

# THE EFFECT OF MARKETING ACTIVITIES ON THE PROFITABILITY AND VALUE OF MANUFACTURING COMPANIES ON THE IDX FOR THE 2018-2020 PERIOD

Etsa Astridya Setiyati, Bina Nusantara University  
Raden Aditya Kristamtomo Putra, Bina Nusantara University  
Nova Kartika Sari, Bina Nusantara University

## ABSTRACT

*This research aimed to investigate the influence of marketing activity on profitability and market value in manufacturing companies listed on the Indonesia Stock Exchange. This study used 15 manufacturing companies from 2018 until 2020, with 45 annual reports observed. The results showed that firm age as the component of marketing activities positively influenced companies' profitability and market value. The marketing expense positively and significantly influenced profitability and market value represented by EPS and Market to Book Ratio. Firm size negatively influenced profitability and a positive influence on the market value represented by EPS and Tobins'Q.*

**Keywords:** Marketing Expense, Firm Size, Firm Age, Profitability, Market Value

## INTRODUCTION

According to Sedjati (2015), marketing is a managerial process by which people obtain what they want or need by creating and exchanging products offered and the value of their products to others. This opinion is also in line with the thoughts expressed by Daryanto (2011) defines.

"Marketing is a social and managerial process where individuals and groups get their needs and wants by creating, offering, and exchanging something of value to one another."

In a Quora article (2017), marketing activities include advertising, selling, and delivering products to consumers or other businesses. Nowadays, marketing activities are one of the most important components to increase revenue and sales of products or services in a company. Marketing activities are mostly carried out by the STP (Segmenting, Targeting, and Positioning) before making a marketing strategy to run effectively and efficiently. In determining to segment, the company must divide consumers in general into several categories of consumers, according to Kotler & Armstrong quoted by Debby Tania & Diah Dharmayanti (2014) which explains that Segmentation is dividing a market into groups of buyers with different desires, characteristics, or behaviors. The market segment that has been formed will make it easier for business people to determine their target market. After that, the company can determine its target market or target with consumer qualifications that suit its needs. According to Kasali (quoted by Sandy Karamoy, 2013) by explaining that the target market is issues of how to choose, select, and reach the market. Products from targeting are target market (marketing goal), *i.e.*, one or more segments market that will focus on marketing activities. Then, the last step is to build positioning or placement. Positioning aims to represent the impression that consumers want to show, or in other words, the positioning process is the company's ability to build a brand image in the minds of its consumers. Therefore, every company that wants to survive and survive in order to grow must develop a strategy.

For its marketing activities as well as possible. Through the right promotion, it will certainly make the company more easily recognized by consumers, and it cannot be denied if this impacts the level of consumer confidence and determining purchasing decisions. Thus, the company can increase its sales and achieve the sales targets that have been set.

In addition, the purpose of marketing activities that go through forming the STP in advance will make it easier for companies to build strategies and marketing models used directly by consumers. That is where the role of producers is needed; sensitivity to consumer wants and needs can increase value no awareness or interest consumers towards the services and products offered. However, the company must also understand that every marketing activity requires certain costs to achieve achievements. Sourced from a large statistical website, it explains that marketing expenses in Indonesia for the period 2018 to 2020, marketing expense in Indonesia fluctuate every year. In 2018 marketing expenses in Indonesia reached 5.97 Billion US Dollars; in 2019, marketing expenses in Indonesia reached 6.21 Billion US Dollars and in 2020 experienced a decline, reaching 6.12 Billion US Dollars and projected to undergo several changes in the following years.

Apart from marketing expenses, several factors can affect the profitability of a company. Among them, there is the influence of the firm age and firm size. According to the results of research conducted by Novelia Sagita Indra & Dicky Arisudhana (2012) which explained that the longer firm age, the higher the ability to get profitability because companies that have an older age are considered more capable of collecting, processing, and producing information on when needed because they already have quite a lot of experience in this matter. Thus, with the old company's flight hours, it will be better able to read the market and consumer behavior changes so that the company will follow the market flow and innovate better.

Then there is another factor, namely the Firm Size, where it can be interpreted by how big and small a company is, seen from the number of assets owned by the company. According to the results of research conducted by Ani Yuliyanti (2011), Firm Size has a significant influence on profitability because the larger the company has, the better the company's internal control so that it can reduce the error rate.

