

## Profitability and Sustainable Growth of Manufacturing Firms: Empirical Evidence from Malaysia and Indonesia

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**Abstract.** *This study aims to determine the effect of profitability on sustainable growth in Malaysian and Indonesian manufacturing firms. By using 58 Malaysia manufacturing firms and 90 Indonesia manufacturing firms that listed on Malaysia and Indonesia Stock Exchanges from 2016 until 2018, the findings show that the profitability of the firm significantly influences the firm's sustainable growth. Firm size as a moderating variable is also able to moderate the effect of profitability on sustainable growth. This research implies that manager in manufacturing firms may boost the profit to achieve sustainable growth. In addition, large scale firms need to optimize their total assets to increase their profit in order to create larger effect on sustainable growth.*

**Keywords.** *firm size; manufacturing firm; profitability; sustainable growth*

**Abstrak.** Penelitian ini bertujuan untuk mengetahui pengaruh profitabilitas terhadap pertumbuhan berkelanjutan di perusahaan manufaktur Malaysia dan Indonesia. Dengan menggunakan sampel 58 perusahaan manufaktur Malaysia dan 90 perusahaan manufaktur Indonesia yang terdaftar di Bursa Efek Malaysia dan Bursa Efek Indonesia selama periode 2016 -2018, hasil penelitian menunjukkan bahwa profitabilitas perusahaan secara signifikan memengaruhi pertumbuhan berkelanjutan perusahaan. Selain itu, ukuran perusahaan mampu memoderasi pengaruh profitabilitas terhadap pertumbuhan berkelanjutan. Penelitian mengimplikasikan bahwa manajer perusahaan manufaktur dapat meningkatkan profit perusahaan untuk mencapai pertumbuhan berkelanjutan. Selain itu perusahaan berskala besar perlu mengoptimalkan total assetsnya untuk meningkatkan profitabilitas agar menciptakan efek yang lebih besar pada pertumbuhan berkelanjutan.

**Kata kunci.** pertumbuhan berkelanjutan; perusahaan manufaktur; profitabilitas; ukuran perusahaan

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### INTRODUCTION

Manufacturing firm is a firm or business entity that processes raw or semi-finished goods into finished materials to create value added. Manufacturing also includes assembling various components to become products. In general, manufacturing has several stages of operation, and each stage of operation makes the raw material closer to the final form.

In Indonesia, manufacturing sector plays an important role in increasing the economic growth because it produce products that can be traded and create workplace (Silalahi, 2014). In 2018 the Indonesia economic growth reach the level of 5.17%, higher than

2017 achievement of 5.07% according to the Ministry of Finance of the Republic of Indonesia (Kementrian Keuangan Republik Indonesia, 2019). The increase in economic growth will have a positive impact on the manufacturing firms' profit since manufacturing sector in Indonesia are the largest contributor of GDP (20.16%) and Indonesian exports (75.99%). (Nastiti, Atahau, & Supramono, 2019).

In Malaysia, manufacturing industry is one of the strategic industries (Mohd Fuzi, Habidin, Janudin, & Ong, 2019) because of its productivity and sustainability (Bahri, St-Pierre, & Sakka, 2017). The study by Wasiuzzaman (2015) shows that Malaysian

manufacturing firms benefit from cash discount offered by the supplier in order to increase profitability.

Higher competition in the manufacturing industry put pressures on the firms to obtain profit. Obtaining profit is the short-term objective of the firm to achieve long term goal of firms' sustainability. There is a positive relationship between profitability and sustainable growth (Manaf et al. 2018). When the firm generate profits then the profit may be used as retained earnings. It can serve as a reserve fund for investment opportunities and increase the sustainability of the firm in the future. Thus, profits will affect the sustainable growth of the firm.

Based on the pecking order theory, the firm should prioritize on the internal financing rather than the external financing in the forms of share issuance and debt, because internal financing is less costly. When the firm issues new shares, it means that the firm is not capable enough to finance their own needs using the internal financial funds (Palombini & Nakamura, 2012). However, if the firm has a high level of profitability, the firm does not need to issue new shares because they have sufficient funding from the internal firm.

