independently without other countries shares.

TNB Genco, a Tenaga Nasional Berhad (TNB) subsidiary, oversees the development, operation, and maintenance of TNB's power-generating units. TNB, a Malaysian multinational corporation, is Peninsular Malaysia's sole provider of electricity. TNB Power Generation Sdn Bhd (TNB Genco) and TNB Retail Sdn Bhd (TNB Retail Sdn Bhd) were established as wholly owned divisions on July 29, 2019.

TNB is Southeast Asia's largest publicly traded power company, with assets worth MYR 182.60 billion. Through Sabah Electricity Sdn. Bhd., it serves over 10.3 million customers in Peninsular Malaysia and the state of Sabah, excluding Sarawak. As of Q4 FY2022, TNB had total revenue of RM 12.92 billion, a net income of RM 806.70 million, and a profit margin of 6.25%. This year's market capitalization for TNB is RM 54.884 billion.

Malaysia has a plentiful supply of power. Petrol is the major fuel source, accounting for more than half of total national energy demand. Along with the country's continued population growth, demand for power would naturally rise, but this should be easily met by the country's indigenous supply. Tenaga Nasional Berhad provides energy in Peninsular Malaysia, while Sabah energy is a joint venture between Tenaga Nasional Berhad, the state government of Sabah, and the private Sarawak Electricity Supply Corporation in East Malaysia. Petronas, Malaysia's largest company, dominates the country's oil business through collaborations with other multinational players, particularly in the exploration sector. The Malaysian Oil and Gas Services Council is the industry's major trade group.

2.1 Vision

To be among the leading corporations in energy and related businesses globally.

2.2 Mission

We are committed to excellence in our products and services.

2.3 Objective and goal

- Ensure that everyone has access to energy that is affordable, dependable, environmentally friendly, and incorporates the latest technological advancements.
- Create cities and human settlements that are inclusive, secure, adaptable, and sustainable, ensuring the well-being and sustainability of all residents.
- Take immediate and effective action to address the challenges posed by climate change and its impacts.

3.0 ORGANIZATIONAL STRUCTURE

TNB Genco

MANAGING DIRECTOR, TNB Power Generation Sdn Bhd

YBhg. Dato' Nor Azman Bin Mufti @ Jaafar

CHIEF OPERATING OFFICER

Dato' Ir. Roslan Bin Abd Rahman

HEAD, TECHNICAL SERVICES

Shahrir Bin Abdul Latiff

HEAD, ASSET OPERATION AND MANAGEMENT

Mohammad Zahir Bin Ismail

HEAD, ENGINEERING

Ir. Md Razip Mohd Yusof

HEAD, Business Development & Commercial

Datuk Mohd Hisham Bin Ab Halim

HEAD, Asset Development

Wan Norazri bin Ab Aziz

HEAD, Compliance & Risk Management

Ir. Ahmad Afzainizam Bin Mokhtar

HEAD, Finance & Strategy

Azlinda Binti Safian

HEAD, Corporate Services

Mustaphakamal bin Yaacob

4.0 INTERNSHIP SELF-REFLECTION

I set a goal for myself during my business administration internship to learn more about how a business operates from a management standpoint. Based on my experience, I believe I was successful in meeting that goal. I had the opportunity to work on a variety of projects that exposed me to various aspects of the business, including operations and finance.

One of the challenges I faced during my internship was adjusting to the fast-paced environment. The workload was frequently heavy, and I had to learn how to organize my tasks and manage my time effectively. I discovered that dividing larger projects into smaller tasks and assigning deadlines to each task allowed me to stay on track and meet my responsibilities.

Throughout my internship, my supervisor provided me with feedback on my performance. I valued constructive criticism and worked hard to incorporate it into my work. I learned how to communicate more effectively with my co-workers, for example, and how to pay more attention to detail in my work.

I also formed valuable relationships with my co-workers and supervisor during my internship. They were always eager to answer my questions and offer advice, and their experiences taught me a lot. I intend to stay in touch with them and seek their advice as my career progresses.

Overall, I believe that my internship was a valuable learning experience and that I gained a great deal of knowledge and skills that will help me in my future career. I plan to build on what I learned during my internship and keep up to date on business administration developments and practices.

PROPOSAL

5.0 INTRODUCTION

5.1 Background of study

A security's marketability or liquidity refers to its owner's ability to convert it into cash. Liquidity has two dimensions: the realized price and the recognized and the amount of time required to sell the asset. (Van Horne & Wachowicz, 2008)Liquidity in a firm is mostly divided into two parts or types which are stock liquidity and asset liquidity. Asset liquidity strengthens more for firms that are less inclined to reinvest their liquid assets. Stock liquidity is important to businesses because it affects their costs of capital by requiring investors to pay a premium for holding illiquid or high liquidity-risk stocks. (Kamrul Bari & Ghosh, 2021). This problem becomes more pressing in manufacturing firms because inventory management, which entails decisions related to the proper flow of inventory, frequently affects their liquidity, causing real concern for their management.

