

## Analysis of the Effect of Location, Design, Housing Facilities, Environmental Characteristics and Developer Brands on Land Value of Housing Properties in Medan Sunggal

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### ABSTRACT

This study was conducted to examine the effect of location, design, housing facilities, environmental characteristics, and developer brand on the land value of housing properties in Medan Sunggal. The population in this study were all houses in the Imperial Mansion Housing Complex and the Habitat Housing Complex with a total of 250 housing units that had been inhabited and the sample was 72 housing units. The data analysis technique used is multiple linear regression analysis. The results showed that location, facilities, environmental characteristics, and developer's brand had a positive and significant effect on the market value of land, and design variables had no significant effect on the market value of land considering that these parameters had a significant effect, then the development of locations, facilities, and environmental characteristics should also contribute to the brand developer.

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## 1. Introduction

### 1.1 Background

The property and real estate industry is one sector that reflects the state of an economy in a country. The results of research conducted by the Association of Indonesian Real Estate Developers (REI) and the University of Indonesia in 2020 showed that the property and real estate sectors contributed to the economic growth of 28% in terms of consumption spending in the building sector. The development of the property and real estate sector is able to attract investors because the value of land tends to increase compared to other types of investment. This is because the supply of land is fixed while the demand will always increase along with the increase in population and the increasing human need for housing (Widodo, 2012). Thus, investors need to manage their investment portfolio by adding risk-free assets or assets that have little risk, in other words, investors need to diversify their investments (Octavianus, et. al., 2021).

One of the factors that increase the value of land in housing areas with the type of housing or complex is located and is one of the factors considered by buyers in buying property. Meanwhile, according to Fanning (2005), the increase in property value is influenced by physical factors, location, and legal factors. In the physical factor itself, including housing facilities, it can increase property value, where to increase sales of housing complex types is to add facilities that are already available, such as commercial and shopping facilities, playgrounds, jogging tracks and making attractive gates and always maintain and perform routine maintenance on existing facilities so that they are well maintained and comfortable when used in order to increase the attractiveness of prospective home buyers (Kustamar et al, 2013)

Apart from the facilities and characteristics of the housing environment, the location factor can be seen as a factor that affects the value of a property. Two properties have the same physical form but if the location is different, then the value will certainly be different (Arifin, 2011).

There is an invisible/intangible factor, namely the developer's brand that can increase the land value of a property. Consumer confidence in certain brands and brand image, especially a positive image, is an important thing. Because without a strong and positive image, it is very difficult for companies to attract new customers and retain existing ones and increase property values (Tjiptono, 2001).

Widodo (2012), with the results of his research showing that based on partial analysis, it turns out that not all independent variables have a positive influence on housing purchasing decisions in Semarang City, only variables (location, environment, income, and demand sensitivity) have a positive influence, while the facility variable has a negative influence on housing purchase decisions in the city of Semarang. and research proves that all independent variables (facilities, location, income, and demand sensitivity) simultaneously have a significant influence on the dependent variable, namely the buyer's decision.

Research on land values in this study was carried out on housing in the Medan Sunggal sub-district, Medan Municipality such as Imperial Mansion housing and Habitat Housing. These two housing complexes are located in adjacent areas with similar housing characteristics, but an indication of the market value of land in the two housing estates has a significant difference, as shown in Table 1.1 below,

