Liquidity and Profitability of Oil and Gas Industry in Malaysia

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Abstract: This paper aims to reveal the impact of liquidity towards profitability of oil and gas industry in Malaysia. The analysis is based on a sample of 25 oil and gas companies that are listed in Bursa Malaysia for the period of 2012 to 2018. Regression analysis was used to test the impact and the trend of financial position after and before decreasing oil price. The result shows that there is a significant impact of only quick ratio on Return on Assets (ROA), Return on Equity (ROE) and Return on Invested Capital (ROIC). While for the cash conversion cycle, the result shows that there is a negatively and significant on ROA, ROE and ROIC. However, for the current ratio, it shows the result as insignificantly with the three dependent variables; ROA, ROE and ROIC. The main results of the paper demonstrate that each ratio (variable) has a significant impact on the financial positions of oil and gas industry with differing amounts and that along with the liquidity ratios in the first place. In addition, this paper shows the results that after the crisis of dropped in oil price, it's affected to the oil and gas industry in Malaysia.

Keywords: liquidity, profitability, regression analysis, oil and gas industry

I. INTRODUCTION

Liquidity is known as a flow concept where it act as an agent of financial system (Nikolaou, 2009). Liquidity management is a concept that every company in this world are concerning about their financial. Therefore, company's manager is trying hard to develop and devise a good strategy to ensure that the company's operations are meet and fulfil the obligations. In addition, they need to ensure that the profitability of the company always arise by day-to-day. Hence, the importance of liquidity management as it affects corporate profitability in nowadays business especially for oil and gas companies in Malaysia, where it cannot be overemphasized. It is because the company needs to pay recent business debts, where the payment including short-term operating and financial expenses but long-term debt maturity (Qasim Saleem & Ramiz ur Rahman, 2011). Furthermore, liquidity ratios are being used in liquidity management, for instance, current ratio, quick ratio and liquid ratio that will give an impact towards company's profitability.

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Liquidity ratios measure the capability of a company to meet payment obligations by matching cash and near cash with payment obligations. It was occurred as liquidity ratios can interrupt the procedures and profitability of the company. Thus, Qasim Saleem & Ramiz ur Rahman (2011) and Sunny Obilor Ibe (2013) were agreed in the concept principle of liquidity versus profitability, there is a trade-off between liquidity and profitability where it will gaining more than one.

On top of that, Malaysia's oil and gas companies have shown strong resilience to a challenging macroeconomic environment and global development in maintaining their daily and yearly operations. This situation can be seen during oil prices dropped sharply since June 2014. Recently, oil prices have plummeted, affecting everyone; producers, exporters, governments and consumers. As we can see, this situation is a shot in the global economy's arm (Ahmed, 2016). Thus, this paper will analyse about liquidity and profitability of oil and gas companies in Malaysia. The main objective of this study is to look at the company's performance that will be measured by profitability where it either or not affected by liquidity ratios. Due to the Malaysia's currency depression, the data for this study were taken from year 2012 until 2018.

II. LITERATURE REVIEW

The past researchers and studies was focusing on bank sector (Sunny Obilor Ibe, 2013; Sulieman Alshatti, 2014), insurance sector (Malik, 2011; Charumathi, 2012; Mehari & Aemiro, 2013; Derbali & Jamel, 2018), manufacturing sector (Ben-Caleb, 2013) and also in oil and gas sector (Mandal & Go swami, 2010; Qasim Saleem & Ramiz ur Rahman, 2011; Raza *et.al*, 2015) regarding the liquidity and profitability. According to Sunny Obilor Ibe (2013), the concept of liquidity is the quantity of capital that available for investment, where the researcher translating the capital as credit but not a cash. Moreover, it also gives the meaning of liquidity as the ability for the company to maintain their sufficient fund to pay maturing obligations. In this situation, it will look at the company's ability to immediate see cash, cheques and withdrawals while surviving by current reserve requirements.

Beside, Sambasivam & Ayele (2013) examined the effects of firm specific factors namely; liquidity ratio, leverage ratio, growth, size of company, volume of capital, age of company, and tangibility of assets on profitability by return on assets.

The study was conducted on 9 listed insurance sectors from the year 2003 to 2011. From the regression analysis result, it shows that liquidity, leverage, growth, capital volume, and size are identified as the most important determinants of profitability, hence growth, size of company, volume of capital are positively related. However, liquidity ratio and leverage ratio were negatively but significantly related to profitability, while age of company and tangibility of assets are not significantly linked to profitability. On the other hand, Sumaira & Amjad (2013) were found that liquidity and growth opportunities are not significant determinants of profitability, while leverage, size, earnings volatility and age of the firm are significant determinants of profitability. Mwangi and Murigu (2015) also claimed that there is no relationship between performance and liquidity, retention ratio, risk and age. However, profitability was positively related to leverage, equity capital, index of management competence and negatively related to size and ownership structure.

