The Relationship between Profitability and the Risk Factors and other Macroeconomic Factors

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Abstract

This study is conducted to investigate the overall performance of Cocoaland Holdings Berhad based on determined risk elements and some other macroeconomic elements to evaluate the profitability performance of the company. The data in this study retrieved from the annual report of the company starting year 2011 until year 2015. This study consists of credit risk ratio, liquidity ratio, profitabilty ratio and operational risk ratio that used to measure the company's profitability. The risk elements that affects the profitability of the company studied using liquidity (quick) ratio, GDP and the operating ratio. The results scrutinized based on regression and bivariate correlation analysis.

Keywords : Firms specific factor, liquidity risk, profitability and macroeconomic factor

1.0 Introduction

1.1 Background of the study

Food industry is the most promising industry in the world. It generates a high percentage of profit for a country. Same goes to Malaysia. Coumpound annual growth rate (CAGR) of Malaysia from the year 2008 until 2012 is 4.6% and it is forecasted to be grow to 5.3% in the year 2017. (Foodservice Profile, 2014). Euromonitor (2013) stated that, due to the price levels of the raw material increase, the subsidy reduce and the heightening in the production cost the foodservice operators has been forced to increase the prices in 2012. Moreover, the food service sector is valued below US$10billion in 2012. According to Euromonitor (2014), the total consumer foodservice is increasing from US$8,358.8million in 2008 to US$9,989.9million in 2012 and it is expected to grow to US$12,939.1million in year 2017. In addition, Euromonitor (2014) also said that the Malaysian foodservice sector had totaling 30,721 outlets all over the Malaysia and recorded more than 1.3billion transaction in the year 2012.

Liquidity is the ability of a company in trading the securities and assets without affecting the asset's price which enable the individual or company meet their financial obligations based on the liquid assets they have (investopedia, 2017). The inability of company in fulling this obligation may occur if inefficient market created as it lacks of conversion asset occurred and asset value losses, this called as liquidity risk (Investopedia, 2016). Therefore, the liquidity is an important factor to measure a company performance. Meanwhile, the sustainability of a company is measured based on operational ratio and if there is a failure in internal operational of the company, then the company may face operational risk exposure where it is determined as the unsystematic risk in nature (Investopedia, 2017).

The risk itself has unknown outcome in the future, since the risk is a parameter that can influence other conditions in firm such as profit, efficiency, etc

(Hoseininassab, E., Yavari, K., Mehregan, N., & Khoshsima, R., 2013). Therefore, this study conducted to determine the manufacturing specific risk factors and macroeconomic factors on profitability performance.

This study consists of four parts. In the next partl researchers will provide the outline of review about the topic, literature review of previous study about this research. The next part will discuss about the descriptive findings which examine the manufacturing specific risk factors and macroeconomic factors on profitability performance and includes the Cocoaland Holdings Sdn Bhd overall performance. The last part contains some discussion, recommendation, and conclusion to the Cocoaland Holdings Sdn.Bhd.

2.0 Literature Review

Net profit is a essential part in a company's income statement. There are many people depends on net profit to evaluate the company's position such as owners, investors, creditors, competitors and the government. Cocoaland's net profit is increasing each year and recorded a high net profit recently. According to Say, T. L (2015), he stated that Cocoaland's net profit was up 134.7% that equivalent to RM8.01mil in the first quarter of March in 2015. This created a good image on the company. Thus, in the competition of take over the Cocoaland company, Hong Kong-listed First Pacific has successfully acquire the entire company with RM2.70 per share or RM463.32million in cash after Cocoaland rejected the offer from Navis Asia BII Management Company Ltd for RM2.20 per share or RM377.52 million in cash (Sunbiz,2015).

