

# Gender in Investment on Firm the Value of Firm (Consumer Goods Industry Sector Companies Listed on the IDX)

Mardiana Mardiana<sup>1\*</sup>

<sup>1</sup> Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

\*Corresponding author. Email: [mardiana@uin-malang.ac.id](mailto:mardiana@uin-malang.ac.id)

## ABSTRACT

The value of firm is influenced by the size of the risk and the expected income. Expected returns and risks are influenced by investment decisions. This study aims to determine the effect of investment decisions on The value of firm and whether the existence of gender moderates the effect of investment decisions on the value of firm in consumer goods industry sector companies listed on the IDX. The data used in this study were obtained from the financial statements of consumer goods industry companies listed on the IDX. The predictor variable in this research is investment decision (X), the dependent variable is the value of firm (Y), and the moderating variable is gender. Data analysis techniques using Partial Least Square (Smart PLS). The results showed that investment decisions have a significant effect on firm value and gender variable moderate the effect of investment decisions on firm value. Companies in the consumer goods industry sector must make maximum investment decisions on fixed assets and intangible assets in company activities, as well as gender equality which must be further enhanced. The application of the right investment decision making and accompanied by the reduction of the gender gap will increase company value.

**Keywords:** *Investment Decisions, The Value of Firm, Gender*

## 1. INTRODUCTION

The industrial world is increasing in the era of this 4.0 industrial revolution. The entire industry is required to increasingly innovate on the products produced, as well as what is done by the consumer goods industry, which is also competing to create products as innovative as possible to attract consumers, to increase company value. The Value of firm is influenced by the size of the risk and the expected income. The expected income and risks are influenced by the financial function, namely investment decisions, funding decisions and dividends decisions [1]. Good financial decisions are financial decisions that increase the market value of equity. To increase the value of the company, the board of directors is required to continue to think actively and creatively, gender equality at the board of director level is no longer an impossibility. A 2017 World Economic Forum (WEF) study revealed that women's contributions were said to be able to boost economic growth

Decision making based on gender in Islam itself is not considered a small issue that should be raised. This is because the gender factor (gender) is not the only main factor that will influence a person in make decision, because of the purpose of Allah SWT. creating different humans just so that humans know each other.

Company financial decisions have a positive influence on firm value [2]. However, [3] shows that there is no significant relationship between total variable debt / total equity ratio and market value variable and assets reinvestment ratio has no significant effect on market value. Gender in companies have a positive influence on the value of firm because female directors have better performance [4]. However, the research of [5], shows a negative impact between the existence of women and the value of firm due to economic growth, the high rate is not seen from gender differences but seen from the potential of the individual board of directors.

Based on the contradiction of some of the research results above, the researcher is interested in examining the effect of investment decisions on firm value, and gender

as a moderating variable on the effect of investment decisions on the value of firm in the consumer goods industry sector companies.

**1.1. The value of the Firm**

The value of firm is the present value of the income or cash flow that is expected to be received in the future [1]. The value of firm is influenced by the size of the risk and the expected income. The expected income and risks are influenced by the financial function, namely investment decisions, funding decisions and dividends [1]. Good financial decisions are financial decisions that increase the market value of equity.

Management's goal is to take a set of decisions that produce the maximum share price because this will maximize shareholder wealth, [6]. Optimizing a company's value is basically the main goal of a company.

**1.2. Investation**

A number of assets used by companies in the growth of wealth (accretion of wealth) through the distribution of investment returns (such as royalties, interest, dividends and rent), to appreciate the value of an investment, or for other benefits for investing companies such as benefits obtained through trade relations, [7].

Investment decisions are a process of selecting investment alternatives that are considered capable of generating benefits from available investment alternatives for companies. An investment can be said to be profitable if the investment can give investors a richer advantage [1]. The definition above is in line with the objective of maximizing company value. The company uses the funds with the hope of receiving cash inflow at a future time that exceeds the initial investment value for one period.

