THE RELATIONSHIP BETWEEN FIRM CHARACTERISTICS AND PROFITABILITY OF CONSUMER GOODS FIRMS IN MALAYSIA

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Abstract

There are many researchers that have investigated a variety of firm characteristics in order to comprehend their impact on performance. This study aims to examine the relationship between firm characteristics and profitability of consumer goods firms in Malaysia. The firm characteristics consist of firm age and firm size meanwhile profitability is measured by return on assets. The study's population comprise of 30 consumer goods firms listed in the Bursa Malaysia from 2015 to 2020. Pearson's correlation and multiple regression are employed in this study as tool for analysis. Hypotheses were formulated and tested for this study which indicates no significant relationship between firm characteristics and profitability of consumer goods firms in Malaysia. The results show that firm size and firm age does not have significant relationship with profitability. Thus, the study recommends to not focus on both firm age and firm size since those variables does not affect the profitability of the consumer goods firms in Malaysia.

Keywords **:** *consumer goods, firm age, firm characteristics, firm size, profitability;*

I. INTRODUCTION

1.1 Background of Study

Several attempts have been made to investigate the relationship between firm characteristics and profitability, however many researchers only focus on one firm characteristic and ignore other firms' characteristics despite the results of their findings indicated significant relationship on the profitability [1]. It is essential to understand the relationship of certain firm characteristics and profitability since it can be considered as the determinants of how successful a company's financial performance. This study is to investigate the relationship between the selected firm characteristics and profitability in a more holistic view of the consumer goods firms.

Profitability refers to the ability of a company to earn a profit. It shows a metric that indicates how profitable a company is [2]. There are certain firm characteristics such as firm size, firm age, leverage and liquidity that have been associated with profitability [3]. However, there are two diverse viewpoints on what truly impacts firm profitability. Galbreath and Galvin [4] pointed out that firm characteristics are the ones that significantly related to the profitability whilst Pervan et al. [5] argued that it was the industry characteristics that influenced profitability. Mahfoudh [6] found out that firm characteristics play a crucial role in determining the profitability of the firm.

Charlesa et al. [7] stated that both internal and external firm characteristics might influence the profitability of a firm. The internal characteristics refer to the management who has control to the factors over the firm disparities in profitability. Meanwhile, external characteristics refer to the uncontrolled factors that influence firms' decisions in which management has no control. In this study, internal characteristics are more focusing on the consumer goods firms which it can be classified as financial and non-financial variables. Financial characteristics are variables that may be extracted from the consumer goods firm's financial statement such as firm size, liquidity, leverage and sales growth. On the other hand, non-financial characteristics are variables that cannot be derived from financial statements which include firm age, scope of operation and managerial skills.

Consumer goods industry is a market sector that sells products purchased by individual buyer rather than industrial producers [8]. This industry includes

Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

companies that specialized in food production, beverages, clothing and electronics. Throughout the year, consumer goods sector in Malaysia grows in line with the rising demand for clothing, food and beverage and other consumer goods. In spite of rising demand, profitability of the firm become a major concern for anyone who has direct and indirect interest on the firm.

It is acknowledged that profitability plays a vital role in going concern of firm but it does not catch high attraction in investigating the relationship between firm characteristics and profitability of consumer goods firms in Malaysia. Thus, this study focus on firm age and firm size related to profitability of listed consumer goods firms in Malaysia from 2015 to 2020.

1.2 Problem Statement

The literature on the relationship between firm characteristics and profitability provides mixed findings. However, there has been little attention to the profitability of consumer goods firms in Malaysia related to the firm age and firm size. Thus, it has previously been observed that other researchers accomplish to study the relationship through different methodologies and variables.

Previous research has established that there was a significant positive relationship between firm size and profitability which the larger firms found to be more profitable [9], [10]. Conversely, other scholars had a contrary view arguing that there is no significant relationship between firm size and profitability due to indebtedness [11].

Regarding the firm age, Islam et al., [12] stated that there was a significant positive relationship of firm age and profitability where firms that are operated for a longer period have been more successful as compared to those that have been in operation for a shorter period. However, Mahfoudh [6] found an opposing view that firm age insignificantly linked to the profitability which the older firms are found to be less profitable because of the structural inflexibility caused by bureaucracy and inertia.

Kartiningsih and Daryanto, [13] measured the independent variables which firm age by analysing from year of established and firm size using total number of assets meanwhile the dependent variable which profitability using return on sales (ROS). Other than that, Charlesa et al., [7] measured firm age by number of years in operations and firm size by total assets with profitability measured by return on assets (ROA).

