



Corporate Sustainable Growth Rate: The Potential Impact of COVID-19 on Malaysian Companies

Fauzias Mat Nor¹, Nur Ainna Ramli¹, Ainulashikin Marzuki¹, Norfhadzilahwati Rahim^{*1}

¹ Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800, Nilai, Negeri Sembilan, Malaysia

ABSTRACT - The COVID-19 pandemic and the economic slowdown have negatively impacted various industries and will cause losses, defaults in debt obligations, and significantly increase the risk of insolvency. An excessive level of debt could lead to unsustainable growth, financial distress, and insolvency. Sustainable growth rate (SGR) may have a significant impact on corporate financial distress. Sustainable growth in a business context is the maximum limit for a company to increase its revenue without depleting its financial resources. Sustainable growth rate depends on the earnings retention rate (R) and the return on equity ($SGR = R \times ROE$). The purpose of this research is to investigate the factors affecting the SGR by segregating the positive and negative profitability of Shariah-compliant companies in Malaysia. Using STATA software, we conducted a static estimation model to analyse data from 181 Shariah-compliant companies in Malaysia collected from 2007 to 2016. The research based on ROE analysis by segregating positive and negative ROE as the potential impact of COVID-19 in Malaysia. For companies of positive ROE, the decrease in the dividend payout and the company's efficiency, and an increase in profitability will increase the sustainable growth rate. The company with negative ROE shows that the decrease in leverage and an increase in the company's profitability and the company's efficiency will result in the increased company's sustainable growth rate. This research can be a guide for companies to the potential or experimental impact of the COVID-19 pandemic either for the company that gains profit or faces the financial losses. This paper also provides an understanding of the corporate sustainable growth rate facing negative and positive profitability in Malaysia.

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INTRODUCTION

Companies all around the world are facing an unpredicted economic slowdown caused by the Coronavirus (COVID-19) pandemic. Malaysian companies also face no exception to the effects of the COVID-19 pandemic. In this regard, Malaysia has run the Movement Control Order (MCO) that started from 18th to 31st March 2020. On March 25th, the MCO was extended to April 14th by adding two more weeks. Then, the MCO was announced on April 10 to be extended until April 28th and announced again on April 23rd to be extended until May 12. A plan had been announced on 1 May to ease the lockdown by allowing businesses to open on 4 May. The COVID-19 pandemic and the economic slowdown have negatively impacted various industries such as tourism, retail, aviation, construction, and travel among

others. Accordingly, in this situation, there are circumstances which certain companies face a lot of debt with little or no revenue generated. This will result in the rise of the number of organizations that will be impacted and it will cause in the suffering of losses, defaults in debt obligations, and significantly increase the risk of insolvency.

In the light of the COVID-19 pandemic, all organizations and industries may face either positive or negative financial performance. Companies may gain higher profit or will be in financial distress caused by the COVID-19 pandemic. Fazzari et al. (1988) stated that financial distress arises when a firm has difficulty in paying principal debt and interest obligations, where, in an extreme case, a firm can become bankrupt. Debt usage is limited, as companies may face financial distress or bankruptcy. Platt (1995) also mentioned that many financially distressed companies have limited or no access to the debt markets. An excessive level of debt could lead to unsustainable growth, financial distress, and insolvency. Sustainable growth in a business context is the maximum limit for a company to increase its revenue without depleting its financial resources. Sustainable growth rate (SGR) depends on the earnings retention rate (R) and the return on equity ($SGR = R \times ROE$). Thus, the results of SGR serve as an imperative tool for the growth strategies of financially distressed firms and other firms which are trying to reduce their leverage, particularly for companies facing the COVID-19 pandemic.

SGR is one of the company's survival goals and is attractive to investors, bankers and analysts alike. SGR has to be evaluated with specific measurements of a company's performance. Determining the factors that affect the firm's SGR is to help stakeholders (either internal or external management or customers) make the right decisions. According to Hartono et al. (2016) and Radasanu (2015), the SGR is influenced by four factors: the profitability ratio, where an increase in the profitability ratio increases the generation of internal funds with direct impacts on achieving growth; the asset turnover ratio, where an increase in this ratio causes an increase in sales generated per asset unit, which reduces the need for additional assets for an increase in sales and which results in an increase in the SGR; financial policy, where an increase in total debt provides additional resources and increases the SGR; and dividend policy, where an increase in the retention rate increases the growth of capital and implicitly the SGR. Johnson and Soenen (2003) stated that strategic planning by handling policy constraints and limitations, referring to leverage and dividend payouts, can help the company sustain its growth. This will assist firms in the crisis of the COVID-19 pandemic, in which priority area should be given to improve and lead their firms to have higher SGR performance. In this case, the decision-making process and the investment guidance are influenced by the company's firm growth and risk of having better financial performance and shareholder wealth.