In addition, Sulieman Alshatti (2014) investigated the effects of liquidity management towards profitability in Jordanian Commercial Banks from 2005 to 2012. He was found that, there is a positive effect of quick ratio and investment ratio towards profitability, while capital ratio and liquid assets ratio is a negative effect towards profitability Jordanian commercial banks. However, a study done by Ben-Caleb (2013) shows that liquid ratio and current ratio are positively associated with profitability, while the cash conversion period is negatively associated with the profitability of manufacturing companies in Nigeria.

III. RESEARCH METHODOLOGY

Data for this study were gathered by secondary data collection method from Bursa Malaysia annual report, Bank Negara Malaysia and Thompson Reuters from year 2012 until 2018 in yearly basis. There are 25 sample sizes of oil and gas companies that were listed in Bursa Malaysia. The data consist of liquidity ratios with the variable of Current Ratio (CR), Quick Ratio (QR) and Cash Conversion Cycle (CCC) as independent variables. On the other hand, profitability ratios comprise of Return on Asset (ROA), Return on Equity (ROE) and Return on Invested Capital (ROIC) would be as dependent variables.

Selection of Variables

Dependent Variables:
1. ROA = Net profit before tax ÷ Total assets
2. ROE = Net profit before tax ÷ Shareholder's equity
3. ROIC = Net profit before tax ÷ Investments
Independent Variables:
1. CR = Current assets ÷ Current liabilities
2. QR = Current assets – Inventories ÷ Current liabilities
3. CCC = Cash + Investments ÷ Current liabilities

Research Framework

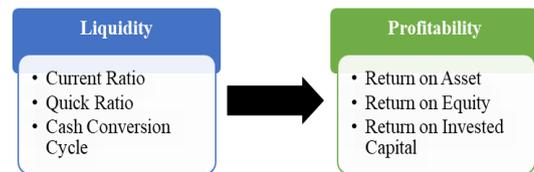The research framework used in this study is visually shown in Figure 1.

Fig. 1 Research Framework

Regression Analysis

This study used multiple regression analysis to test the impact of liquidity ratios on company's profitability; ROA, ROE and ROIC as proxies, with the firm specific factors; Return on Asset (ROA), Return on Equity (ROE) and Return on Invested Capital (ROIC). The regression models used in this study are as the following:

Multiple regression models:
$$ROA = \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \varepsilon$$
(model 1)

$$ROE = \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \varepsilon$$
(model 2)

$$ROIC = \beta_1\chi_1 + \beta_2\chi_2 + \beta_3\chi_3 + \varepsilon$$
(model 3)

$\beta_{1,2,3}$ = Regression coefficient;
χ_1 = Current ratio;
χ_2 = Quick ratio;
χ_3 = Cash conversion cycle;
ε = Error term

Research Hypothesis

Based on the proceeding discussion, the hypothesis is developed as follows:
H1: There is a significant impact between liquidity ratios towards ROA of oil and gas companies in Malaysia.
H2: There is a significant impact between liquidity ratios towards ROE of oil and gas companies in Malaysia
H3: There is a significant impact between liquidity ratios towards ROIC of oil and gas companies in Malaysia

IV. RESULTS AND FINDINGS

Table 1 presents the multiple regression analysis to examine the impact between Return on Assets (ROA) and three independent variables. Based on the table 1, quick ratio (*p*-value = 0.000, *t* = 5.165) was found to be positively and significantly related to the ROA. After that, cash conversion cycle (*p*-value = 0.003, *t* = -2.971) was found to be negatively and significantly related to the ROA. On the other hand, current ratio (*p*-value = 0.762, *t* = -0.303) was found to be negatively and insignificant related with ROA. R^2 value for ROA is 0.152 indicating that 15.2 percent of the variation of factors affecting profitability of oil and gas companies in Malaysia could be explained by the three independent variables.

Table. 1 Regression Results for ROA

Variables	B	t-value	p-value
Quick ratio	0.372	5.165	0.000
Current ratio	-0.021	-0.303	0.762
Cash conversion cycle	-0.214	-2.971	0.003
R^2 = 0.152			
Adjusted R^2 = 0.137			

Table 2 presents the multiple regression analysis to examine the impact between Return on Equity (ROE) and three independent variables. Based on the table 2, quick ratio (p-value = 0.001, t = 5.383) was found to be positively and significantly related to the ROE. On the other hand, cash conversion cycle (p-value = 0.005, t = -2.828) was found to be negatively and significantly related to the ROE. Last but not least, from table 2 shows that current ratio (p-value = 0.934, t = -0.083) was found to be negatively and insignificant related to the ROE. R^2 value for ROE is 0.083 indicating that 8.3 percent of the variation of factors affecting profitability of oil and gas companies in Malaysia could be explained by the three independent variables.