**Table 1.1** The phenomenon of land value in residential in Medan Sunggal

housingName	House Type	Land Area (m <sup>2</sup> )	Building Area (m <sup>2</sup> )	Building Condition	Property Market Value (Rp. Million)	Land Market Value/ m <sup>2</sup> (Rp. Thousand)
<i>Imperial Mansion</i>	Jade	84,00	121,00	Ready to Reside	975	6.709
<i>Imperial Mansion</i>	Diamond	120,00	130,00	Ready to Reside	1.275	6.291
<i>Imperial Mansion</i>	Ruby	84,00	121,00	Ready to Reside	1.025	6.728
<i>Imperial Mansion</i>	Emerald	112,00	130,00	Ready to Reside	1.425	7.151
<i>Komplek Perumahan Habitat</i>	<i>Tahap 1</i>	72,00	144,00	Ready to Reside	900	4.250
<i>Komplek Perumahan Habitat</i>	<i>Tahap 2</i>	72,00	72,00	Ready to Reside	810	5.622
<i>Komplek Perumahan Habitat</i>	<i>Tahap 2</i>	90,00	90,00	Ready to Reside	972	5.960
<i>Komplek Perumahan Habitat</i>	<i>Tahap 2</i>	85,00	125,00	Ready to Reside	1153	6.221

Source: Processed Secondary Data

From the table above, it is found that the average market value of land in Imperial Mansion housing is Rp. 7,020.684,- /m<sup>2</sup>, and the average market value of land in Habitat housing is Rp. 5,313,566,- /m<sup>2</sup>. There is a land value difference of approximately Rp.1,507,000,-/m<sup>2</sup> between the Imperial Mansion Housing Complex and the Habitat Housing Complex. The difference is caused by several factors such as Location, Design, Housing Facilities, Environmental Characteristics, and Developer Brand.

This study aims to analyze the factors that affect the value of the land, especially to analyze the influence of the developer's brand on the value of the land. This research is important so that the public, developers, and appraisers are not mistaken in determining the market value for a property. And be able to look at the factors that contribute to the creation of land value.

Apart from the differences and contradictions in the effect of location, design, housing facilities and environmental characteristics, and developer's brand on the market value of land, this study aims to examine the effect of these factors on the market value of

the land. The findings of this study are expected to contribute to science in the field of property management and valuation, its implications for developers and prospective housing buyers.

## **2. Theoretical Foundation and Hypothesis Development**

### **2.1 Market Value Definition**

Market value according to KEPI & SPI 101 point 3.1 (MAPPI, 2018) Market value is defined as the estimated amount of money that can be obtained from the exchange of an asset or liability on the valuation date, between buyers who are interested in buying and sellers who are interested in selling, in free transaction ties, the marketing of which is carried out appropriately, where both parties each act based on their understanding, prudence and without coercion.

### **2.2 Location Definition**

The development of housing land location has implications for the value and price of land. The process of increasing the value and price of land begins with the development of the function and role of the area. If an area develops due to increased production capabilities and better transportation facilities, the utilization and use of land will also increase both intensively and extensively. (Hilman, 2004).

### **2.3 Design Definition**

Design factors were taken based on previous research conducted by Malahati (2018), Davis et al. (2015), Wisnupraba and Christiono (2015), and Wahyuni (2017) where design is one of the factors thought to affect property values. Housing with three different housing concepts which includes six building designs, both from the facade of the building and the interior which refers to aesthetic aspects, lighting, air circulation, comfort, and security and with good housing design will increase the value of the property.

### **2.4 Housing Facility Definition**

Based on previous researchers, namely Fachrudin and Fachrudin (2014), Meak, Yuvenalis Kanisius, (2018), and Kurniawan, Yuniaristanto, and Sutopo (2016) that the factor of completeness of facilities has a positive and significant influence on housing property values. With the facilities in the housing, it will increase buyer interest and increase the selling price of the property.

### **2.5 Environment Characteristic Definition**

Housing characteristics were taken based on previous research conducted by Abidoye and Albert (2016) and Wisnupraba and Christiono (2015). Characteristics of housing with one gate system so that privacy and security are maintained.

### **2.6 Developer Brand Definition**

The brand or Credibility of a developer/developer is related to consumer confidence in choosing a house. According to economic principles, high demand will be in line with higher supply. So this will also have an impact with an increased value, for similar properties, in the same area but developed by developers with different levels of credibility. (Yudi, 2015).

