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PROFITABILITY PERFORMANCE ANALYSIS: THE EVIDENCE FROM PRIVATE TELECOMMUNICATION FIRMS IN MALAYSIA

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ABSTRACT

This paper examines the macroeconomic factors influencing the profitability performance of private telecommunication firms in Malaysia. A yearly basis data between 2007 and 2016, which contained a total number of 49 data observations were analyzed using the Random Effects Model to estimate the factors of concern. The sources of these data have been predominantly extracted from DataStream. The variables involved in this investigation were liquidity (LIQ), leverage (LEV), firm size (SIZE), and gross domestic product

(GDP). This study has been motivated by the declining profitability performance of private telecommunication firms in Malaysia, which has been attributed to the decreasing return on assets. The findings suggest that leverage has a significant and negative relationship with return on assets, while liquidity has a negative insignificant towards the firms' profitability. On the other hand, firm size and gross domestic product have a substantial and positive relationship with return on assets. Moreover, the findings seemed to suggest that the bigger the size of a firm, the higher the total assets would be, which in turn, would improve the firm's profitable performance. In sum, the prerequisite attribute that a telecommunication firm needed to possess in attaining high profitability performance was its strong and high productivity in the management of its total assets.

INTRODUCTION

Nowadays, external and internal competitiveness variables in sectors involving agriculture, manufacturing, and telecommunications have shifted up and down widely in the trading market. The telecommunication sector has long been well-established in many Asian countries (Salleh et al., 2013). In Malaysia, the telecommunications industry has remained one of the vital sectors that has consistently generated profitability, as well as sustained financial stability in the country. Based on the 2018 Annual Economic Survey report, the gross output value of information and telco services in Malaysia had shown an increase of 7.8 percent per annum from 2015 to 2017, with the telecommunications service being the largest contributor with RM87.4 billion or 60.4 percent (Department of Statistics, 2019). Accordingly, a report issued by the Malaysian Communications and Multimedia Commission (MCMC) revealed that the telecommunications sector constituted the largest portion of market share revenues at 69 percent (RM35.63 billion), followed by broadcasting at 12 percent (RM6.2 billion), and postal services at five percent (RM2.58 billion). Meanwhile, services under Access, Certainty and Efficiency (ACE) market listing applications, network

facilities, and network-service providers contributed14 percent, or RM7.23 billion of the total industry revenue. It is a market in the Bursa Malaysia that has replaced the Second Board and the MESDAQ. This trend illustrates that the largest source of revenue injection has come from the country's telecommunications sector, comprising more than 90 established telecommunications firms, either owned by the government or private entities.

Therefore, it was no surprise when the National Telecommunication Policy of Malaysia (1994-2020), explicitly stated that the key objective of the country's telecommunication sector was to foster competition among the companies involved, with a view to achieving productivity, and providing excellent, high quality services to the customers (Nambiar, 2009). In recent years, however, both external and internal competitiveness variables in agriculture, manufacturing, and telecommunication sectors have experienced some form of volatile movements in trading markets worldwide. As a result, several problems have arisen and adversely affected many Asian telecommunication firms, which had experienced declining annual revenues from 2006 to 2016 (El-Darwiche et al., 2017).

According to Kok (2017), one of the major challenges which confronted Malaysia's telecommunications industry in early 2017 was arguably, the declining trend of revenues experienced by many of the country's major telecommunication firms such as in Maxis, DiGi, and Celcom. They had rigorously attempted to address their shrinking market shares, but to no avail. The dwindling profitability of these telecommunication firms in Malaysia has adversely hindered not only the growth of the domestic industry, but also the country's overall economy. Kok (2017) also pointed out that a similar trend could similarly be seen in other Asian telecommunication companies, they too had suffered a substantial decline in their annual revenues. This gloomy situation has provided the motivation, or could even compel telecommunication firms in Malaysia to expand their market shares and assets, and subsequently could enhance the overall performance of the entire industry. Taking this background assessment of the situation into consideration, Malaysia is seen as a suitable research site to measure the performance of local private telecommunication firms amidst the challenge of declining revenues (Salleh et al., 2013).