Determining an appropriate level of liquidity is a critical aspect of asset management. The optimal level of a current asset is determined by its profitability and maintenance cost flexibility. The primary responsibility of financial managers used to be working capital management, which included the current assets they had and supporting financing. (Van Horne & Wachowicz, 2008). The scope of this study is limited only to the investigation of the relationship between liquidity and firm performance of TNB, PetGas and YTL Corporation.

5.2 Background of company

This study is specific on Tenaga Nasional Berhad (TNB), Petronas Gas (PETGAS) and Yeoh Tiong Lay (YTL) Corporation Bhd. The sole reason on choosing PetGas and YTL for the company that needed to study along with TNB because the companies are specified for utility sector in Malaysia. We also need to identify the relationship of liquidity and firm performance for each of the company.

The first company that included in this research and study is PetGas receives processing fees from its parent company, PETRONAS, under long-term agreements for processing natural gas piped offshore. Under multi-year agreements with PETRONAS, the Gas Transportation business transports offshore natural gas through pipelines to customers in Malaysia and Singapore. The second company is YTL Corporation Berhad that is an integrated infrastructure developer with broad activities in nations and assets of RM72.4 billion as of December 31, 2022. The YTL Group provides world-class products and services at reasonable costs.

5.3 Objective of study

Liquidity is vital for a company's survival. It primarily effects financial cost reduction or growth, changes in the sales dynamic, and the risk level of the organization. The essential importance of liquidity implies that it is important for corporate development while also being one of the primary endogenous elements responsible for company market position. The main objective for this study is to evaluate the corporate liquidity for utility company.

This study also aims to examine of the comparative analysis between liquidity and firm performance of TNB Berhad, Petronas Gas and YTL Corporation. It is also including to examines the impact of liquidity towards firm performance. The dependent variable as stated in this study is measured by the return on asset. As the return on asset are focus on measuring the company's liquidity and profitability.

Many researchers and scholars have looked at the impact of various business variables including leverage and liquidity on firm performance as measured by profitability (ROA) (Mahfoudh,2013). The importance and barriers to firm performance, according to (Almajali,2012), include liquidity and leverage risk. (Zulkipli,2019) discovered significant relationships between financial leverage and corporate profitability. (Chesang,2017) discovered that the debt-to-equity and current ratios significantly impact the nation's agricultural firms.

The specific objective for this study is to examine the relationship between current ratio and firm performance. Research examining the relationships between profitability, liquidity, and business size frequently uses the current ratio to measure internal liquidity (Owolabi, Obiakor, and Okwu, 2011). Liquidity refers to an asset's or security's capacity to convert to cash, and it is seen as an essential requirement for ensuring that enterprises can meet their short-term obligations. Next, to study the relationship between net working capital and firm performance. This is because, nowadays, it is critical to understand the effects of working capital indicator management on corporate performance. Lastly, one of the objectives of conducting this study is to research the relationship of size of the company and firm performance. A firm's performance is influenced by a wide range of external and internal factors, in addition to its size.

5.4 Problem statement

To begin, one of the most common difficulties that utility businesses face is a shortage of corporate liquidity. In Europe, for example, a corporation is experiencing an enormous margin call and unprecedented liquidity stress. The difficulties could result in significant differences in petrol prices, putting pressure on the profits of European power firms. The improvement in the green or no pollution transition is driving this issue. According to Eurelectric's Power Barometer, wholesale electricity costs increased by 532% between January 2021 and August 2022 due to declining gas supplies.

One of the issues is that businesses frequently worry about a lack of short-term liquidity because it might interfere with regular business operations. The possibility of principal-agent conflict in a corporate setting is increased by the opportunity cost associated with excess liquidity. The manager chooses the most effective way to divide available funds between dividends and growth investments. The amount of investment may be constrained by internal financial constraints in businesses, but more investment implies more productive growth.

If this trend emerges in a cross-section of stocks, sensitivity to changes in predicted market liquidity may serve as a proxy for a limited investing requirement. (Virk & Butt, 2022) They are durational claims, so the best way to determine the firm's ability to settle them quickly is to look at its liquidity. The company's overall financial health is stronger the more profitable and riskier types of business it is. (Van Horne & Wachowicz, 2008)

In this study, it is assumed that returns on investment are higher when money is raised internally due to the friction involved in raising external capital. Companies with high levels of leverage, poor performance, and cash flow risk believe that the optimal level of asset liquidity will be lower, resulting in a more pronounced convex relationship between credit spreads and asset liquidity. A company with more liquidity can sell a smaller proportion of its assets while still improving recovery rates and increasing the likelihood that bondholders will be fully repaid.

Furthermore, one of the concerns that businesses have is how the COVID-19 epidemic would affect the firm's asset allocation strategy between real and financial assets. Mobility limitations and trade controls, on the other hand, would have a detrimental influence on operating activities while boosting firm liquidity needs.

Firms with higher pandemic exposure, according to the precautionary motive hypothesis, are more inclined to maintain more financial assets to develop precautionary liquidity buffers and better liquidity management. Firm value and liquidity are the primary drivers of firm continuity, growth, and survival in this competitive economic period.