## **3. Data and Methodology**

### **3.1 Research sample and data**

The population in this study are all houses in the Imperial Mansion Housing Complex and the Habitat Housing Complex because the housing complex is located on the same road, which is on the same road, namely Jalan Pasar III, Medan Sunggal and has almost the same concept and target market but was built. or developed by two different developers. Based on information compiled from the developer's management office, the number of houses in the two complexes is 361 units. However, from this figure, the number of houses that are currently inhabited is 250 units. In determining the number of samples, the researcher used a statistical approach referring to the Slovin theory, so the results of calculations using the Slovin formula obtained the number of samples to be used in this study, namely 71.43 (rounded to 72)

### **3.2 Operational definition and variable measurement**

This research is survey research. Data collection techniques are carried out in two ways, namely:

- a) Questionnaire  
This technique is done by providing a list of questions that will be filled out by residents of the Imperial Mansion Housing Complex and Habitat Housing Complex as correspondents. The distribution of the questionnaire using the Sampling technique, distributed by researchers by taking samples that happened to be encountered at that time.
- b) Interview  
Interviews were conducted with the management and residents of the housing estate as additional information about the Imperial Mansion Housing Complex and the Habitat Housing Complex.

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The operational definition is a definition based on the properties of the defined thing that can be observed and measured (Widodo, 2012). The operational definitions of variables in this study are described as follows:

1. The location variable in this study is the place where the location of the house for each type stands in one housing.
2. The design variable in this study is a housing house design with three different types which include six-building designs and interior parts that refer to aesthetic aspects, lighting, air circulation, comfort, and security.
3. The facility variables in this study are the facilities available around the housing to support the activities of the residents of the housing as well as other available facilities.
4. The environmental characteristics variable in this study is the existence of good environmental quality and neighborly comfort so that social interaction is formed.
5. The developer's brand in this study includes the good name owned by the developer which can increase the value of the property's land and whether the developer's brand factor influences the decision to purchase the property.
6. The land value in the study is the result of the extraction carried out to find out the market value of the land in the housing

**Tabel 3.1 Research Variable Operational**

No	Variable	Definition	Indicator	Scale
1	Location (X <sub>1</sub> )	The situation of a place is closely related to the relationship between that place and its surroundings in the same geographic space (ARE, 2013)	(1). Strategic house position (2). The house position is close to the gate (3). Close to worship places (4). Close to parks (5). Close to clubhouse	Interval
2	Design (X <sub>2</sub> )	To be able to formulate a design solution approach appropriately, several things must be understood, namely the function of the house, planning elements, and a detailed solving approach (Sunarmi,2013)	(1). Esthetics of facade (2). Esthetics of interior (3). Esthetics of interior spatial (4). Lighting (5). Air Circulation (6). Building Structure (7). Quality of wall paint (8). Quality of floor (9). Quality of roof (10). Quality of doors (11). Quality of windows	Interval
3	Housing Facility (X <sub>3</sub> )	Appearance, capabilities, infrastructure, and the state of the surrounding environment in showing their existence to external parties (Lupiyoadi, 2012)	(1). Housing security (2). Availability of parks (3). Availability of swimming pools (4). Waste, lighting, and drainage maintenance	Interval
4	Environment Characteristics (X <sub>4</sub> )	A group of houses with environmental facilities (hasugian et al, 2016)	(1). Low pollution environment (2). House noise level (3). Safe environment (4). Flood-free (5). Presence of variative ethnicities (6). Close to families/colleagues house (7). Availability to park on the roadside without interfering passerby's	Interval

5	Developer Brand (X <sub>5</sub> )	A good name owned by a developer can increase the value of the property managed by the developer.	(1). The developer brand is the main decision in buying property (2). Popular developers can increase housing prestige (3). Popular developers can increase property land prices (4). My house has an elite impression	Interval
6	Land Value(Y)	Land value in Grand Menteng Indah housing	(1). Land Value	Nominal

## 4. Results and Discussions

### 4.1.1 Medan Sunggal Housing General Description

Housing in the Medan Sunggal sub-district is increasing and is also an area with a high occupancy rate with the concept of housing being a housing concept that is in demand by the people of Medan City, where housing is considered to have better facilities and is more attractive to live in. The object of research in this thesis is the Habitat Housing Complex and Imperial Mansion Housing which was built by developer wiraland Properti Group, where Imperial Mansion Housing consists of 101 houses with 4 types and the Habitat Housing Complex was built by developer Vigourland. 2 (two) stages, where stage I consists of 131 houses with 4 types.