Profitability ratio is playing a major role in conducting a business in term of financial position. Meanwhile liquidity ratio also been concerned by stakeholders in making decision. The suppliers will make sure of the company's liquidity before

having a credit trading relationship with the company because liquidity ratio gives the supplier a secure in order to get back their money. Apart from that, employees also concerned about the liquidity of the firm so that the company can fulfill the employee based obligations. (Ghazali 2008 cited Waemustafa.W,. and Sukri. S,. 2016), found a positive relationship between liquidity and Return on Assets (ROA). Based on previous studies Waemustafa.W,. and Sukri. S,. (2016), they aslso stated that the liquidity and ROA has a significant positive relationship. (Kosmidou and Pasiouras,2005). Meanwhile, the study by Choon et al (2012 cited Waemustafa.W,. and Sukri. S,. 2016), said that liquidity is negatively significant to ROA. This can be seen through the financial statement of Cocoaland Holdings Sdn Bhd.

Further study conducted to analyze the relationship between liquidity risk and Islamic and Conventional banks in Malaysia by (Waemustafa, W., 2016). The result showed that the mean percentage is the tool to measure the liquidity performance of Islamic bank compared to Conventional bank . The liquid variable is measured by cash + short term market securities to total bank asset. The lack of lender last resort, interbank money market and the asset and liability structure of Islamic bank is the power of this factor which forced the Islamic bank to maintain an adequate liquidity provision to fulfill the expected loss from Islamic bank' financing activities. Moreover, both risk and profit shared among Islamic banks and their customers are allowed in terms of its asset and liability structure of profit and loss sharing-based investment account allows .

Another study by Waemustafa, W and Abdullah, A. (2015) investigated whether there is any significant influence between Shariah supervisory boards and their remuneration towards Islamic banks choices in financing mode. The study used 18 Islamic banks from the year 2012 to 2013 which operated in Malaysia and analyzed. The study reveal that the Shariah supervisory board may determine the mode preference of financing toward BBA and 6 | P a g e Murabahah, however the SSB effectiveness does not have significant relationship into the financing mode but the remuneration have significant relation to the choice of Islamic financing mode where the notion lead to "cosmetic reason"

3.0 Descriptive Analysis

3.1 Average Collection Period

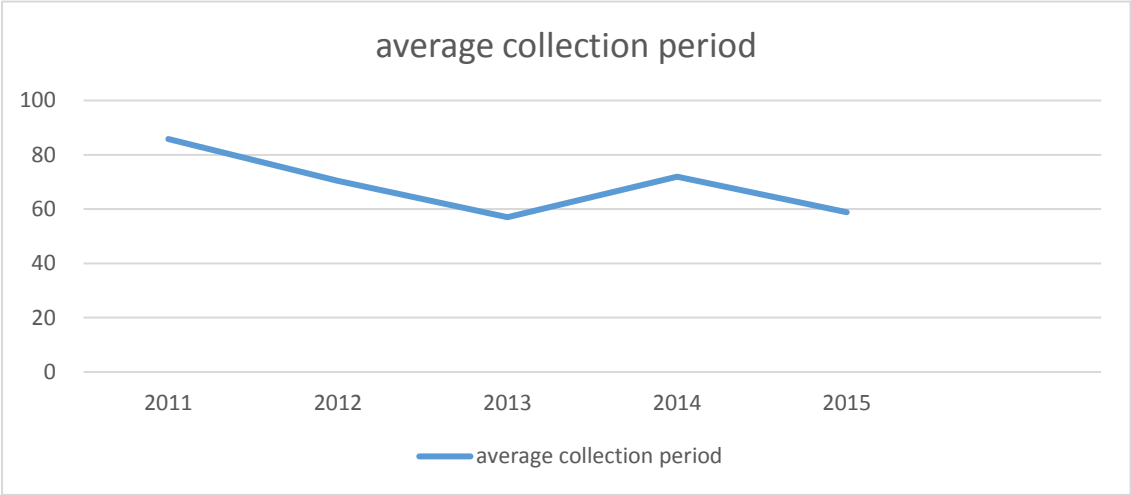

Figure 1 : Average Collection Period

Before the overview trend analysis of the ratio, the formula of the ratio for year 2011-2015 can be calculated as following :

