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**Performance and Risk: Empirical Evidence from Petroliam Nasional Berhad
(PETRONAS)**

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Abstract

The paper aims to recognize the relationship between risk and profit in the company Petroliam Nasional Berhad (PETRONAS). This company is one of the leading companies in oil and gas industry, therefore, knowing the risk taken by the company and their management and the impact on the profit to the shareholder. The main focus in this paper is to recognized risk especially in operational risk, liquidity risk and credit risk while the profit is indicate by using ROA, ROE, Profit Margin Ratio, Debt to Equity Ratio, Debt to Asset Ratio and Interest Coverage Ratio. In addition, the size of the company is considered to have relationship with the risk factor. It involved the total assets and the Malaysian economic outlook looking at the GDP growth, inflation, exchange rate and the unemployment. In addition, Pearson correlation coefficient and significant (1-tailed) are used to find the relationship between the ROA and the 13 items that be as independent variables. The ROE and Profit Margin Ratio are significant in this business due to the direct and indirect relationship to the profitability in the company. In conclusion, this paper takes further examines if the company has taken the appropriate decision in retaining the risk as mention that will reflected to the profitability and the growth of the company.

Keywords: company performance, operational risk, liquidity risk and credit risk, return on asset, return on equity, profit margin ratio, debt to equity ratio, current ratio, quick ratio, cash ratio, interest coverage ratio, GDP, inflation, exchange rate, unemployment.

1.0 INTRODUCTION

1.1 Background of Company

Petroleum Nasional Berhad (PETRONAS) was established 42 years and first incorporated in 17 August 1974. This company was stated in Malaysia and it is fully integrated oil and gas multinational ranked among the largest corporations on FORTUNE 500^R. For our country it was the custodian national oil and gas resources. For PETRONAS itself they were explore, produce and deliver energy to meet the society's growing needs. The purpose of establishing this company is to growing the demand for energy inspires and to steadily drive for the new solutions and impulse the boundaries toward a sustainable energy in future. PETRONAS also approaches the technology in order to maximize energy sources event in the remote and problematic environment. PETRONAS also has consistently and successfully implemented in various social, environmental and also in community programmed. Throughout the rapidly network and steady growth company, the company was fully integrated the value chain spans from exploration marketing, from logistic to technological infrastructures. Nowadays, PETRONAS has achieving their operation in over 50 countries all over the place in the world. This company also listed in Bursa Malaysia.

Petroleum Nasional Berhad (PETRONAS) was led by Datuk Wan Zulkiflee Wan Ariffin as the President and Group Chief Executive Officer, Datuk Samsiah Abu Bakar as the Chief Integrity Officer, Sarbini Suhaili, as Vice President Group Health, Safety, Security and Environment, Zahariah (Liza) Abdul Rahman as Head Group Strategic Communications, Syed Syeikh Syed Idrus Alhabshi, Datuk Mohd Anuar Taib as Executive Vice President and Chief Executive Officer Upstream Business, Md Arif Mahmood as Executive Vice President and Chief Executive Officer Downstream Business, Datuk Manharial Ratilal as Executive Vice President and Group Chief Financial Officer, Mazuin Ismail, Senior Vice President Project Delivery and Technology, Adif Zulkifli as Senior Vice President Corporate Strategy, Dato' Raiha Azni Abd Rahman as Senior Vice President Group Human Resource Management, Mohamad Rauff Nabi Bax as Senior Vice President and Group General Counsel.

2.0 LITERATURE REVIEW

According to Waemustafa and Sukri, 2015, the significant of the credit risk creation based on RSF shows that the credit risk give the big impact on their financing exposure to the economy sector. For example on the real estate, property and residential. It is the most risky when economy is downturn and the speculative elements lead to property price bubbles. The most significant influence of credit risk are including the inappropriate credit policy, poor lending practices, limited institutional capacity, volatility in interest rate, poor management, lack of knowledge about law, direct lending, massive licensing bank, low capital and liquidity risk, laxity in credit assessment, poor loan underwriting, poor lending practice, inadequate supervision, government interference and lack of knowledge about borrowers.