## 4.2 Validity and Reliability Sampling

### 4.2.1. Determining Validity Test

**Table 4.2: Validity Test Results**

Variable	Question	R Count	R Table	Decision
Fasilitas	Strategic house position	0.649	0.361	Valid
	The house position is close to the gate	0.615	0.361	Valid
	Close to worship places	0.514	0.361	Valid
	Close to parks	0.693	0.361	Valid
	Close to clubhouse	0.679	0.361	Valid
Desain	Esthetics of facade	0.729	0.361	Valid
	Esthetics of interior	0.528	0.361	Valid
	Esthetics of spatial	0.754	0.361	Valid
	Vegetation area availability	0.560	0.361	Valid
	Air circulation	0.578	0.361	Valid
	Natural lighting	0.578	0.361	Valid
	House structure	0.713	0.361	Valid
	Floor quality	0.786	0.361	Valid
	Wall paint quality	0.733	0.361	Valid
	Door quality	0.693	0.361	Valid
Fasilitas Perumahan	Window quality	0.399	0.361	Valid
	one gate system	0.790	0.361	Valid
	Park availability	0.686	0.361	Valid
	Clubhouse availability	0.588	0.361	Valid
	Swimming pool availability	0.736	0.361	Valid
	Waste managed by the developer	0.867	0.361	Valid
	Lighting maintenance managed by the developer	0.678	0.361	Valid
Drainage maintenance managed by the developer	0.772	0.361	Valid	
Karakteristik	Low pollution environment	0.407	0.361	Valid

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Lingkungan	Low noise level	0.578	0.361	Valid
	Safe from criminalities	0.729	0.361	Valid
	Safe from floods	0.560	0.361	Valid
	Presence of variative ethnicities	0.635	0.361	Valid
	Close to families/colleagues	0.560	0.361	Valid
	availability to park on the roadside without interfering passerby's	0.653	0.361	Valid
Brand Pengembang	Developer brand is the main decision factor in property buying	0.480	0.361	Valid
	Popular developers can increase the housing prestige	0.693	0.361	Valid
	Popular developers can increase property land value	0.679	0.361	Valid
	My house is in the prestigious area	0.729	0.361	Valid
	The areas around my house have an elite impression	0.619	0.361	Valid

Source: Processed Primary Data

Based on Table 4.2 above, it can be explained that for location variables ( $X_1$ ), design ( $X_2$ ), housing facilities ( $X_3$ ), environmental characteristics ( $X_4$ ) and developer brand ( $X_5$ ), each has several different instrument items developed by researchers, and all of the instrument items meet the validity test requirements because each of them has a significance value ( $p$ ) smaller than alpha 0.05. Thus, all instrument items from all observed variables can be included in further testing.

#### 4.2.2 Reliability Test

**Table 4.3: Reliability Test Result**

Cronbach's Alpha	N of Items
.964	35

Source: Processed Primary Data

From Table 4.3 it can be explained that all items as a measure of the observed variables are reliable, because the Cronbach alpha value of the tested variables has an SIA (Standardized Item Alpha) greater than the allowed reliability value, which is 0, 6

#### 4.3 Classic Assumption Test

##### 4.3.1 Data Normality Test

**Table 4.4 Normality test for each variable**

##### One-Sample Kolmogorov-Smirnov Test

*Unstandardized Residual*

N		72
Normal Parameters <sup>b</sup>	Mean	.0000000
	Std. Deviation	.48822975
Most Extreme Differences	Absolute	.072
	Positive	.072
	Negative	-.049

Test Statistic	.072
Asymp. Sig. (2-tailed)	.200 <sup>c,d</sup>

Source: Processed Primary Data

Based on the normality test of the data using the Kolmogorov-Smirnov test, it can be seen that the unstandardized residual of all variables shows a significance value (p) of 0.200 which is greater than 0.05, so it can be concluded that the normality assumption is met.