This study uses the manufacturing industry, where it can be understood as an economic activity which in its activities changes a basic good mechanically, chemically, or by hand so that it becomes finished or semi-finished goods and or goods of less value into goods of higher value, and are closer to the end-user (Holzi & Sogner, 2004). According to the latest data obtained from the Ministry of Industry in 2015, the industrial sector, especially the non-oil and gas manufacturing sector, experienced significant growth, surpassing the GDP growth of Indonesia in the first quarter of 2015. In addition, BPS data explains that the contribution of the non-oil and gas manufacturing industry sector to GDP in 2015 reached 18.18% with a value of IDR 2,089 trillion. This figure increased compared to 2014, which reached 17.89% with achievement of Rp 1,884 trillion.

## MARKETING EXPENSES

### Definition of Marketing Expenses

According to Mulyadi (2018), marketing expenses include all costs incurred when the product is produced and stored in the warehouse until the product is converted back into cash. Meanwhile, according to Supriyono (2011), marketing costs are all costs incurred in carrying out marketing activities.

Therefore, based on previous research, considering that this research will also express marketing expenses in the form of ratios, the logarithm of marketing expenses will be used to normalize the data.

## Characteristics of Marketing Expenses

There are several characteristics in determining marketing expenses:

- a) Companies in marketing products or services carry out various marketing activities, so there will be differences in costs and forms of marketing between one product and another.
- b) Marketing activities are always changing according to the demands and market conditions to adjust
- c) marketing costs.
- d) Two costs must be considered in marketing costs, namely indirect and joint costs, which have greater difficulty solving than production costs.

## Marketing Expense Function

Marketing expenses help increase the company's ability to earn revenue for the next period and provide added value for the company itself. There is a formula that can be used to measure the marketing burden on the company:

$$MKT = \log_{10} ME - 1$$

Notes:

MKT = Beban Pemasaran ME = Marketing Expense

## FIRM SIZE

### Definition of Firm Size

Firm size can be explained as a scale that can be classified as the company's size as measured by total assets or total assets (Putu Ayu & Gerianta, 2018). So, in general, Firm size (company size) can be interpreted as a form of comparison of the size of a company or, in other words, that it shows the size of the wealth (assets) owned by a company.

According to Mochfoedz (1994) in Rahmi (2010), firm size has divided into three categories:

#### Large Firm

A large firm that has large assets, indicating that the company has a large size. Companies categorized as major companies generally have to go public in the capital market and already have a total asset of at least IDR 200,000,000,000.

#### Medium Firm

Companies that are categorized as medium-firm are the company with total assets between Rp. 2,000,000,000 to Rp. 200,000,000,000, and these companies are usually listed on the capital market on the second development board

#### Small Firm

A small firm can be defined as companies with total assets less than IDR 2,000,000,000, and in general, these small companies are still not listed on the Stock Exchange.

### Target of Firm Size

Firm measurement aims to differentiate quantitatively between large companies (large

firms) with a small company (small firm) the size of a company that can affect the ability of management to operate the company with various situations and conditions it faces.

SIZE=logarithm (TA)

Notes:

SIZE=Firm Size TA=Total Assets

## **FIRM AGE**

### **Definition of Firm Age**

Firm age is the length of life or the establishment of a company or form of business engaged in business and aims to profit (Poerwadarminta, 2003). Meanwhile, Widyastuti (2002) in Rahmawati (2012) explains that the firm age indicates that the company still exists and survives in market competition.

### **Firm Age Measurement**

Firm age can be measured by calculating it from the date of the IPO to the date of the annual report (Ulum 2009). Meanwhile, Collins & Porras (2001: 17) argue that firm age can also be measured from the year of establishment of a company.

AGE=logarithm (firm established)

Notes:

AGE=Firm Age

### **Profitability Measure**

Profitability measure is used to assess the company's ability to seek profit. This ratio also provides a measure of the level of management effectiveness of a company. Meanwhile, according to Prof. Dr. Dermawan Syahrial & Djahotman Purba, SE, MM., Ak explained that the profitability ratio is a measurement of the ability to earn profits by using the company's assets or capital. So it can be interpreted that the higher this ratio, the better because the profit obtained is getting bigger. Profitability can be measured using ratios such as Return on Assets (ROA). ROA is calculated by dividing operating profit by the company's total assets.