According to Waemustafa and Sukri , 2016 stated that liquidity risk currently is a big problem to excess the results. It will give negative impact subsequently that will arise from the extensive use of trade based on the profit and loss sharing mode. In addition, the organization of liquidity risk is sometimes unreliable when do not have the high knowledge about the risk formation. It will be the most critically to identify the procedure before to continue for further stage of risk management process. As a result, the liquidity of risk development of the equity based method of financing will demolished the old-style relationship between the lender and the borrower which depend to the based on interest. With clear understand thorough the source of liquidity risk, it will allow the company to manage the liquidity risk inside and more clearly.

According to Waemustafa and Abdullah, 2016 said that the Shariah Supervisory Board (SSB) have a relationship with the corporate governance mechanism that will involve in monitoring the framework. SSB also reflect to the issue in company such as independence, transparent, accountable, responsible and fair in all of the activities. In the presence of the SSB, it also will monitor and having a good corporate governance in order to achieve objective of the Shariah. In addition, the connection between SSB effectiveness and remuneration is achieved and effective. The SSB committees among their membership with the cooperation as remain to long period as the committee members. It means, their relationship give a big influenced by the management since their collaboration member is purely due to the strong bond in the company.

According to Toms, (2010), stated that operational sable theory of risk can be influenced for the purpose in manage the decision making. In addition, the firms cost organization give the influence to the employee remuneration and it is not exactly linked to revenue that will fall in staff costs. The revenue will increase while the staff cost will be fixed.

According to Amit and Livnat (1988) stated that the profits and amount of variability in profits, risk that are based on a cash flow surrogate and funds from the operations. From the analysis that have been made, it shows that the systematic risk should not significantly contrast among the firms. In addition, if the firm have a group with high return and high risk, when the medium return and medium risk, or even the group with low return and low risk it show that have a related diversification characteristic.

3.0 DESCRIPTIVE FINDINGS

3.1 Size

Year	2011	2012	2013	2014	2015
Total asset	10,533,754	11,500,263	11,690,183	13,260,477	12,368,160

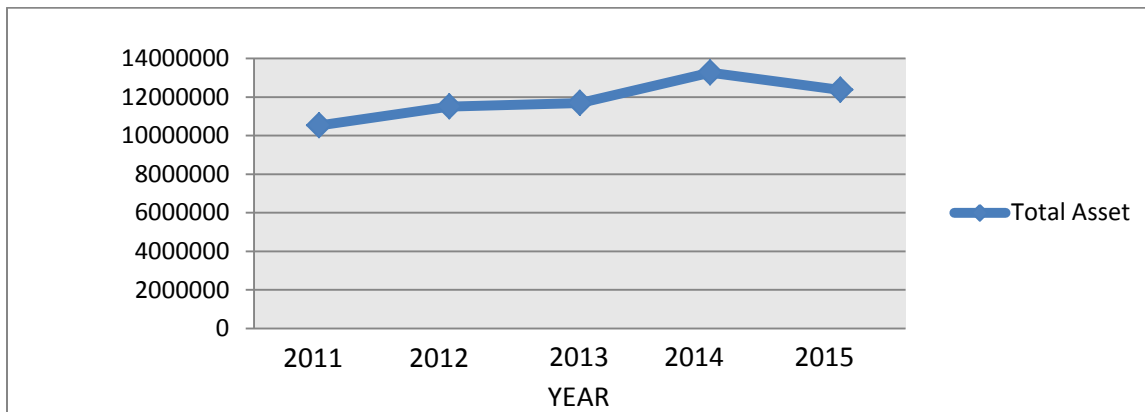


Figure 1 : Size

Based on figure 1 Petroliam Nasional Berhad (PETRONAS) it show the uptrend movement in their size by the year. We can see the total asset of PETRONAS is currently increasing by the year 2011, 2012, 2013 and 2014 which is RM10,533,754, RM11,500,263, RM11,690,183, RM13,260,477 respectively. But we can see from 2015 it started to decrease by

RM12,368,160. We can see the different is among RM892,317. In 2015 the PETRONAS may have some problem such as economic decline. The decreasing of their total asset will give negative impact to the company itself and their investor.

