

DOI <https://doi.org/10.18551/rjoas.2018-06.07>

**ANALYSIS OF PROFITABILITY, MARKETING ACTIVITIES AND E-COMMERCE
IMPLEMENTATION ON FIRM VALUE: EVIDENCE FROM INDONESIAN CONSUMER
GOODS LISTED COMPANIES IN 2014-2016**

Rachman Helmy Aulia*, Soewarno Noorlaily, Isnalita

Faculty of Economics and Business, University of Airlangga, Indonesia

*E-mail: cakhelm@gmail.com

ABSTRACT

The purpose of this study is to examine the effect of profitability, marketing activities, and E-commerce implementation on firm value of consumer goods industry sector which's listed in Indonesia stock exchanges in 2014-2016 periods. The firm's value in this study is measured by using Tobin's Q ratio whereby it is the best predictor used to measure firm value and can be used to explain the financial condition of the firm and market conditions. The results showed that profitability and marketing activities had a positive significant effect on firm value while the e-commerce implementation had a negative non significant effect on firm value.

KEY WORDS

Profitability, marketing activities, e-commerce, firm value.

The purpose of the company establishment is to increase the prosperity of owners and shareholders by increasing the value of the company (Wahyuni, 2013). The firm value is the perception of investors to companies that are often associated with stock prices. For a company that trades stocks on the floor of the stock, maximizing the value of the firm is equal to maximizing stock prices, so that the stock market price is an indicator of the value of the company. While the stock market price itself is a description of the various policies undertaken management, so it can also be said that the value of the company can be based on management decisions. (Sudana, 2011).

Many strategies can be implemented by each company to respond to tight business competition conditions, whereby marketing activity is one of them. The main purpose of marketing activity is to improve the company's long-term financial performance while also creating sustainable competitive advantage (Kanagal, 2009). This was done so that the company can maintain the activity and existence of the company. Advertising is one of the most significant marketing activities affecting the company's performance so that managers tend to allocate resources owned in large quantities to advertise in order to increase sales and ultimately will impact on increasing the value of the company (Kim dan Joo, 2013). Research from Ryoo (2016) explains that aggressiveness in marketing activities can provide more premium and give rise to stock prices and market reaction.

Lately with the increase of internet users in the world then many companies are implementing E-Commerce on sales and marketing system. E-Commerce will facilitate the end consumer in recognizing and buying goods manufactured by the manufacturer so as to provide new methods in marketing and sales activities (Grandon, 2003). In addition, companies that have superior performance in the field of E-Commerce will have better customer relationships and improve the short-term performance of the company (Saeed, 2005). Research from Lee (2002) of companies in South Korea indicates that E-Commerce and E-Bussines have a significant impact on firm value and its development in the future. Implementation of E-Commerce can be seen from the availability of online stores, sales websites, and can be measured by the network advantage and the number of visitors from a website and online store (Rajgopal, 2001).

In addition, the company needs an analysis of financial statements to determine the company's ability to overcome financial problems and take quick and precise decisions.

The financial statements are sources of information related to the financial position and financial performance of the company. The financial data is analyzed further so that

information will be obtained that can support the decision made. These financial statements should describe all relevant financial data and have been established procedures so that financial statements can be comparable so that the accuracy of the analysis can be accounted for.

In addition to being useful to the company and its management, the analysis of financial statements is required by interested external parties such as creditors, investors, and governments to assess the financial condition and development of the company. Creditors use it to assess the level of liquidity and solvency of the company in paying its debts. Investors use it as a basis in determining the investment that will be implemented, from the financial statements investors can assess the level of profitability of the company.

Such information should at least allow investors to conduct a stock valuation process that reflects the relationship between risk and returns that match the preferences of each type of stock (Mahendra, 2012). Agustia (2012) shows that the level of profitability of the company can have a positive impact on the value of the company where the increase profitability can be started with the achievement of relevant economies of scale and efficiency of cost costs. The firm's value in this study is measured by using Tobin's Q ratio whereby it is the best predictor used to measure firm value and can be used to explain the true financial condition of the firm and market conditions (Sucuahi, 2016)

The author conducted a study on the firm values in the consumer goods industry sector (consumer goods) listed on the Indonesian Stock Exchange period 2014-2016. Data were obtained from the official website of Indonesia Stock Exchange and the company's website. In this study, the authors only focused on companies that consistently publish annual report and the financial report. Companies that do not have the completeness of the data will be removed from the population.