Previous study by Nastiti et al. (2019) discussed the influence of working capital on profitability and sustainable growth. Using 136 manufacturing firms listed in the Indonesian Stock Exchange from 2010 to 2017, the result shows that working capital significantly affects firms' profitability. Wasiuzzaman (2015) also studied working capital and firms' profitability using the sample of 160 Malaysia manufacturing firms. The study finds a negative relationship between profitability and working capital. Notwithstanding the previous studied conducted in Indonesia and Malaysia, the study on the effect of profitability on sustainable growth is still scarce. Generally, some of the previous studies only focused on the impact of working capital on profitability (Deloof, 2003; Raheman et al. 2010; Hien Tran et al. 2017) and seldom relate the profitability to the firms' sustainability.

Previous research regarding the relationship of profitability and firm size, find that size is the factors that affect the profitability of firms (Yazdanfar, 2013; Zaid, Ibrahim, & Zulqernain, 2014). Yazdanfar (2013). Several studies stated that most firms realize the importance of profitability concept, but they may not know how to increase profitability itself and the factors that affect profitability (Alarussi & Alhaderi, 2017).

Size of the firm usually measured by using total firm assets at the end of a certain year. Large firms benefit from economies of scale in utilizing their assets to achieve a high level of profit. A high level of profit will increase the profitability as well as the sustainable growth. Based on the previous studies, this study seeks to analyze the effect of profitability on sustainable growth of manufacturing firms in Malaysia and Indonesia. The selection of Malaysia and Indonesia is because both are developing countries which are members of the Association of Southeast Asian Nations (ASEAN). This study focuses on manufacturing firms because manufacturing firms have a wide range of type and also play a strategic role in Malaysian and Indonesian economy (Raheman et al., 2010)

This study is expected to contribute to the manufacturing managers' evaluation on the firms' performance. In addition, it is also expected to provide insightful information of the sustainability growth of Indonesian and Malaysian manufacturing firms.

## **HYPOTHESIS DEVELOPMENT**

Some of the previous studies have already discussed profitability and sustainable growth. Research by Bivona (2000) observed the relationship between profitability performance with sustainable growth policies in changing the market. There are three elements that represent the firm's sustainable growth policies like operational activities, management activities and structure in terms of resources. His research found that external key factors' requirements, a desired balance financial

structure, and profitability level can be fulfilled with the feedback approach.

The ability of firms to make profits is closely related to the availability of internal financing. Shapiro, A. and Balbirer (2000) stated that sustainable growth do not only concern in the ability of a firm to develop, but also the firm's ability to develop using internal funding sources. Therefore, firms have to increase their profitability constantly because when those firms have enough profit, they can fulfill their liabilities or needs with internal financing and can minimize external sources of funds. The findings by Manaf et al. (2018) showed that sustainable growth and profitability have a significant positive relationship. Amouzesh et al (2011) also discovered the relationship between sustainable growth and profitability. The studies above showed that profitability has a positive influence on sustainable growth. Based on the discussion above, the first hypothesis is formulated as follows:

H1: Profitability has a positive effect on sustainable growth.

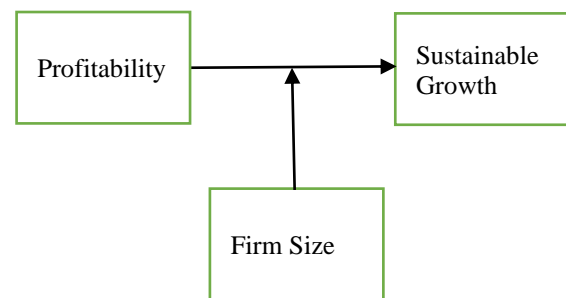
Based on the resource-based theory, we can decrease the cost of capital by increasing the access to financial resources. This theory is suitable for big size firms because larger firms have greater access to funding from various sources. Therefore, getting loans from creditors will be easier because large-sized firms have a greater probability of winning the competition or staying in the industry. On the other hand, small-scale firms are more flexible in the face of uncertainty, because small firms react faster to sudden changes. Therefore, it is possible for large firms to have a greater degree of leverage than small firms. The study by Ha-Brookshire & Dyer (2008) and Stierwald (2010) have discovered a positive relationship between profitability and size. Nanda & Panda (2018) also explained that the liquidity and the size of a firm can increase the profitability ratio in India manufacturing firms. From that research, it can be seen that firm size affects the profitability level of a firm because a larger firm have higher profitability. Meanwhile,