Moreover, SGR plays an important role in maximizing growth rates without increasing firm debt or issuing new equity. The growth that is too rapid can exhaust resources, but a slow growing company may not be able to make effective use of its resources (Chang, 2012). While, the combination of rapid growth, high debt, and decreasing profit margin may result in financial distress (McFaddin & Clouse, 1993). Too much growth sometimes causes financial stress to the company, hence the company faces higher costs and debt, bankruptcy, financial losses and declining market share (Fonseka et al., 2012). A company has suitable conditions when it can manage and improve its financial conditions or is subject to pressure that requires changes in its operating or financing policies (Emery, 2000). SGR is the key indicator that firms use to gauge their business profitability performance. The handling of financial and operating activities becomes an important factor which can influence the company's sustainable growth. Thus, on the COVID-19 pandemic issues, this research can be potential or experimental guidance for companies that faced or are facing the impacts of the COVID-19 pandemic; either the company gains profit or faces financial losses towards the SGR. The question is whether these factors similarly influenced

the SGR of the Shariah-compliant companies; given its different financial performance? This research examines the factors affecting the SGR by segregating the positive and negative profitability as the potential impact of COVID-19 of Shariah-compliant companies in Malaysia.

To answer the above research question and objective, we used 181 Malaysian Shariah-compliant companies from 2007 until 2016 which were retrieved from Thomson Reuters Database. We run static estimation models of analysis. This paper is organized as follows; literature review on financial distress and SGR is discussed at the next session. This is followed by research methodology, analysis model, and discussion of the findings. The final section is the research conclusion.

LITERATURE REVIEW

The Importance of Sustainable Growth Rate (SGR)

The Sustainable Growth Rate (SGR) results can be used to guide the growth strategies of financially distressed firms and firms trying to reduce their leverage. The SGR formula tells financial market-access firms whether they will need to raise new funds to achieve a level of sales growth above their SGR (Platt, 1995). Moreover, Harkleroad (1993) stated that SGR provides an analytical framework to help identify which elements of a firm's operating and financial structures management should focus on to improve financial performance. It also enables analysts to compare performance over time to quickly identify the key elements of a competitor's strategy so they can focus their efforts on identifying the competitors' strengths and weaknesses. SGR is also an imperative tool in helping managers make major corporate financial decisions (Babcock, 1970). Arora et al. (2018) mentioned that SGR can be useful for managers in balancing their operational and financial strategies. It has been cited as a concept that is practically applicable in the modern context of financial management, which can be used as a firm's strategic planning and control tool (Fonseka, 2012).

Moreover, the concept of SGR by Ashta (2008) is useful for firms that are growing very fast and for those facing financial distress; by modifying the calculation it can improve financial analysis and clarity by calculating the firms' SGR. The author's findings proved that the modification of the SGR formula was consistent when the calculation used opening assets in the asset turnover ratio. Furthermore, the calculation for leverage ratio is opening total assets divided by opening equity and should use figures of the same date. Specifically, the modification of the calculation of the asset turnover rate based on those changes can be calculated by sales divided by opening total assets rather than dividing the closing total assets as used by Higgins (1977). The modification to use the same date is more intuitive because sales are created based on assets rather than other factors, which are more indirect and remote (Ashta, 2008). Therefore, both assets and equity should have a specific term in the calculation of leverage ratio; and the value of the assets should be in the same period.