**1.3. Gender**

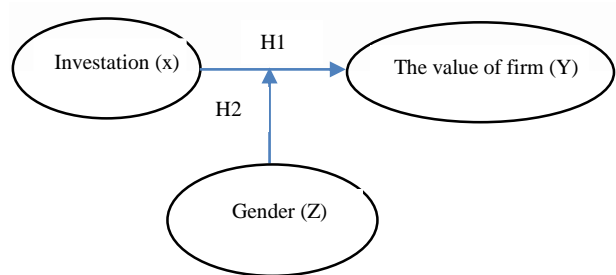
Gender is part of the self-concept that involves the identification of the individual as a man or woman [8]. The terms gender and sex have differences in terms of dimensions [9]. The existence of women in the world of work or what is often known as career women is still considered unusual. Women seen as having a gentle nature which tends to be considered unsuitable for being in the work environment, while men seen as having strong and tough traits which are considered better in the world of work. Research on the influence of gender on ethics has shown mixed results. The influence of gender on ethical compliance occurs during the decision-making process.

The number of women on the board of commissioners is still very low in the business world. The existence of a

small number of women on the board of commissioners may be due to different views on women and men in leading a company. Gender equality is at the heart of decent work. The issue of gender equality has become an interesting issue in the world. The 2017 World Economic Forum (WEF) study revealed that the contribution of women was said to be able to boost economic growth by US \$ 5.3 trillion, this indicates that gender equality will increase global gross domestic growth (GDP) [10].

**1.4. Conceptual Framework**

Researchers have a conceptual framework to make it easier for readers to understand. The conceptual framework is as follows:



**Figure 1. Conceptual Framework (Source: Primary Processed Data, 2019)**

description:

- : Latent Variables
- - - -> : Direct influence
- > : Moderation influence

**1.5. Hypothesis**

**1.5.1. Influence of Investment Decisions and The Value of Firm**

The value of the firm is the present value of the expected revenue or cash flow received in the future, [1]. The value of the firm is influenced by the small amount of risk and expected revenue. Expected earnings and risks are influenced by financial functions such as investment decisions, funding decisions and dividends, [1]. A good financial decision is a financial decision that increases the value of the equity market.

An investment decision is the process of selection of one or more alternative investments, a decision to invest in tangible assets or intangible assets that are considered capable of generating profits from a number of investment alternatives available to the company or an investment can be said to be profitable if the investment can benefit its investors, [1].

Research [2] shows that, the value of the company is significantly affected by investment decisions. But contrary to research conducted by [3] which shows that assets reinvestment ratio has no significant effect on market value. Based on the theory and gap of the above research, the hypothesis in this study is as follows:

H1: There is an influence between investment decisions on the value of the firm.

*1.5.2. Gender moderates the influence of investment decisions on The Value of Firm*

Gender is a part of self-concept that involves identifying an individual as a man or woman. the determination of gender roles in various social systems, mostly referring to biological or gender views, [8]. Gender equality is at the heart of decent work. The issue of gender equality has become an interesting issue in the world. The 2017 World Economic Forum (WEF) study revealed that the contribution of women was said to be able to boost economic growth by US \$ 5.3 trillion, this indicates that gender equality will increase global gross domestic growth (GDP) [10].

One of the supporters of economic growth is company development. Financial managers must provide the best service for company owners by identifying goods and services that can increase the value of the company, because they are desired and valued in a free market [1]. The value of the firm is influenced by the size of the risk and the expected income. The expected income and risks are influenced by the financial function, namely investment decisions, funding decisions and dividends [1]. Good financial decisions are financial decisions that increase the market value of equity. Investment decisions affect business risk. The main objective of managerial decisions by considering the risk and time associated with the estimated earnings per share is to maximize the price of the company's ordinary shares, [4].

That gender diversity has a positive and significant effect on Tobin's Q [4]. However, in [5] study, the number of women serving on the board of directors does not significantly affect the company's financial performance. Based on the theory and gaps of the above studies, the following hypothesis is formulated:

H2: Gender moderates the effect of investment decisions on the value of firm.

**2. METHODS**

Population and Samples The population and sample of this study is a consumer goods industry sector company registered in IDX in 2015-2019. The independent variables in this study are investment decisions. The

moderation variable in this study is gender. While the dependent variable is the value of the company.