3.2 PERFORMANCE

3.2.1 Operational Risk

Year	ROA	ROE	Profit Margin Ratio
2011	0.10	0.13	0.39
2012	0.13	0.16	0.41
2013	0.12	0.15	0.40
2014	0.14	0.17	0.42
2015	0.19	0.21	0.61

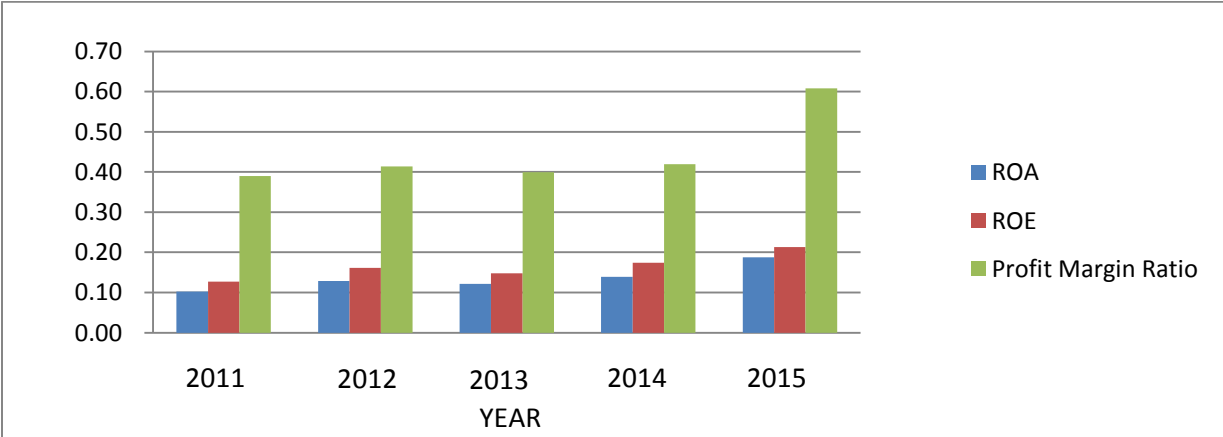


Figure 2 : Operational Risk

Based on the above figure, Petroliaim Nasional Berhad (PETRONAS) Return on Asset (ROA) was started to increase in 2011 and 2012. These happen because the company increasing their asset in the company. For example, in year 2011 and 2012, the company would increase their fixed for the purpose use of the company. In 2013 the ROA shows some decreasing about 0.01 between 2012 which is 0.12 due to their losses in fair value in their financial instrument which is make company losses from the other year. For the year 2014 and 2015, it started to increase back after their losses in 2013. From this two year, we can see that how company can make their profit relatively to the total assets of the company itself. For the year 2014 and 2015, the total asset was increase is because of their property, plant equipment and cash will be the first

factors that influence their total asset. Besides, the number of their administrative and the expenses also increase and give the big influence to this company. For PETRONAS itself, based on the five year of ROA we can see that the highest ROA is in 2015 which is 0.19. It will show how the companies perform well and effectively to convert their money that they have into the net income. In this year, the higher of their ROA, is much better. It is because it will show that the companies are making much money on less in the investment. In addition, the companies also make a better choice in order to allocate their resources. Everyone can make their profit in the company by putting the money when they have a problem, but there is less of managers will make a huge profit with the less investment.

Based on the above figure, Petroliam Nasional Berhad (PETRONAS) Return on Equity (ROE) was started to increase in year 2011 and 2012 which is 0.13 to 0.16. In 2013 the ROE show the decreasing about 0.01 which is back to 0.15. This show that the company are less on ROE because of some factor. We can assume that their management is not efficiency in order t utilizing the equity to generate the better return to the outsider investor. From 2014 and 2015, the ROE show the increasingly in their net income. In 2014 and 2015 the ROE show 0.17 and respectively to 0.21. Based on five years, the highest ROE are shown in 2015 which is 0.21. Its mean that the amount of their net income returned are reflected in the percentage of the investor equity. From the year 2015, ROE also shows the profitability of PETRONAS company show how much of their profit in the company PETRONAS itself generated the money that receive by their shareholder was invested. By that, PETRONAS earned more profit from the other year.

Lastly, based on the above figure, Petroliam Nasional Berhad (PETRONAS) Profit Margin Ratio show the uptrend from the year 2011 and to 2012. In year 2013 it show some downtrend to 0.40. It happen because, the company has a lower sales that make a company suffering because of their high expenditure and internal management problem. But, from the 2014 and 2015 the figure show that the profit margin started to increase about 0.42 to 0.61. From the above five year, we can see that the PETRONAS was effectively converting their sales into the profit of the company itself. In 2015, the companies also make a good selling and also make a good profit that will relates it to their total expenditure.