A widely known framework for the SGR was developed by Higgins (1977), and the framework identifies four main factors that influence the SGR; these are the capital structure, dividend policy (under financial constraints), profitability, and asset efficiency. Amouzesh et al. (2011) find that a firm's SGR depends only on its earnings' retention rate (R) and return on equity ($SGR = R \times ROE$). The calculation of the SGR refers to the retention ratio multiply with returns on equity. Capital structure, profitability (profit margin), asset efficiency and the retention ratio are associated with the SGR and it reflects a combination of operating and financial elements. Then, the combination of operating a company (i.e. profit margin and asset efficiency) and financial elements (i.e. capital structure and retention ratio) into a single measure becomes a very valuable measure of financial performance for each company.

The SGR must be evaluated with specific measures of a company's performance. This measurement can be described by determining the factors that affect a firm's SGR to help stakeholders (either internal or external management teams or customers) make the right decisions. According to Hartono et al. (2016) and Radasanu (2015), the SGR is influenced by four factors: the profitability ratio, where an increase in the profitability ratio increases the generation of internal funds with direct impacts on achieving growth; the asset turnover ratio, where an increase in this ratio causes an increase in sales generated per asset unit, which reduces the need for additional assets for an increase in sales and which results in an increase in the SGR; financial policy, where an increase in total debt provides additional resources and increases the SGR; and dividend policy, where an increase in the retention rate increases the growth of capital and implicitly the SGR. Thus, specific measurements of a company's performance can be described by determining the factors that affect a firm's SGR to help stakeholders (either internal or external management teams or customers) make the right decisions especially for the company that faced the impact of COVID-19 pandemic.

According to Vasiliou and Karkazis (2002), the SGR is not only applicable to firms but can also be used for banks. The authors have shown that banks need to determine the maximum annual rate to increase total assets that can be supported by equity capital generated internally. On the one hand, by studying annual reports between 2006 and 2014, Mat Nor et al. (2017) investigated the sustainable growth rate within limited minimum capital structure, leverage and liquidity requirements of banks in Malaysia, and by using focus group interviews between 2006 and 2015 in order to obtain data and information. In terms of bank growth, both full-fledged Islamic banks versus conventional bank's Islamic subsidiaries in Malaysia are capable of sustaining and growing the bank business but with mixed growth, despite tight minimum risk exposure requirements. The SGR helps explain why a proper balance must be maintained between firm growth and profitability and it is also a useful tool for a banker to determine a company's creditworthiness (Fonseka, 2012). Therefore, the concept of SGR can be useful not only for firms but also for banks.

Sustainable Growth Rate (SGR), Financial Stress and the Crisis

Sometimes, a growth rate that is too high causes financial stress, and, therefore, the company will face higher costs, which may lead to bankruptcy, financial losses, and declining market share (Fonseka et al., 2012). Fazzari et al. (1988) stated that financial distress arises when a firm has difficulty in paying principal debt and interest obligations, where, in an extreme case, a firm can become bankrupt. Platt (1995) also mentioned that many firms in financial distress have limited or no access to the debt markets. The relationship between the fundamentals of financial institutions (i.e. cost income ratio, equity to total assets, total asset growth, and ratio of loan loss reserve to gross loans) and all these variables with a lag of one year had a positive impact on the financial distress probability in the next year (Zaki et al., 2011). Consequently, many financial agreements normally require inclusion of target debt equity ratios (Fazzari et al., 1988). In addition, Kanani et al. (2013) stated that the key factors in financial information are firm growth, as well as company risk. Gómez-Bezares et al. (2017) stated that firms incorporating sustainability issues into their business operations are better able to leverage their resources towards stronger financial performance and shareholder value creation than other companies. In other words, the use of debt is limited as companies might face financial distress or bankruptcy. Also, firms with low growth types are more likely to issue new debt than equity when the economic and market conditions improve, while firms with high growth types are less likely to issue debt and equity. Meanwhile, the relationship between financing and growth behaviour is explicitly integrated (Molly et al., 2012).

Anderson and Nyborg (2011) stated that they found a negative correlation between growth and firm performance. In relation to this, Shaikh (2010) expressed that leveraged firms can expand their profits in booms. However, in a declining economy, they may even face bankruptcy. Leveraged firms are more stable and profitable compared to non-leveraged firms during economic booms but during recessions, are more risk-prone and less profitable than no leveraged firms. As such, leveraged firms rely on good economic conditions to remain profitable. In addition, leverage amplifies the losses or gains in business activities (Ilie & Olaru, 2013). Leverage boosts gains and supports economic growth during good times. As such, governments and firms are using leverage on a large scale. However, governments and firms deleverage during bad times. Financial crises can occur due to high leverage, and, usually, deleveraging will follow a financial crisis. This is because firms want to reduce risk and strengthen their financial stability and sustainable growth rate. In this case, the decision-making process and the investment guidance are influenced by the company's firm growth and risk of having better financial performance and shareholder wealth.