firm size affects the sustainable growth since larger firm has greater opportunity to develop its business. This is because larger firms have both good management and leverage levels to maintain the sustainable growth well. Therefore, this study uses firm size as a moderating variable to find out whether firm size moderate profitability on the sustainable growth in manufacturing firms in Malaysia and Indonesia. Based on the empirical studies, the second hypothesis is formulated as follows:

H2: Firm size reinforces the effect of profitability on sustainable growth.

### Research Model

Figure 1. Moderation model



## RESEARCH METHOD

### Sample

This study uses samples from all manufacturing firms in Malaysia and Indonesia listed in the stock exchange market from 2016 to 2018. The authors uses the data from 2016 to 2018 because the beginning of 2016 was the enactment of a single ASEAN market or commonly known as the ASEAN Economic Community. Therefore, it will have an impact on a wider trading area so that it can increase sales and will affect the firm's profitability and sustainable growth rate. After that, the samples obtained will be processed using the purposive sampling technique with the criteria of have been listed in the stock exchange market in 2016 or before and still survived until 2018 and experience profit during the research period.

The data sources in this study are collected from the website of Malaysia Stock Exchange market

(<https://www.malaysiastock.biz>) and Indonesia Stock Exchange website (<https://www.idx.co.id>) for Indonesia manufacturing firms.

### Variables measurement

Table 1. Variables measurement

Variables	Measurements	Supported studies
Profitability	Return on Asset $RoA = \frac{Net\ Income}{Total\ Asset}$	Oseifuah & Gyekye, 2016; Singhanian & Mehta, 2017
Sustainable Growth	Sustainable growth = ROE x Retention Rate 1. Return on Equity $RoE = \frac{Net\ income\ after\ tax}{Total\ Equity}$ 2. Retention Rate $Retention\ Rate = \frac{(Net\ income - Dividends\ Distributed)}{Net\ income}$	Higgins, 1977
Firm Size	Total Sales	Kajüter, 2006

Based on the above variables, the dependent variable is sustainable growth measured by the multiplication between retention rate and return on equity. The independent variable is profitability and the moderating variable is firm size.

### Analytical technique

This study uses EViews 9 as a tool to analyze the relationship between profitability and sustainable growth with firm size as the moderating variables. Therefore, this study uses the following models:

$$SGR_{it} = \alpha_0 + \alpha_1 ROA_{it} + \alpha_2 AGE_{it} + \alpha_3 LVRG_{it} + e_{it} \quad (1)$$

$$SGR_{it} = \alpha_0 + \alpha_1 ROA_{it} \cdot FSIZE + \alpha_2 AGE_{it} + \alpha_3 LVRG_{it} + \alpha_4 FSIZE_{it} + e_{it} \quad (2)$$

Note:

SGR = Sustainable Growth, dependent variable

ROA = Return on Asset, independent variable

AGE = Age of Firm, control variable

LVRG = Leverage, control variable

FSIZE = Firm Size, moderating variable

Model (1) demonstrates the effect of ROA variable as an indicator of profitability on sustainable growth (SGR), while model (2) demonstrates the effect of ROA variable as an indicator of profitability with firm size (X1) as the moderating variable.

This study uses panel data regression which is a combination of cross-section and time-series data. Panel data regression also means that the regression comes from several individuals or objects in a certain period. There are 3 (three) test models used in this study, they are Chow test, Hausman test, and Lagrange test. The Chow test is a test to determine which model is most appropriate to use in estimating panel data. These models include (H0: Common Effect (CE), H1: Fixed Effect (FE)). Hausman test is a statistical test to choose which model is the most effective Fixed Effect or Random Effect (H0: Random Effect (RE), H1: Fixed Effect (FE)). Furthermore, the Lagrange Multiplier Test is a test to find out which model is better to use between Random Effect and the Common Effect.