Table. 2 Regression Results for ROE

Variables	B	t-value	p-value
Quick ratio	0.244	3.263	0.001
Current ratio	-0.006	-0.083	0.934
Cash conversion cycle	-0.212	-2.828	0.005
R^2 = 0.083			
Adjusted R^2 = 0.067			

Table 3 presents the multiple regression analysis to examine the impact between Return on Invested Capital (ROIC) and three independent variables. Based on the table 3, quick ratio (p-value = 0.000, t = 4.004) was found to be positively and significantly related to the ROIC. Next, cash conversion cycle (p-value = 0.000, t = -3.920) was found to be negatively and significantly related to the ROIC. On the other hand, current ratio (p-value = 0.967, t = -0.042) was found to be negatively and insignificant associated with ROIC. R^2 value for ROIC is 0.132 indicating that 13.2 percent of the variation of factors affecting profitability of oil and gas companies in Malaysia could be explained by the three independent variables.

Table. 3 Regression Results for ROIC

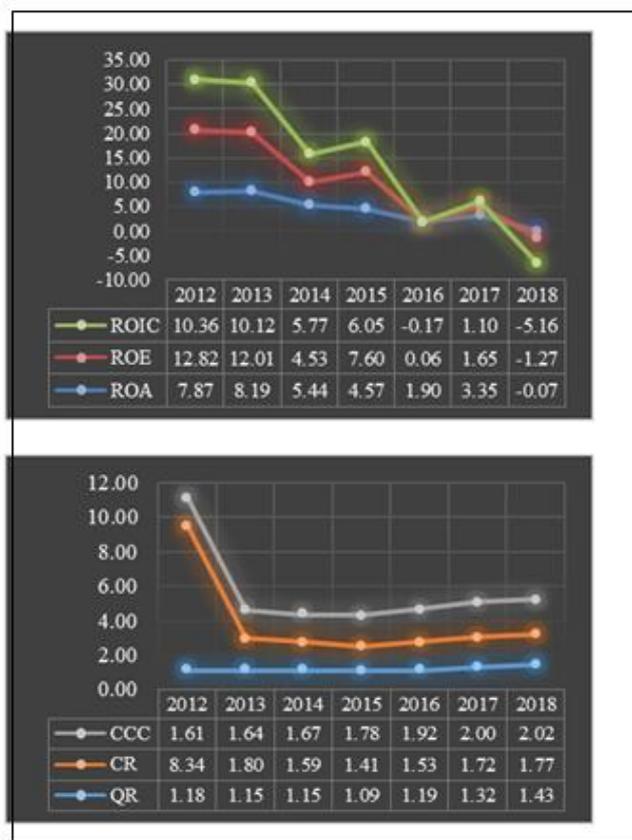| Variables	B	t-value	p-value
Quick ratio	0.292	4.004	0.000
Current ratio	-0.003	-0.042	0.967
Cash conversion cycle	-0.286	-3.920	0.000
R^2 = 0.132			
Adjusted R^2 = 0.117			

Fig. 2 Profitability and Liquidity of Oil and Gas Companies in Malaysia

Figure 2 shows the profitability and liquidity of oil and gas companies in Malaysia. As we can see, the profitability of the companies dropped as oil prices dropped sharply since June 2014. However, liquidity of the companies shows consistent after the crisis in oil prices. It can conclude that, even though the company's performance was decreasing every year, the companies cannot liquidate their asset successfully.

V. CONCLUSION

As a conclusion, this study measures three variables, namely quick ratio, current ratio and cash conversion cycle in measuring factors affecting profitability of oil and gas companies in Malaysia. Based on the findings, only quick ratio was positively and significantly impact towards profitability of oil and gas companies in Malaysia. Cash conversion cycle on ROA, ROE and ROIC shows negatively significant impact towards profitability. Besides, quick ratio was claimed negatively and insignificant impact towards profitability of oil and gas companies in Malaysia.

Hence, the operating cash flows generated by assets will disturb current firm liquidity. It is not just because of the liquidation value. Companies that have fewer current assets will get in trouble to manage their operations while if the current assets are too much, it shows that the ROI not in a good situation. Since optimum cash levels are influenced by factors that beyond the preventive concept of treasury, the companies must think approximately and take right decisions on how to achieve the profit so that the opportunities are available in the cash flow process.

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