Average collection period = Trade receivables / (Revenue / 365)

Year	Acc receivable	Revenue	Days	average collection

				period
2011	**40,903,781**	**173,993,856**	**365**	**86**
2012	**43,025,967**	**223,207,717**	**365**	**70**
2013	**39,743,213**	**254,449,588**	**365**	**57**
2014	**51,358,862**	**260,760,337**	**365**	**72**
2015	**42,177,720**	**261,645,476**	**365**	**59**

Table Result 1. Descriptive Results

According to figure 1, the average collection period is considered stable. There was a rapid drop in the number of days of average collection period from year 2011 (86 days) until 2013 (57 days). It shows a good sign for the company which means the company is able collect the cash from customer within 57 days in the year 2013. But then the average collection period plunged in the year 2014 about 14 days. We can deduce that the company is facing some difficulties in collecting cash from their account receivables. Again in 2015 the average collection period dropped from 72 days to 59 days. The shorter the collection period may positively effect the short-term debt paying ability of the company. Thus, we can conclude that year 2013 is the most effective year in term of average collection period and the company able to maintain the credit risk not more than 86 days so that the performance of the company increase.

3.2 Quick Ratio

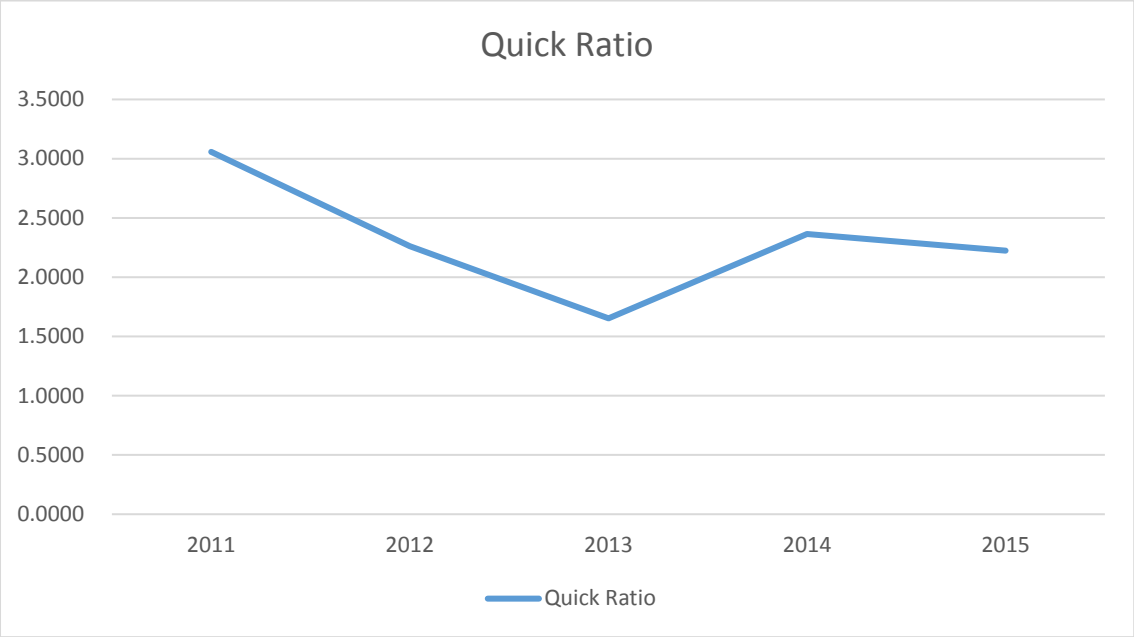

Figure 2 : Quick Ratio

Before the overview trend analysis of the ratio, the formula of the ratio for year 2011-2015 can be calculated as following :