## RESULT & DISCUSSION

### The effect of profitability on the sustainable growth of manufacturing firms in Indonesia

Before conducting data testing to test the existing hypotheses, firstly, the author conducts descriptive statistics and outlier tests. After that run a classic assumption test, which in this study uses the multicollinearity test and heteroscedasticity test. Then, the author carries out a data regression test to find out the results of the research and also proves the hypothesis.

Table 1.1 Descriptive Statistics

	SGR (%)	ROA (%)	AGE	LVRG	FSIZE
Mean	7.49	5.88	39.97	0.952143	28.482
Median	5.99	4.79	39.00	0.710000	28.364
Maximum	57.51	28.15	113.00	4.950000	32.959
Minimum	-49.28	0.10	7.00	0.080000	1.170
Std. Dev.	7.91	4.809712	15.70	0.801497	2.298
Observations	252	252	252	252	252

Table 1.1 shows the results of descriptive statistics and outliers wherein the descriptive statistics there are mean, median, maximum, minimum and standard deviation on the research variables. In the above table, it is known that the average level of sustainable growth in manufacturing companies in Indonesia is 7.49%, with a minimum value of -49.28% (Charoen Pokphand Indonesia Tbk) and a maximum value of 57.51% (Merck Sharp Dohme Pharma Tbk), while the ROA variable shows an average value of 5.88% with a minimum value of 0.1% (Nusantara Inti Corpora Tbk) and a maximum value of 28.15% (Jembo Cable Firm Tbk).

An outlier test is conducted to find out whether data has been strayed too far or not. When data is found deviates too far, the data should be eliminated. Eliminating data aims to make the analysis results unbiased and reflect actual phenomena.

Table 1.2 Outlier (secondary data, processed)

Firm code	Outlier
WSBP	0.034
SULI	81.014
SULI	0.130
MLBI	0.062
MLBI	0.149
MLBI	0.191
HMSP	0.016
HMSP	0.016
MERK	0.239
UNVR	0.047
UNVR	0.043
UNVR	0.375

In the outlier test table, there are 6 firms that become outliers, they are: Waskita Beton Precast Tbk. (WSBP), SLJ Global Tbk. (SULI), Multi Bintang Indonesia Tbk. (MLBI), H.M. Sampoerna Tbk. (HMSP), Merck Tbk. (MERK), Unilever Indonesia Tbk. (UNVR). Therefore, for the subsequent data processing, these 6 firms are not included in the data test.

Table 1.3 Correlations Between Variables

	ROA	AGE	LVRG	FSIZE
ROA	1.000000	0.086010	-0.196451	0.162237
AGE	0.086010	1.000000	-0.065602	0.008790
LVRG	-0.196451	-0.065602	1.000000	0.022314
FSIZE	0.162237	0.008790	0.022314	1.000000

Table 1.3 shows the results of correlation tests between variables. From both results there are no correlation results that exceed 0.8. Therefore, these variables have passed the multicollinearity test. In other words, there is no multicollinearity problem.

Table 1.4 Heteroscedasticity test with Glejser

Dependent Variable: RESABS  
Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	511.1838	748.5846	0.682867	0.4956
ROA	7.543045	6.398146	1.178942	0.2401
AGE	-10.06968	18.02357	-0.558695	0.5771
LVRG	85.36948	57.84269	1.475891	0.1419

Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	366.2654	857.3448	0.427209	0.6698
ROA	0.244282	0.223770	1.091665	0.2766
AGE	-9.647101	18.28786	-0.527514	0.5985
LVRG	109.9931	57.52715	1.912020	0.0576
FSIZE	3.659596	9.526886	0.384133	0.7014

Table 1.4 is the result of heteroscedasticity test using the Glejser test on both models, from these results it can be seen that the value of Prob > 0.05 on all the independent variables. It shows that the data of this study are homoscedasticity or free from heteroscedasticity problems.

Table 1.5 Chow Test

Model 1

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.260414	(83,165)	0.0000
Cross-section Chi-square	191.376251	83	0.0000

Model 2

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.304697	(83,165)	0.0000
Cross-section Chi-square	193.989398	83	0.0000

Before conducting the data regression, the author must first determine the test model to be used. Table 1.5 is the result of the Chow test. Chow test is used to determine the model that want to be used between fixed effects or common effects. Chow test results show that the value of Prob <0.05 which means the best model is to use fixed effects.