The consumer goods industry sector belongs to the manufacturing sector companies. Consumer goods themselves are goods that are often consumed by everyday society such as food and beverages, cigarettes, medicines, cosmetics, and household utensils.

The consumer goods industry sector is chosen because companies in this sector are the most heavily engaged in promoting their products or services. This can be seen in various media, such as print media, social media, and electronics such as television.

Therefore, companies in this sector are required to be able to assess the condition and development of financial performance as well as maintain the effectiveness in investment marketing activities in order to increase the value of the company and maintain the existence and able to increase the company's growth amid rapid economic growth and increasingly competitive business strict.

The results of this study contribute to the literature that can be used as a discussion by the various parties, especially related to E-Commerce Implementation and firm value. E-Commerce Implementation is expected to improve the firm value in stock exchange and enhance the firm profitability (Filson, 2002). On the other hand the implementation of E-commerce that requires a lot of cost can be a review of the company given the effects given are volatile and often seem to fluctuate for no reason.

LITERATURE REVIEW

Signalling Theory. The signaling theory states that the company deliberately gives a signal to the market, thus it is expected that the market will react and affect the stock price of the company. If the company signal informs good news on the market then it is expected to increase the stock price, on the contrary if the company signal informs bad news then the company's stock price will decrease. In relation to this research, stock prices reflect the value of the firm.

The signals can be given by the company through the delivery of financial statements. These signals can be a signal of success or failure signal by management as the executing agent to be conveyed to the owner of the capital as the owner. Signals provided through the delivery of these financial statements, can indicate whether the management has performed in accordance with what has been agreed with the owner or not.

In its role as an executing agent, management has internal information more and more timely than the information obtained by investors, this is called information asymmetry. The existence of this information asymmetry makes it difficult for investors to know which companies are really performing well as reported in the financial statements and which are not.

Lack of this information makes investors tend to provide low prices for the company as a business of self-protection. To overcome this, companies must reduce the information asymmetry in order to increase the value of the company. One way to reduce the asymmetry of information is to provide strong signals to investors with the presentation of complete and relevant financial statements.

HYPOTHESIS OF STUDY

The Effect of Profitability on Firm Value. Increased profitability of the company shows the company's better performance and better company prospects as well. Companies that have good prospects are highly favored by investors because they are considered to provide a good rate of return. Profitability measures the company's financial performance in generating profits using assets owned. So, investors catch an increase in profitability as a positive signal that can increase the value of the company.

Increase in firm value can be determined by earnings power from company assets. The higher the earning power the more efficient the asset turnover and the higher the profit margin earned by the company (Dewi, 2013).

H1: Profitability has a positive effect on Firm Value.

The Effect of Marketing Activities on Firm Value. Kim and Joo (2013) said in his research that advertising is one of the most significant marketing activity to the company's performance so that managers tend to allocate resources owned in large quantities to advertise in order to increase sales and ultimately will affect the increase in firm value. This indicates that the information about the greater marketing expense issued by the company to be a positive signal for investors that will affect the greater the value of the company.

H2: Marketing Activities has a positive effect on Firm Value

The Effect of E-Commerce Implementation on Firm Value. Filson (2002) in his research revealed that the E-Commerce has a positive influence on the value of the company in which the E-Commerce strategy will bring the company to a new environment that will bring a positive impact on marketing and sales to the final consumer. Such as more efficient use and more convenience stores offline promotion delivery by the company. It will be positively correlated to meningkanya performance of the company and increasing the value of companies in the stock market.