**Table 1.** Variable Operational Definitions

Research Variables	Indicator
<b>Investment Decisions (X)</b>	$\text{MKTBK ASS} = \frac{(\text{Total assets} - \text{Total equity}) + (\text{Number of shares outstanding} \times \text{Share price})}{\text{Total assets}}$ <p>[13]</p>
<b>Gender (z)</b>	$\text{WoB} = \frac{\text{Number of women's}}{\text{Number of entire councils}} \times 100\%$ <p>[6]</p>
<b>The value of the firm (Y)</b>	$\text{PBV} = \frac{\text{Market Share Price}}{\text{Book Value per Share Houston}}$ <p>[9]</p>

Source: Research Processed Data (2020)

**3. RESULTS AND DISCUSSION**

**3.1. PLS Approach Structural Equation Test results**

*3.1.1. Testing Assumptions of Normality*

Detecting variable normality data, by conducting kolmogorov-smirnov test with a significance value of > 0.05, then the test assumption of normality is met. The SPSS output results test assumptions of normality.

Based on the table 2, obtained asymp sig value. 0.053 which means the sig value is greater than 0.05. This indicates that normal distributed data and normal assumptions are met.

**Table 2.** results test assumptions of normality

One-Sample Kolmogorov-Smirnov Test	Unstandardize d Residual	Information
Asymp. Sig. (2-tailed)	.053	normality

Source: smart PLS, 2020

3.1.2. Linearity Assumption Test Results

Table 3. Linearity Assumption Test Results

Relationships Between Variables		Test Results	Information
Investment Decisions (X1)	Firm Value (Y)	Linear model significance 0.000 < 0.05 (significant linear model)	Linier

Source: smart PLS, 2020

Linearity Test is a statistical test to find out which relationships are contained in free and bound or dependent variables and independent relationships are significant or insignificant. Linearity test calculation results are shown in table 3.

From Table 3 it appears that the linear test of research is for variable investment decisions against the value of the company is linear by 0.00 smaller than 0.05, so that linearity assumptions are met and deserve to be analyzed to the next stage

3.1.3. Structural Model Testing (Inner Model)

The Goodness of Fit testing of structural models on the inner model uses predictive - relevance (Q2), values to measure how well observational values are generated by the model

Table 4. Goodness of Fit Test Results

Endogenous Variables	R - Square
The value of the company (Y)	0,723

Source: smart PLS, 2020

The R-Square value of 72,30% indicates that the diversity of data that can be explained by the model is 72,30% or in other words the information contained in the 72,30% data can be explained by the model. While the remaining 27,70% is explained by other variables (which are not yet contained in the model) and errors.

3.1.4. Hypothesis Test results (Inner Model)

3.1.4.1. Hypothesis Testing and Direct Influence Pathway Coefficient

Testing hypotheses and coefficients direct influence pathways between variable investment decision on the value of the company. The results of the analysis of direct influence tests between variables can be seen from the path coefficient values, statistical t and p values presented in Figur. 2 dan Table 5.

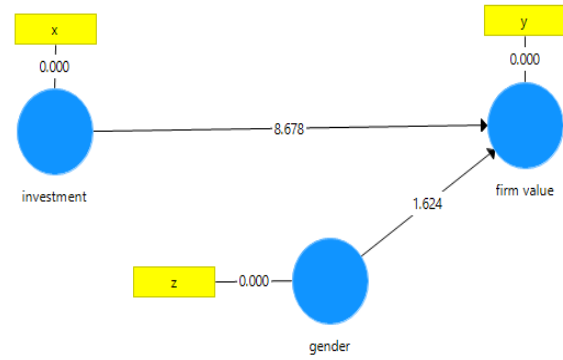


Figure 2. Structural Model Path Diagram in PLS (Source: smart PLS, 2020)

Table 5. Direct Influence Hypothesis Test Results

Variable Free	Dependent variable	Coefficient Path	t statistic	p-value	Information
Investment decision	the value of the firm	0.744	8,678	0.000	Sig

Source: smart PLS, 2020

The results of hypothesis testing are presented based on Figure 2 and Table 5, Overall, the results of hypothesis testing in this study will be explained as follows

H1. There is an influence between investment decisions on the value of the value of the firm.