Government-initiated steps of privatization have been viewed as an approach to relieve its administrative and financial burdens and, at the same time, to likely lead to the enhancement of its service delivery quality (Lee, 2002). The Malaysian government has strongly supported the policy of establishing private telecommunication firms, with the overarching goal of maintaining the quality of service without sacrificing competition among those firms. Presently, it is also hoped that this effort will help the industry to grow and increase company profitability by increasing the revenues of telecommunication firms. This policy orientation is anticipated to assist the industry to grow and expand its profitability and subsequently, increase the revenue of telecommunication firms. In light of this background of the telecommunication industry, the main objective of this study has been to examine the factors which have contributed to the firms' profitability performance. The factors are both the implicit and explicit variables in the companies and capital markets. These variables are important in fulfilling the working capital requirements and in earning the transaction profits. Furthermore, the ability of the management team to forecast any future business-related scenario will be deemed valuable, not only in terms of producing good operating results, but also as desirable business accomplishments. Therefore, this study was focused on investigating the macroeconomic impacts on the performance of the private telecommunication firms in Malaysia. The analysis carried out in the present study an evaluation of the performance of the five main private telecommunication firms in Malaysia, namely DIGI.com.Berhad, MAXIS Berhad, M-MODE Berhad, XINGHE Holding Berhad, and TIME DOTCOM Berhad.

The period of the study was between 2007 and 2016. The selected indicator of profitability proxy was the return on assets (ROA), which would serve as a measure of company performance, in other words, the indicator of the level of company profitability in relation to the ROA. Endri and Fathony (2020) have suggested that the measurement of the total ROA could be used after calculating the interest and tax expenses, that is, the greater the percentage of net income to total assets, the better the share appreciation. This suggestion has been supported by Romus et al. (2020), who have discovered that the ROA might contribute to cost-effectiveness in firms. Meanwhile, interest

rates had been exempted in the analysis in the present study as they would lead to the charging of a rise in liabilities and, at the same time, the firm would have to reconsider raising the amount of debt in order to improve its market potential (Spitsin et al., 2020). Corporations would likely adopt a more conservative approach in their financial strategies. In addition, the raising of interest rates would make it harder for firms to repay their debts and consequently, this would decrease their net profit. Accordingly, the telecommunication companies would be hesitant to extend their debts because they would feel that they would not be able to make the repayment (Elfiswandi et al., 2020). Therefore, the selected independent variables for the present study were as follows: leverage (LEV), liquidity (LIQ), size of firm (SIZE), and Gross Domestic Product (GDP), as had been suggested by most previous studies done by many scholars (Romus et al., 2020; Khan et al., 2013; Kanwal & Nadeem, 2013).

LITERATURE REVIEW

An increasing number of scholars have recognized that middle managers were the key players in deciding strategic organizational changes and directions (Nizam & Mohd Nazari, 2018). To ensure their businesses survive in the long run, it is imperative for companies to have a clear and precise focus on profit performance with minimal operating costs. Financial performance has been epitomized by the revenue, income, and stock appreciations of a company, as demonstrated by the rising share price of the corporation (Tesfaye, 2018).

Profitability has always been a topic of considerable interest to managers and researchers worldwide. In particular, the variables, which may affect, and influence profitability factors are always an important subject for investigation. Numerous theoretical and empirical investigations have assessed the impact of variables on corporate productivity, such as the return on assets, the return on equity, and the return on sales. Evidence of scholarly studies on these variables can be found in the works by Kanwal and Nadeem (2013), Khan et al. (2013) and Romus et al. (2020). Nevertheless,

the research findings have been varied, depending on the specific characteristics of each country and industry, as well as each stage of one's economic development (Le et al., 2020). A study done by Sritharan (2015) has recorded that the ROA was highly important in measuring the profitability of companies. It has been widely used in scientific research to test the financial performance and sustainability of businesses (Chatterjee, 2012; Santis et al., 2016; Vaicondam & Ramakrishnan, 2017). Thus, for the present study, the ROA has been chosen as the dependent variable for analysis because it has been widely used in scientific research to test the financial performance and sustainability of businesses (Chatterjee, 2012; Santis et al., 2016; Vaicondam & Ramakrishnan, 2017).