#### 4.3.2 Multicollinearity Test

**Tabel 4.5 Multicollinearity test using VIF**

	VIF	
Location	1.834	No multicollinearity
Design	1.287	No multicollinearity
Housing Facility	1.325	No multicollinearity
Housing Characteristics	1.627	No multicollinearity
Developer Brand	1.615	No multicollinearity

Based on Table 4.5 above, it can be concluded that for the 5 independent variables there is no multicollinearity shown by the VIF value of the five independent variables which is smaller than 10.

#### 4.3.3 Heteroscedasticity Test

**Tabel 4.6 Heteroscedasticity test using Glejser test**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.712	.837		2.047	.045
X1	-.010	.031	-.051	-.322	.748
X2	-.018	.013	-.184	-1.385	.171
X3	.026	.018	.194	1.438	.155
X4	-.051	.030	-.255	-1.705	.093
X5	.037	.027	.211	1.413	.162

Source: Processed Primary Data

Based on Table 5.20, the probability value or Sig. Glacier from the location is 0.748, the probability value or Sig. The glacier of the design is 0.171, the probability value or Sig. The glacier of a housing facility is 0.155, the probability value or, Sig. The glacier of the environmental characteristics is 0.093, the probability value or Sig. The glacier of the developer brand is 0.162. It is known that all Sig Glejser values are > 0.05, so it is concluded that there is no heteroscedasticity.

**4.4 Hypothesis Testing**

**4.4.1. Simultaneous Significance Test Results (F Test)**

**Table 4.10: Simultaneous Significance Test Results (F Test)**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	59.867	5	11.973	14.166	.000 <sup>b</sup>
Residual	55.786	66	.845		
Total	115.653	71			

Source: Processed Primary Data

Based on Table 4.10 above, the hypothesis is carried out by the F test, namely simultaneous testing, the Fcount results are 14,166 with a significance value (0.000) which is much smaller than alpha 0.05, so Ho is rejected. This shows that there is a significant influence of location (X1), design (X2), housing facilities (X3), environmental characteristics (X4), and developer brand (X5) on the market value of land (Y).

**4.4.2. Partial Significance Test Results (t-test)**

**Table 4.11: Partial Significance Test Results (t-test)**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-6.618	1.459		-4.535	.000
X1	.122	.054	.263	2.274	.026
X2	-.029	.023	-.125	-1.286	.203
X3	.069	.032	.214	2.173	.033
X4	.126	.052	.264	2.418	.018
X5	.105	.046	.247	2.274	.026

Source: Processed Primary Data

Based on Table 4.11, it can be concluded that the regression equation is as follows :  $Y = -6.618 + 0.122 X_1 - 0.29 X_2 + 0.69 X_3 + 0.126 X_4 + 0.105 X_5$ .

Based on the results of Table 4.11, it was found that:

1. The regression coefficient value of the location is 0.112 with a significance value (Sig.) 0.026 > a significance level of 0.05, then the location has a positive and significant effect on land value.
2. The regression coefficient value of the design is -0.29 with a significance value (Sig.) 0.203 < 0.05 significance level, then the facility has a negative and insignificant effect on land value.
3. The regression coefficient value of the facility is 0.69, with a significance value (Sig.) 0.033 < 0.05 significance level, then the design has a positive and significant effect on land value.
4. The regression coefficient value of environmental characteristics is 0.126 with a significance value (Sig.) 0.18 > a significance level of 0.05, then the environment has a positive and significant impact on land values.
5. The regression coefficient value of the developer brand is 0.105 with a significance value (Sig.) 0.26 > a significance level of 0.05, then the environment has a positive and significant effect on land value

**4.4.3 Determination Coefficient Analysis**



**Table 4.12: Determination Coefficient Statistic Value (R<sup>2</sup>)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.719 <sup>a</sup>	.518	.481	.919

Source: Processed Primary Data

Based on Table 4.12, it is known that the value of Adjusted R-squared () = 0.481. This value can be interpreted that the variables of location, design, housing facilities, environmental characteristics, and developer brand affect the market value of land by 48.1%, while the remaining 51.9% is influenced by other factors.