3.2.2 Liquidity Ratio

Year	Current Ratio	Quick Ratio	Cash Ratio
2011	5.72	5.72	4.29
2012	1.91	1.91	1.30
2013	1.68	1.68	0.64
2014	1.63	1.63	0.81
2015	3.10	3.10	2.02

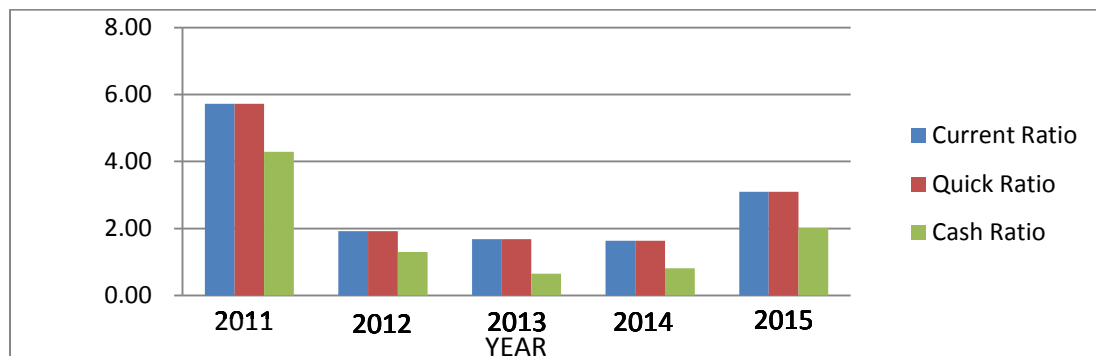


Figure 3: Liquidity Ratio

Based on the above figure 3, liquidity ratio is consisting three type of ratio that use to see the liquidity of Petroliam Nasional Berhad (PETRONAS). The ratios have been use is current ratio, quick ratio and cash ratio. For the PETRONAS itself, the current ratio show the uptrend in 2011. It started to increasing in the year 2011 which is the value is 5.72. In year 2012, 2013 and 2014 the trend shows decreasing by 1.91, 1.68 and 1.63 respectively. In 2015 the graph show the value is 3.10. From the above graph, we can see that PETRONAS Company has a bad financial health because year by year it started to decreasing. This current ratio also show that the have a small number of asset proportion. It also show that the company didn't have the ability to pay the their short term and long term requirements.

From the above figure, the quick ratio also show the downtrend. The quick ratio for Petroliam Nasional Berhad (PETRONAS) is increase in 2011 which is the value is 5.72. In 2012, 2013 and 2014 it started to show the downtrend and it continuously decrease from 1.91, 1.68 and 1.63 respectively. In 2015, the graph show that the quick ratio started to increasing back from the other year which is the value is 3.10. From the above graph, the quick ratio cannot

meet the short term financing of this company because lack of liquid asset to cover their current liabilities of the company itself.

Based on the above figure 3, the cash ratio of Petroliam Nasional Berhad (PETRONAS) show the uptrend in 2011 which is the value of cash ratio s 4.29. At the year 2012, 2013 and 2014, the cash ratio shows that it have downtrend because it started to show the decreasing of the cash ratio by 1.30, 0.64 and 0.81 respectively. In 2015 it started to show some increasing in the cash ratio by 2.02. By that, we can see the company’s liquidity that will continue to refines the current ratio and also quick ratio. It will measure the amount that the company have, and also the cash that equivalent to cover the current liabilities of this company.

3.2.3 Credit Risk

Year	Debt to Equity Ratio	Debt to Asset Ratio	Interest Coverage Ratio
2011	0.24	0.19	88.01
2012	0.25	0.20	94.64
2013	0.22	0.18	36.69
2014	0.25	0.20	30.85
2015	0.14	0.12	24.97