Meanwhile, liquidity refers to the extent to which debt commitments may be met by the cash or financial assets that are due over the next twelve months. It shows the capability of an organization to convert an asset to cash quickly, and also demonstrates the capacity of the organization to handle working capital. The studies by Ologbenla (2018) and Abdul Manaf et al. (2021) on the performance of insurance firms and telecommunications service providers, had discovered that liquidity had not had a significant impact on the ROA in these two business sectors. Samsuri (2017) also revealed the same findings in a study of the banking sector. To a certain extent, Gatsi and Gadzo (2013) also found that liquidity was negatively significant towards profitability as it was found that high liquidity would make it unnecessary for the firm's management team to boost yearly operating results. In contrast, Ondigi and Willy (2016) mentioned that the liquidity of insurance firms was one of the major determinants of a firm's profitability. Therefore, their study has suggested that companies should retain sufficient liquidity levels, preferably in the form of short-term marketable securities. However, Ahmed et al. (2010) claimed that liquidity was found to have a statistically insignificant relationship with the ROA. Likewise, Abera (2012) had discovered that the correlation between liquidity risk and profitability was statistically insignificant.

On the issue of company size, Sritharan (2015) and Djashan (2019) had affirmed how the size of a firm was the most important variable to determine the extent of profitability of listed firms. In addition, Tesfaye

(2018) argued that the economies of scale was one of the primary themes in the experimental analysis of the affiliation. However, one can argue that companies do not simply attain economies of scale by increasing their size. In a study conducted on the Istanbul Stock Exchange, Doğan (2013) and Tan et al. (2018) had discovered that the size of a firm had a positive relationship with the ROA. A similar result has been claimed by Berhe and Kaur (2017), who in their findings showed a relatively parallel with the theory of comparative market power assumption. They agreed with the assertion made by the theory of comparative market power that large size firms were generally competent and were able to leverage their market power by using their products to generate the highest revenues. Conversely, Deitiana and Habibuw (2015) in their analysis on the size of selected organizations discovered that size was not considered to be a key element of organizational efficiency. However, Zadeh and Eskandari (2012) did argue that firm size did have a different quality and quantity for different countries. The same result has been corroborated in Singapurwoko and El-Wahid (2011) who had disclosed that the asset size did not have a profound impact on profitability. However, in a recent study done by Endri and Fathony (2020), the outcome of their t-test revealed that the size of a company did not affect the value of the firm, but the coefficient had a positive relationship.

Other studies by Hossain (2020), Jihadi et al. (2021), and Ramlan and Nodin (2018) had asserted that leverage served as an important instrument for calculating the efficacy of using corporate debts. Leverage has been measured by using a debt-to-equity ratio, which is the ratio of a business's overall debt to that of a company's total equity. The study by Endri and Fathony (2020) had found that leverage did not affect the value and performance of a business, but the coefficient had a positive relationship direction. They had reported that, if a company had a low debt value, but had the ability to fund its operations and activities using its own capital, the said company was deemed to have a good value. Therefore, it should be noted that the increase or decrease in the value of the leverage was not always the cause of a company's high or low valuation. This is because investors often perceived investment risks from different angles when perusing financial statements, and not simply attributing it to the leverage of the company. Moreover, Vătavu (2015), using the cross-sectional

regressions method, conducted a study examining the Romanian listed companies' preference for debt to measure difficulties, business-risk stock exchange, and operation in the manufacturing sector from 2003 to 2010. He showed that the performance in the return on assets had an insignificant relationship with the debt ratio in Romanian listed companies, the same finding as was shared by Raza and Bhuttu (2013).