Table 1.6 Hausman Test

Model 1

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.247036	3	0.0041

Model 2

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	13.923978	3	0.0030

After the chow test, then the test continues with the Hausman test which aims to find out the best model between fixed effects and random effects. Hausman's test results show a Prob value <0.05, which means the best model is still using fixed effects.

Table 1.7 Regression Result

Dependent Variable: SGR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5674.247	1940.328	-2.924374	0.0039
ROA	146.7385	16.58397	8.848216	0.0000

AGE	128.1735	46.71703	2.743614	0.0067
LVRG	457.8923	149.9280	3.054081	0.0026

Model 1

The regression results above show the ROA variable used to measure profitability has t-value of 8,848 and a significance level of 0,000. Therefore, profitability (ROA) has a positive and significant effect on sustainable growth (SGR). From the results above it can be concluded that H1 is accepted.

These results are in line with previous research conducted by Manaf et al., (2018). The research shows that profit greatly influences sustainable growth and has a positive effect. It means that when profitability increases it will also increase a firm's sustainable growth and vice versa. Meanwhile, firm age variables (AGE) and leverage (LVRG) as control variables in this study also have a significant effect on the sustainable growth rate in Indonesian manufacturing firms, with significance levels of 0.0067 and 0.0026, respectively. The Firm Age Variable (AGE) indicates the longer a firm has been established, the higher sustainability level of the firm, and assumes that the firm has been experiencing ups and downs in running its business and still surviving. While Leverage Variable (LVRG) interprets that the higher of firm's ability to meet its obligations, the better the sustainability level of the firm.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4574.445	2232.130	-2.049363	0.0420
ROA	4.971561	0.582593	8.533502	0.0000
AGE	118.8466	47.61314	2.496088	0.0135
LVRG	467.3238	149.7742	3.120190	0.0021
FSIZE	-25.19818	24.80362	-1.015907	0.3112

Model 2

In the regression model 2, where there is a moderating effect of firm size on profitability (ROA x FSIZE), it can be seen that firm size (FSIZE) does not directly affect the level of a firm's sustainable growth. However, in model 2 the ROA variable is a

moderation between firm size and ROA itself. Moderation effect can be seen from the significance level of the ROA variable of 0,000 and the t value is 8,533. This shows that firm size has reinforces the effect of profitability on sustainable growth. Therefore, it can be concluded that H2 is accepted.

These results are consistent with the research conducted by Nanda & Panda, (2018). The research also shows that firm size moderates a firm's profitability. For a large firm, the relationship between profitability and sustainability growth is stronger than a smaller firm. Similar with the result in model 1, firm age (AGE) and leverage (LVRG) variables also have a significant effect on sustainable growth.

**The effect of profitability on the sustainable growth of manufacturing firms in Malaysia**

After testing the data from Indonesia, it can be seen that both hypotheses in this study are answered well. Then, the same treatment is also applied in testing the data from Malaysia.

Table 2.1 Descriptive Statistics

	SGR (%)	ROA (%)	AGE	LVRG	FSIZE
Mean	5.69	6.61	36	0.54	27.748
Median	4.81	5.55	34	0.31	27.840
Maximum	18.12	25.03	77	8.35	31.860
Minimum	-3.70	0.20	12	0.02	24.360
Std. Dev.	4.23	4.47	14.18	1.09	1.578
Observations	153	153	153	153	153

The table above shows the results of the average, median, maximum, and minimum values obtained from descriptive analysis and outlier test tables that contain data which be removed. In the descriptive analysis table, it can be seen that the average value of sustainable growth rates in manufacturing firms in Malaysia is 5.69% with the maximum value of 18.12% (Astino Berhad) and the minimum value of -3.70% (Advanced Packaging Technology Berhad). Meanwhile, the ROA variable has an average value of 6.61% with the maximum value of 25.03% (BP Plastics Holding Berhad) and the

minimum value of 0.20% (Priceworth International Berhad).