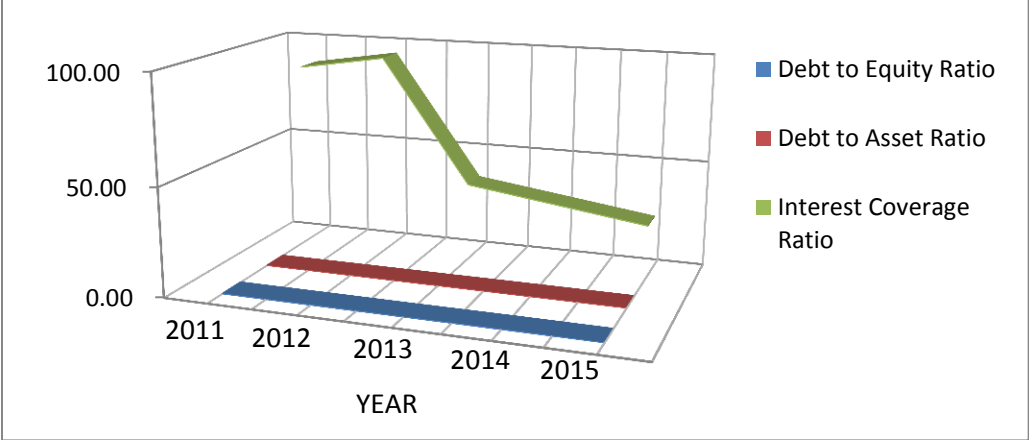


Figure 4 : Credit Risk

Based on the above figure 4, it consists in three ratios in order to measure the credit risk in the company Petroliam Nasional Berhad (PETRONAS). The three credit risks are debt to equity ratio, debt to asset ratio and interest average ratio. From the above graph the trends show that the debt equity ratio shows the uptrend from 2011 and 2012 which is 0.24 and 0.25 respectively. At the year 2013 it started to show some increasing about 0.01 which is the value

0.24. In 2014, the debt equity ratio started to increase by 0.25 higher than the two year before. At the year 2015, the value of the debt equity ratio is the smallest from the previous year which is 0.14. From the above figure we can see that the companies have a huge debt in 2012 and 2014 in order to finance their asset that are relates to the value that show in shareholder equity.

Next, for the debt to asset ratio in figure 4 show an increasing in Petroliam Nasional Berhad (PETRONAS). It shows the uptrend in year 2011 and 2012 which represented the value of 0.19 and 0.20 respectively. In year 2013 the debt asset ratio show decreasing value about 0.01 which is 0.18. At the year 2014 its started to increasing from 0.18 to 0.20. The above figure also shown that the smallest values are in 2015 which are 0.12. From the five years above, it indicate that the higher the value shows the more leverage and more unsafe to the company.

From the above figure 4, it shows the interest coverage ratio for Petroliam Nasional Berhad (PETRONAS). The trend of the above ratio is showing the uptrend in 2011 and 2012. The value is 88.01 and 94.04. After the two years is started to show some decreasing in year 2013, 2014 and 2015. The value is 36.69, 30.85 and 24.97 respectively. The interest coverage ratio is used in order to see that the company can pay their interest expenses in the outstanding debt. From the above figure, in year 2015 the companies are being burdened and suffered by their debt expense.

3.2.4 Growth Domestic Product (GDP)

Years	GDP	Inflation	Exchange rate	Unemployment
2011	5.3	3.2	3.17	3
2012	5.5	1.7	3.06	3
2013	4.7	2.1	3.28	3
2014	6	3.1	3.5	3
2015	5	2.1	4.29	3.3

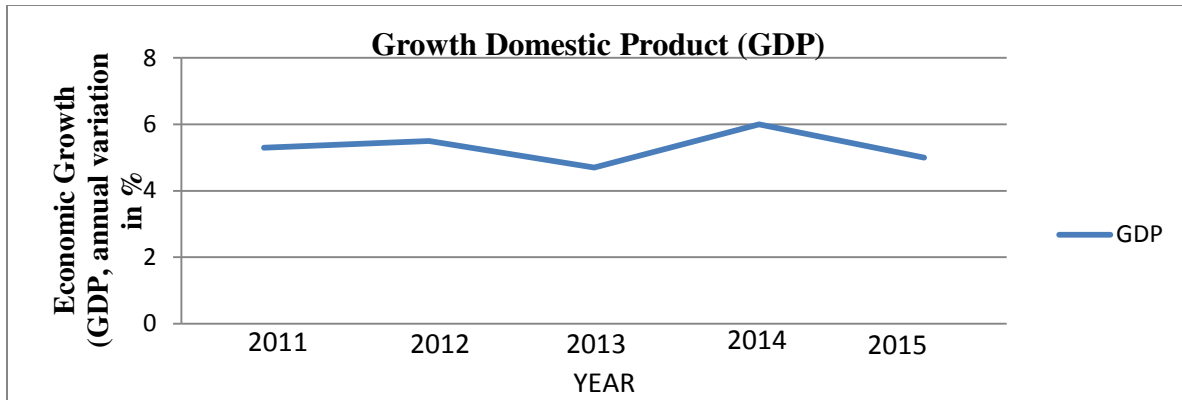


Figure 5: Gross Domestic Product (GDP)

The Gross Domestic Product (GDP) is determined by the monetary value of the final goods and also the services which is produced by our country boundaries itself and have a specific time dated. From the GDP it will be calculated in annual basis. It also includes all privates and public consumption, government outlays, investment in exports and import that are occur. GDP is also a broad measurement of the nation's includes in economic activity.

