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From the Selected Works of Miranti Nastiti

Spring April 17, 2017

Liquidity and Operational Risks Relationship with the Performance of Nestle Berhad

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Liquidity and Operational Risks Relationship

With the Performance of Nestle (Malaysia) Berhad

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Abstract

This paper aims to recognize the relationship between risks and performance of Nestle (Malaysia) Berhad. Nestle (Malaysia) Berhad is one of the leading company in foods and beverages manufacturing industry, therefore, knowing the risks taken by the management and the impact on the performance is important to the shareholders. The focused risks are operational and liquidity risks while the performance is indicated by profitability measurements of the company, using ROA while also taking ROE, ROIC, ROCE and EPS into consideration. Aside of the profitability, the size of company is also considered to have relationship with the risks – presented by total assets and the Malaysia's economic situation – presented by GDP growth. Pearson correlation coefficient and linear regression are used to find the relationship and significance of the chosen risk and profitability variables. Liquidity and operational risks are significant in business due to their direct and indirect relationship to profitability, therefore, this paper further examines if the management has taken appropriate decision in retaining the stated risks, reflected in the profitability and growth trend of the company.

Keywords: company performance, liquidity risk, operational risk, firm specific factor, profitability, macroeconomics.

1.0. Introduction

Liquidity refers to the ability of a company to make cash payments as they become due (Hull, 2012). Effective liquidity management in a company plays its role by maintaining the right level of more liquid assets in the entity while keeping up with its current obligations and day-to-day operations. Liquidity can be assessed using various ratios, the most common ones being the current ratio (CURRATIO), quick ratio (QR), acid test ratio (ATR), working capital ratio and times interest earned ratio. Generally, company that is more liquid gets favored by the market due to its ability to pay its obligations and lesser liquidity risk – the uncertainty of a company not fulfilling its current obligations; as the lesser the liquidity is, the higher the risk becomes.

However, keeping too much excess liquid assets in the company may raise new issue to the company. Converting excess liquid assets to profitable investments increases shareholder's value, while not converting excess liquid assets may subject them to risk of decrease in value and associated opportunity costs. Therefore, the management must decide on what level of liquidity does the company must maintain in order to be in line with its goal; which is to increase performance that leads to increasing shareholder's value. Furthermore, in order to know whether to decrease or increase liquidity in a company, the management must know the relationship between liquidity risk and performance in a company.

According to Basel Committee (2001), operational risk is the risk of loss arising from failures from internal control, systems and people or from external events. Operational risk differs according to the type of operation the company does. Nevertheless, the scope of operational risk is regarded vital and difficult to manage. Operational risks result in increases in costs or decreases in revenue (Hull, 2012), which can be caused by multiple reasons and become severe in impact to the business. Corporate governance and efficiency take a significant role in managing the operational risk.

Nestlé (Malaysia) Berhad, is a public listed company in Malaysia that engages in manufacturing and marketing food and beverages to consumers. Beginning its operation in Malaysia since 1912, headquartering in Penang, the company was listed in the Bursa Malaysia Berhad on 13 December 1989. The products sold by Nestlé have become household names in Malaysia and has strong market share position. This research will further find out

the relationship between liquidity and operational risks of the company and its performance, determinable in profitability.

2.0. Literature Review

Cifuentes, Ferrucci, and Shin (2005) stated that failure in managing liquidity risk affects several other areas. The contagious effects of liquidity risk failures make up the systemic risk in the organization, in which the stability of the overall system is at stake. Cifuentes et al. (2005) further explains that illiquidity ratio is one of the parameters that affect systemic stability. When the company's liquidity ratio is high, the company will be able to readjust the amount of assets in their balance sheet without having to lose much in the value of their less liquid possessions, or in a simpler term, the conversion of the illiquid assets into liquid assets can be done at the right price, given the elasticity of the market demand, when company has higher liquidity; thus, lowering the systemic risk that may happen to the company. Here, although company assets play a role of a capital cushion, having too many illiquid assets is less useful compared to liquid assets in terms of managing the risk due to volatile market price (Cifuentes et al., 2005).

The preference in having higher liquid assets is also discussed in the risk culture of the company. Each company has different set of risk exposures and conventional risk taking behavior is negatively influenced by level of liquidity. If the liquidity is higher, the risk exposure will be lower (Waemustafa & Sukri, 2015).