The result of testing the first hypothesis is that the relationship between the investment decision variable and the firm value variable shows a positive path coefficient of 0,744. The positive path coefficient indicates that the relationship between investment decision variables and firm value variables is in line. The p value shows that the number is 0.00 less than 0.05 and the t-statistic value of 8,678 is greater than the t-table 1.980. With these results, it shows that there is a significant influence on the relationship between the investment decision variable on the firm value variable. This means that hypothesis 1 is accepted. The higher the level of investment decisions in consumer goods sector companies listed on the IDX in 2015-2019 will affect the value of the consumer goods sector companies listed on the IDX in 2015-2019

3.1.4.2. Hypothesis Testing and Coefficient of Moderation Variable Influence Pathways

Variable moderation is stated to moderate the variable relationship of independent decisions to dependents, if the T-statistical value reflected from the table total effect is more than 1.98. The following is a table of total effects that presents the T-statistics value in detail for variable moderation:

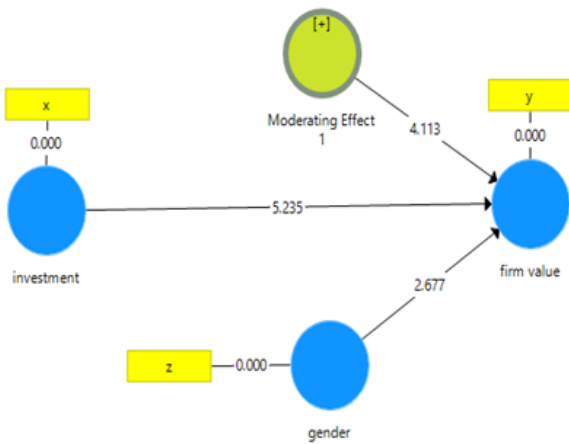


Figure 3. Structural Model Path Diagram with moderation in PLS (Source: smart PLS, 2020)

Table 6. Table Total Effect Variable Moderation

independent Variable	Dependent variable	Coef ficient Path	t statisti k	p-value	Inform a tion
Moderating Effect	Firm value	0.496	4,113	0.008	Moderation
Investation decision	the value of the firm	0,943	5,235	0.000	Sig

Source: smart PLS, 2020

The results of hypothesis testing are presented based on Figure 3 and Table 6, explained by the results of hypothesis testing in this study as follows:

H2. Gender moderates the effect of investment decisions on firm value.

Based on the results of the table above, it can be explained that after adding the influence of the moderating variable, it shows a positive path coefficient value of 0.496. The positive path coefficient indicates that the relationship between the investment decision variable on the firm value variable and the gender moderating variable on the board is consistent. The p value shows the number 0.008 is smaller than 0.050 and the t-statistic value of 4.113 is greater than the t-table 1.980. With these results, it can be concluded that the gender variable is on the board as a moderating variable, meaning that hypothesis 2 is accepted. The gender variable moderates the effect of investment decisions on company value in the consumer goods sector listed on the IDX in 2015-2019.

### 3.2. Influence of investment decisions on the value of the firm

The discussion about the effect of investment decisions on the value of the firm answers the formula of the first hypothesis that there is an influence between investment decisions on the value of the firm. The results of this study show that investment decisions have a significant positive effect on the value of the firm. The results of this study are in line with the stakeholder theory, according to the stakeholder theory, that the company is not an entity that only operates for its own benefit but should benefit its stakeholders (shareholders, creditors, consumers, suppliers, governments, communities, analysts, and other parties).

The company's management is expected to carry out the activities expected by stakeholders, they and the stakeholders can control the management in managing the resources owned by the company. Therefore, good management of all the potential owned by the company will create value added for the company which can then drive the financial performance and value of the company for the benefit of stakeholders. The results of this study are in accordance with Signaling Theory, investment decisions give a positive signal to investors and potential investors, so that investment decisions positively affect the value of the firm.

The results of this study support the research of [1] which states that there is a positive relationship between investment decisions and the value of the firm. The results of this study do not support [3] research which states that the asset return ratio does not have a significant effect on market value.