Shariah-Compliant Firms

Concerning financial strategies, the Securities Commission (SC) has introduced new screening methodology benchmarks based on financial ratios (cash over total assets and debt over total assets) to be listed as Shariah-compliant firms (Securities Commission Malaysia, 2013). The conventional debt must not exceed 33 percent. Due to the new screening methodology benchmarks, the number of Shariah-compliant firms reduced from 801 (May 2013) to 653 (Nov 2013). One of the reasons for the reduction in the number of Shariah-compliant firms is that companies have higher conventional debt, where the financial ratios are more than the limit or threshold of 33 percent (Junaina, 2015). About this issue, in other words, for a firm to be listed as a Shariah-compliant firm and comply with the SC financial ratio benchmarks it encourages firms to have more Islamic debt instead of conventional debt. As mentioned earlier, the changes in financial and operating activities would have an impact on the SGR of a firm. Hence, financial strategies become one of the important elements for a Shariah-compliant firm to investigate because the changes in financial activities lead to a change in operating activities and would have an impact on SGR performance.

Figure 1 of the research framework shows that there are few factors of SGR (capital structure, dividend policy, profitability, and asset efficiency) that might influence the SGR.

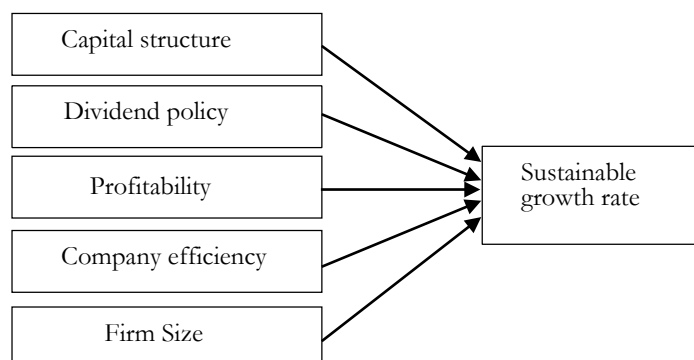


Figure 1: Research Framework

METHODOLOGY

Sample

We obtained the data from the Thomson Reuters database from 2007 to 2016 (ten years). The data start from 2007 because the FTSE Bursa Malaysia EMAS Shariah Index replaced the KLSE Shariah Index in 2007 (Mohd-Sanusi et al., 2015). Therefore, there will be firms that are excluded and newly classified as Shariah-compliant. Table 1 shows that from a total of 1020 Shariah-compliant firms from 2007 to 2016, and after the arrangement, only 188 Shariah-compliant firms maintained the listed status from 2007 to 2016. After removing companies with insufficient information, only 181 from 188 firms were available. The sample consists of Shariah-compliant firms from all sectors except for the financial sector of Bursa Malaysia because of its exclusive features in terms of financial statements and business activities (Ali et al., 2009).

The research is based on ROE analysis by segregating positive and negative ROE as the potential impact of COVID-19 in Malaysia. An outlier is an observation with a large residual, which can be measured using Cook's distance test (Cook, 1977).¹ If $D > 1$, this indicates a big outlier problem and should be removed from the data set based on OLS regression analysis. After removing the outliers, the final observations (N) become 1520 and 203 for the positive and negative ROE. Refer Table 1.

Table 1: Sample of the Shariah-Compliant Firms for Each Sector from 2007 until 2016

No.	Sector	Total Shariah Compliant firms from 2007 until 2016	Total Shariah Compliant firms maintained from 2007 until 2016 for the 10 years	Completed Data
1	Industrial Products	335	60	58
2	Trading Services	249	38	35
3	Consumer Products	164	35	34
4	Properties	140	18	17
5	Construction	73	19	19
6	Plantation	59	18	18
Total		1020	188	181

Research Measurement

Table 2 indicates the variables used in this research with the measurements of each variable. As the objective of this study is to investigate the factors that affect the SGR by segregating positive and negative profitability of Shariah-compliant companies in Malaysia, the dependent variable is SGR and the independent variables are financial leverage (capital structure), dividend policy, profit margin (profitability), company efficiency, and firm size.