5.5 Significance of study

5.5.1 Companies

This study has several implications, and analysing short-term liquidity is always crucial since we want to be confident in the company's near-term financial viability before assessing long-term solvency. (Financial Accounting Video Library: Selections from DCCCD Telecourse., 2000) Furthermore, a company or organization can always review and analyse its firm liquidity ratio and enhance it if necessary.

Many studies consider the importance of liquidity to the performance of Polish enterprises. For example, (Zygmunt, 2013) analysed the level of liquidity in polish firms in the light industry. However, it should be noted that the possible relationship between liquidity and profitability in Polish enterprises has not been thoroughly investigation.

5.5.2 Researchers

Furthermore, all researchers must investigate a wide range of variables by introducing a variety of internal factors that could influence liquidity and business performance. The variables included in this study can be used as a reference for future research and for companies to examine when determining whether elements have a negative association with both their liquidity and firm performance.

5.5.3 Body of knowledge

Aside from that, the findings of this study help both present and new investors. When examining Malaysia's money supply, the results made it easier for investors to decide how to make the most money feasible. Furthermore, this component of the research allows investors to discover more about how the Asia-Pacific economic boom influences the money supply. This is since investor confidence and financial circumstances both influence money demand via the industrial production index.

6.0 LITERATURE REVIEW

The ability to turn assets into cash or the ability to repay short-term obligations has been defined as liquidity (Financial Accounting Video Library: Selections from DCCCD Telecourse., 2000) They also noted that a severe liquidity problem can lead to a corporation's incapacity to pay off its short-term obligations within a year's time and may even require the firm to liquidate its investment at a reduced price.

In this study there are several variables that we use to analyze the liquidity between TNB, PETGAS and YTL. The variables include Return on Asset (ROA) as the dependent variable for liquidity. It includes the study of every liquid asset that the company has. Furthermore, the independent variables that are included in this study to make the comparative analysis happen are Current Ratio (CR), Net Working Capital (NWC) and Size of the company (SIZE).

6.1 Dependent Variable (DV)

6.1.1 Return on Asset (ROA)

The indicator is generally presented as a percentage based on a company's net income and average assets. A greater Return on Asset (ROA) shows that a corporation is more effective and productive in managing its balance sheet to create profits, whilst a lower ROA suggests that potential for development exists. In this study, ROA is used as an indication of the firm's liquidity performance. Liquidity refers to a company's assets' capacity to be quickly transformed into cash.

According to (Barber & Lyon, 1996) the ROA focuses on gauging the company's overall profitability and liquidity, which is not hidden by specific items or affected by the firm's capital structure. Companies work hard to keep their liquidity, or the capacity to meet their obligations on time. As a result, liquidity management is crucial for any organization in order to meet existing business obligations, such as financial and operating expenses with a short-term (ST) debt maturity. Furthermore, to better understand the channels through which liquidity risk affects a bank's ROA during a financial crisis, we assess the effects of liquidity risk on two critical components of ROA in a subsequent analysis: net interest margin and loan-loss provision expenses. (Chen et al., 2021)

The extent to which a corporation can employ asset sales in this manner is restricted by the liquidity of its real assets, which is defined as the ease with which real assets can be sold without experiencing a major loss in value. By selling a smaller amount of its assets, the corporation can both increase the possibility of fully repaying bondholders and boost the

recovery rate. (Nejadmalayeri & Usman, 2022) During improved market and economic conditions, a low-growth company will be more likely to issue new debt than equity, but a high-growth company will be more likely to raise both debt and stock. As a result, most businesses will invest and deploy their financial resources in accordance with their growth type.

Salim and Mohamed (2016) evaluated the impact of liquidity management on the Omani banking sector's financial performance. The purpose of the study was to investigate the liquidity situation and its impact on financial performance. The research found a relationship between liquidity position and ROA. Manyo and Ogakwu (2013) evaluated the impact of liquidity on the return on assets of 46 Nigerian Stock Exchange-listed enterprises between 2000 and 2009. Their findings demonstrated that liquidity has a significant positive impact on return on assets (ROA), implying that a unit change in liquidity resulted in a corresponding gain in ROA. Previous research that parallels this study indicates that there is a favorable influence on ROA and liquidity.

6.2 Independent Variable (IV)

6.2.1 Current Ratio (CR)

The current ratio (CR) is the first independent variable in this study. A company with a low current ratio has few current assets to satisfy its short-term commitments, whereas a company with a high current ratio is not necessarily good because a high current ratio can result from insufficient cash and inventory management. According to (Husna and Satria,2019) standard ratio, such as the ratio standard of connected business segments, is necessary to establish if a company has a suitable level of liquidity or not.

Efficient liquidity management entails the planning and control of current assets and obligations, reducing the probability of the firm's failure to meet short-term responsibilities and preventing surplus in these asset investments. (Farizal Mohammed et al., 2020)

Almazari (2014) conducted research on Saudi corporations and discovered that the current ratio is the most important metric of liquidity. Similarly, Akenga (2015) discovered that the financial performance of companies listed on the National Stock Exchange is influenced by liquidity. She added that the current ratio and cash reserves have a substantial impact on agricultural sector financial performance. The higher the current ratio, the smaller the profit of the company.