### **Firm Value Measure**

Firm value is the investor's perception of a company, frequently associated with stock prices. Due to a high stock price, the firm value is also high and increases market confidence in the company's current performance and prospects in the future. Noerirawan (2012) opinion explains that the firm value condition that a company has achieved illustrates public trust in the company after going through a process of activities for several years, namely, since the company was founded until now. Firm value can be measured using Earnings Per Share (EPS), Tobin's'Q, and market-to-Book ratio (MTBR).

a. Earnings per share: measuring tool in determining the market value of the company. In Slavin's research (2007), it can be interpreted that EPS is the ratio of company profits about each share outstanding to issuers. In addition, EPS is formulated with:

b.  $EPS = NI / \text{Total Shares Outstanding}$

Notes:

EPS=Earnings per share

NI=Net Income

c. Tobin's Q or it can be called Tobin's Q (theory or Q ratio), is one of the measuring tools or ratios used to measure the value of the company as a form of the combined value of tangible assets (assets) and intangible assets (assets).used to explain several phenomena of the firm such as diversification and investment decisions (Chung & Pruitt, 1994). Tobin's Q is Formulated as follows:

$$\text{Tobin's Q} = \frac{\text{MVE} + \text{DEBT}}{\text{TA}}$$

Tobin's Q=

TA

Notes:

MVE=Minimum Viable Experience

DEBT=Company debt

TA=Total Assets

d. Market to Book Ratio is a measuring tool that is often used to assess the company's market price (Ross, Westerfield & Jordan, 2010). It is stated in Ross, Westerfield & Jordan's book that the book value in the market to book ratio formula is an accounting number that shows the historical cost. The formulation used for the Market to Book Ratio is as follows:

$$\text{MTBR} = \frac{\text{Market value per share}}{\text{Book Value per share}}$$

Book Value per share

Notes:

MTBR=Market to Book Ratio

## Marketing Expenses and Profitability

According to Mulyadi (2018), marketing expenses include all costs incurred when the product is finished being produced and stored in the warehouse until the product is converted back into cash. In addition, another study conducted by Hansen and Mowen, translated by Thomson Learning, states that marketing expenses are the costs required to market, distribute, and serve products or services. So it can be concluded that the application of marketing expenses can encourage companies to achieve better profits in the future. The profitability indicator in this study will use ROA.

*H1 Marketing expenses have a positive and significant effect on profitability.*

## Marketing Expenses and Firm Value

Kotler & Armstrong (2014) define marketing as a process of creating consumer value that starts from understanding market needs and consumer desires and the process of managing relationships with consumers. It will increase brand value and company value in return for the satisfaction and innovation that the company provides to consumers. Meanwhile, according to Serenia & Hatane (2015), it is explained that marketing expenses have a positive and significant impact on the returns obtained by shareholders. It applies to companies that invest heavily in marketing expenses or is not too large (20% of companies with low marketing expenses).

Similar research by Irawan & Hatane (2015); Ciawi & Hatane (2015) stated that the marketing activity variable positively affects firm value because capital market investors respond positively to businesses that promise better returns. Morgan (2012) explains that one of the factors that cause a company to be superior to others is the marketing strategy. Chauvin & Hirschey (1993) also found that advertising activities that are part of marketing influence firm value.

*H2 Marketing expenses have a positive and significant effect on firm value.*

### **Firm Size and Profitability**

Companies that have a large size will have the capacity to take on debt in larger amounts than small companies. A large firm also has greater access to capital markets and banking than a small firm. So that it can be interpreted that large firms have great access to sources of funds both to the capital market and banking to finance their investments to increase their profits. Therefore, the larger the size of the company, the higher the profitability. Thus, firm size has a positive effect on firm profitability. The results of research by Ville (1984); Eljelly (2004); Abor (2005) found that firm size has a positive effect on firm profitability.

*H3 Firm size has a positive and significant effect on profitability.*

### **Firm Size and Company Value**

Based on Novari (2016) research, Firm size is stated to be positively and significantly related to firm value. Meanwhile, another study conducted by Angga Pratama & Wiksuana (2018) states that firm size has a positive and significant effect on firm value, according to Okada (2006), who conducted research using company research objects in Japan that firm size had a positive effect on firm value. It is presumably because the big firm value has a stronger influence than a small firm. The value of the large firm is often used as a standard in determining book value.

*H4 Firm size has a positive and significant effect on firm value.*

### **Firm Age and Profitability**

Research conducted by Zuchrinata, Fitri & Yunita (2019) stated that the aged firm had no significant effect on profitability. This study is also supported by research conducted by Loderer & Waelchli (2010), which also shows that it also finds that firm age has a negative effect on profitability. Loderer & Waelchli suspect that this result cannot be separated from the longer the company will become ineffective.