According to other scholars, the most commonly employed firm profitability measures in studies include net profit margin (NPM), return on equity (ROE), return on assets (ROA), and return on sales (ROS) [14]. This study differs from previous studies as it applies to the consumer goods sector, different time frame data collected besides using other firm characteristics that may affect firm profitability.

II. LITERATURE REVIEW

2.1 Profitability

Prior studies established empirical understanding on profitability where it has been proven that firm which is not profitable will not survive. Thus, firms that aim to attain consistent profitability must understand the internal and external factors that might affect profitability. In a recent article, Dioha et al., [15] pointed out the characteristics of internal factor are those management-controllable aspects that explain profitability disparities across firms. These include firm size, firm age, growth of sales, liquidity, and leverage. External factor are uncontrolled factors that influence the decision of the firms which management has no control over. Moreover, Saleh and Alhaderi [16] in their research sought to identify financial indicators of profitability by experimentally evaluating various aspects of firm characteristic that have relationships with profitability.

According to Mahfoudh [6], profitability is the most widely used to measure the financial performance since it is the best indicator in companies. Hence, return on assets (ROA) is the common measurement used to indicate the profitability. ROA refers to a metric that measures of how successfully a firm utilizes its assets to generate profit. This view is supported by Dogan [17] which in his study, he employed ROA to determine firm profitability.

2.2 Firm Characteristics

2.2.1 Firm Size

Firm size is one of the firm characteristics that constantly linked to profitability which typically assessed by either the total number of assets or sales. A study by Mahfoudh [6] examined that large-sized firm have more capabilities to diversify, able to capitalize on economies of scale and being highly structured in terms of procedures. In

Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

addition, larger firm also are described as having high-level capacity in running a business [9]. Thus, firm size can significantly contribute to a firm's profitability.

Furthermore, Kenton [18] stated that large firms are linked with high profits because they gained benefit from economies of scale owing to mass production which gives them an advantage in their competitive over small firms. Moreover, due to their penetration, they also have a bigger market share than their competitors, lead to providing them a competitive advantage. In addition, larger firms also have all of the options of smaller firms and they can also invest in lines requiring big scale which small firms are excluded. From the preceding statement, it is apparent that the size of the company has an impact on profitability.

2.2.2 Firm Age

As for firm age, it can be determined by the establishment of a company since it has been greatly related to the firm profitability [13]. It is the amount of time that a firm has been in existence since its foundation. A study by Mallinguh et al. [19] inspected that older firm have more expertise in carrying out business operations and well-recognized. In this study, firm age is measured by the difference between the year of study conducted and the year of consumer goods firms was established.

In previous study, there were few arguments about how a firm's profitability affected by its age. According to Alex et al. [20], older firms do better financially because they have more experience, rather than new firms indicated limitations in order to confront new challenges. However, David and West [21] in their study stated that firm age may have a negative influence on a profitability since it can cause the firm to become rigid and unable to adapt to the fast changing in business environment. From this viewpoint, it is evident that firm age is associated with a loss of agility and responsiveness resulting in more market opportunities being lost.

2.3 Consumer Goods

Any product or service purchased related to personal, family, or household uses can be concluded as consumer goods. Consumer goods are made to meet human desires and needs through direct consumption or usage such as clothing, foodstuffs and toys [22]. It can be categorized into three different type of groups depending on the regularity and time of the usage. Firstly, durable goods which can be used continuously for a long time or repeatedly like household appliances. Next, semi durable goods which have certain period of lifetime of about a year that can be used on several occasion such as clothing and footwear. Furthermore, nondurable goods which usually consumed a few uses or once. For instance, body care products, gasoline, and groceries [23].

In Bursa Malaysia, consumer goods sector has the are eight sub of consumer goods sectors which consists of automotive, food and beverages, consumer services, agricultural products, personal goods, leisure and hospitality, household goods, retailers and travel. Consumer goods firms are important to the individuals and economy since they contribute to increase the manufacturing sector and exports, as well as providing customer satisfaction, hence increasing the economy's Gross Domestic Product (GDP) [24].

Previous research has established that consumer goods firms give significant data that can be collected on the study of relationship between firm characteristics and profitability [15]. This is due to this sector's higher financial performance achievement. On the other hand, consumer goods industry also has been influenced by the modern technology in which the methods of created, delivered, advertised and sold have changed considerably thus making this sector reliable to be examined [25].