Quick Ratio = (Current Assets - Inventories) / Current Liabilities

Table Result 2. Descriptive Results

Year	Current Asset	Inventories	Current Liabilities	Quick Ratio
2011	**118,005,982**	**25,335,686**	**30,307,760**	**3.0576**
2012	**118,640,025**	**32,418,122**	**38,108,128**	**2.2626**
2013	**105,142,450**	**39,970,063**	**39,430,415**	**1.6528**
2014	**122,496,200**	**38,164,927**	**35,662,930**	**2.3647**
2015	**121,464,228**	**35,868,038**	**38,484,858**	**2.2242**

Quick ratio is the measurement of how well the company can fulfill their short-term financial obligations. Referring to figure 2, the company is able to meet their short-term obligations more efficient in year 2013 compared to year 2011. The quick ratio decreased from 3.06 in the year 2011 to 1.65 in the year 2013. Then, it slightly increase in the year 2014 and 2015. In short, lower quick ratio means the company's cash flows are stable and predictable. From the figure 2, it shows year 2013 has the lowest quick ratio meanwhile year 2011 is the highest. So, we can induce that lately the company is well managing its liquidity risk because low quick ratio is the best for the company.

3.3 Return on Asset

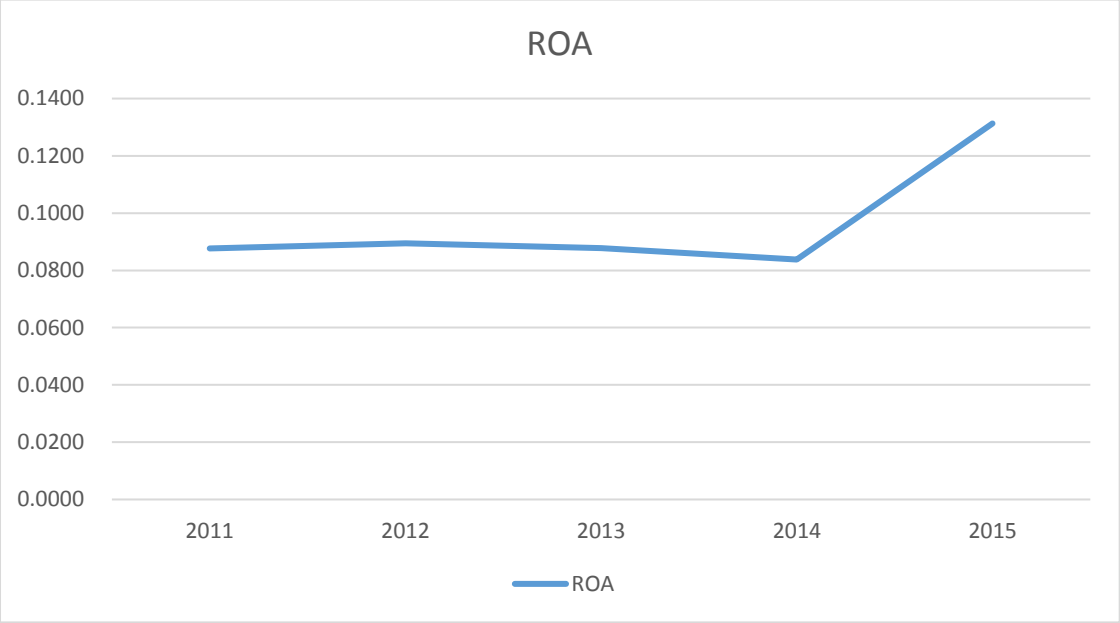

Figure 3 : Return On Assets

Before the overview trend analysis of the ratio, the formula of the ratio for year 2011-2015 can be calculated as following :

ROA = Net Income / Total Assets

Table Result 3. Descriptive Results

Year	Net Income	Total Asset	ROA
2011	19,192,020	219,050,224	0.0876
2012	21,218,139	237,320,735	0.0894
2013	22,129,042	252,075,670	0.0878
2014	21,921,484	261,633,874	0.0838
2015	32,969,674	251,106,716	0.1313

Return on asset is very important for a company because it determine how efficient the company can produce profit using its assets. Since high return on assets is better for a company, so that the company can generate more profit with the assets they have, it can be said that Cocoaland Holdings is producing more profit based on return on asset ratio. It can be proven as the figure 3 shows a strong and steady growth during year 2011 until 2015. After a stable growth throughout the years 2011 to 2014, it soot up in the year 2015 from 8.38% to 13.13%. Thus, we can conclude that the company performance is getting better each year based on the graph of return on assets.