H3: E-commerce implementation has a positive effect on Firm Value

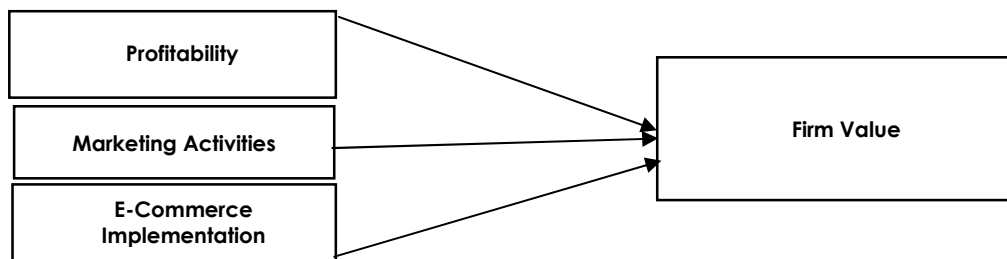


Figure 1 – Conceptual Framework

METHODS OF RESEARCH

Population and Sample. The population in this study is Indonesian consumer goods manufacturing company listed on the Indonesia Stock Exchange from 2014 until 2016.

Sampling using purposive sampling with criteria published financial statements and annual reports as well as a complete display data for research purposes

Operational Definition of Variables:

Profitability. Profitability in this study using Return on Assets (ROA) ratio, which is the ratio used to measure the company's financial performance in generating profit using assets owned. Investors capture an increase in Return on Assets as a positive signal that can increase the firm value. So the higher the Return on Asset the higher the firm value. This ratio is chosen because it is comprehensive able to measure the overall financial statements for companies that promote profit. Return on Assets (ROA) ratio is formulated as follows:

$$\text{Return on Asset} = \frac{\text{Net Income}}{\text{Total Asset}}$$

Marketing Activities. Marketing activities are activities undertaken by companies to be able to inform the public of the existence of products or services offered by the company. Sharma and Sharma (2009, in Ciawi and Hatane 2015) stated that in calculating marketing expense in a study using multiple regression models can use the logarithm of the book value of marketing expense. The book value of marketing expenses is chosen because through this investor can see how far effort management to expand market segmentation by see how big of sacrifice of asset and source of capital owned.

The book value of marketing expenses is derived from the income statement or if included in the sales expense, the book value of marketing expenses can be found in the notes to the financial statements of the details of the sales expense. The name of the marketing expense account that is usually included in the sales expense is promotion or advertising. The calculation of marketing activities carried out using the following formula:

$$\text{Marketing Activity} = \text{LOG} (\text{Book Value Marketing Expense})$$

E-Commerce Implementation. E-Commerce is an enterprise business activity, where companies can market and sell their products directly to end customers via the internet. All promotions and information about the company's products will be displayed in online stores owned by the company. Implementation of E-Commerce itself can be seen from the availability of online store on the official website of the company and the official online store on other E-Commerce website such as tokopedia, bukalapak, etc.

E-Commerce variables are dummy and independent variables. Companies implementing E-Commerce are rated 1 and companies that do not implement E-Commerce are assigned a value of 0.

Firm Value. Dependent variable in this research is Firm value (TOBINSQ). The value of a firm is an investor's perception of the success rate of the firm that is often associated with the stock price or is the market value of the outstanding debt and equity securities of the company. In this study to determine the value of a firm, Tobin's Q. Tobin's Q ratio is the ratio of the market value of a company's asset as measured by the market value of the number of shares outstanding and the debt (enterprise value) on the replacement cost of the firm's assets (Lindenberg, 1995). The formula of Tobin's Q ratio used is as follows:

$$\text{Tobin's Q} = \frac{(\text{Share} \times \text{CP}) + \text{DEBT} + \text{INV} - \text{CA}}{\text{TA}}$$

Where: Share = Number of shares outstanding; CP = Closing Price; DEBT = Total Debt; INV = Inventory; CA = Current Asset; TA = Total Assets.