From the research conducted within Malaysian Islamic banks, Waemustafa & Sukri (2016) opine that the liquidity ratio in Islamic banks is higher compared to their conventional counterparts due to higher equity and the activity of trade financing. It can be noticed that different activities in organizations that engage in the same industry can affect the liquidity management, thus, affecting the liquidity risk and any other idiosyncratic risks possessed by each organization, which in turn, contribute to the systemic risk of the organization itself.

Meanwhile, operational risk which is the risk of loss caused by failures in people, system and internal control or from external events; can be broken down to several factors, one being the decisions regarding current assets. The most common current assets are cash, account receivables and inventories. Michalski (2008) argued about using portfolio theory in order to manage the possibility of heightening credit risk for a business due to its activity on

selling on trade credit terms to customers. However, the methods in managing operational risks varied due to the large spectrum covered in the risk.

Several studies have been conducted in finding the relationship between liquidity and operational risks to profitability, such as Deloof (2003), Waemustafa & Sukri (2016) and Cool, Dierickx, and Jemison (1989). In using working capital management to measure its relation with corporate profitability using gross operating income in 1,009 non-financial big firms in Belgium, the amount of working capital managed has a significant impact on the profitability of firms (Deloof, 2003). The findings show that there is a significantly negative statistical relationship between the compared variables. One of the finding suggests that there is a negative relationship between profitability and number of days account payable, as one compared variable. This shows that less profitable companies are more likely to take longer periods to fulfill their current obligations (Deloof, 2003). The longer time a company needs to fulfill their obligations may cause company to face higher liquidity risk. From that point, it can be figured out that liquidity risk has negative relationship with profitability. Henceforth, when a company has low profit, it may actually bear higher risk of liquidity, as it has lesser current assets in their account.

In another study, liquidity is found to have significant positive relationship with profitability, depicted by return on assets (ROA), where a company has sufficient cash reserve and at the same time is also able to generate profit (Waemustafa & Sukri, 2016), however to an extensive certainty, liquidity for financial companies is needed in order to suppress credit risk. It means that when the company is liquid, it can also generate profit, or vice versa, as which variable affecting whom is undeterminable, as supported by Deloof (2003), it cannot be ruled out that the negative relation between WCM and profitability is to some extent a consequence of profitability affecting WCM, and not vice versa. Aside of the profitability, risks in term of credit risk has negative relationship with credit risk in conventional banks and positive in Islamic banks as stated by Waemustafa & Sukri (2015).

Cool et al. (1989) found a positive relationship between operational efficiency and return, which followed by the finding that a better organizational fit should be conducive both to make a greater operational efficiency. Operational efficiency necessarily affects the operational risk, as the higher the efficiency is, the lower the operational risk possessed by the company.

The decision of managing and financing the company which affect the amount of current liabilities and long-term debts, however, is not only made solely by the management, but also with the approval from the board of directors or any authorized boards. The stated effective corporate governance issue which affects the managerial decisions in the company was brought up by Waemustafa & Abdullah (2015) in the case of Islamic bank financing with the Shariah Supervisory Board that effective SSB does not have significant bearing towards the choice of Islamic mode of financing, while remunerative does. This creates concern regarding the function of corporate governance and internal control which seriously affect the decisions that are determining the level of operational and liquidity risks a business is taking.

3.0. Descriptive Findings

The data used are collected from Nestle’s financial statement from the year of 2011 to 2015 available from Datastream and Bursa Malaysia. Pearson correlation is used to measure the relationship between liquidity risk in the form of current ratio (CURRATIO) and operational risk in the form of operating ratio (OPRATIO) with company size in terms of total assets (TA) and profitability in the forms of return on assets (ROA), return on equity (ROE), return on invested capital (ROIC), return on capital employed (ROCE) and earnings per share (EPS). CURRATIO measures the ability of the company to pay for its current obligations given the size of its current liabilities. OPRATIO measures how efficient does the management manage its operational expenses to its net sales.