#### **4.5 Discussion**

##### **4.5.1 The effect of location on the land value of housing properties in Medan Sunggal**

Based on the results of this study with the t-test, it is known that the location variable affects the land value positively and significantly on the property land value in Medan Sunggal. One of the factors that respondents agreed with was the strategic position of the house where the house was strategically positioned and close to shopping centers, schools, and places of worship.

Based on the results of respondents' answers regarding the location of the house where the proximity of the house to the main gate access can be the basis for choosing a residence as time efficiency. The closer the house is to the main door access, the more attractive the house will be and the land value of the house will increase. In this modern era, where prospective residents will pay more to get a good housing location. Property with a good location will also increase the value of the property and it will also increase the land value of the property. The results of this study are in line with, Fachrudin and Widodo (2012) and Elina Monica (2018), Mbachu and Lenono (2005) that the location of the factors is one of the factors that have a major influence on the market value of housing. However, this is contrary to the research conducted by Malahati, CD (2018), wherein his research it was found that the location factor had no significant effect on property values in Citra Wisata Housing.

##### **4.5.2 Effect of design on the land value of housing properties in Medan Sunggal**

Based on the results of this study with the t-test, it is known that the design variable does not significantly affect the value of property land in Medan Sunggal, where based on the answers from respondents that the majority of buyers will buy houses according to housing developer standards or in vacant conditions. And buyers tend to build and design according to their own preferences for the house, so the design has no significant effect on increasing the land value of the property in Medan Sunggal housing, but it will further increase the building value of the property and is in line with research conducted by other researchers. i.e. Slightly different from this study, that the design has a positive and significant effect on property values.

The results of this study are in line with, Malahati (2018), Davis et al. (2015), Wisnupraba and Christiono (2015), and Wahyuni (2017) where design is one of the factors thought to affect property values. Housing with three different housing concepts which includes six building designs, both from the facade of the building and the interior which refers to aesthetic aspects, lighting, air circulation, comfort, and security and with good housing design will increase the value of the property.

##### **4.5.3 The effect of housing facilities on the land value of housing properties in Medan Sunggal**

Based on the results of this study with the t-test, it is known that the housing facility variable affects the land value positively and significantly on the property land value in Medan Sunggal, facilities are often associated with the reason people choose a house, especially in housing. Several facilities are located around housing such as facilities having a garden, clubhouse, swimming pool, good complex security and garbage maintenance, lighting, and drainage that are managed properly will be an attraction for respondents in buying a house.

Housing with good facilities will make it easier for residents to carry out daily activities, which will also increase the demand for housing and will also increase the value of the housing land.

Based on the results of respondents' answers, that having a swimming pool, clubhouse, and maintenance of garbage, lighting, drainage that is well managed are the main factors in increasing the value of land in housing in Medan Sunggal.

The results of this study are in line with Fachrudin and Fachrudin (2014), Meak, Yuvenalis Kanisius, (2018), and Kurniawan, Yuniaristanto, and Sutopo (2016) that the factor of completeness of facilities has a positive and significant influence on housing property values. With the facilities in the housing, from several studies that have been carried out, the research shows that the facility variable affects the value of the property because it will also increase the land value of the housing.

##### **4.5.4 The influence of environmental characteristics on the land value of housing properties in Medan Sunggal**

Based on the results of this study with the t-test, it is known that environmental characteristics variables affect land values positively and significantly affect property land values in Medan Sunggal, the results show that environmental variables have a positive and significant effect on property values. The first thing that residents pay attention to is the security of the house from crime. The location of housing that is far from the city center is a consideration in the selection of housing homes because it has a low noise level and the presence of a sewer that is kept clean makes the housing environment safe from flooding. Continuous activity in the area causes this housing to not be considered a low-pollution environment.