2.4 Profitability, Firm Characteristics and Consumer Goods

A number of studies have postulated a convergence between firm characteristics and profitability of consumer goods firms in both Malaysia and worldwide. These are empirical studies on firm characteristics that demonstrate the relationship between size and age of the firm and profitability in various circumstances.

Dogan [17] examined that there was a significant relationship between firm size and profitability as measured by ROA of listed consumer goods companies in Istanbul Stock Exchange from 2008 to 2011. This was due to the quantity of resources possesses being optimally utilised for investment operations which enable to fulfil product demand and gain market share. Thus, the company's profits increased. Stierwald [26] investigated the relation between firm size and profitability of firms operating in Australia from 1995 to 2005. The study

Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

also indicated that firm size has significant relationship with firm profitability.

However, Ni Soh et al. [27] studied the relationship between firm characteristics and firm financial performance of public listed company in Bursa Malaysia from 2009 to 2013. The study found that firm size has no significant relationship with firm profitability measured by ROA. Becker et al. [17] also observed that firm size has no significant relationship on profitability in USA's sector. Their finding stated that no relations exist between total assets and total sales of the firms and their profitability.

As for firm age, Uwuigbe et al. [28] carried out a study on the relationship of selected corporate attributes on profitability of listed companies at the Nigerian Stock Exchange (NSE) from 2007 to 2011. They found that firm age revealed a significant relationship with profitability measured by return on assets. As a results, they discovered that older firms outperformed younger firms since they had more experience and thus enjoyed higher profitability. Donna and Daryanto [13] also studied on the relation of firm characteristics and profitability of consumer goods companies listed in Indonesia Stock Exchange from 2009 to 2014. The results showed firm age has significant relationship on profitability as they found number of years in operation was linked to business success.

In a contrary view, Dogan [17] indicated that firm age has no significant relationship on profitability measured by ROA. Yazdanfar [29] also examined the profitability related to the firm characteristics of consumer goods firms in Sweden from 2006 to 2007. He revealed that there is no significant relationship between firm age and profitability which explain that younger firms able to outperform the older firms.

III. RESEARCH METHODOLOGY

3.1 Research Design

A quantitative research design was used in this research. As stated by Kenton [30], quantitative analysis is an approach for understanding behavior that employs mathematical and statistical modelling, measurement, and research. Moreover, the current study would like to investigate and determine relationship among different variables hence quantitative method was chosen in seeking outcome of the aforementioned research questions.

3.2 Samplings

The respondents consist of thirty (30) consumer goods companies listed on Bursa Malaysia. The accessibility and dependability of financial data can be justified by the usage of these listed consumer goods firms.

In order to accomplish the stated research objective, this study employed data from secondary sources. As stated by Egbunike [3], these are data that were previously gathered for purposes other than the present research. Thus, the data were obtained from the annual reports provided to the Bursa Malaysia by each consumer goods firms from 2015 to 2020.

3.3 Data Analysis

This study employs descriptive statistics of mean score and standard deviation. In addition, Pearson's correlation and multiple regression analysis are used also to identify the relationships between the dependent and independent variables. This is due to acquire the relationship of firm characteristics and profitability of the consumer goods firms. Therefore, the data was analysed using the Social Science Statistical Package (SPSS) and the results were utilised to evaluate the hypothesis developed for the study.

Analyzing data includes a lot more in-depth method to analyzing, recording and dissecting data as well as reporting the findings in an understandable format [31]. Thus, SPSS can easily help the process in the simple steps which SPPS offers reliable and fast answers [32].

IV. RESULT AND DISCUSSION

4.1 Correlation Analysis

According to Nickolas [33], correlation refers to measure the strength of a two-variable linear relationship. It is value using Pearson's Correlation which r-value range must be between -1 to 1. Besides, if the value ranges from 0 to 1, it is positively correlated, and if it ranges from 0 to -1, it is negatively correlated.

When the r-value from 0 approaches 1, it signifies a strong positive correlation and when it is near to -1, it signifies a strong negative correlation between variables. The strength solely relates to the number, not the positive or negative sign. Besides, a correlation of 0 shows no relationship between variables.