*H5 Firm age has a negative and significant effect on company profitability.*

### **Firm Age and Firm Value**

Research conducted by Dewi Septianawati (2019) shows that firm age does not affect the firm value. It is in line with research conducted by Binti Ulin Ulfa (2017), which shows that the firm age has an effect on firm value for the audit committee has a positive effect on it. Firm size has a negative effect on firm value.

*H6 Firm age has a positive and significant effect on firm value.*

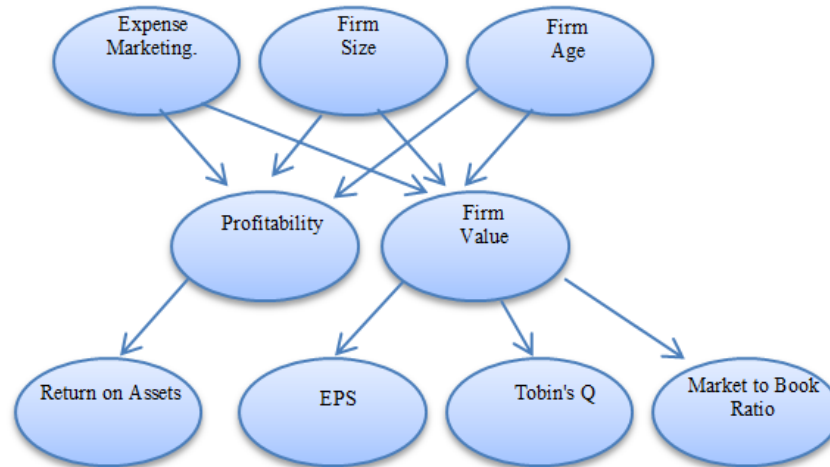
## **RESEARCH METHOD**

This study will examine the effect of marketing activities on profitability and firm value. This type of research is quantitative research. This study uses multiple linear regression analysis and testing marketing activities represented by marketing expenses, size, and age. The profitability variable is measured by ROA and EPS, Tobins'Q, and MTBR measures firm value.

This study uses a population of manufacturing companies listed on the Indonesia Stock Exchange. The sample in this study is a manufacturing company listed on the Indonesia Stock Exchange for 2018 - 2020. The number of companies that meet the criteria above is 15 because these 15 companies have complete financial statements and meet the needs in this study.

In the test claimed hypothesis in this study, secondary data in the form of financial statements from 2018 to 2020 were used, obtained from the Indonesia Stock Exchange website. There are 45 companies, but there are 30 companies that do not meet the sample requirements, so that only 15 companies are used with a total observation of 45 Financial Statements.

The hypothesis in this study will be tested using multiple regression. The analytical model used in this study are:



**FIGURE 1**  
**RESEARCH ANALYSIS MODEL**

The regression model proposed in this study is as follows:

$$(1) \quad ROA = 0 + 1 \text{ MKT} - 2 \text{ SIZE} - 3 \text{ AGE} + \varepsilon$$

$$(2) \quad EPS = 0 + 1 \text{ MKT} + 2 \text{ SIZE} + 3 \text{ AGE} + \varepsilon$$

$$(3) \quad \text{Tobin's Q} = 0 + 1 \text{ MKT} + 2 \text{ SIZE} + 3 \text{ AGE} + \varepsilon$$

$$(4) \quad \text{MTBR} = 0 + 1 \text{ MKT} + 2 \text{ SIZE} + 3 \text{ AGE} + \varepsilon$$

$$(4) \quad EPS = 0 + 1 \text{ MKT} + 2 \text{ SIZE} + 3 \text{ AGE} + \varepsilon$$

+ Notes:

ROA: Profitability (Return on Assets) EPS; Tobin's Q, MTBR: firm value

MKT: Marketing expenses

SIZE: Log Total Asset

AGE: Log (Firm Established)

$\beta$ : coefficient constant

$\varepsilon$ : error

## RESULT AND DISCUSSION RESEARCH

The data used in this study amounted to 45 observations (15 companies for three years of observation). The aim is to fulfill the normality test, classical assumption test, and hypothesis testing, and data normalization was carried out to eliminate data that had deviations too far so that the Ln formula was used in the test.