In the profitability side, ROA measures how much of a return the company can generate given the level of total assets that it has; ROE measures how much of a return of company can generate in the period given on the total equity that the shareholders invest; ROIC measures how much of a return a company can generate in the period given the level invested capital in the company; ROCE measures how much of profit the company can generate in terms of employed capital and lastly, EPS measures how much profit the company can give to the shareholders. The extracted data are as followed:

Table 1 Selected Financial Data of Nestle Berhad FY 2011 - 2015

Total Assets (TA)	Current Assets (CA)	Current Liabilities (CL)	Current Ratio (CUR RATIO)	Net Sales	Operating Expenses (OE)	Operating Ratio (OPRATIO)
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2011	1,992,841	1,015,064	914,740	1.11	4,700,994	957,658	0.204
2012	1,872,757	840,703	929,392	0.9	4,556,423	898,298	0.197
2013	2,062,959	929,987	1,071,862	0.87	4,787,925	960,543	0.201
2014	2,275,338	893,350	1,306,084	0.68	4,808,933	972,801	0.202
2015	2,477,262	1,015,412	1,524,627	0.67	4,837,957	1,071,330	0.221
	EPS (cent)	ROA	ROE	ROIC	ROCE	GDP Growth	
2011	182.1	22.90%	71.20%	46.63%	63.24%	5.30%	
2012	215.5	26.98%	67.27%	59.71%	80.50%	5.50%	
2013	239.5	27.23%	71.66%	65.52%	85.72%	4.70%	
2014	234.7	24.19%	69.08%	61.09%	86.54%	6%	
2015	251.9	23.85%	79.52%	61.57%	93.13%	5%	