A high current ratio shows an excess of current assets, which is harmful to business performance because current assets provide a lower return than fixed assets (Mamduh and Halim, 2003). Furthermore, a study conducted by Malik and Saif (2013) used a purposive sample of 30 enterprises from 2002 to 2011, and found that current ratio, inventory turnover, and receivable turnover have a strong positive correlation with company performance. It can be argued that the findings and results reveal that current assets have a substantial link with corporate success.

6.2.2 Net Working Capital (NWC)

Efficient working capital management resulted in the firm being less reliant on external funds to manage operating expenses. Firms with efficient working capital are more likely to respond quickly to economic changes. (Enqvist et al., 2014)found that efficient working capital management had a greater impact on profitability during economic downturns than during economic growths. Furthermore, when an inefficient firm faces cashflow constraints, stakeholders may perceive a high likelihood of the firm abandoning any value-creating investment, lowering firm value (Kokodey et al., 2020).

Based on the calculation of the net working capital, we can conclude that keeping a high level of current assets implies a high level of liquidity, which assists a corporation in avoiding future liquidity concerns. Nonetheless, a high degree of liquidity prohibits a firm from reaping the profits that could have been realized if this liquidity had been invested (Aktaset al., 2015). According to Deloof (2003), the findings of this study indicate a strong negative relationship between aspects of working capital management and firm profitability / performance and liquidity.

The working capital approach to liquidity management was the main technique for planning and controlling liquidity for a long time. However, instead of using working capital as a measure of liquidity, many financial analysts prefer employing liquidity ratios, which have the advantage of allowing for temporal or cross-sectional comparison. However, the ultimate measure of liquidity management performance is impact. It generates no profit or value for shareholders. (Chukwunweike, 2014)

Working capital, the difference between current assets and liabilities, is required to fund a business's daily activities due to the time lag between purchasing raw materials for production and collecting money from the sale of the finished product. With vast sums spent on working capital, it is logical to expect that asset management will have a significant impact on a company's profitability. (Enqvist et al., 2014)

6.2.3 Size of the company (SIZE)

The size of the company in this study indicates the largeness and smallness of a corporation as determined by the total amount of active value. (Marius Siahaan and Ragil Handayani,2014) As the company's size grows, there is a higher probability that more investors will devote themselves to it. This is because huge corporations have more stable conditions than small businesses. According to Elton and Gruber (2004), the asset size of a large firm is deemed to have less risk than that of a small company, because a large corporation has greater access to the capital market than a small one.

When establishing the firm's value, investors must also consider the company's size. A corporation's total assets, revenue, capital revenue, or capital can be used to calculate its size, according to (Thakur & Workman, 2016). Enterprises with substantial assets have achieved the maturity stage, are regarded to have great prospects in a relatively stable time and can generate profits when compared to enterprises with little total assets.

According to Hartono (2000), different firm sizes result in varied job risks that differ significantly between large and small businesses. A large firm is thought to have fewer risks than a small company because the former has access to the capital market, making it easier to obtain additional investment that can improve financial performance, whilst the latter does not.

According to (Ruguru, 2018), there is a significant relationship between firm size and firm performance. Larger organizations are more profitable than smaller ones because they can take advantage of economies of scale. Another perspective is that huge corporations can obtain finance at lower costs than small companies. However, as companies grow, the benefit may shrink, turning the relationship negative. Based on previous studies, size of the company has a significant relationship with the firm’s performance.

7.0 METHODOLOGY

7.1 Data Collection

The data is gathered from secondary sources. The data for this study came from each company's annual report on Bursa Malaysia. The data spans 20 years, beginning in 2003 and ending in 2022. Journals, publications, and a thesis that are complete and connected to this study that studies liquidity and firm performance are the additional secondary data for this study. This study includes on measurement or calculation of Return on Asset (ROA), Current Ratio (CR), Net Working Capital (NWC) and the Size of the company (SIZE) variables. This research includes analyze data using Stata on Descriptive stats, Correlation analysis, Panel Specification tests, Diagnostic Tests: Linear Regression, and Regression Analysis. The calculations/formula used in this study as stated below,

Below shows the formula to calculate each of the variables:

Dependent Variable	**Formula**
Return on Asset (**ROA**)	$\frac{\text{Net Income}}{\text{Total Assets}}$
Independent Variable	**Formula**
Current Ratio (**CR**)	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$
Net Working Capital (**NWC**)	Current Assets – Current Liabilities
Size of the company (**SIZE**)	Total Assets

Table 1: Formula table source based on the study by Kamrul Bari & Gosh, 2021

All the formula/calculations above are based on a study by (Kamrul Bari & Ghosh, 2021)**.** Based on the table above, it shows that the formula for ROA is net income of the company divided by the total assets. For the dependent variable, I used the Return on Asset (ROA) mainly for the firm performance indicator because ROA is used to indicate the profitability and liquidity of a firm according to its total assets. ROA is also important for the company to assist them in managing their assets in a good investment or loan.