3.4 Operating Ratio

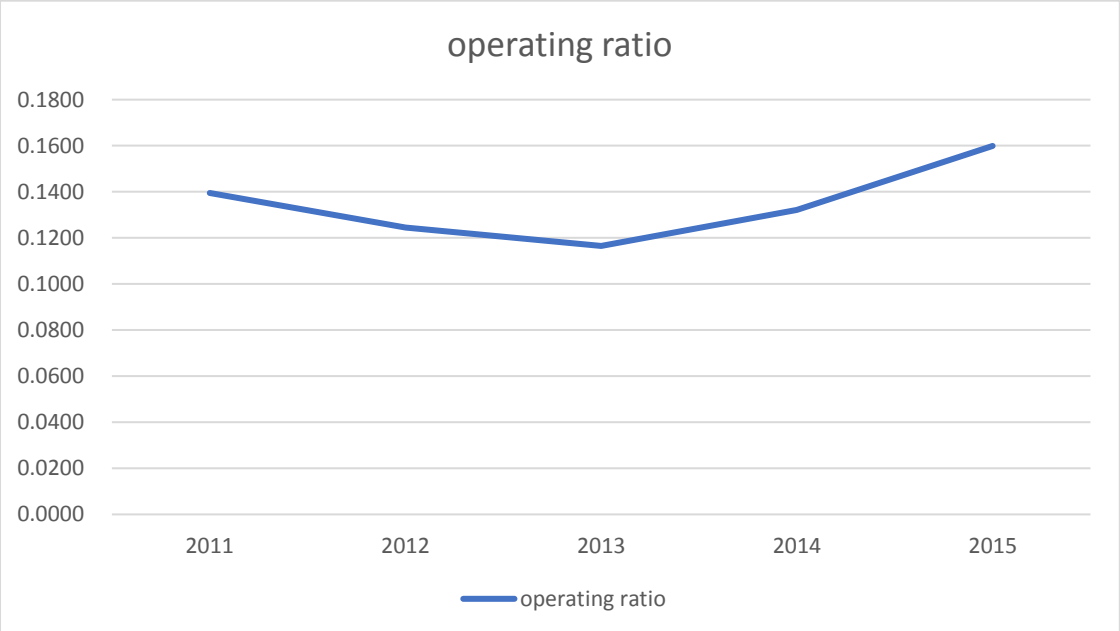

Figure 4 : Operating Ratio

Before the overview trend analysis of the ratio, the formula of the ratio for year 2011-2015 can be calculated as following :

Operating Ratio = Operating Expenses / Revenue

Table Result 4. Descriptive Results

Year	Operating expenses	Revenue	Operating ratio
2011	**24,276,378**	**173,993,856**	**0.1395**
2012	**27,779,550**	**223,207,717**	**0.1245**
2013	**29,645,789**	**254,449,588**	**0.1165**
2014	**34,457,216**	**260,760,337**	**0.1321**
2015	**41,836,944**	**261,645,476**	**0.1599**

Operating ratio identify the relationship between fixed cost and production or sales volume. According to figure 4, it can be induced that the operating ratio is slightly decreasing throughout the years 2011 until 2013 but then it started to increase from the year 2014 from 0.12 in year 2013 to 0.13 and 0.16 in the year 2014 and 2015 respectively. It means Cocoaland is earning more throughout the sales. In short, the company is well diversifying its operational risk lately which can give better profit in future.