4.2 Correlation Analysis of Firm Age and Profitability

Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

Table 4.2.1: Correlation of Firm Age and Profitability

		Firm Age	Return on Assets
Firm Age	Pearson Correlation	1	-.040
	Sig. (2 tailed)		.595
	N	180	180
Return on Assets	Pearson Correlation	-.040	1
	Sig. (2 tailed)	.595	
	N	180	180

Table 4.2.1 indicates there is a negative low to none significant relationship between firm age and profitability of the consumer goods in Malaysia (r = -.040, p-value = .595). This is due to the r-value is far from 1 and close to 0. Firm age is measured by natural logarithm of difference between observation year and year of incorporation. The result shows that firm age is insignificant to the profitability of consumer goods firms in Malaysia within the study period. Thus, firm age cannot be determined by return on assets (profitability). Therefore, the null hypothesis is accepted.

This finding is in accordance with Dogan [17]that indicated firm age has no significant relationship on profitability measured by return on assets. Yazdanfar [29] also revealed that there is no significant relationship between firm age and profitability which explains that younger firms were more profitable than older firms.

In contrast, this is completely against with the result of finding which Uwuigbe et al. [28] found that firm age revealed a significant relationship with profitability measured by return on assets because firms that have been established for long time period are more profitable than younger firms since they have more knowledges and experiences. Similar to Donna and Daryanto [13] also studied on the relation of firm age and profitability which shows firm age has significant relationship on profitability as they found that number of years in operation was linked to business success.
Therefore, in this study, older or younger firms did not give any impact on the profitability. Consequently, consumer goods firms in Malaysia does not have to focus on firm age and does not have to put any efforts on firm age since the number of years incorporated does not related to profitability of a company.

4.3 Correlation Analysis of Firm Size and Profitability

Table 4.3.1: Correlation of Firm Size and Profitability

		Firm Size	Return on Assets
Firm Size	Pearson Correlation	1	-.004
	Sig. (2 tailed)		.953
	N	180	180
Return on Assets	Pearson Correlation	-.004	1
	Sig. (2 tailed)	.953	
	N	180	180

Table 4.3.1 indicates there is a positive low to none significant relationship between firm size and profitability of the consumer goods in Malaysia (r= .004, p-value = .953). This is due to the r-value is far from 1 and close to 0. Firm size is measured by the total number of assets which larger firms have more assets than smaller firms to be utilized in order to generate profits. The result shows that firm size is insignificant to the profitability of consumer goods firms in Malaysia. Thus, firm size cannot be determined by return on assets (profitability). Therefore, the null hypothesis is accepted.

This finding is in line with Becker et al. [17] observed that firm size has no significant relationship on profitability measured by return on assets. Similar to Ni Soh et al. [27] found that firm size has no significant relationship with profitability which describes that smaller firms able to generate more profits than larger firms.

In contrast, this is completely against with the result of finding which Dogan [17] examined that there was a significant relationship between firm size and profitability as measured by return on assets of listed consumer goods companies. Stierwald [26] also investigated the relationship between firm size and profitability which indicated that firm size has significant relationship with the firm profitability since the greater size of a company, the more profits can be derived from the assets owned.

Therefore, in this study, smaller or larger firms did not give any impact on the profitability. Consequently, consumer goods firms in Malaysia does not have to focus and put any efforts on firm size since the total number of assets does not related to profitability of a company.

Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

4.4 Recommendations

Based on this study, there are several improvements that can be implemented in order for this study to be relevant in the future.

First and foremost, this study uses secondary data which analysed by using SPSS 27. It is suggested for other researchers to employ more and various analysis techniques when analysing secondary data since it will definitely generate more results and points of view for the data. For example, Structural Equation Modeling (SEM) data analysis and descriptive statistics can be used in order to obtain a better and strong results [34].

Furthermore, widen the research objectives also can be employed for future studies. It is included in applying other firm characteristics such as sales growth, leverage and liquidity which could affect the firm's profitability [35]. This is because, there are many significant firm characteristics that need to be taken into consideration in conducting the study.

Next, it is recommended for future researcher to increase the tenure of research to be able to capture the exact relationship between firm characteristics and profitability. For example, in this study uses six years of period from 2015 to 2020, however, it is suggested for researcher to go for ten years and above. Hence, the researcher will incur larger number of data and might get different as well as accurate results.

Another recommendation is future researcher should use other type of industry in Malaysia. Since this study resulted in no impact towards consumer goods industry, there are many ranges of industries in Bursa Malaysia that can be chosen to conduct future research. For instance, agriculture industry is one of the examples that can be used in order to get diverse results.

ACKNOWLEDGMENT

We would like to express our gratitude to our supervisor who helped us during this research and brilliant team members who made the process in completing this research easier.

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Revised: 24 June 2022
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Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication

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Received: 14 June 2022
Revised: 24 June 2022
Accepted: 03 July 2022
Publisher: ICBE Publication