Previous studies used the Higgins model to calculate the SGR (Fonseka et al., 2012; Molly et al., 2012). Similarly, this study adopted Higgins's SGR equation to calculate the SGR of Shariah-compliant firms in Malaysia by multiplying the return on equity (ROE) with 1 minus the dividend payout ratio (1-DPR).

¹ High Influence if $D > 4/N$ (N is sample size)

Table 2: Measurement of Variables in the Analysis

Variable	Symbol	Measurement
Capital structure	TDTE	Total debt / Total equity
Dividend policy	DPR	Dividend per share/Earnings per share
Profitability	NPM	Net income / Sales
Company efficiency	STA	Sales /Total assets
Firm size	Log TA	Logarithm of total assets
Sustainable growth rate	SGR	Return on equity × Retention ratio

MODEL OF ANALYSIS

This research used a panel data method to examine the direct effect of the factors affecting the sustainable growth rate (SGR) by segregating the positive and negative profitability of Shariah-compliant companies in Malaysia using STATA software. Panel data analysis was tested by using static estimation models.

Regression models for panel data must meet some assumptions before testing the model, either it is linear, unbiased, lagging structure or other important results. This research utilized the following model to test the factors affecting the SGR:

$$SGR_{it} = \beta_0 + \beta_1 TDTE_{it} + \beta_2 DPR_{it} + \beta_3 NPM_{it} + \beta_4 STA_{it} + \beta_5 LogTA_{it} + \varepsilon_{it} \quad (1)$$

Where $SGR_{i,t}$ is sustainable growth rate based on Higgins model calculation (return on equity multiply retention ratio) of firm i at time t ; $TDTE_{i,t}$ is a total debt ratio of firm i at time t and proxy of capital structure; $DPR_{i,t}$ is a dividend payout ratio of firm i at time t and proxy of dividend policy; $NPM_{i,t}$ is a profit margin of firm i at time t and represents profitability; $STA_{i,t}$ is sales to assets ratio of firm i at time t and represents company efficiency; and, $LogTA_{i,t}$ represents the natural logarithm of total assets.

The pooled model pools all data together into one dataset and imposes a common set of parameters across unit and time. The pooled model essentially has the same intercept and slope across unit and time. However, the result of the pooled model may cause heterogeneity bias. Therefore, random and fixed effects will assume that each unit has its own intercepts. To solve such heterogeneity bias, the error term is formed as:

$$\varepsilon_{it} = \lambda_i + \mu_{it} \quad (2)$$

In order to apply random and fixed effects, the calculation is written as:

$$SGR_{it} = \beta_0 + \beta_1 TDTE_{it} + \beta_2 DPR_{it} + \beta_3 NPM_{it} + \beta_4 STA_{it} + \beta_5 LogTA_{it} + \lambda_i + \mu_{it} \quad (3)$$

To select the preferred model, Table 3 shows the statistical tests to choose the appropriate model in the context of panel data analysis used in this study. This study used three statistical tests such as partial F-test, Breusch-Pagan LM test and Hausman test. Hence, it is important to select an appropriate model for further analysis either POLS, REM or FEM by using three statistical tests such as partial F-test, Breusch-Pagan LM test and Hausman test.

In the light of the COVID-19 pandemic, all organizations and industries may face either positive or negative financial performance. After the data analysis segregating the positive and negative ROE, the model of analysis is based on two models as below:

i. Positive ROE (N: 1520):

$$SGR_{it} = \beta_0 + \beta_1 TDTE_{it} + \beta_2 DPR_{it} + \beta_3 NPM_{it} + \beta_4 STA_{it} + \beta_5 LogTA_{it} + \lambda_i + \mu_{it} \quad (4)$$

ii. Negative ROE (N:203):

$$SGR_{it} = \beta_0 + \beta_1 TDTE_{it} + \beta_2 DPR_{it} + \beta_3 NPM_{it} + \beta_4 STA_{it} + \beta_5 LogTA_{it} + \lambda_i + \mu_{it} \quad (5)$$