The Gross Domestic Product (GDP) is one of the external factors influencing the performance of a firm. Romus et al. (2020) has considered the GDP as the most common economic measure for assessing the economic situation of a country, and the most vital macroeconomic indicator used to evaluate a country's economic health. This is because the GDP shows that it has a positive effect on consumers' purchasing power, as well as helping to improve a company's product demand. This was seen as a good sign because it would also boost the income of the company (Er, 2017; Romus et al., 2020; Salleh et al., 2016). This view has also been supported by Jadah et al. (2020), who pointed out that the GDP has been used as an indicator in measuring the profitability of Iraqi banks. However, the overall findings by Ishak et al. (2017) and Samsuri (2017) concluded that all financial ratios have had an effect on the performance of firms, but the GDP did not have much of an impact on the profitability of selected companies.

METHODOLOGY

The present research has been conducted to provide a clearer understanding of the impact of independent variables such as, liquidity (LIQ), leverage (LEV), firm size (SIZE), and gross domestic product (GDP) on the performance of five Malaysian private telecommunication firms. The data for the study was obtained from the annual financial reports of firms and DataStream during the period 2007 to 2016, by using STATA10. The quantitative method was used as the research design, and the data-collection techniques used in this study included compiling, recording, and analyzing secondary data of audited financial statements released in Malaysia by the private telecommunication firms. The independent variables used in this study were liquidity, size, leverage, and gross domestic product. The

dependent variable was the return on assets, and it was regarded as a strong measurement of profitability. The   researchers had selected the variables used in the present study after a thorough review of the discussions in previous studies and the availability of data. To ensure the comprehensive collection of the required data , the researchers used the panel data approach, which was a mixture of time-series data and cross-sectional data, and all the collected data had been used to observe two or more-time periods (Gil-García & Puron-Cid, 2014). The equation generated to examine the estimation of the study model is as shown in Equation (1):

$$ROA_{i,t} = \beta_0 + \beta_1 LIQ_{i,t} + \beta_2 SIZE_{i,t} - \beta_3 LEV_{i,t} + \beta_4 GDP_{i,t} + \varepsilon_{i,t} \qquad (1)$$

where,
$ROA_{i,t}$ = return on assets (percentage)
$LIQ_{i,t}$ = liquidity (percentage)
$SIZE_{i,t}$ = size of firm (percentage)
$LEV_{i,t}$ = leverage (percentage)
$GDP_{i,t}$ = gross domestic product (percentage)
$\varepsilon_{i,t}$ = error term
β_i = coefficients ($i = 0,1,2,3,4$)

Panel data analysis is a frequently used statistical method in social science, epidemiology, and econometrics to analyze two-dimensional (usually cross-sectional and longitudinal) panel data. It enables researchers to obtain a greater level of statistical validity in policy analysis and programme evaluation when compared to only cross-sectional data statistical methodologies. Panel data has been used extensively in a variety of studies all across the world (Eom et al., 2007). According to Hun (2011) when given a well-organized panel data, panel data models were surely intriguing and appealing because they provided techniques to deal with variability and could analyze fixed and/or random effects in longitudinal data. For this research, the descriptive statistical analysis and panel data regression analysis techniques were deployed to analyze the data. Three ways to regression model estimation using panel data were available as follows: pooled least square, fixed effects model, and random effects model. Several tests, including the Breusch and Pagan Multiplier Test, the Lagrange multiplier test, and others had be performed in order to choose the best model (Endri & Fathony, 2020). The Random Effects Model has been used to omit the variables that could be fixed over time difference

between cases, and others might be fixed among the cases, but could be different over time. Besides, it has also been used to identify the individual characteristics for each observation in the sample.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 1 shows the summary of the data used in the present study, that is, the dependent and independent variables and their analysis. The average value of return on assets for the non-governmental telecommunication firms was 12.35 units, which indicated that those firms have made 12.35 percent of the profit from their assets during the past 10 years. The weak percentage return on assets showed that the telecommunication firms had been experiencing low efficiency when using their assets to generate profits. At the same time, it should be noted that the return on assets has recorded the highest standard deviation, which was 17.08 times, indicating that return on assets has the highest variability of data, whereas the least variability was recorded by the LEV, which proved to be the most stable one.