Table 2.2 Outlier (secondary data, processed)

Firm id	outliers
ANZO	0.024
BPPLAS	0.023
CHINWEL	0.087
MBL	0.073
POLY	0.027
SRB	0.042
UCHITEC	2.188

In the outlier test table, there are 7 firms that become outliers, they are: Anzo Holdings Berhad (ANZO), BP Plastics Holding Bhd (BPPLAS), Chin Well Holdings Berhad (CHINWEL), Muar Ban Lee Group Berhad (MBL), Poly Glass Fiber M Bhd (POLY), Sapura Resources Berhad (SRB), and Uchi Technologies Bhd (UCHITEC). Thus, for the next test data, those seven firms are not included.

Table 2.3 Correlations Between Variables

	ROA	AGE	LVRG	FSIZE
ROA	1.000000	-0.174956	-0.113821	0.502566
AGE	-0.174956	1.000000	-0.043181	0.053985
LVRG	-0.113821	-0.043181	1.000000	-0.017842
FSIZE	0.502566	0.053985	-0.017842	1.000000

The table above is the result of multicollinearity test, which is useful to find out whether there is a correlation between the independent variables or not. The result shows that there is no correlation between the available independent variables. This is proved by the correlation coefficient that does not exceed 0.8. This also means that the data has passed the multicollinearity test.

Table 2.4 Heteroscedasticity test with Glejser

Model 1  
Dependent Variable: RESABS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.75445	327.4387	0.063384	0.9496
ROA	5.972083	3.744464	1.594910	0.1139
AGE	-0.283382	8.846844	-0.032032	0.9745
LVRG	116.2996	64.94009	1.790875	0.0763

Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-104.7558	79.38508	-1.319591	0.1900
ROA	0.006200	0.009393	0.660067	0.5108
AGE	-0.288796	0.824774	-0.350152	0.7270
LVRG	2.646633	4.246869	0.623196	0.5346
FSIZE	4.352719	3.553863	1.224785	0.2236

In the heteroscedasticity test above, it can be said that the data on the independent variables in the two research models are homoscedasticity because the probability value or Prob > 0.05. In other words, the problem of heteroscedasticity does not occur.

Table 2.5 Chow Test

Model 1

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.122759	(51,101)	0.0000
Cross-section Chi-square	219.797472	51	0.0000

Model 2

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.385777	(50,99)	0.0000
Cross-section Chi-square	178.679430	50	0.0000

In the above table are the results of the chow test which aims to find the right model to be used in the regression test, either fixed effects or common effects. If the value of prob > 0.05 means that the chosen model is a common effect but if the value of prob. < 0.05 means that the chosen model is fixed effects. The results in table 2.5 show the value of Prob. < 0.05 which means the best model is the fixed effect.

Table 2.6 Hausman Test

Model 1

Correlated Random Effects - Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.024603	3	0.0002

Model 2

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	10.617308	3	0.0140

After conducting the Chow test and the chosen model is the fixed effect, the next step is to carry out the Hausman test which aims to find out the best model between fixed effects or random effects. Table 2.6 shows the value of Prob. < 0.05 which means the model chosen for the regression test is the fixed effect.

Table 2.7 Regression Result

Dependent Variable: SGR

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1166.502	805.8783	-1.447491	0.1509
ROA	104.7622	9.215718	11.36777	0.0000
AGE	23.67039	21.77348	1.087120	0.2796
LVRG	362.2473	159.8278	2.266485	0.0256

Model 1

In the model 1 regression test results, it can be seen that the profitability variable (ROA) has the t value of 11,367 and the Prob value equals to 0,000. It means the ROA variable has a positive effect and a high level of significance for sustainable growth. Therefore, it can be interpreted that H1 is accepted.