From the above figure 5, The GDP in year 2011, was decrease by 5.3%. It happens because the activity that comes from black market activity that are happen behind the employment which is not reported to the government.

For year 2012, the GDP is increased from the past year which is 5.5%. It is because when the GDP is high it means the country in 2012 are increasing the number of production that are take part in the economy and their populations have generate high income and also spend more. For year 2013, the GDP become decrease from the past year and have a value 4.7%. The recession occurs because it have some unemployment and having some crisis in that year. For year 2014, the GDP become increase by this year because the aggregate value of production in economy was increase and also increase in income. GDP also increase in this year because of lifestyle of the citizens. For example, the rich people spending more money on expensive things such as clothes, automobile that are imported from abroad. For the year 2015, it seems the GDP back to decrease to the value 5%.

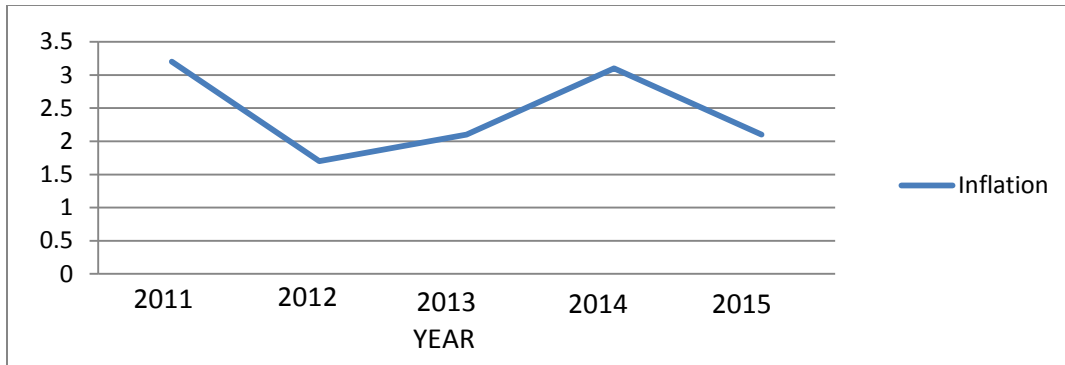


Figure 6 : Inflation

From the figure 6, the inflation in year 2011, the inflation is 3.2% is the most higher among the five years. It is because the demands occur for the goods and services in the economy rises rapidly than the economy productivity capacity. In year 2012, 2013, 2014 and 2015 the inflation decreases from the year 2011 which is 1.2%, 2.1%, 3.1%, 2.1% respectively. It happens because the prices may fall because of the supply of the goods become higher than the demands for the goods. This happen because the reducing in money by the citizens, credit and also consumer spend less.

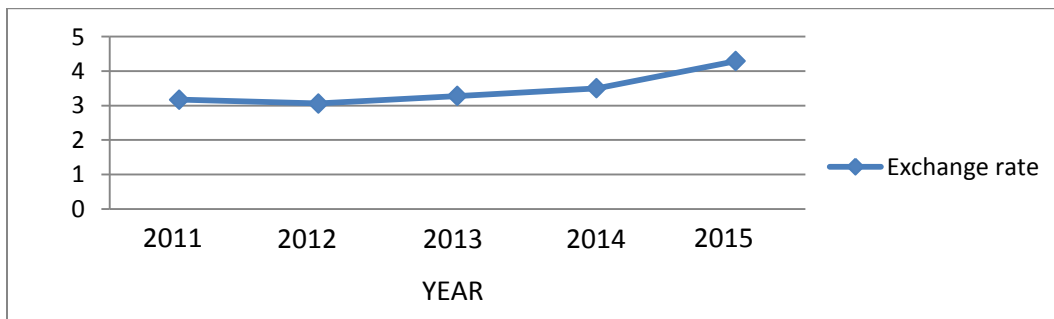


Figure 7: Exchange Rate

From the figure 7, it show the increasing among the five years. From the year 2011, the value is 3.17%, year 2012 the value is 3.06%, year 2013 the value is 3.28%, year 2014 the value is 3.5% and year 2015, the value is 4.29%. From the five years, the highest exchange rate is in 2015. It happens because the countries increase the trade in the exports price increase. This will result in higher revenue that will give impact for the demand in country currency and it will increase the currency value.