Table 1

Statistical Description of the Study Variables

	ROA	LEV	LIQ	SIZE	GDP
Mean	12.345	0.540	4.612	19.231	27.243
Minimum	-41.590	0.000	0.000	11.513	25.989
Maximum	51.160	7.000	43.100	22.495	35.757
CV	1.384	1.819	1.971	0.135	0.105
Variance	291.751	0.965	82.611	6.710	8.249
Kurtosis	4.538	38.942	13.060	2.682	8.054
Std. Dev.	17.081	0.982	9.089	2.590	2.872
Skewness	-0.630	5.823	3.209	-0.638	2.648

Note: The dependent variable is Return on Assets (ROA). Meanwhile, the independent variables are Leverage (LEV), Liquidity (LIQ), Size of Firm (SIZE using a logarithm of total assets), and Gross Domestic Product (GDP using the logarithm of the annual gross domestic product).

The average value of the GDP was recorded at 27.243 units, which meant that 27.24 percent of the earned profits had come from the GDP

for the past 10 years. Meanwhile, the standard deviation of the GDP recorded was 2.872 times of performance, which helped explain the lower variability data in the changes of the GDP in the same period. However, the lowest mean in the independent variable was recorded by the LEV, with only 0.54 percent and the standard deviation was 0.982 times. The result showed that the LEV had less variability in affecting the performance of the firms. By having the lowest standard deviation, it was an indication that the LEV had a low variability in data changes for the firms' performance. The higher standard deviation is an indication that the return on assets has a low variability, which has the least variability and is the most stable. Most of the variables examined have shown positive mean values, therefore, the data have the least variability because the standard deviation of the dependent variable was higher than its mean value.

The result in Table 1 also demonstrates that the maximum value return on assets was 51.16, while the minimum value was -41.59. The maximum values for the independent variables, LEV, LIQ, SIZE, and GDP were 7, 43.10, 22.49, and 35.76, respectively. However, the minimum values for LEV, LIQ, SIZE, and GDP were 0, 0, 11.51, and 25.99, respectively. Meanwhile, skewness is an analysis used to measure the symmetry of variables. The positive value of the data shown was skewed to the right, and vice versa. Based on the analysis, it is observed that LEV, LIQ, and GDP were skewed to the right due to their positive values, while ROA and SIZE were skewed to the left.

Correlation Analysis

The results shown in Table 2 has revealed the association between the variables which had been analyzed using the correlation matrix. The correlation matrix had been applied to assess the direction of correlation among variables, either in a positive or a negative direction. In addition, correlation analysis among variables can also be used to detect the existence of the problem of multicollinearity. The results in Table 2, however, shows that the multicollinearity problem did not exist because the correlation coefficients for all variables were less than 0.5. The results reveal that the SIZE and the GDP had positive correlations with the ROA, or the non-governmental telecommunication firms' performance because their correlation coefficient values were positive. On the other hand, the LEV and the

LIQ had a negative correlation with the ROA because their correlation coefficient values were negative. The result also shows that the LEV and the SIZE had a high correlation with the ROA.

Table 2

Correlation between the Study Variables

	ROA	LEV	LIQ	SIZE	GDP
ROA	1.000				
LEV	-0.391	1.000			
LIQ	-0.044	-0.222	1.000		
SIZE	0.462	-0.293	-0.297	1.000	
GDP	0.164	-0.050	0.225	0.082	1.000

Variation Inflation Factor

In addition to the correlation analysis, the existence of multicollinearity among variables in the model can be detected using the variation inflation factor (VIF). The multicollinearity problem can be detected by looking at the value of the VIF. As a rule of thumb, the benchmark for the VIF is 10. It can also be traced by the mean value of the VIF, which is more than 5. Based on the results shown in Table 3, the VIF values for all the variables were less than 10, which indicated that there was no problem with multicollinearity. In addition, the mean VIF was 1.25, which was lower than 5.00. This value signified that there was no multicollinearity problem in the present study.