3.5 Relationship of GDP, Liquidity, Operational to the Profitability

Table Result 5. Descriptive Results

ROA (%)	ROE (%)	ROIC	ROCE	EPS	Liquid (quick ratio)	Operate (%)
8.76%	**13.81%**	**8.96%**	**10.17%**	**11.18**	**3.06**	**13.95%**

8.94%	10.82%	3.76%	10.65%	12.36	2.26	12.45%
8.78%	10.66%	5.36%	10.41%	12.85	1.65	11.65%
8.38%	10.04%	4.76%	9.70%	9.58	2.36	13.21%
13.13%	16.27%	-7.36%	15.51%	14.3	2.22	15.99%

Total Asset	Total Equity	Net Profit Margin	Dividend	EBIT	GDP %
219,050,224	138,962,602	19,192,020	6,735,295	21659426	5.3
237,320,735	196,159,607	21,218,139	13,727,996	27990271	5.5
252,075,670	207,563,655	22,129,042	10724995	29277491	4.7
261,633,874	218,331,144	21,921,484	11,153,995	30644291	6.0
251,106,716	202,680,654	32,969,674	48,620,164	44761136	5.0

Table Result 6. Correlation Matrix Cocoaland Holdings Sdn Bhd Specific Risk Determinants to Profitability

Pearson Correlation	ROA	ROE	ROIC	ROCE	EPS	Liquid	Operate	GDP
ROA	1							
ROE	0.848	1						
sig	0.690							
ROIC	0.350	0.768	1					
sig	0.563	0.130						
ROCE	0.999	0.833	0.320	1				
sig	0.000	0.080	0.600					
EPS	0.766	0.607	0.157	0.795	1			

sig	0.131	0.278	0.801	0.108				
Liquid	-0.109	0.342	0.610	-0.143	-0.425	1		
sig	0.862	0.574	0.275	0.818	0.475			
Operate	0.834	0.901	0.620	0.806	0.349	0.412	1	
sig	0.079	0.037	0.264	0.099	0.564	0.491		
GDP	-0.395	-0.398	-0.323	-0.419	-0.801	0.450	-0.015	1
sig	0.510	0.507	0.596	0.483	0.103	0.447	0.981	

Table Result 7. Coefficient Stepwise Regression analysis for Cocoaland Holdings Sdn Bhd Specific Risk Determinants to Profitability

Variables	Beta	t	Sig.
ROE	0.053	0.949	0.443
ROIC	0.032	0.282	0.804
EPS	-0.074	-2.346	0.144
GDP	0.028	0.789	0.513
Liquid	0.035	1.228	0.344
Operate	0.080	3.058	0.092

3.5.1 Liquid to Profitability

Liquid is measured using quick ratio with P value > 0.10 which implies that liquid have negative and insignificant relation to the profitability in all respective variables of the measurement. This shows that the company is having low quick ratio which can give more profitability to the company. Since Cocoaland is selling food products, the inventories will be sold in credit. By deducting inventories from current asset, we can

exactly know how liquidity is the company. From the table result 6, it can be seen that Cocoaland is well diversifying the quick ratio in order to obtain more profit.

3.5.2 GDP to Profitability

As a part of macroeconomic factor, the GDP variable tested with P value > 0.10 indicates insignificant relation to profitability. 1 out of 6 variables of profitability (liquid) shows positive insignificant relation. This implies that the liquidity will increase the demand for Cocoaland products. This could generate more income received which eventually it boosts profitability. However, 5 out of 6 variables of profitability (ROA, ROE, ROIC, ROCE, EPS) has negative insignificant relation to GDP. Although, the drop in GDP also increase the profitability and increase the demand.