Types and Data Sources. This study uses quantitative data types of numbers or numbers that can be processed and analyzed using mathematical calculation techniques or statistics. Source of data in this research is in the form of secondary data. Secondary data can be obtained through books, journals, literature, internet, or other sources that do not involve direct observation of researchers. The following is the secondary data along with the data sources used in this study:

- The information of manufacturing companies of consumer goods industry sector listed in Indonesia Stock Exchange (IDX) period 2014-2016 obtained from sahamkok
- The financial statements of consumer goods industry manufacturing companies that have been audited and listed in Indonesia Stock Exchange (IDX) period 2014-2016 obtained from the Indonesia Stock Exchange (IDX) Web site (BEI)
- The annual report of manufacturing companies listed on the Indonesia Stock Exchange (BEI) for the period of 2014 - 2016 obtained from the Indonesia Stock Exchange (BEI) website,

Data Collection Procedures. Companies that have been sampled in this study have met the requirements that have been determined, namely:

- Consumer goods industry manufacturing sector listed on Indonesia Stock Exchange and have financial report during 2014 - 2016.
- Companies that provide complete data required in the study Throughout the year 2014 - 2016, the total sampled companies are 102 sample data.

Analysis Data Method. This study uses multiple regression analysis used to measure the relationship between two or more variables and show the direction of the relationship between dependent and independent variables (Ghozali, 2011: 96). Before the multiple regression calculations to determine the effect of independent variables on the dependent variable in unison, then will be tested classical assumptions. The classical assumption test is performed to meet the BLUES (Best Linier Unbiased Estimation) regression characteristic. The classical assumption test consists of: (1) Normality Test; (2) Autocorrelation Test; (3) Multicollinearity Test; and (4) Heteroscedasticity Test. The application used for data processing in this research is SPSS 24.0 application.

The regression equation is as follows:

$$Y = \alpha + \beta_1X_1+ \beta_2X_2+ + \beta_3X_3+ e$$

Where: Y = Firm Value; α = Konstanta; $\beta_1 \dots \beta_n$ = Coefficient regression direction; X1 = Profitability; X2 = Marketing Activities; X3 = E-Commerce Implementation; e = Residual Error.

RESULTS OF STUDY

Testing Results and Discussion. Here are the results of multiple linear regression analysis using SPSS 24 to test the effect of independent variables ROA, BVME, and ECOM on the firm value.

Table 1 – Results of Multiple Linear Regression Analysis

		Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
Model		B	Std. Error	Beta				Tolerance
1	(Constant)	-1.248	.963		-1.295	.198		
	ROA	16.645	1.568	.712	10.618	.000	.972	1.029
	BVME	.239	.099	.174	2.420	.017	.849	1.178
	ECOM	-.346	.524	-.047	-.661	.510	.871	1.148

a. Dependent Variable: TOBINSQ

Source: Data Processed, 2017.

Based on the results contained in Table 6, it can be arranged regression equation as follows:

$$TOBINSQ = -1.248 + 16,645ROA + 0,239BVME - 0,346ECOM + e$$

Hypothesis testing:

Table 2 – Test Coefficient of Determination

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.756 ^a	.572	.559	2.46504	2.176

a. Predictors: (Constant), ECOM, ROA, BVME

b. Dependent Variable: TOBINSQ

Source: *Processed Data, 2017.*

Based on Table 7 is known coefficient of determination (R²) is equal to 57,2%. This shows that 57.2% change in the dependent variable (Firm value) can be explained by the independent variables Profitability, Marketing Activity, and E-Commerce Implementation, while the rest that is equal to 42.8% explained by other variables not found in this study.

This can happen because for financial performance, the authors enter in this study only from the level of profitability, where there are other financial ratios of solvency and liquidity.

Testing the hypothesis 1 (one) was performed using the t test. Tests conducted to see the effect of profitability on firm value. Research conducted on 102 data. The test results are shown in Table 3 below.

Table 3 – Effect of Profitability Against Firm values

Model	Variables	Coefficient	Significant	Coclusion
Model 1	ROA	16,645	0,000	Significant positive effect

Source: *Processed Data, 2017.*

Based on t test results can be concluded that the profitability of significant positive effect on firm value. This can be seen by the significant value of ROA count of 0.000, which means the level of significance arithmetic < From a level of 0.05,

Based on the calculated significance value to see the impact of profitability on the firm value, it can be concluded profitability significant positive effect on firm value. This shows that the hypothesis of one (1) which states Profitability has a positive effect on firm value is proven.

Hypothesis testing two (2) was performed using the t test. Testing was conducted to see the effect of marketing activities on the value of the company. Research conducted on 102 data. The test results can be seen in Table 4 below.