|                    | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Std. Deviation</b> |
|--------------------|----------|----------------|----------------|-------------|-----------------------|
| LOG_MKT            | 15       | 0.01           | 0.67           | 0.076       | 17                    |
| SIZE               | 15       | 0.02           | 50             | 0.1021      | 0.12                  |
| AGE                | 15       | 0.02           | 0.16           | 0.068       | 0.03                  |
| ROA                | 15       | -0.07          | 0.17           | 0.0713      | 0.06                  |
| EPS                | 15       | -5.21          | 413.81         | 112.36      | 134.27                |
| Tobins_Q           | 15       | 0.44           | 9.86           | 3.63        | 2.98                  |
| MTBR               | 15       | 1.13           | 40.93          | 11.4        | 22.53                 |
| Valid N (listwise) | 15       |                |                |             |                       |

In Table 1 column N, it can be seen that the amount of data from each variable used is 15, during 2018 - 2020, the highest LOG\_MKT belongs to the company. Mayora Indah is 0.67 or equivalent to Rp108 billion rupiah, while for LOG\_MKT, the lowest is company. Bumi Teknokultura Unggul Tbk of 0.01 or approx. Ninety-four billion rupiahs are company. Buyung Poetra Sembada Tbk of 0.01 or around 95 billion rupiah, is company. Multi Bintang Indonesia of 0.01 or around 12 billion rupiah and company. Ultrajaya Milk Industry & Trading Co Tbk of 0.01 or around 25 billion rupiahs.

Throughout 2018 – 2020, the largest SIZE is 0.50 or 56 trillion rupiah owned by the company. Mayora Indah and the smallest SIZE of 0.02 belong to PT. Akasha Wira International Tbk was amounting to 2.6 trillion rupiahs, PT. Bumi Teknokultura Unggul Tbk amounting to 2.5 trillion rupiah, and PT. Sekar Laut Tbk amounted to 2.3 trillion rupiah.

Another independent variable is AGE or firm age. This study also uses the natural logarithm of the company established until 2020 as the year the researchers set out to conduct this research. The manufacturing company used this research has been around for 12 years to 92 years or if the natural logarithm is 0.02 to 0.16. The most recently established company is PT. Indofood CBP Sukses Makmur Tbk while the long-established company is PT. Multi Bintang Indonesia Tbk.

Return on Assets (ROA) shows the company's ability to generate profits from its assets. The company with the highest ROA during 2018 – 2020 was PT. Multi Bintang Indonesia Tbk is 0.17, and the company with the lowest ROA is PT. Bumi Teknokultura Unggul Tbk is -0.07.

Earnings Per Share (EPS) is an indicator of how much profit investors get per share owned. Table 1 has a maximum value of 413.81, which PT owns. Indofood CBP Sukses Makmur Tbk. Meanwhile, the minimum EPS value for 2018 - 2020, which is -5.21, is owned by PT. Bumi Teknokultura Unggul Tbk. The average EPS of manufacturing companies during 2018 – 2020 is 112.36, which means that the profit earned by investors per share owned is 112.36.

Tobins'Q, a manufacturing company in Indonesia, has a maximum value of 9.86, which belongs to the company PT. Indofood Sukses Makmur Tbk and a minimum value of 0.44 belongs to PT. Buyung Poetra Sembada Tbk. The average Tobins'Q is 3.63.

Market to Book Ratio shows the investor's assessment of a company. Market to Book Ratio of manufacturing companies in Table 1 has a maximum value of 40.93, which PT owns. Buyung Poetra Sembada Tbk, while PT. Budi Starch & Sweetener Tbk of 1.13. The average Market to Book Ratio based on Table 1 is 11.4, which indicates that investors still think that manufacturing companies are still quite good. The higher the Market to Book Ratio, the better. If the value is above 1, then investors consider that the company still has potential in the future.



|   |        |
|---|--------|
| R   | 0.735a |
| R Square  | 0.54   |
| Adjusted R Square   | 0.415  |
| Predictors: (Constant), AGE,MKT,SIZE; Dependent Variable: ROA |        |

Determine the relationship between the dependent Variablevariable and the independent Variablevariable is determined by the coefficient of determination value (Adjusted  $R^2$ ). In the dependent variable ROA, the number of Adjusted  $R^2$  can be seen in Table 2. In Table 2, the number of Adjusted  $R^2$  is 0.415. This figure shows that the relationship between the independent variables, namely marketing expenses, firm size, and firm age to ROA, is 41.5%. Moreover, the rest (100%-41.5%) of 58.5% explained by other factors.

|   |        |
|---|--------|
| R   | 0.735a |
| R Square  | 0      |
| Adjusted R Square   | 0.214  |
| a. Predictors: (Constant), AGE,MKT,SIZE, b. Dependent Variable: EPS |        |