Table Result 8. Stepwise Regression Analysis for Cocoaland Holdings Sdn Bhd Specific Risk Determinants to Profitability

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.999[a]	.997	.996	.0012017	2.109

a. Predictors: (Constant), ROCE

b. Dependent Variable: ROA

Table Result 8. Anova Regression Analysis for Cocoaland Holdings Sdn Bhd Specific Risk Determinants to Profitability

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.002	1	.002	1088.568	.000[b]

	Residual	.000	3	.000		
	Total	.002	4			

a. Dependent Variable: ROA

b. Predictors: (Constant), ROCE

All of the variables added after the test conducted. With the stepwise method shows that R value is 0.999 and shows a high degree of correlation between variables. R^2 is 0.997 and indicates that 99.6% of variation in ROA is explained by independent variable ROCE. In terms of relationship to profitability, for ROCE variable which it measured by operating ratio with a P-value > 0.00 indicates negative insignificant relation to profitability. However, the ROCE variable to profitability (ROA) has a positive significant relation with a P value < 0.00. This positive relation indicates that the company's ROCE can increase the profitability of company. Cocoaland company is generating more net income while increasing the ROCE. Instead of having profit, the negative relation indicates the decreases of ROCE effect the income of this company that cannot maximize the profit. However, out of 6 variables tested only one (ROA) which has significant relationship to profitability. This model is also significant with the significant of anova regression P < 0.00. In addition, OPERATE variable has the highest impact with the t value 3.058 to the profitability compared to the ROIC and EPS.

4.0 Discussion and Recommendation

4.1 Discussion

During the consecutive year 2011-2015, overall performance of Cocoaland was showing favorable in the performance result for all measurements of liquidity, average collection of period, and operation in annual basis. The effective average collection period from the account receivable to collect the outstanding debt without

any issue and the efficient operation without incurring any additional expenses are reflected to the overall performance of Cocoaland company. However, since the GDP has the result with the highest t-value= -0.395 indicates that this variable impacted much on profitability measurements. One of profitability measurement has a significant relationship which is ROA to ROCE. With this high impact of capital is empoyed to profitability and one of profitability measurement is significant relationship to ROCE. Therefore, the attention of the company into the ROCE factor should become priority on 2015 onwards beside the GDP and liquidity to enhance the profitability.

4.2 Recommendation

According to Panigrahi (2013), he stated that the adequate liquidity and a careful management of its liquidity can make significant difference between successful and failure of a firm. The maximum liquidity management can avoid a firm from 15 | P a g e having a lower liquidity ratio which can give creditors a doubtful situation because the firm is unable to meet their obligation on specified time. Therefore, some improvement should be made in terms of liquidity performance with the measurement of quick ratio. Liquidity ratio is very essential for a company because it measures the company capability in holding enough cash to purchase from suppliers with better pricing during purchasing process which can increase the company's profit. So, having liquidity affects the firm profitability based on study (Lazaridis and Tryfonidis, 2005). For more improvement, this company should diversify investment activity in order to maximize its profit. By applying liquidity management, companies can ensure themselves not suffer from the lack-of or excess liquidity to meet its short-term obligation.

Another enhancement should be implemented is the better inventory control where the company should clear up the stock of inventories in the warehouse. Generally, company is not supposed to held inventory in longer term than it has been expected to sold out or converted to cash at timely manner. By inventory control, it is useful to sell the asset in the right time because of those inventories do not sold out well in the market, the value will be drop, then the company is forced to sold that

inventory below the book value of inventory (Investopedia, 2017). This could happen in the company which afterwards the company might get lower cash generated from the inventories sold, then it does not contribute to the profitability of company.

5.0 Conclusion

In conclusion, it is clear that liquidity risk, operational risk (unsystematic risk), and systematic risk is faced to all the companies especially in the study of the manufacturing firm. Cocoaland Holdings Sdn Bhd could handle the liquidity risk and operational risk effectively and efficiently with the ratio is beyond and below the standard of benchmark. The liquidity and operational performance annually shows this company is not having problem to settle the obligation and operates efficiently that could generate more profit. In addition, to maintain the performance in 2015 onwards, from the findings, one of variable is significant (ROA) as a profitability variable to the operation with the highest impact compared to all of variables. Therefore, this company should concern more to the corporate governance to reduce any inefficiency that reducing the ability of a company in generating more profit. Also, to maintain and improve continuous profitability of this company, the implementation of liquidity management and inventory control with following the trend or cycle of market should put into consideration as a part of profitability contribution although the findings shows liquid as well as GDP is not significant to profitability.

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