This research performed diagnostic checks namely heteroscedasticity and Serial Correlation after selecting an appropriate model of analysis. In numerous applications, heteroscedasticity arises, in both cross-sectional and time series data. In this research, heteroscedasticity tests were conducted using the Modified Wald Test.² If the results show that the p-value is less than 5 percent (reject the null hypothesis), it indicates that heteroscedasticity is present (heteroscedasticity problem). The reason to detect the presence of heteroscedasticity is to test the equality of the variances in regression error. Thus, to rectify the problems this research used the random effect or fixed effect model with heteroscedasticity and serial correlation robust standard error.³

Table 3: The Statistical Test in The Context of Panel Data Analysis

Fixed effect (F test)	Random effect (BP-LM test)	Hausman test	Appropriate model
H_0 is not rejected (No fixed effect)	H_0 is not rejected (no random effect)	-	Pooled OLS
H_0 is rejected (fixed effect)	H_0 is not rejected (no random effect)	-	Fixed effect model
H_0 is not rejected (No fixed effect)	H_0 is rejected (random effect)	-	Random effect model
H_0 is rejected (fixed effect)	H_0 is rejected (random effect)	H_0 is rejected (fixed effect)	Fixed effect model
H_0 is rejected (fixed effect)	H_0 is rejected (random effect)	H_0 is not rejected (random effect)	Random effect model

Notes: F test = Pooled OLS versus Fixed Effect; BP-LM test = Pooled OLS versus Random Effect, and; Hausman test = Random Effect versus Fixed Effect.

RESULTS

This section reports and presents the results of the descriptive statistics, correlation analysis and the estimations for static regression model. The results also interpret the results of various methods to check the robustness of the results, where we produced results with standard errors that are asymptotically robust to general heteroscedasticity.

Descriptive Statistics

Table 4 presents the descriptive statistics for the positive and negative profitability of Shariah-compliant companies in Malaysia.

² STATA commad: xttest3

³ STATA command: xtreg, re cluster (code) or xtreg, re vce (robust) or xtreg, fe cluster (code) or xtreg, fe vce (robust)

Table 4: Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Positive ROE (N: 1520)				
Capital structure	0.3581	0.4226	-3.0576	3.4338
Dividend policy	0.3778	0.6139	-6.2854	14.5349
Profitability	0.1120	0.1212	-0.3749	1.5278
Company Efficiency	2.0937	2.1277	-0.0446	19.8046
Firm size	20.3876	1.2955	17.7009	25.6129
Sustainable growth rate	0.0667	0.0594	-0.3132	0.5479
Negative ROE (N:203)				
Capital structure	0.4820	0.8560	0	8.9437
Dividend policy	-0.1419	.7679	-7.7389	2.4671
Profitability	-0.1526	.3285	-3.5002	-.0009
Company Efficiency	3.7784	5.9626	0.1810	51.0788
Firm size	19.7516	1.2395	17.4224	24.4472
Sustainable growth rate	-0.0913	0.1053	-0.7724	0.0155

The average capital structure and company efficiency for positive ROE is 35.81 percent and 209.37 percent, respectively, which are lower than negative ROE, 48.20 percent and 377.84 percent. The minimum capital structure for positive ROE is -305.76 percent and the maximum are 343.38 percent with 42.26 percent standard deviation. While capital structure for negative ROE, the minimum capital structure is 0 percent, the maximum is 894.37 percent with 85.60 percent is the standard deviation. The minimum and maximum company efficiency for positive ROE is -4.46 and 198.046 percent, respectively while the minimum and maximum company efficiency for negative ROE is 18.10 percent and 510.79 percent, respectively. This indicates that capital structure and company efficiency for negative ROE is more volatile with a standard deviation of 85.60 percent and 596.26 percent, respectively compared to positive ROE of 42.26 percent and 212.77 percent, respectively.

The average dividend policy, profitability, firm size and sustainable growth rate (SGR) for positive ROE are 37.78 percent, 11.20 percent, 20.38 and 6.67 percent, respectively, which are higher than those of negative ROE, -14.19 percent, -15.26 percent, 19.75 and -9.13 percent, respectively. The minimum and maximum dividend policy for positive ROE are -628.54 percent and 145.35 percent (with 61.39 percent is the standard deviation), respectively, while dividend policy for negative ROE is -773.89 percent and 246.71 percent (with 76.79 percent is the standard deviation), respectively. This indicates that the dividend policy for positive ROE is less volatile. Similarly, the profitability and SGR for positive ROE (12.12 percent and 5.94 percent, respectively) are lower volatility compares to negative ROE (32.85 percent and 10.53 percent, respectively).