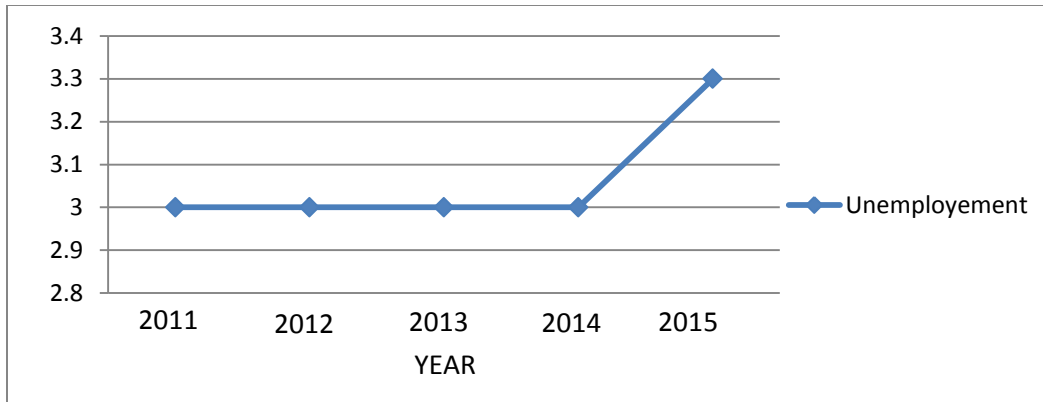


Figure 8: Unemployment

From the above figure, the unemployment shows the uptrend year by year. From the year 2011, 2012, 2013, 2014 it remains constant for the value of 3%. In year 2015, the unemployment in 2015 increase by 3.3%. This happen because the workers and company did not adapt the changing in demand nowadays. As a result it will increase the unemployment year by year.

4.0 DISCUSSION AND RECOMMENDATION

4.1 DISCUSSION

The finding of this study shows in table, 8 out of the 16 items was significant. The first significant is index score with positive ROA. Next, the significant is remuneration, size, ROE, profit margin ratio, Debt to equity ratio, Debt to asset ratio, exchange rate and unemployment. All of these items are the mostly significant to the ROA.

Pearson Correlation	ROA	Index score	Remuneration	Size	ROE	Profit Margin Ratio	Current Ratio	Quick Ratio	Cash Ratio	Debt to Equity Ratio	Debt to Asset Ratio	Interest Coverage Ratio	GDP	Inflation	Exchange rate	Unemployment	
ROA	1.000																
Index score	0.584	1.000															
Remuneration	0.742	0.961	1.000														
Size	0.616	0.735	0.856	1.000													
ROE	0.989	0.651	0.799	0.701	1.000												
Profit Margin Ratio	0.952	0.342	0.516	0.374	0.902	1.000											
Current Ratio	-0.285	-0.939	-0.847	-0.688	-0.377	-0.004	1.000										
Quick Ratio	-0.285	-0.939	-0.847	-0.688	-0.377	-0.004	1.000	1.000									
Cash Ratio	-0.287	-0.933	-0.852	-0.696	-0.371	-0.012	0.994	0.994	1.000								
Debt to Equity Ratio	-0.817	-0.234	-0.389	-0.172	-0.723	-0.922	-0.086	-0.086	-	1.000							
Debt to Asset Ratio	-0.827	-0.238	-0.395	-0.181	-0.735	-0.930	-0.085	-0.085	0.045	-	1.000	1.000					
Interest Coverage Ratio	-0.645	-0.551	-0.720	-0.764	-0.638	-0.532	0.436	0.436	0.507	0.569	0.567	1.000					
GDP	-0.097	0.000	0.040	0.426	0.025	-0.252	-0.119	-0.119	-	0.586	0.570	0.166	1.000				
Inflation	-0.359	-0.635	-0.482	0.025	-0.352	-0.307	0.514	0.514	0.485	0.327	0.326	-0.042	0.468	1.000			
Exchange rate	0.930	0.330	0.550	0.518	0.883	0.953	-0.027	-0.027	-	-0.898	-0.904	-0.730	-0.198	-0.090	1.000		
Unemployment	0.909	0.250	0.427	0.274	0.841	0.992	0.093	0.093	0.059	0.078	-0.954	-0.960	-0.502	-0.339	-0.284	0.944	1.000