The second dependent Variable in this study is EPS. For EPS, the Adjusted  $R^2$  figures can be found in Table 3. In Table 3, it can be seen that the amount of Adjusted  $R^2$  EPS is 0.214. This figure indicates that the relationship between EPS as the dependent Variable with marketing expenses, firm size, and firm age is 21.4%, and other reasons explain the remaining 78.6%.

|   |        |
|---|--------|
| R   | 0.576a |
| R Square  | 0.331  |
| Adjusted R Square   | 0.149  |
| a. Predictors: (Constant), AGE,MKT,SIZE, b. Dependent Variable: Tobin's Q |        |

The next dependent Variablevariable is Tobins'Q. In Table 4, the value of Adjusted  $R^2$  is 0.149. This figure shows the relationship Tobins'Q with independent variables such as marketing expenses, firm size, and age 14.9%, and other factors explain the remaining 85.1%.

|  |        |
|--|--------|
| R  | 0.240a |
| R Square   | 0.058  |
| Adjusted R Square  | 0.199  |
| a. Predictors: (Constant), AGE,MKT,SIZE, b. Dependent Variable: MTBR |        |

The last dependent Variable is the Market to Book Ratio. The Adjusted  $R^2$  figure belonging to the Market to Book Ratio can be seen in Table 5, 0.199. That means that the relationship between the dependent Variable, namely the Market to Book Ratio, with the independent variables, namely

marketing expenses, firm size, and firm age is 19.9%, and other reasons explain the remaining 80.1%.

| <b>Table 6</b>  |              |                       |           |                    |          |                    |
|---|--------------|-----------------------|-----------|--------------------|----------|--------------------|
| <b>RESULTS OF REGRESSION TEST FOR MKT, AGE, SIZE VARIABLES ON ROA</b> |              |                       |           |                    |          |                    |
| <b>ANOVA</b>  |              |                       |           |                    |          |                    |
|   | <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b>        |
| 1   | Regression   | 0.028                 | 3         | 0.009              | 4.308    | 0.031 <sup>b</sup> |
|   | Residual     | 0.024                 | 11        | 0.002              |          |                    |
|   | Total        | 0.052                 | 14        |                    |          |                    |
| a. Dependent Variable: ROA, b. Predictors: (Constant), MKT, AGE, SIZE |              |                       |           |                    |          |                    |

From Table 6, it can be seen that the results of the F test are 4308, with a significant level of 0.031. This significant result is less than 0.05, so it can be concluded that the independent variables of marketing expense, firm size, and firm age together significantly affect ROA.

| <b>Table 7</b>  |              |                       |           |                    |          |                    |
|---|--------------|-----------------------|-----------|--------------------|----------|--------------------|
| <b>RESULTS OF REGRESSION TEST FOR MKT, AGE, SIZE VARIABLES ON EPS</b> |              |                       |           |                    |          |                    |
| <b>ANOVA</b>  |              |                       |           |                    |          |                    |
|   | <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b>        |
| 1   | Regression   | 389,496               | 3         | 129.832            | 1        | 0.042 <sup>b</sup> |
|   | Residual     | 1427.471              | 11        | 129.77             |          |                    |
|   | Total        | 1816.967              | 14        |                    |          |                    |
| a. Dependent Variable: EPS, b. Predictors: (Constant), MKT, AGE, SIZE |              |                       |           |                    |          |                    |

From Table 7, it can be seen that the results of the F test are 1.00 with a significant level of 0.042. Because the significance level is less than 0.05, the regression model can predict the EPS variable. The variables of marketing expense, firm size, and firm age affect EPS.

| <b>Table 8</b>  |              |                       |           |                    |          |                    |
|---|--------------|-----------------------|-----------|--------------------|----------|--------------------|
| <b>REGRESSION TEST RESULTS FOR MKT, AGE, SIZE VARIABLES AGAINST TOBIN'S Q</b> |              |                       |           |                    |          |                    |
| <b>ANOVA</b>  |              |                       |           |                    |          |                    |
|   | <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b>        |
| 1   | Regression   | 41.351                | 3         | 13.784             | 1.817    | 0.020 <sup>b</sup> |
|   | Residual     | 83.444                | 11        | 7.586              |          |                    |
|   | Total        | 124.795               | 14        |                    |          |                    |
| a. Dependent Variable: Tobins_Q, b. Predictors: (Constant), MKT, AGE, SIZE    |              |                       |           |                    |          |                    |