The preliminary observation, based on the descriptive statistics, is that generally, positive ROE has higher growth in SGR, and the SGR is comparatively more stable than negative ROE.

Correlation Analysis

Tables 5 and Table 6 report the correlation analysis between variables used in the analysis. Capital structure is reported to be negatively correlated to the sustainable growth rate (SGR) for negative ROE, which indicates that firms that consume higher debt tend to have lower SGR and vice versa. Capital structure was found to influence the SGR of a firm (Escalante et al., 2009;

Fonseka et al., 2012; Higgins, 1977). A firm with higher leverage leads to a higher SGR (Fonseka et al., 2012).

Adding to that, profitability is positively correlated with the SGR for positive ROE while the firm size is positively correlated with the SGR for both positive and negative ROE. Dividend policy and the company's efficiency appear to have a negative correlation with SGR for positive ROE.

Table 5: Correlation Analysis for Positive ROE

Variable	Sustainable growth rate	Capital structure	Dividend policy	Profitability	Company's Efficiency	Firm's size
Sustainable growth rate	1.0000					
Capital Structure	-0.0399	1.0000				
Dividend policy	-0.3531***	-0.0489**	1.0000			
Profitability	0.3058***	-0.1036***	-0.0349	1.0000		
Company Efficiency	-0.0977***	0.0947***	-0.0659**	0.4643***	1.0000	
Firm size	0.0427*	0.3487***	0.0110	0.1416***	0.1776***	1.0000

Note: ***, ** and * denote significant at 1%, 5% and 10% levels, respectively.

Table 6: Correlation Analysis for Negative ROE

Variable	Sustainable growth rate	Capital structure	Dividend policy	Profitability	Company's Efficiency	Firm's size
Sustainable growth rate	1.0000					
Capital Structure	-0.5244***	1.0000				
Dividend policy	0.0009	-0.0049	1.0000			
Profitability	0.2754***	0.0444	-0.0602	1.0000		
Company Efficiency	0.1072	-0.0652	-0.0128	-0.5362***	1.0000	
Firm size	0.0172	0.2327***	-0.0181	0.1420**	0.0700	1.0000

Note: ***, ** and * denote significant at 1%, 5% and 10% levels, respectively.

Static Panel Data Analysis

Table 7 presents the regression results for positive and negative ROE as the potential impact of COVID-19 either for the company that gains profit or faces the financial losses. We reported that the preferred static model for positive ROE is a fixed effect while negative ROE is a random effect after considering all the statistical test panel data analysis based on the F test, Breusch-Pagan LM Tests, and Hausman test.

Table 7: Results of Static Panel Data Estimations for Positive and Negative ROE

Variable	Positive	Negative
Constant	0.206	-0.149**
Capital structure	0.001	-0.066***
Dividend policy	-0.024**	0.004
Profitability	0.279***	0.149***
Company efficiency	-0.009***	0.006***
Firm size	-0.007	0.005
Adjusted r-squared	0.2948	0.4300
F test	6.81***	1.48**

Breusch-Pagan LM Test	672.44***	0.00
Hausman Test	64.03***	-
Multicollinearity (vif)	1.21	1.23
Heteroskedasticity	1.7e+29***	6643.41***
Serial Correlation	89.789***	0.067
Preferred Static Model	Fixed effect	Random effect
r-squared	0.2451	0.4442

Note: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

The research found that the diagnostic checks found that there is heteroscedasticity and autocorrelation problem. Thus, to rectify the problem, the research used fixed effect and random effect regression with robust standard error. The results of the fixed and random effect model together with the robust standard error after addressing both the heteroscedasticity and autocorrelation problems in the residuals.

Based on the above result for positive ROE, the results indicate that dividend policy and company efficiency are negatively significant related to the sustainable growth rate (SGR). Dividend policy is negatively related to the SGR at the 5 percent significant level while company efficiency is negatively related to the SGR at the 1 percent significant level. Moreover, profitability is found to be positively related to the SGR at 1 percent significant level. Thus, the results indicate that for the company that gains profit from the impact of the COVID-19 pandemic where the higher the dividend payout, the more likely that SGR will decrease. And, the higher the firm's profitability could lead to an increase in the SGR.