3.1. Trend Analysis

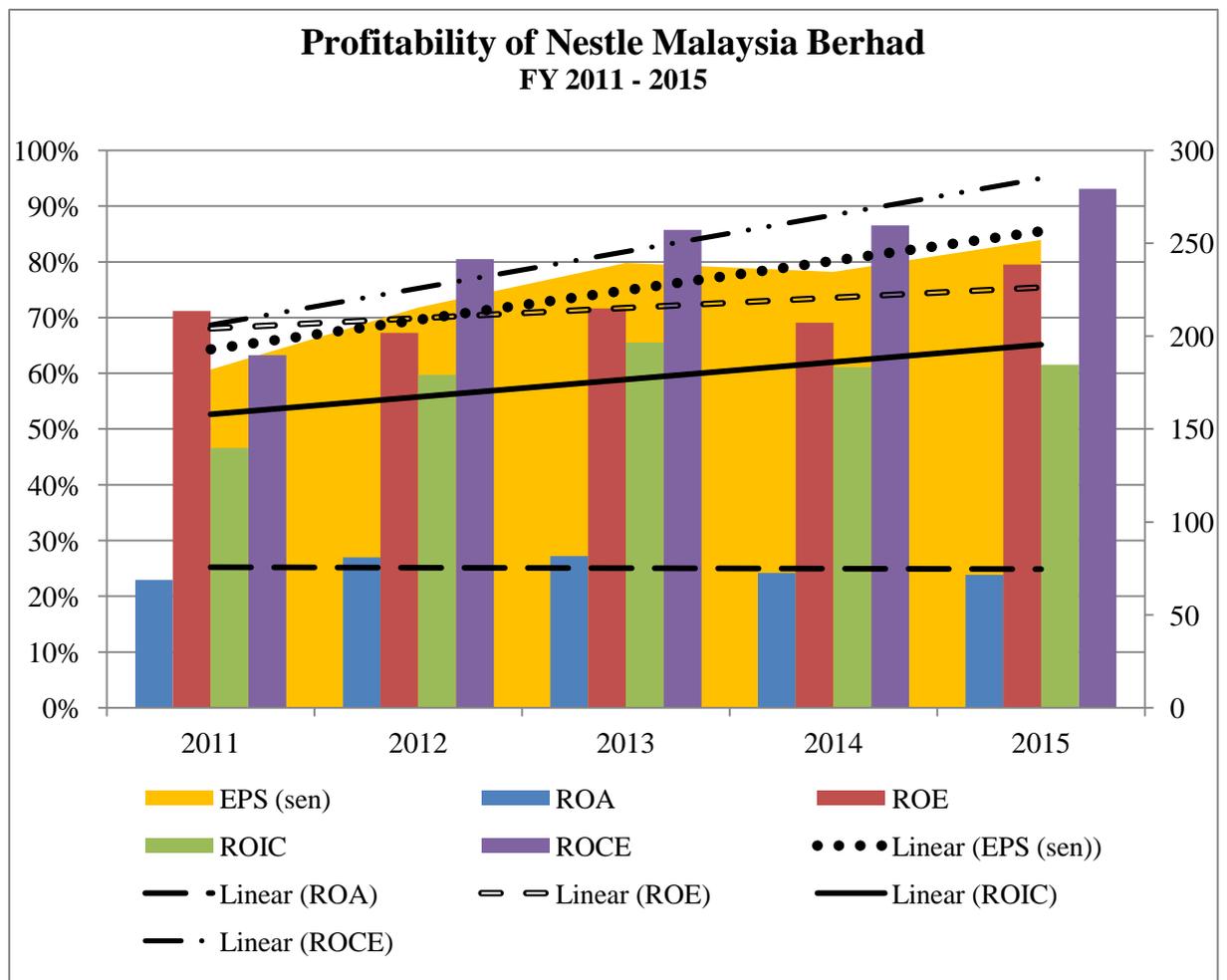


Figure 1 Nestle Berhad Profitability FY 2011 - 2015 Trend

Nestle Malaysia Berhad generally shows an upward trend in terms of profitability as shown from the linear for EPS, ROCE, ROE and ROIC; while profitability from ROA is showing very slight upward trend. The profitability of Nestle Malaysia Berhad is relatively steady, known from the standard deviation of the computed variables, as seen as one of the characteristics for established company.

Table 2. Descriptive Statistics

	ROA	ROE	ROIC	ROCE	EPS	TA	GDP	OPR	CUR
								ATIO	RATIO
Mean	0.250	0.717	0.589	0.818	224.740	2,136,231	0.053	0.205	0.846
Std. Deviation	0.020	0.047	0.072	0.113	27.195	240,313	0.005	0.009	0.181

Figure 2 Nestle Berhad Liquidity and Operating Ratios FY 2011 – 2015

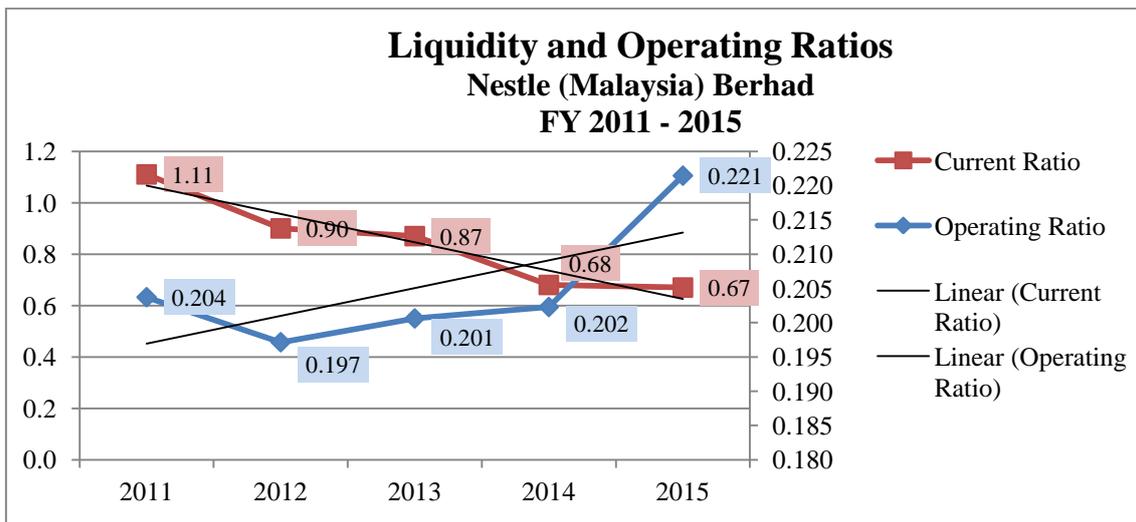
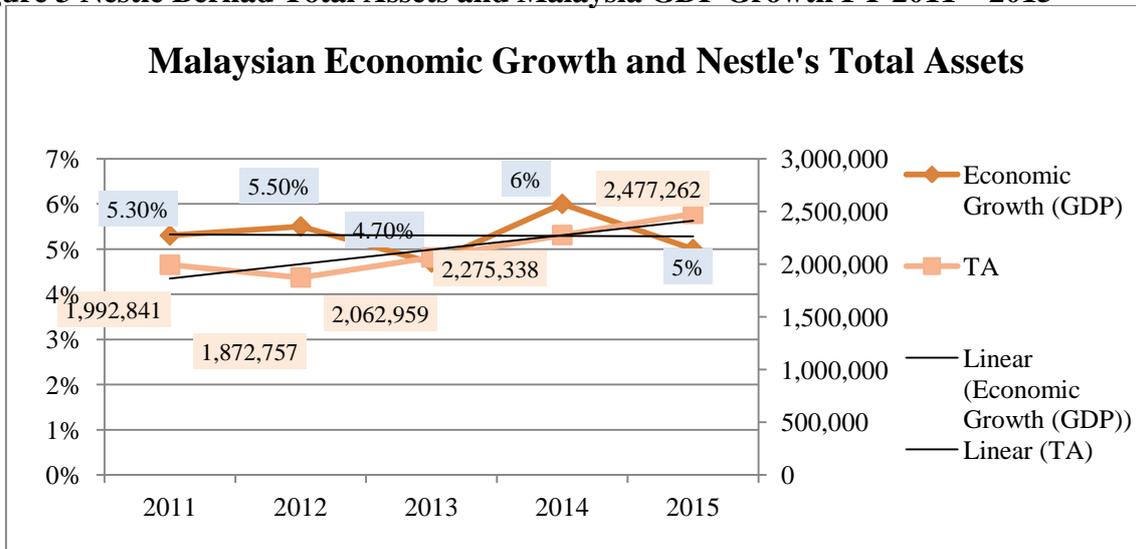