When an increase in profits of a firm will increase the level of sustainable growth, by generating good profits, the firm will also have a good level of sustainable growth. The results of this study are in line with the research conducted by Amouzesh et al., (2011) that examined the sustainable growth rate and firm performance. The leverage variable (LVRG) which is the control variable in this study also affects the level of sustainable growth. However, in manufacturing firms in Malaysia, the age of the firm does not affect the level of sustainable growth.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2532.843	3107.139	-0.815169	0.4170
ROA	3.719978	0.367660	10.11800	0.0000
AGE	5.771418	32.28171	0.178783	0.8585
LVRG	359.9734	166.2228	2.165607	0.0328
FSIZE	73.52065	139.0985	0.528551	0.5983

Model 2

The regression model 2 shows the same thing, where the firm size variables (FSIZE)



do not have a direct effect on sustainable growth rates. However, ROA variable has a positive and significant effect on the level of sustainable growth with a t value of 10,118 and a significance level of 0,000. Thus it can be concluded that H2 is accepted.

The results of this study are consistent with research conducted by Stierwald (2010) and Yazdanfar (2013), who found that there is a positive relationship between profitability and firm size. Therefore, the increasing profitability supported by firm size will also have an impact on the increasing sustainable growth rates and vice versa. Leverage as a control variable (LVRG) in Model 2 also has an influence on the level of sustainable growth. However, this is inversely related to firm age variables (AGE) which have no impact on the level of sustainable growth.

## CONCLUSION AND SUGGESTION

This study analyzes the effect of profitability on sustainable growth in manufacturing firms in Malaysia and Indonesia. The results of this study indicate that corporate profitability significantly affects the level of sustainable growth in manufacturing firms in both countries. In addition, firm size as a moderating variable also manages to moderate the effect of profitability on the level of sustainable growth of manufacturing firms in both countries.

Based on the findings, manager of Indonesian and Malaysian firms should increase profitability to achieve sustainable growth. Larger firms may optimize their total assets to achieve profitability and sustainable growth.

The limitation of this study is the absence of the use of macroeconomic variables in each country. Macroeconomic variables include the level of national income, household consumption, government spending, and others. Therefore, the future research can use the existing macroeconomic variables. Thus, can find out the contribution of manufacturing firms to the economy of the country concerned.

## REFERENCES

- Alarussi & Alhaderi. (2017). *Factors Affecting Profitability*. XIV(3), 1–7. <https://doi.org/10.1108/JES-05-2017-0124>
- Amouzes, N., Moenifar, Z., & Mousavi, Z. (2011). Sustainable Growth Rate and Firm Performance: Evidence From Iran Stock Exchange. *International Journal of Business and Social Science*, 2(23), 249–255.
- Bahri, M., St-Pierre, J., & Sakka, O. (2017). Performance measurement and management for manufacturing SMEs: a financial statement-based system ", *Measuring Business Excellence*. *Measuring Business Excellence*, Vol. 21 Is. <https://doi.org/http://dx.doi.org/10.1108/MBE-06-2015-0034>
- Bivona, E. (2000). How to define a profitable and sustainable growth policy in a changing market? A case study: a small publishing company. *18th International System Dynamics*, (August), 6–10.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of Business Finance and Accounting*, 30(3–4), 573–587. <https://doi.org/10.1111/1468-5957.00008>
- Ha-Brookshire, J. E., & Dyer, B. (2008). Apparel import intermediaries: The impact of a hyperdynamic environment on U.S. apparel firms. *Clothing and Textiles Research Journal*, 26(1), 66–90. <https://doi.org/10.1177/0887302X07304479>
- Hien, T., Abbott, M., & Jin-Yap, C. (2017). How does working capital management affect the profitability of Vietnamese small and medium sized enterprises? *Journal of Small Business and Enterprise Development*, 24(1). <https://doi.org/10.1108/JAMR-06-2017-0076>
- Higgins, R. C. (1977). *Much Growth Can Firm Afford?* 6(3), 7–16.