Table 3

Variation Inflation Factor (VIF)

Variable	VIF	1/VIF
LEV	1.24	0.806
LIQ	1.33	0.749
SIZE	1.33	0.754
GDP	1.09	0.921
Mean VIF	1.25	

Estimation Results

The results in Table 4 show the estimation results of the Pooled Ordinary Least Squares (POLS). The result shows that only coefficients of the

LEV and the SIZE were statistically significant at the five percent significance level. The negative coefficient value of the LEV shows that the LEV had a negative relationship with the profitability (ROA). This condition reflects the view held that if there is a one percent increase in the LEV, the ROA will decrease by 4.95 percent. However, the SIZE and the ROA were positively correlated at the five percent significant level. The one percent increase in the SIZE had caused the ROA to increase by as much as 2.38 percent. Meanwhile, both the LIQ and the GDP did not have a significant relationship with the ROA because their coefficient values were statistically insignificant at the five percent significant level.

Table 4

Pooled Ordinary Least Square (POLS) Regression Analysis

Dependent variable: ROA

Variables	Coefficient	Std error	z	P> z	95% Conf	Interval
LEV	-4.953	2.437	-2.03	0.042**	-9.730	-0.1755
LIQ	-0.054	0.273	-0.20	0.843	-0.590	0.4811
SIZE	2.380	0.963	2.47	0.013**	0.492	4.2678
GDP	0.750	0.779	0.96	0.335	0.776	2.2764
Cons	-51.147	26.227	-1.95	0.051*	-102.552	0.2572
No of obs	49					
Prob (F-stats)	0.001					
R-squared	0.299					

Note: *, ** and *** denote statistically significant at 10%, 5% & 1% level of significance, respectively.

Furthermore, **t**he appropriateness of using the Random Effects Model was justified by the Breusch and Pagan (BP) Multiplier test. The result of the BP Multiplier for this research was 0.385 with the Prob > χ^2 is 0.000, which was less than $\alpha = 0.05$. Therefore, the null hypothesis (POLS Model) was rejected. The Random Effects Model was more suitable than the POLS model and therefore, the former was used in the estimation.

Table 5 shows the results produced by the random effects analysis. Only the coefficients of the LEV and the SIZE were statistically

significant at the five percent significance level. The coefficients of the LIQ and the GDP were statistically insignificant at the same level of significance. In light of this result, it was clear that the LEV had a negative relationship with the ROA. By holding other variables constant, the result shows that with a one percent increase in the leverage, the ROA would decrease by 4.95 percent. The effect of the LEV on the ROA was higher than the effect on the SIZE. It could therefore, be assumed that the LEV could be considered as one of the important factors affecting the increment of profitability in firms. This result further corroborated the findings of the studies by Hossain (2020), Jihadi et al. (2021) and Ramlan and Nodin (2018). The results of these studies indicated that an increase in debts could lead to a decrease in the performance of the return on assets in telecommunication firms. Therefore, the non-governmental telecommunication firms in Malaysia should maintain their efficiency in managing overall total assets to gain much higher profitability.