From Table 8, it can be seen that the results of the F test are 1.817, with a significant level of 0.020. This significant result is less than 0.05, so it can be concluded that the independent variables of marketing expense, firm size, and firm age together significantly affect Tobins'Q.

| <b>Table 9</b>   |              |                       |           |                    |          |             |
|--|--------------|-----------------------|-----------|--------------------|----------|-------------|
| <b>RESULTS OF REGRESSION TEST FOR MKT, AGE, SIZE VARIABLES ON MTBR</b> |              |                       |           |                    |          |             |
| <b>ANOVA</b>   |              |                       |           |                    |          |             |
|  | <b>Model</b> | <b>Sum of Squares</b> | <b>df</b> | <b>Mean Square</b> | <b>F</b> | <b>Sig.</b> |

|  |            |          |    |         |       |                    |
|--|------------|----------|----|---------|-------|--------------------|
| 1  | Regression | 73.974   | 3  | 24.658  | 0.225 | 0.007 <sup>b</sup> |
|  | Residual   | 1206.857 | 11 | 109.714 |       |                    |
|  | Total      | 1280.831 | 14 |         |       |                    |
| a. Dependent Variable: MTBR; b. Predictors: (Constant), MKT, AGE, SIZE |            |          |    |         |       |                    |

From the ANOVA test or F test results in Table 9 above, the calculated F is 0.225 with a significance level of 0.007. Since the significant level is less than 0.05, the regression model can predict the MTBR variable. The variables AGE, MKT, and SIZE, when tested together, affect MTBR.

| <b>Table 10</b>   |            |                                    |                   |                                  |          |             |
|---|------------|------------------------------------|-------------------|----------------------------------|----------|-------------|
| <b>HYPOTHESIS REGRESSION TEST RESULTS 1 – 6</b>                             |            |                                    |                   |                                  |          |             |
| <b>Coefficients</b>   |            |                                    |                   |                                  |          |             |
| <b>Model</b>  |            | <b>Unstandardized Coefficients</b> |                   | <b>Standardized coefficients</b> | <b>t</b> | <b>Sig.</b> |
|   |            | <b>B</b>                           | <b>Std. Error</b> | <b>Beta</b>                      |          |             |
| 1   | (Constant) | 0.004                              | 0.029             |                                  | 0.141    | 0.891       |
|   | MKT        | 0.187                              | 0.184             | 0.519                            | 1.019    | 0.33        |
|   | SIZE       | 0.25                               | 0.263             | -0.488                           | 0.952    | 0.361       |
|   | AGE        | 1.277                              | 0.361             | 0.732                            | 3.532    | 0.005       |
| Model 1. Predictors: (Constant), MKT, SIZE, AGE; Dependent Variable: ROA    |            |                                    |                   |                                  |          |             |
| 2   | (Constant) | 20.87                              | 7.12              |                                  | 2.929    | 0.014       |
|   | MKT        | 16.79                              | 44.69             | 0.25                             | 0.376    | 0.714       |
|   | SIZE       | 20.77                              | 63.99             | 0.217                            | 0.325    | 0.752       |
|   | AGE        | 150.2                              | 87.94             | 0.463                            | 1.709    | 0.115       |
| Model 2. Predictors: (Constant), MKT,SIZE,AGE; Dependent Variable: EPS      |            |                                    |                   |                                  |          |             |
| 3   | (Constant) | 1.38                               | 1.72              |                                  | 0.805    | 0.438       |
|   | MKT        | 23.49                              | 10.8              | -1.337                           | -2.174   | 0.052       |
|   | SIZE       | 32.34                              | 15.47             | 1.291                            | 2.09     | 0.061       |
|   | AGE        | 10.79                              | 21.26             | 0.127                            | 0.508    | 0.622       |
| Model 1. Predictors: (Constant), MKT,SIZE,AGE; Dependent Variable: Tobins_Q |            |                                    |                   |                                  |          |             |
| 4   | (Constant) | 15.218                             | 6.552             |                                  | 2.323    | 0.04        |
|   | MKT        | 20.391                             | 41.093            | 0.362                            | 0.496    | 0.63        |
|   | SIZE       | 21.278                             | 58.838            | 0.265                            | -0.362   | 0.724       |
|   | AGE        | 45.867                             | 80.867            | 0.168                            | -0.567   | 0.582       |
| Model 2. Predictors: (Constant), MKT,SIZE,AGE; Dependent Variable: MTBR     |            |                                    |                   |                                  |          |             |

The results for the first hypothesis show that marketing expenses have a positive and significant effect on profitability, so H1 is accepted. In addition, another study conducted by Hansen and Mowen, translated by Thomson Learning, states that marketing expenses are the costs required to market, distribute, and serve products or services. So it can be concluded that the application of marketing expenses can encourage companies to achieve better profits in the future. Even in Indonesia, especially companies in the manufacturing industry, it is also true that investments made by companies for marketing expenses can affect profitability. Investing in marketing expenses

wisely by understanding the market in the manufacturing industry in advance can lead to the expected results, such as the expected increase in profitability.