Table 4 – Effect of Marketing Activities Against Firm values

Model	Variables	Coefficient	Significant	Coclusion
Model 1	BVME	0,239	0,017	Significant positive effect

Source: *Processed Data, 2017.*

Based on t test results can be concluded that marketing activities have a significant positive effect on firm value. This can be seen based on the significance of BVME count of 0.017 which means the level of significance count < from the level of trust 0.05.

Based on the value of significance count to see the effect of marketing activity on firm value, it can be concluded marketing activities have a significant positive effect on of firm value. This shows that hypothesis 2 (two) which express marketing activity have positive effect to firm value proven.

Hypothesis testing three (3) is done by using t test. Tests conducted to see the effect of E-Commerce implementation of firm value. The study was conducted on 102 data. Test results can be seen in Table 5 below.

Table 10 – Effect of E-Commerce Implementation against firm values

Model	Variables	Coefficient	Significant	Conclusion
Model 1	ECOM	-0,346	0,510	Significant positive effect

Source: Processed Data, 2017.

Based on the result of t test can be concluded that Implementation of E-Commerce has negative effect not significant to firm value. It can be seen based on the value of calculation significance ECOM of 0.510 which means the level of significance count > from the level of trust 0.05.

Based on the significance of the calculation to see the effect of E-Commerce Implementation on Firm value, it can be concluded that the implementation of E-Commerce has no significant negative effect on Firm value. This shows that the 3 (three) hypothesis that E-Commerce Implementation has a positive effect on Firm value is not proven.

DISCUSSION OF RESULTS

Hypothesis 1 (one) profitability has a positive effect on firm value. The results showed that profitability has a positive effect on firm value. This is indicated from the significance level of the count of 0.000 is smaller than the trust level of 0.05.

This indicates that any increase in profitability will cause an increase in firm value, and is dominant compared to other factors. Thus, H1 is accepted which means that profitability has a significant positive effect on Firm value.

Profitability shows the level of net profit that a company can achieve when operating its operations. Profits that are distributed to shareholders are profits after interest and taxes, so with high profitability can add value to the value of the company as reflected in the stock price. When firms have high profitability, the use of external funds can be reduced by more internal funds because they have high profitability, so shareholders earn profits in the form of dividends from the profit generated and reduce the company's obligation to pay interest on debt.

The higher the level of profitability then the higher the value of the company. The more companies are able to continue to generate profits from year to year, indicating that the company is currently in optimal operational conditions. This will be captured by investors as a positive signal for the company to produce a high rate of return as well. Thus the value of the company continues to increase along with the increasing amount of investment funds from investors.

Hypothesis 2 (two) marketing activities have a positive effect on firm value. The results showed that profitability has a positive effect on firm value. This is indicated from the significance level of the count value of 0.017 is smaller than the trust level of 0.05.

This indicates that any increase in Marketing Activity will cause an increase in Firm value. Thus H2 is accepted which means that Marketing Activity has a significant positive effect on Firm value.

With the conduct of marketing activities such as advertising and promotion, the company will be easily recognizable by investors, with the more familiar investors in the company, the investor will be easier to believe that the company is able to process the source of funds properly. Because investors see the incessant marketing activities that indicate that the current company is in optimal financial condition and will be more optimal with the conduct of these marketing activities. This will be a positive signal for investors.

Hypothesis 3 (three) implementation of E-Commerce have negative effect to firm value. The results showed that the implementation of E-Commerce negatively affect the value of the company. This is indicated from the significance of the count value of 0.510 greater than the trust level of 0.05.

This indicates that any increase in Marketing Activity will cause a decrease in Firm value. So H3 is not accepted which means that Implementation of E-Commerce has negative effect not significant to Firm value.

This study rejects the hypothesis 3 (H3) who stated that the implementation of E-Commerce affected the firm value. The results of this study contrast with a study conducted by filson (2002) which states that companies that have implemented E-Commerce have more values in the stock exchanges. Basically, the implementation of E-Commerce is an activity undertaken by the company to facilitate the marketing and sales to final consumers, so that the final consumer increasingly easy to identify and acquire items of companies. But investors in the premises do not see it as an implication on the value of companies in the stock market so that the implementation of E-Commerce is less describes the value of the company

CONCLUSION

Based on the analysis of the results and discussion, the conclusion of this study is Profitability and Marketing Activities affect the value of the company. But e-commerce has not significantly terhadap value of the company.