Figure 3 Nestle Berhad Total Assets and Malaysia GDP Growth FY 2011 – 2015



Meanwhile for measuring liquidity risk that the company is exposed to, current ratio is calculated by dividing the current assets with current liabilities. From the results, it is found out that the current ratio is showing a downward trend, implicating that the liquidity of the company is decreasing, thus increasing the liquidity risk.

On the other hand, operating ratio (shows upward trend, indicating there has been a slight increase in operating expenses compared to net sales, thus implicating slightly decreasing efficiency in managing the expenditure; increasing operational risk. The size of the company is showing upward trend using the total assets as the indicator. The company's growth in terms of profitability and also TA keeps up with the percentage of GDP's growth in Malaysia, possibly due to the relatively stable high demand in the market during most of the economic cycle in the 2011 – 2015.

3.2.Relationships Analysis

Regression analysis is further used to show the relationship of one independent variable to one or more dependent or responding variables. The dependent variable (Y) is ROA while the independent variables (X1, X2 and X3) are OPRATIO, CURRATIO and GDP growth with 95% confidence level. This results in the finding of R^2 of 0.868, means that 86.8% of ROA is determined by OPRATIO, CURRATIO and GDP while another 13.2% is determined by other variables.

Table 3. Model Summary of ROA as dependent variable with GDP, CURRATIO and OPRATIO as independent variables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.932 ^a	0.868	0.473	1.41829	2.7

a. Predictors: (Constant), GDP, CURRATIO, OPRATIO

b. Dependent Variable: ROA

Table 4. ANOVA Linear Regression (Enter method) of ROA as dependent variable with GDP, CURRATIO and OPRATIO as independent variables.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.266	3	4.422	2.198	.452 ^b
	Residual	2.012	1	2.012		

Total	15.277	4
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a. Dependent Variable: ROA

b. Predictors: (Constant), GDP, CURRATIO, OPRATIO

Table 3 shows that GDP, CURRATIO and OPRATIO toward ROA are insignificant (P value > 0.1), means that the independent variables are not likely to give statistically significant impact on the dependent variable. The significances of each independent variables are seen from Table 4, whereas although all of the P value > 0.1, OPRATIO is likely to affect ROA more than GDP and CURRATIO.

Table 5. Coefficient Linear Regression (Enter method) of ROA as dependent variable with GDP, CURRATIO and OPRATIO as independent variables.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	96.783	28.048		3.451	.180
	GDP	-3.180	1.661	-.805	-1.915	.306
	OPRATIO	-	97.828	-1.125	-2.415	.250
	CURRATIO	236.301	4.815	-.709	-1.585	.358

a. Dependent Variable: ROA

b. Predictors: (Constant), GDP, CURRATIO, OPRATIO

Although the result using ROA as the main dependent variable proven to have insignificant relationship with the independent variables, Pearson correlation coefficient test is conducted to further analyze the relationships with other supporting profitability variables to present broader analysis between profitability, GDP, CURRATIO, OPRATIO and TA.