While Table 7 also shows the results for negative ROE for the company that faces the financial losses from the impact of the COVID-19 pandemic. The results recorded that capital structure is negatively significantly related to the SGR indicating the lower the usage of debt, the more likely that SGR is increased. In contrast with positive ROE, company efficiency found that positively significantly related to SGR. This means, the higher the company efficiency, the more likely that SGR is increased and will be considered by the companies. This finding is in line with the findings of Fonseka et al. (2012) and Higgins (1977). Similarly, negative ROE also found that profitability positively significantly related to SGR indicating that the increase in SGR is more depend on the performance of the company. Also, the results are consistent with Liow (2010) where he found that the higher the earnings retention rate, the lower the dividend payout ratio will result in higher SGR. In contrast, the SGR will increase by a higher profit margin, a lower dividend payout ratio, a higher debt to equity ratio, or lower assets to sales ratio (Arellano and Higgins, 2007). But, Fonseka et al. (2012) stressed that large firm with high leverage is given less SGR by using Higgins model. Therefore, increasing (decreasing) in capital structure and dividend policy will decrease (increase) SGR. While increasing in profitability tends to increase SGR. Besides, the results show that firm size is not significantly related to SGR. This means, larger or smaller firms could not give impact to the higher in the SGR. This result is consistent with Park & Jang (2010) found that small firms were growing faster than large firms, but as firm size increased, the growth rate decreased.

Overall, the results indicated that the potential impact during the COVID-19 pandemic for the company of positive ROE show that the decrease in dividend policy and company efficiency and an increase of profitability will increase the SGR. And, the company with negative ROE, the decrease in capital structure and an increase in the company's profitability and company's efficiency will increase the company's SGR. Based on the results, the financial activities, that is the capital structure did not trigger the issue of the financial ratio benchmarks of a Shariah-compliant firm.

However, it should be noted that, the overall results without segregating the positive and negative ROE, a decrease in capital structure and dividend policy, and an increase in profitability

and larger firms tend to increase in SGR. An excessive level of debt could lead to unsustainable growth, financial distress, and insolvency. This will assist firms in terms of which priority area should be given to improve and lead their firms to have higher SGR performance. SGR is very important for companies to monitor in order to have a better SGR performance. It should create awareness concerning the importance of the best planning to manage their financial leverage, the payment of dividends, profitability, and company efficiency to sustain firm's growth.

CONCLUSION

This research examines the factors affecting the SGR by segregating the positive and negative profitability among 181 Shariah-compliant companies in Malaysia from 2007 to 2016 as the potential or experimental impact of the COVID-19 pandemic. The COVID-19 pandemic has negatively impacted various industries, where, certain companies face a lot of debt with little or no revenue generated which will affect their profitability. The SGR plays an important role in maximizing growth rates without increasing firm debt or issuing new equity. The SGR also is the key indicator that firms use to gauge their business profitability performance. Our empirical results reveal that companies with negative profitability or face losses due to the impacts from the COVID-19 pandemic, the decrease in the company's capital structure and also an increase in profitability and company efficiency will increase the SGR. The results also reveal that companies with positive profitability, the decrease in dividend policy and company's efficiency and an increase in profitability will increase the SGR. However, no significant effect of capital structure on the SGR. This will assist firms in terms of which priority area should be given to improve and lead their firms to have higher SGR performance for the company that faced the impact of the COVID-19 pandemic.

The findings of the present paper provide financial indicators concerning the usage of debt in a firm's capital structure, the payment of dividends, the firm's profitability, the company's efficiency, and larger or smaller firms that could lead to a higher or lower SGR. Interestingly, these results will guide the company to sustain the company's growth rate due to the impact of COVID-19 pandemic either the company gains profit or faces financial losses. These results demonstrate that certain factors influence the SGR, including the planning and managing of a firm's financial and operational activities. The SGR is important for helping firms to manage, guide, control and plan their operating and financial strategies. The SGR can also improve financial performance and assist managers with financing decisions especially for the company that faces financial crisis.

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