Sig. (1-tailed)	ROA	Index score	Remuneration	Size	ROE	Profit Margin Ratio	Current Ratio	Quick Ratio	Cash Ratio	Debt to Equity Ratio	Debt to Asset Ratio	Interest Coverage Ratio	GDP	Inflation	Exchange rate	Unemployment
ROA																
Index score	0.151															
Remuneration	0.076	0.005														
Size	0.134	0.079	0.032													
ROE	0.001	0.117	0.052	0.093												
Profit Margin Ratio	0.006	0.287	0.186	0.268	0.018											
Current Ratio	0.321	0.009	0.035	0.100	0.266	0.497										
Quick Ratio	0.321	0.009	0.035	0.100	0.266	0.497	0.000									
Cash Ratio	0.320	0.010	0.033	0.096	0.270	0.492	0.000	0.000								
Debt to Equity Ratio	0.046	0.352	0.259	0.391	0.084	0.013	0.445	0.445	0.471							
Debt to Asset Ratio	0.042	0.350	0.255	0.385	0.079	0.011	0.446	0.446	0.471	0.000						
Interest Coverage Ratio	0.120	0.168	0.085	0.066	0.123	0.178	0.232	0.232	0.191	0.158	0.159					
GDP	0.438	0.500	0.475	0.237	0.484	0.341	0.424	0.424	0.464	0.150	0.158	0.395				
Inflation	0.277	0.125	0.206	0.484	0.281	0.308	0.188	0.188	0.204	0.296	0.296	0.473	0.213			
Exchange rate	0.011	0.294	0.168	0.185	0.023	0.006	0.483	0.483	0.463	0.019	0.018	0.081	0.375	0.443		
Unemployment	0.016	0.343	0.237	0.328	0.037	0.000	0.441	0.441	0.451	0.006	0.005	0.194	0.289	0.322	0.008	

Table 1: Correlation Matrix

Based on the above table, the items that can influence the ROA have 3 items that were involved. ROA is positively significant with ROE. When the equity increases, the profit for the company also increases. It is because the ROA and ROE have a positive value which is $p < 0.001$. The debt to asset ratio is negatively significant because the t value is -227.704 and the value is not relevant and does not influence the ROA. Even though the debt to asset ratio is not significant, it does not give the impact to profit to the company. In profit margin ratio, the revenue gives influence to the company because it has a positive significant. From the sales, it will generate the profit to the company.

Coefficients ^a									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
3	(Constant)	0.023	0.000		99.888	0.006			
	ROE	0.786	0.001	0.794	1234.764	0.001	0.989	1.000	0.260
	Debt to Asset Ratio	-0.158	0.001	-0.172	-227.704	0.003	-0.827	-1.000	-0.048
	Profit Margin Ratio	0.027	0.000	0.0076	64.360	0.010	0.952	1.000	0.014

Table 2 : Coefficient

4.2 RECOMMENDATION

From the above, the recommendation that should be included in order to improve the company profitability is by improving the current ratio of the company by using the sweep accounts which transfer the resources into the higher interest rate when the company does not need and ready to access the account when it is needed. In other words, the company should pay off the liabilities. Next, the companies also need to improve the quick ratio in order to maintain the profit in the company. For example, the companies need to have a good relationship with the stakeholder in order to extend their support. The companies need to keep it up, the ratio controlled and managed well. Besides, to improve the quick ratio, the company must pay to the creditor all the liabilities faster and quickly on the loans. For the company, it is better when the lower current liability it will produce the quick ratio.

5.0 CONCLUSION

All in all, the company profitability can be effective by many aspects. For example, the income that the company generates must be exceeding from the expenses. Besides, the company should have an effective management in order to go for long-term growth of the company. For example, if the companies have a successful management among their cooperation it will give good impact to the company itself. For instance, the profitability of the company can be seen by how well their management manages the company performance, operational risk, liquidity risk and credit risk. It will show significant that influences between with clear understand about the risk creation in the company. Thus thorough the understanding risk in each mode of performance in the company, this will allow the management to manage their risk internally. Hence, it will able to provide the liquidity option in order to seek the liquid solution.

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