The current ratio is the first independent variable employed in this study. This study uses the current ratio to help organizations manage their liquidity. This is because the current ratio allows the organization to describe the relationship between its assets and liabilities. The formula for the current ratio, which is current assets divided by current liabilities, is also shown in the table above. Moreover, the net working capital in this study helps organizations manage their short-term financial situation because the NWC formula is current assets minus current liabilities. The goal is to assist the company to meet all of its short-term financial obligations.

The last independent variable in this study is the firm size (SIZE), which is computed from each company's total assets. This is since total assets signify how much the company values and is worth. The size of the company is crucial in this study since it provides a broad view of the firm's performance in terms of current and non-current assets.

7.2 Framework

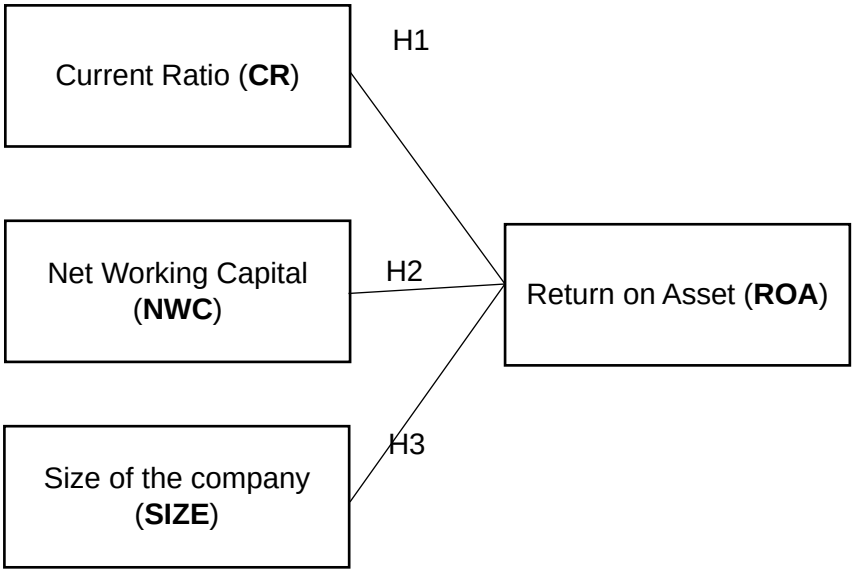

Figure 1: Theoretical framework based on the study by (Kamrul Bari & Gosh, 2021)

This theoretical framework is based on a study by (Kamrul Bari & Ghosh, 2021) Following them, the dependent variable that may be used as a proxy for liquidity is ROA, and the factors that we employ to analyze the relationship between a firm's or company's liquidity are CR, NWC, and SIZE.

7.3 Hypothesis

H1: There is a significant relationship between the current ratio and financial firm performance.

H2: There is a significant negative relationship between net working capital and firm performance.

H3: There is a significant relationship between firm size and firm performance.

8.0 ANALYSIS

In this chapter, I examine data from 3 Malaysian companies in the utility sector over 20 years, from 2003 to 2022. Data for the study's independent and dependent variables were acquired from each company's annual report. In addition, I ran a relevant diagnostic analysis in Stata14 to see whether there were any statistical difficulties. I use descriptive, correlation, and regression analysis to examine it by using Hausman test.

8.1 Descriptive statistic

Variable	Obs	Mean	Std. Deviation	Minimum	Maximum
ROA	60	0.0655	0.03967	0.01	0.16
CR	60	2.542833	2.584966	0.5	12.29
NWC	60	1429.858	2315.724	-6950.5	6562.1
SIZE	60	34548.61	39629.17	4324.65	162009.8

Table 2: Descriptive statistics

Descriptive statistics are precise informative variables that define a particular data collection, which can represent the complete population or a subset of a population. This data is used to analyze using descriptive analysis, regression analysis and correlation analysis. This study also includes 60 number of observations that represent 20 years of data for each company. On the table above it shows a descriptive statistic for this study in terms of its variable includes dependent and independents for their ROA, CR, NWC and SIZE of the company for their whole performance in terms of financially and non-financially. In terms of these three companies the lowest mean is ROA with 0.0655 followed by the highest mean is size with 34548.61. It indicates that the average ROA in utility sectors company is 0.0655. As for the mean or average value for the current ratio is 2.54 with a standard deviation of 2.58. It shows that the current ratio for the three companies in the utility sector is high and their company efficiency in managing their current assets is low.

8.2 Correlation Analysis

The study then performed correlation analysis before moving on to Regression analysis. Correlation analysis is useful for determining the degree and direction of the relationship between two continuous variables. The study's correlation analysis is as follows:

	ROA	**CR**	**NWC**	**SIZE**
ROA	1.0000			
CR	0.5094* 0.0000	1.0000		
NWC	0.1367 0.2975	0.2839* 0.0279	1.0000	
SIZE	-0.4355* 0.0005	-0.3009* 0.0195	-0.1693 0.1959	1.0000

Table 2: Correlation table

The correlation data is provided at a 10% significance level. It represents the relationship between the variables. The most significant relationship of firm performance was discovered includes the current ratio and size of the company whereas the least significant relationship was discovered is net working capital. As a result, despite the most significant relationship among the variables, most of the correlations are less than 0.8 points of confidence.