In the firm value research, EPS has positive and significant results. It can happen because quoting from the journal Serenia & Hatane (2015) explain that marketing expenses positively impact the returns obtained by shareholders. It applies to companies that invest heavily in marketing expenses or is not too large (20% of companies with low marketing expenses).

In EPS which uses the formula of net income divided by the number of shares outstanding, the authors observe that the number of weighted shares of each company in the observation period does not change significantly, and it is not uncommon for the number of weighted shares to be the same as in the previous period. Therefore, the formula that is affected is the net income owned by the company. Therefore, from the results of this observation, it can be concluded that the activities or marketing activities carried out in Indonesia can also allow higher income in the future.

The results for the second hypothesis show that marketing expenses have no significant effect on Tobins'Q. Sahay & Pillai's research also revealed that marketing expenses do not affect Tobins'Q. It may occur because if a company cannot allocate marketing expenses, it is diminishing marginal or diminishing marginal of the firm value. It can have no effect or even have a negative impact.

Positive and significant results were obtained on the Market to Book ratio. Market value is very sensitive to the market view of the company. One of the indicators that can affect market value is profitability, where the market assessment of a company impacts the company's stock price.

The results showed that the third hypothesis was rejected, which means that firm size has a positive and significant effect on profitability. These results are consistent with research conducted by Ville (1984); Eljelly (2004); Abor (2005), finding that firm size has a positive effect on firm profitability.

The results of this study indicate that the fourth hypothesis indicates that firm size has a positive effect on firm value. It can be seen that firm size has a positive relationship with firm value on the EPS and Tobins'Q indicators. The results of this study are by research conducted by Novari (2016). Firm size is stated to be positively and significantly related to firm value. Meanwhile, another study conducted by Angga Pratama & Wiksuana (2018) states that firm size has a positive and significant effect on firm value, according to Okada (2006), who conducted research using company research objects in Japan that firm size had a positive effect on firm value.

This study indicates that the fifth hypothesis is rejected because the results are not following the research conducted by Zuchrinata, Fitri & Yunita (2019) stated that the age of the company had no significant effect on profitability. This study is also supported by research conducted by Loderer & Waelchli (2010), which also shows that it also finds that firm age has a negative effect on profitability. Loderer & Waelchli suspect that this result cannot be separated from the longer the company will become ineffective.

The results of this study for the sixth hypothesis are that the firm's age has a significant positive effect on firm value. The results of this study no According to research conducted by Dewi Septianawati (2019), it shows that the firm age does not affect the firm value.

## CONCLUSION

The results obtained in the study "The Effect of Marketing Activities on Profitability and Value of Manufacturing Industry Companies Listed on the IDX for the 2018 - 2020 period" are independent variables, namely marketing expenses, firm size, and firm age simultaneously have a significant influence on the dependent variable, namely ROA as indicators of profitability and EPS, Tobins'Q and MTBR as indicators of firm value. While partially, the independent variables that

affect profitability are marketing expenses and firm size. Independent variables that affect company value are marketing expenses, firm size, and firm age.

### LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

This study is limited to the manufacturing industry; the results of this study cannot be generalized to different industries. So, further research can use the same variables but in different industries. Further research can also use independent variables other than firm age and size to explain the effect of marketing activities on profitability and firm value. For example, by using a variable number of employees, the number of customers, brand value, company condition, customer satisfaction, and other marketing factors.

### REFERENCES

- Fatin, N. (2017). About understanding.
- Hatane, S.S. (2015). Effect of marketing activities on profitability and value of property and real estate companies on the IDX. *Business Accounting Review*, 268-279.
- Karamoy, S.W. (2013). Strategy segmenting, targeting and positioning their effect on purchase decisions. *EMBA Journal*, 562-571.
- Riadi, M. (2017). *KajianPustaka.com*.
- Syaifudin, M. (n.d.). Analysis of the effect of privacy, security and trust on intentions to transact online. *Journal of Marketing Management*.
- Ujang S.M. (n.d.). Consumer decision model and marketing strategy.