This can be caused by the viewpoint of investors who think that the higher the company's ability to generate profits, the better the overall performance of the company and will have an impact on the increase in the value of the company.

Consumption sector companies focused on necessities of everyday people such as food, beverages, cigarettes, drugs, cosmetics, and household appliances. Due to the nature of its usage is intense pose stiff competition for companies in this industry sector. Companies must be able to create product differentiation compared to other similar products belonging to a competitor, that is to conduct marketing activities.

However, the implementation of E-Commerce in marketing and sales is less able to provide added value to the value of the company because the implementation of E-Commerce today can not convince investors in Indonesia that the existence of these activities can help companies to have better performance so as to increase the value of the company.

REFERENCES

1. Agustia, Dian. 2012. Pengaruh Profitabilitas dan Likuiditas Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening. JAKPI Vol 2 No.1, hal 43-52. Surabaya: Fakultas Ekonomi dan Bisnis Universitas Airlangga.
2. Christiani S., Devi. 2010. Analisis Perbandingan Kinerja Keuangan dan Kinerja Saham Sebelum dan Sesudah Seasoned Equity Offerings Pada perusahaan Manufaktur di BEI. Tesis, Program Magister Manajemen UNUD.
3. Dewi, PD, & Suaryana, I. 2013. Effects of EPS, DER, and PBV Share Price. E-Journal of Accounting, University of Udayana 4 (1), 215-229.
4. Grandon, Elizabeth. 2003. Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & Management*. 42 (2004) 197-216.
5. Filson. Darren. 2002. The Impact of E-Commerce Strategies on Firm Value: Lessons from Amazon.com and its Early Competitors. *The Journal of Business*, 77, (S2).
6. Kanagal, Nagasimha Balakrishna. 2009. Role of Relationship Marketing in Competitive Marketing Strategy. *Journal of Management and Marketing Research*, Vol. 2, July 2009 P-1-17.
7. Kim, Y., & Joo, J. 2013. The Moderating Effect of Product Market Competition in The Relationship Between Advertising Expenditures and Sales. *Journal of Applied Business Research*, 29 (4), 1061-1065.
8. Kim, Jin Woo. 2010. Linking marketing activities to shareholder value: philosophical and methodological issues. *Journal of Management and Marketing Research* 5, 1.

9. Lee, Ho Geun. 2002. Impact of e-Business initiatives on firm value. *Electronic Commerce Research and Applications* 1 (2002) 41-56.
10. Lindenberg, Eric B. 1995. Tobins Q ratio and industrial organization. *The Journal of Business*. Vol 54. No1.
11. Dj Mahendra, Alfredo et al. 2012. Effect of Financial Performance Against Corporate Values At Manufacturing Company in Indonesia Stock Exchange. *Journal of Management, Business Strategy and Entrepreneurship* Vol. 6, No. August 2nd, 2012. 130-138. Denpasar: Faculty of Economics, University of Udayana.
12. Rajgopal, Shivaram. 2001. The value Relevance of network advantage: the case of E-Commerce Firms. *Journal of Accounting Research*. Vol 41, No1.
13. Ryoo, Juyun. 2016. Do marketing activities enhance firm value? Evidence from M & A transactions. *European Management Journal*, 34, (2016), 243-257.
14. Saeed, Khawaja. 2005. The Relation of E-Commerce Competence to Customer Value and Firm Performance: and empirical investigation. *Journal of management information system*. Vol 22, No1.
15. Sucuahi, William. 2016. Influence of Profitability to the Firm Value of Diversified Companies in the Philippines. *Accounting and Finance Research*. Vol. 5, No. 2; 2016
16. Sudana, I Made. 2011. *Corporate Financial Management*. Jakarta: Erlang.
17. Wahyu Tri. 2013. Factors affecting the value of companies in the property sector, real estate, and building construction. *Surabaya University Student Science Journal*, Vol 2, No1, 2013.