Table 2 above shows the correlation analysis between liquidity and firm performance (ROA) for TNB Sdn. Bhd., Petgas Bhd. and YTL Corp. Bhd. For this study, it shows that the current ratio (CR) has the most significant and positive relationship with return on asset (ROA). In difference, the size of the company (SIZE) has a negative yet significant relationship with return on assets (ROA). For the last variable, which is the net working capital (NWC) it is found that it has a positive insignificant relationship with return on assets (ROA). It is concluded that the result shows that there are two significant variables which is current ratio (CR) and size of the company (SIZE). Other than that, the other one variable is insignificant which is Net Working Capital (NWC).

8.3 Panel Specification Tests

The following step is the decision of which static panel approach to use. There are three models to choose from: pooled ordinary least squares (POLS), fixed effects (FE), and random effects (RE). In this study, the selection of an acceptable model from POLS, FE, or RE is based on three types of tests, as proposed, and explained by Park (2011). F-test, Breusch-Pagan Lagrangian multiplier (BPLM) test and Hausman test are the tests. It also helps to assist this study to write down the analysis from all the data that I collected from the 20 years of financial annual reports from each company that represents the utility sector.

	F-Test		BP-LM Test		Hausman		Appropriate model
	F	p-value	chibar2	p-value	chibar2	p-value	
ROA	F (2, 54) = 24.28	0.0000	0.00	1.0000	26.51	0.0000	**Fixed Effect (FE)**

Table 3: Panel Specifications test for liquidity and firm performance.

In this paper, following the result of the Hausman test, FE /RE model was used to analyse the data. This is because, based on the results on the table above for F-test and Breusch-Pagan Lagrangian multiplier (BPLM) test are not applicable or acceptable for this study. It is discussed on the panel specification tests that the Hausman test is the most appropriate model for this study compared to F-test and BPLM test. The Hausman test is used to the study between Random Effect Model (RE) and Fixed Effect Model (FE).

Based on the table above, the results indicate that the p-value for F-test is less than 0.05 which is 0.0000. The results imply that the variable in this study is significant. To choose between POLS and Random Effect (RE), use the Breusch Pagan and Lagrangian Multiplier tests. The result indicates that the p-value is more than 0.05, which is 1.000. Furthermore, the table discusses the Hausman test, which is significant for deciding between the Fixed Effect model and the Random Effect model. The p-value is less than 0.05, which is 0.00, based on the results. As a result, Ho is discarded, and the Fixed Effect (FE) model is the best fit. Based on the overall test results, the Fixed Effect model appears to be the best model estimator for liquidity and firm performance in this study.

The goal of this test is to determine whether distinct error relates to regression, the null hypothesis indicates that it is not. Using Stata to run the Hausman test on both fixed and random data, the result is 26.51 (p-value = 0.000), which is less than (p-value= 0.01), which rejects the null hypothesis. As a result, the fixed effect is most appropriate for our regression model.

8.4 Diagnostic Tests: Linear Regression

Based on diagnostic test, the study has been conducted three (3) tests which are multicollinearity test (Variance inflation factors), Heteroskedasticity (Modified Wald Test) and Serial Correlation test (Autocorrelation).

	p-values of the tests			
	VIF	H	SC	Strategy
ROA	1.13	0.2114	0.0123	Fixed Effects (within) regression with AR (1) disturbances

Table 4: Diagnostic Tests: Linear Regression

Based on the table above, it shows all the results for multicollinearity test (Variance inflation factors), Heteroskedasticity (Modified Wald Test) and Serial Correlation test (Autocorrelation) tests. For this study, it reveals that the result for variance inflation factors (VIF) is less than 10 that indicates the data analysis have no problem regarding the multicollinearity. Moreover, I perform the Modified Wald test to get the results regarding the heteroskedasticity for this diagnostic tests. Based on the results that I get from this study; it shows that the p-value is higher than 0.05 which is 0.2114. Hence, the H0 is accepted and the variances in this study are constant and no problem regarding heteroskedasticity. Lastly, for the Autocorrelation results, I perform the serial correlation test to obtain the results which is 0.0123. Based on this result, I can conclude that autocorrelation problem exists in this study. In conclusion, based on the diagnostic tests that being perform for this set of data it shows that this study has no multicollinearity and heteroskedasticity problem. It also indicates that this study has an autocorrelation problem. As for the solution, Fixed Effect regression with robust option was conducted to rectify the problem of heteroskedasticity.

8.5 Regression Analysis

A COMPARATIVE ANALYSIS BETWEEN LIQUIDITY AND FIRM PERFORMANCE OF TNB SDN. BHD., PETRONAS GAS BHD, AND YTL CORP. BHD.