The results of this study illustrate that the management of companies in the consumer goods sector in the 2015-2019 period has mandated existing resources to increase company value. Companies in the Indonesian consumption sector have utilized the company's tangible and intangible assets effectively and efficiently. This proves that investment decisions have a positive effect on firm value. The choice of investment in company assets and use of tangible assets as well as intangible assets of the company are increased to increase company value.

#### 3.2.1. Gender moderates the effect of investment decisions on the value of the firm.

The discussion about the effect of variable investment decisions on a company's value variable with a gender variable is to answer the hypothesis that gender variables moderate the influence of investment decisions on the value of the company. The results of this study show that variable investment decisions affect variable values with gender variables as moderation. The results of this study are in accordance with Agency Theory, and Stakeholder

Theory which states that the company is not an entity that only operates for its own benefit but must benefit stakeholders (shareholders, creditors, consumers, suppliers, governments, communities, analysts, and other parties).

The results of this study support [8] which shows that gender diversity has a positive and significant effect on the value of the company or Tobin's Q. But the results of this study are at odds with the research of [5] stating the number of women serving on the board of directors has no significant effect on the company's financial performance. The 2017 World Economic Forum (WEF) study revealed that the contribution of women was said to be able to boost economic growth by US \$ 5.3 trillion, this indicates that gender equality will increase global gross domestic growth (GDP) [7].

The results of this study illustrate that the management of consumer goods sector companies in the period 2015-2019 has processed existing resources to improve financial performance. The company has implemented gender equality. The Company should properly implement investment decisions of long-term fixed assets, as well as apply gender equality to the company, to increase the value of the company.

#### 4. CONCLUSION

Investment decisions are directly influential, with a positive and significant direction towards the value of the company in the consumer goods sector companies listed in IDX in 2015 to 2019. Management of consumption sector companies has taken the right investment decisions, utilizing tangible assets and intangible assets of the company effectively and efficiently to improve the company's financial performance and value.

Gender as moderation on the influence of investment decisions on the value of companies in the consumer goods sector listed in IDX in 2015 to 2019. The results of this study in accordance with the results of the World Bank study say, the level of well-being globally can increase, if gender equality is implemented.

The limitation of my research is variable investment decisions using the MKTBKASS indicator, so I suggest to the next Researcher is to use variable investment decisions with other indicators.

#### REFERENCES

- [1] I. M. Sudana, *The theory and practices of The Company's Financial Management*. Jakarta: Erlangga, 2015
- [2] T. Nawaz, "Momentum investment strategies, corporate governance and firm performance: an analysis of Islamic banks". *Corporate Governance: The International Journal of Business in Society*, 17(2) 2017 DOI: <https://doi.org/10.1108/CG-03-2016-0052>. ISSN: 1472-0701
- [3] G. Aras and F. M. Yildirim, "The impact of corporate finance decisions on market value in emerging markets". *International Journal of Productivity and Performance Management*, 67(9) 2018, 1959-1976. DOI 10.1108/IJPPM-11-2017-0285
- [4] M. Kılıç and C. Kuzey, "The effect of board gender diversity on firm performance: evidence from Turkey", *Gender Management: An International Journal*, 31(7) 2016, DOI: <http://dx.doi.org/10.1108/GM-10-2015-0088>
- [5] C. H. Cono, and M. A. Gonzalez-Perez. "Representation of Women on Corporate Boards of Directors and Firm Financial Performance," *Diversity within Diversity Management*. 2019 37-60. DOI: <https://doi.org/10.1108/S1877-636120190000022003>
- [6] E.F. Brigham, and J. F. Houston, *Eleventh Edition Financial Management Basics*. Jakarta: Salemba Empat, 2011
- [7] Indonesian Accounting Association. *Financial Accounting Standards*. Jakarta. IAI, 2018
- [8] A. R. Baron, *Social Psychology*. Bandung: Intellectual Treasures, 2000
- [9] J. W. Santrock, *Life Span Development: Life Span Development*. Jakarta: Erlangga, 2002
- [10] Katadata.co.id. 2018. *Gender Equality Is Key to Economic Growth*. <https://katadata.co.id/timpublikasikatadata/finansial/5e9a55e514525/kesetaraan-gender-kunci-pertumbuhan-ekonomi>