From extracted data in Table 1, the Pearson correlation between the profitability, operating and liquidity risk using current ratio can be computed using the formula:

$$r = \frac{\sum XY - \frac{(\sum X)(\sum Y)}{n}}{\sqrt{\left(\sum X^2 - \frac{(\sum X)^2}{n}\right) \left(\sum Y^2 - \frac{(\sum Y)^2}{n}\right)}}$$

Table 6. Pearson correlation coefficient table

Pearson Correlation	ROA	ROE	ROIC	ROCE	EPS	TA	GDP	OP RATIO	CUR RATIO
ROA	1								
ROE	-0.401	1							
Sig.	0.252								
ROIC	0.663	0.129	1						
Sig.	0.111	0.418							
ROCE	0.32	0.429	0.901	1					
Sig.	0.3	0.235	0.019						
EPS	0.305	0.486	0.905	0.988	1				
Sig.	0.309	0.203	0.017	0.001					
TA	-0.473	0.787	0.329	0.665	0.693	1			
Sig.	0.21	0.057	0.294	0.11	0.097				
GDP	-0.301	-0.543	-0.216	-0.12	-0.221	-0.029	1		
Sig.	0.311	0.172	0.363	0.424	0.361	0.482			
OPRATIO	-0.531	0.97	0.058	0.428	0.457	0.848	-0.331	1	
Sig.	0.178	0.003	0.463	0.236	0.22	0.035	0.293		
CURRATIO	-0.04	-0.386	-0.741	-0.932	-0.904	-0.785	-0.186	-0.461	1
Sig.	0.474	0.26	0.076	0.011	0.018	0.058	0.382	0.217	

4.0. Discussions and Recommendations

4.1. Discussions

4.1.1. Liquidity Risk

From the regression result of ROA to CURRATIO, where P value > 0.1, ROA is likely not to give significant impact on CURRATIO. Negative correlation coefficients implicate that the return of the company is likely to become higher when the liquidity is lower and vice versa. It is possible that the credit activity of Nestle may boost the performance and effectiveness of the company that it increases the profitability. The

company may take credit to purchase for its supplies to increase quantity of products that leads to more sales.

CURRATIO, however, shows significant negative relationship with ROCE (with P value = 0.011) and EPS (P value = 0.018). Possible explanation regarding CURRATIO and ROCE's negative relationship may lie on the ROCE calculation $[EBIT/(TA-CL)]$, whereby TA increases, which may be caused by increase in CA, will affect in decreasing ROCE whilst increasing CURRATIO. On the other hand, CURRATIO has lesser, but significant relationship with ROIC (P value = 0.076) and TA (P value = 0.058). The relationship between size of the company and liquidity risk, measured using TA and CURRATIO is also calculated using Pearson correlation coefficient, with the result of -0.785. The negative relationship between TA and CURRATIO means that the size of company increases while the risk is also increased. It can be possibly explained that the increase of TA is contributed mainly by the increases in FA while the increases in CA are lesser than the growth in CL, which enables CURRATIO to decrease although the TA increases.

4.1.2. Operational Risk

The result of operating ratio's correlations with profitability of the company varied. For the ROA, the operating risk shows insignificant (P value > 0.1) negative correlation. Although insignificant, OPRATIO may affect ROA more compared to TA, GDP and CURRATIO as it shows the least significance value. Decrease in operating ratio shows that the management uses less expense to generate sales while increasing operating ratio implicates that the management use more operating expenditures (OE) to generate the same level of sales. The negative result which means that when the ROA increases, the OPRATIO decreases and vice versa, can be possibly caused by the level of inventories held by the company. When more inventories are being held by the company, the assets are larger, whilst may indicate that the company is not making sales, which in turn, decreasing the net sales. Supposedly the net income is constant; ROA decreases while the OPRATIO increases (more OE used in given level of net income, more inefficient) thus creating the negative correlation between ROA and operational risk.