- Higgins, R. C. (2007). Sustainable Growth under Inflation. *Financial Management*, 10(4), 36. <https://doi.org/10.2307/3665217>
- Kajüter, P. (2006). *Risk disclosures of listed firms in Germany: a longitudinal study*. In *10th Financial Reporting & Business Communication Conference Cardiff Business school*.
- Kementrian Keuangan Republik Indonesia. (2019). Pertumbuhan Ekonomi Indonesia Tahun 2018 Lebih Tinggi Dari Tahun 2017. Retrieved from <https://www.kemenkeu.go.id/publikasi/berita/pertumbuhan-ekonomi-indonesia-tahun-2018-lebih-tinggi-dari-tahun-2017/>
- Kinasih Yekti Nastiti, P., Atahau, A. D. R., & Supramono, S. (2019). Working capital management and its influence on profitability and sustainable growth. *Business: Theory and Practice*, 20, 61–68. <https://doi.org/10.3846/btp.2019.06>
- Manaf, N. B. A., Saad, N. B. M., Mohamad, N. E. A. B., Ali, I. B. M., & Rahim, N. B. (2018). Determinants of Sustainability Growth Rate (SGR) By Using Zakon's Model To Encounter With Shariah Compliance Requirements For Shariah Securities Compliance Firms in Malaysia. *International Journal of Industrial Management*, 4(June), 61–69. Retrieved from <http://ijim.ump.edu.my/images/IJIM-4/IJIM4-4.pdf>
- Mohd Fuzi, N., Habidin, N. F., Janudin, S. E., & Ong, S. Y. Y. (2019). Critical success factors of environmental management accounting practices: findings from Malaysian manufacturing industry. *Measuring Business Excellence*, 23(1), 1–14. <https://doi.org/10.1108/MBE-03-2018-0015>
- Nanda, S., & Panda, A. K. (2018). The determinants of corporate profitability: an investigation of Indian manufacturing firms. *International Journal of Emerging Markets*, 13(1), 66–86. <https://doi.org/10.1108/IJoEM-01-2017-0013>
- Oseifuah, E. K., & Gyekye, A. (2016). Cash Conversion Cycle Theory and Corporate Profitability: Evidence from Non-Financial Firms Listed on the Johannesburg Stock Exchange. *Journal of Accounting and Management*, 6(3), 37–51.
- Palombini, N. V. N., & Nakamura, W. T. (2012). Key factors in working capital management in the Brazilian market. *Revista de Administração de Empresas*, 52(1), 55–69. <https://doi.org/10.1590/s0034-75902012000100005>
- Raheman, A., Afza, T., Qayyum, A., & Bodla, M. (2010). Working capital management and corporate performance of manufacturing sector in Pakistan. *International Research Journal of Finance and Economics*.
- Rahim, N. (2017). *Sustainable growth rate and firm performance: a case study in malaysia*. 3(2), 48–60.
- Sartono, A. R. (1998). *Manajemen Keuangan Teori dan Aplikasi*. Yogyakarta: BPFE.
- Shapiro, A. & Balbirer, S. (2000). *Modern Corporate Finance: A Multidisciplinary Approach to Value Creation*. New Jersey: Prentice Hall.
- Silalahi, S. A. F. (2014). Kondisi Industri Manufaktur Indonesia Dalam Menghadapi Globalisasi. *Jurnal Ekonomi Dan Kebijakan Publik*, 5(1), 1–13. <https://doi.org/10.22212/JEKP.V5I1.149>
- Simamora, H. (2000). *Akuntansi Basis Pengambilan Keputusan Bisnis*. Jakarta: Salemba Empat.
- Singhania, M., & Mehta, P. (2017). Working capital management and firms' profitability: evidence from emerging Asian countries. *South Asian Journal of Business Studies*, 6(1), 80–97. <https://doi.org/10.1108/SAJBS-09-2015-0060>
- Stierwald, A. (2010). Determinants of Profitability: An Analysis of Large Australian Firms. In *Ssrn*.

<https://doi.org/10.2139/ssrn.1632749>

Wasiuzzaman, S. (2015). Working Capital and Profitability in Manufacturing Firms in Malaysia: An Empirical Study. *Global Business Review*, 16(4), 545–556.

<https://doi.org/10.1177/0972150915581098>

Yazdanfar, D. (2013). Profitability determinants among micro firms: Evidence from Swedish data. *International Journal of Managerial Finance*, 9(2), 151–160.  
<https://doi.org/10.1108/17439131311307565>

Zaid, N. A. M., Ibrahim, W. M. F. W., & Zulqernain, N. S. (2014). The Determinants of Profitability : Evidence from Malaysian Construction Companies. *5th Asia-Pacific Business Research Conference*, 1–13.