	Model 1	Model 2	Model 3	Model 4
CR	0.0067***	0.0009	0.0067***	0.0009
	(3.79)	(0.58)	(3.79)	(1.00)
NWC	-0.0000	-0.0000	-0.0000	-0.0000
	(-0.38)	(-0.13)	(-0.38)	(-0.36)
SIZE	-0.0000***	-0.0000	-0.0000***	-0.0000
	(-2.77)	(-1.07)	(-2.77)	(-2.79)
Constant	0.0602***	0.0699***	0.0602***	0.0699***
	(7.40)	(8.27)	(7.40)	(44.63)
N	60.0000	60.0000	60.0000	60.0000
r2	0.3590	0.0317		0.0317
r2_a	0.3247	-0.0579		-0.0201
r2_w		0.0317	0.0197	0.0317
r2_b		0.4676	0.7766	0.4676
r2_o		0.2798	0.3590	0.2798
F	10.4566	0.5897		.
p	0.0000	0.7078	0.0000	.
chi2			31.3699	

Table 5: Regression Table

t statistics in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$
Notes: (1) CR=Current Ratio, NWC=Net Working Capital, SIZE= Size of the company.
(2) Figures in parenthesis are t-statistic.

Table 5 above shows the regression results for this study between liquidity and firm performance. Contemplating the various panel and diagnostic tests have been conducted to analyses this study. Based on the table above, it shows that the model 3 of this regression result is the most appropriate model for my study between liquidity and firm performance. The independent variables, current ratio (CR) with t-value of 3.79, and size of the company (SIZE) with t-value of -2.77 are indicates having a significant relationship with ROA. This is because, current ratio and size of the company have an important effect on the firm performance for every company. By increasing the size of the company, it can create a lot of opportunities to improve the firm performance. This is proven by (Ruguru, 2018), there is a significant relationship between firm size and firm performance. This is because larger organizations are more profitable than smaller ones because they can take advantage of economies of scale.

In addition, with current ratio having a positive significant relationship with firm performance is evidenced by Malik and Saif (2013) found that the current ratio has a strong positive significance on company performance in a targeted group of 30 firms from 2002 to 2011. Having a good or strong current ratio can affect your firm's performance well. Furthermore, for net working capital (NWC) with a t-value of -0.38 it shows on the table above that it has an insignificant negative relationship with firm performance or return on asset (ROA). The outcomes of the past research, according to Deloof (2003), show a significant negative association between characteristics of working capital management and business profitability/performance and liquidity.

Although model 1 generated the same results as model 3 in terms of current ratio and firm size having a significant relationship with return on asset, it also had does not having enough data that can support this study, as well as model 2. Thus, in this regression analysis, model 3 is the greatest fit for this study when compared to all other models. This analysis also shows that this study used r2 within.

9.0 DISCUSSIONS

As I stated in the analysing section, the size of the company and the current ratio are critical to maintaining or improving the firm's success. Based on the data that being analysed in this study it shown and proven that current ratio has a positive significant relationship with firm performance. Based on the return on assets for each company, they have a strong or good return on assets, which means that the entire company is in good shape, but they also need to enhance their liquidity, such as the current ratio, to ensure that their company will continue to run for a long time.

Furthermore, based on the analysis that had been conducted in this study it is proven that size of the company has a negative significant relationship with firm performance. It also being proven by (Pervan & Višić, 2012) the findings demonstrated that firm size had a considerable positive (although weak) influence on firm profitability. Scale of economies may develop for a variety of reasons, including financial ones. This demonstrates when a huge corporation can obtain a lower interest rate as well as a lower discount rate due to the large amount purchased.

Meanwhile, net working capital has a negative insignificant relationship with firm performance. This is because, reduced demand during economic downturns quickly lessens enterprises' working capital. Economic policy focused on increasing business cash flows, either directly or indirectly, can be extremely beneficial in easing strain on working capital. (Enqvist et al., 2014)

10.0 CONCLUSION AND RECOMMENDATIONS

The following section provides an overview of the entire research project. Moreover, the most relevant conclusions are discussed in a distinct section of this chapter, which is then followed by some recommendations about the relationship between liquidity and firm performance. Based on the problem arising within the company, the main problem is when covid-19 outbreak affected the company firm performance. The workers need to adapt with the new environment of work. As for TNB, the effect that TNB gain from Covid-19 is that the group's revenue declined 1.5% year on year to RM11,478 million from RM11,654.5 million, attributable mostly to lower electricity sales. Electricity sales continued to fall but at a slower 0.2% year-on-year rate down in FY2021. This was backed up by the government's stance of enabling economic operations to continue.

Even though Tenaga Nasional Berhad (TNB), Petronas Gas (Petgas), and YTL Corporation dominate their business demand. These businesses equally face numerous problems and issues to sustain their performance. This study aids in determining the most essential components/factors on which these businesses should concentrate or focus. One of the recommendations that companies can used based on the regression analysis is that consider selling any underutilized capital assets that are not producing a profit. This cash inflow boosts your short-term assets column, which boosts the company's current ratio. Buildings, equipment, vehicles, obsolete inventory, and other objects that do not generate revenue for the company are examples of liabilities that can be converted to cash. This is important as the analysis shows that current ratio have a significant relationship with firm performance.