Table 5

Random Effects Results

Dependent variable: ROA

Variables	Coefficient	Std error	z	P> z	95% Conf	Interval
LEV	-4.953	2.437	-2.03	0.042**	-9.730	-0.1755
LIQ	-0.054	0.273	-0.20	0.843	-0.590	0.4811
SIZE	2.380	0.963	2.47	0.013**	0.492	4.2678
GDP	0.750	0.779	0.96	0.335	0.776	2.2764
Cons	-51.147	26.227	-1.95	0.051*	-102.552	0.2572
No of obs		49				
Prob (F-stats)		0.001				
R-squared		0.299				

Note: *, ** and *** denote significance at the 10 percent, 5 percent and 1 percent significant level, respectively

Meanwhile, the SIZE was seen to have a positive relationship with the ROA. By holding other variables constant, the coefficient of the SIZE showed that a one percent increase in firm size will increase the ROA by 2.38 percent. This result was in line with some of the latest studies which had found a positive relationship between profitability

and the size of the firm in both the developing and developed countries (Berhe & Kaur, 2017; Djashan, 2019; Doğan, 2013; Sritharan, 2015; Tan et al., 2018; Zadeh & Eskandari, 2012). These studies had also claimed that there was a significant positive influence of the firm size on a firm's profit. With regards to the non-governmental telecommunication firms in Malaysia, this result demonstrated that the telecommunication firms had used all their total assets to generate high profits. However, the opposite finding of a negatively significant coefficient had also been claimed in the studies of Salleh et al.,(2016) and Salleh et al. (2013).

At this juncture, it should be pointed out that the coefficient of the LIQ and the GDP were found to be statistically insignificant at the five percent level of significance. Therefore, in the context of company performance, both the independent variables in this study have had an insignificant relationship with the return on assets. The finding of insignificant effect of the LIQ on the ROA was in line with other studies carried out by Abdul Manaf et al. (2021), Ologbenla (2018), and Samsuri (2017). Meanwhile, Ishak et al. (2017) and Samsuri (2017) had also claimed that the GDP was an insignificant determinant of the ROA.

Table 6

Summary of Analysis

Variables	Findings	Author(s)
Leverage (LEV)	Negative and significant	Hossain (2020); Jihadi et al. (2021); Ramlan & Nodin (2018)
Liquidity (LIQ)	Negative and insignificant	Abdul Manaf et al. (2021); Abera (2012); Ahmed et al. (2010); Gatsi & Gadzo (2013); Ologbenla (2018); Samsuri (2017)
Firm size (SIZE)	Positive and significant	Berhe & Kaur (2017); Djashan (2019); Doğan (2013); Sritharan (2015); Tan et al. (2018); Zadeh & Eskandari (2012)
Gross domestic product (GDP)	Positive and insignificant	Ishak et al. (2017); Samsuri (2017)

In terms of the coefficient determination (R^2), the result of the present study showed that there was only a 29.9 percent variation in the ROA, which was simultaneously explained by the variation in all independent variables. The low value of the R^2 was to be expected because this study had used a panel data analysis which involved a different unit of analysis in the estimation. The estimated model was acceptable because the probability F-stat = 0.001 which was less than α = 0.05. This indicated that all variables would jointly affect the ROA. Table 6 summarizes the findings of the analysis carried out in the present study.

CONCLUSIONS

In summary, the findings of the present study has indicated that firm size positively and significantly influenced the return on assets, while leverage negatively and significantly influenced a company's performance. On the other hand, gross domestic product and liquidity were not significant and did not influence the return on assets. Overall, leverage and firm size influenced profitability in the private Malaysian telecommunication firms examined in the study. Hence, good, and high efficiency in managing total assets in the telecommunication firms would reflect high profitability and performance in these firms. In addition, the results of this study could have implications for businesses, investors, and policymakers, when these groups are considering the services offered by the private telecommunication companies in Malaysia. The elements that were seen as having an impact on profitability might help to shape the regulatory policies which were aimed at stabilizing and sustaining the performance of Sharia-compliant businesses in general. However, the outcomes of the research need to be interpreted bearing in mind several limitations. For example, the samples used in this research has to be expanded to include other countries for purposes of comparison and contrast. Besides, future studies could also further explore other industries to attain a better generalization of the results to other types of businesses. Likewise, future researchers could also add other macroeconomic variables, such as inflation rates, foreign exchange rates, and others, to get a clearer picture and deeper understanding of firm performance.

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