Meanwhile, other profitability measures; ROCE, EPS and ROIC, along with TA show insignificant ($P > 0.1$) positive relationship with OPRATIO. It can be caused that if the OPRATIO is decreasing, it indicates that when the more OE used to generate sales or lesser net sales generated compared to the OE, the four profitability measures and TA will also increase. Possible explanation about the positive relationship is that when the OE increases, it means that the company produces more products which increase the inventory side in the TA. As for the profitability, there are possibilities that the positive relationship is due to the capital usage of the production. Different result from the relationship of ROE and OPRATIO, which shows significant ($P = 0.003$) positive relationship. The possible scenario is that when the equity or capital increases, the company increases the quality or quantity of the expenses used to operate the business due to having more funding, therefore, minding that net income and net sales are constant, the ROE increases while the OPRATIO also increases.

4.1.3. GDP Growth.

The findings show that GDP growth has insignificant negative relationship with all profitability variables, liquidity and operational ratios. Suggesting that if the GDP growth decreases, the profitability, liquidity and operating inefficiency (the higher the OPRATIO, the more inefficient) will increase. The negative relationship between GDP growth and profitability may be explained by the strong market and mass consumers of Nestle's products, which become staples in Malaysian food industry. With strong market, inconsiderable percentage slowdown in GDP growth may not have immediate effects to the company.

4.2.Recommendations

4.2.1. Reducing Liquidity

It is recommended that, acknowledging the negative relationship of liquidity risk and profitability of Nestle (Malaysia) Berhad, the company shall focus on maximizing the efficiency of liquidity by borrowing more current liabilities or liquidizing more current assets, to achieve more profit in the future at indeterminable degree. For example, Nestle may decrease the level of inventory that it holds by boosting its sales using more promotional activities and varieties of distributional channels, such as increasing the number and productivity of F&B booths in educational institutions (e.g. selling Milo drinks nearby lecture halls in campuses). It can also consider borrowing more current liabilities to finance the daily operation, such as buying out supplies in credit to boost production and sales.

4.2.2. Improving Operation

The result showing that ROA has more tendencies to be negatively affected by operating ratio, implies that the higher the operational risk is, the higher the ROA. It can be linked to the net sales of the company that also has positive relationship with the OR. Therefore, to increase the ROA, Nestle (Malaysia) Berhad may spend more amount of money on the operating expenses given a level of the income. The operating expenses, however, must be kept in a level that assures the management is not putting the company in a risky situation by reducing the income. The operating expenses may be increased in terms of using higher quality ingredients, more advanced technology, increasing hygiene standard and greener packaging to do good to the environment. The expenses used for operation, shall not only be aimed to boost return, but also for the sustainability of the company itself.

4.2.3. Continuous Good Practice of Corporate Governance

The management of both liquidity and operational risks however must be carefully and thoroughly done. One of the principal steps that must be undertaken by the company as a whole system to ensure that the risks are managed is through having proper corporate governance. Williamson (1988) argued that simple governance structures were able to cope effectively with the needs of simple transactions just until the contractual hazards spread out, hence, switching to more complex and costly governance structure that favors discretion to rules, can be the source of added values. Among factors that influence the quality of corporate governance, having good mix of skill and diversity in the board, decent remuneration, procedure transparency and independence of board may incur extra expenses to the company, however they contribute to the quality of corporate governance practice. That being said, Nestle (Malaysia) Berhad may be able to boost its performance if it continues to improve its corporate governance practice.

5.0. Conclusions

Nestle (Malaysia) Berhad showed stable and upward growth during FY 2011 – 2015 amidst the cycle of the economy in Malaysia shown from their profitability measures GDP growth. Despite the negative correlation, GDP does not significantly affect the profitability

measures. However, liquidity and operational risks are proven to be critical in nowadays' business, although the company has strong financial standing, as both affect the profit and loss of the company. From the findings it can be concluded that Nestle (Malaysia) Berhad's relationship of performance in terms of profitability and liquidity risk is positive, which is consistent with the study done by Waemustafa & Sukri (2016).

In term of operational risk, it is found that the operational efficiency has positive relationship with profitability except with ROA, which shows negative relationship with the operational efficiency. The findings on ROE, ROCE, ROIC and EPS are consistent with the study completed by Cool, et al. (1989), where operational efficiency and return has positive relationship. Measuring the operational efficiency of Nestle (Malaysia) Berhad, although only having inconsiderable upward movement, proves that majority of profitability measures coherently increase.

With 86.8% of ROA determined by the GDP, operational risk and liquidity risk, there are still other variables left for future studies to find out. The possible reasons of discrepancy of correlation results to the independent variables between ROA and other profitability measures in this paper are also to be further identified for laying out more comprehensive background for decision making process in the company.

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