As for the size of the company, maintain a better size and good value of total assets are important because the analysis shows that size of the company have a significant relationship with firm performance. Moreover, the recommendation to maintain it is that company in utility sector can do in growing the firm performance is that improve or increase their investment capabilities. This is because, investments also have a huge role or assets in their companies. sector investments have a strong relationship with government policies. In 2016, nearly 95% of power generation investments were made by companies operating under fully regulated revenues or mechanisms to manage the revenue risk associated with variable wholesale market pricing. Utility plans now consistently emphasize themes around business model transformation, enhanced operational efficiency and improved financial management. As in TNB, the example, of investment companies that has a highest.

One of the recommendations is that improve their customer services experience to maintain the customer relationship attributes. This applies especially to all company in this study because, the customers will be satisfied as their needs and wants are being fulfilled. Other than that, utility companies are often interact with their customer whether offline or online using many platforms such as mail, phones, and social media. Utility sector company mainly can interact with their customer to know the scale of satisfactions from the customers while their using apps or paying bill online. Companies also can use social media as a platform that can notify their customers or clients regarding case of an outage or new services that they can use. Utility companies may boost satisfaction among consumers, offer more effective products, minimize support costs, reduce abandonment, and eventually grow their client base by improving the customer experience.

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12.0 APPENDICES

Figure 2: Being assigned to help the sectrial affairs for the Kenyir Management Conference.

Figure 3:Attend an assembly with the Head Director of Terengganu state to introduce to the Malaysia Energy Literacy Program (MELP) for stakeholders.

Figure 4:Attend a talk session for the technical visit program from Kapar Energy Ventures (KEV).

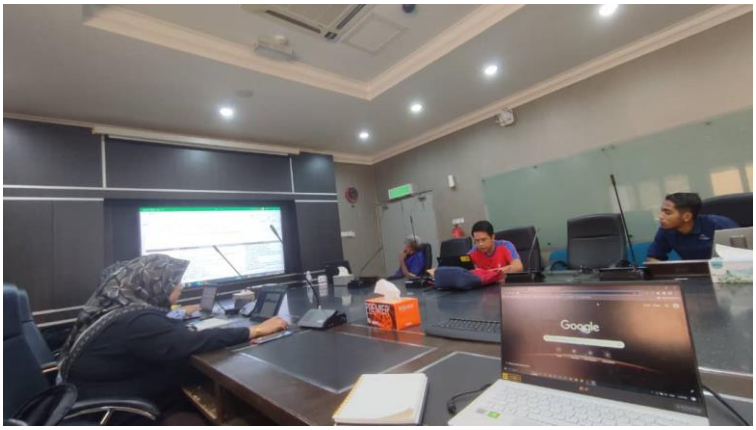

Figure 5: Attend Business Support Services (BSS) Unit Meeting #2 at Kenyir station.

Figure 6:Participate in the TNB Wellness Day program, which takes place in Padang Kelab Kilat.

Figure 7: Attend SJKenyir's Budget Challenge Meeting (BCM) with TNB Genco HQ.

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2.0 COMPANY'S PROFILE TNB started as the electricity supply company for Malaysia and the initial source of electricity that found in Malaysia is at Rawang, Selangor with a mining power generation. In 1894, Loke Yew and Thamboosamy Pillai installed their own power generation from mining to operate an electric supply. Based on this history, it became the sole beginning of electric source in Malaysia. As for maintaining the nation's impor and anizationnd orgaadvantage, Tenaga Nasional Berhad (TNB) introduced to replace the old Electricity Act in Malaysia. This is because, with TNB, Malaysia will be established a new corporation and create more opportunities for Malaysia to grow independently without other countries shares. TNB Genco, a Tenaga Nasional Berhad (TNB) subsidiary, oversees the development, operation, and maintenance of TNB's power-generating units. TNB, a Malaysian multinational corporation, is Peninsular Malaysia's sole provider of electricity. TNB Power Generation Sdn Bhd (TNB Genco) and TNB Retail Sdn Bhd (TNB Retail Sdn Bhd) were established as wholly owned divisions on July 29, 2019. TNB is Southeast Asia's

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largest publicly traded power company, with assets worth MYR 182.60 billion. Through Sabah Electricity Sdn. Bhd., it serves over 10.3 million customers in Peninsular Malaysia and the state of Sabah,

excluding Sarawak. As of Q4 FY2022, TNB had total revenue of RM 12.92 billion, a net income of RM 806.70 million, and a profit margin of 6.25%. This year's market capitalization for TNB is RM 54.884 billion. Malaysia has a plentiful supply of power. Petrol is the major fuel source, accounting for more than half of total national energy demand. Along with the country's continued population growth, demand for power would naturally rise, but this should be easily met by the country's indigenous supply. Tenaga Nasional Berhad provides energy in Peninsular Malaysia, while Sabah energy is a joint venture between Tenaga Nasional Berhad, the state government of

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Sabah, and the private Sarawak Electricity Supply Corporation in East Malaysia. Petronas, Malaysia's largest company, dominates the country's oil business through collaborations with other

multinational players, particularly in the exploration sector. The Malaysian Oil and Gas Services Council is the industry's major trade group.
2.1

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Vision To be among the leading corporations in energy and related businesses globally. 2.2 Mission