Humans always live side by side with other people. However, the availability of parking space will also become a conflict that often occurs in a housing estate, therefore having regulations from the developer on parking policies and road widths will also create comfort and avoid conflicts between residents of housing.

Characteristics of a good and comfortable housing environment are one of the factors that are quite a determinant of good and bad housing, where an environment that is low in pollution, noise pollution, safe from flooding, and comfortable to live in, will tend to be more attractive.

Based on the principle of supply and demand, housing with good environmental characteristics will be more desirable and will also increase the land value of the housing.

The results of this study are in line with Abidoye and Albert (2016) and Wisnupraba and Christiono (2015) that environmental characteristics have a positive and significant influence on the value of housing property, from several studies that have been carried out, in this study, it shows that environmental characteristics variables affect the value of the property, because it will also increase the land value of the housing.

#### ***4.5.5 The influence of the developer's brand on the land value of housing properties in Medan Sunggal***

Based on the results of this study with the t-test, it is known that the developer brand variable affects the land value positively and significantly affects the property land value in Medan Sunggal, according to the respondents' answers, residents think that the housing is prestigious housing and has an elite impression and believes that housing is with the developer brand has an influence in increasing buying interest and the value of the housing land.

A good developer brand can be seen from the historical housing or property that has been developed previously, where a good developer will still maintain and care for the housing that has been built or developed, a good developer can also be seen from the many properties that have been successful and successful in Indonesia. develop or be developed.

These things show that a good developer brand can improve the social status of residents and will be in demand by the community as a dream place to live that can increase the value of property land, based on research that has been done it was found that the Wiraland Properti Group developer brand is considered superior to Vigourland because better known by the public and has a history of property development that is quite successful and accepted by the community. The results of this study are in line with, Hoang, Ho, Phan, Le (2019), Rahadi, Wiryono, Koesrindartoto, (2012) that Brand developers affect consumer buying interest and the value of the property.

## **5. Conclusion**

Based on the results of the study, it can be concluded that the location, facilities, environmental characteristics, and developer's brand have a positive and significant effect on the market value of the land and the design variables have no significant effect on the market value of the land. This shows that property developers must pay more attention to public trust in big names, which of course must be accompanied by the quality of their property products, the commitment, and the integrity of the developer. location, facilities, and environmental characteristics are components that property developers can build and develop, given that these parameters have a significant effect, the development of the location, facilities, and environmental characteristics should contribute to the developer's brand. Further researchers are expected to be able to research developer brands that can affect housing land values and further expand the range of variables that are suspected to have a significant effect on housing property values, and on housing reputation variables it is suggested that further research can be carried out to find out which housing classification can increase the value of housing. property. For the community, it can be taken into consideration in determining the value of housing property, namely adjusting the price offered with the facilities and infrastructure provided around the housing area.

## **References**

- [1] Anastasia, U. Y. N. (2014) Pengaruh Kualitas Produk dan Citra Merek Terhadap Keputusan Pembelian Konsumen, *Jurnal Ilmiah Manajemen Kesatuan Vol. 2 No. 2 Desember*, Program Studi Manajemen Sekolah Tinggi Ilmu Ekonomi Kesatuan Bogor.
- [2] Appraisal Institute (2013) *The Appraisal of Real Estate 13th Edition*, Chicago: Illinois.
- [3] Augustine, Y. and Dan R. Kristaung (2013) *Metodologi Penelitian Bisnis dan Akuntansi*, Jakarta : PT. Dian Rakyat.
- [4] Arifin, M. Y. (2011) *Analisis Tingkat Kapitalisasi Nilai Properti Perumahan di Kabupaten Klaten*, Tesis Program Pascasarjana Magister Ekonomi dan Studi Pembangunan Universitas Sebelas Maret Surakarta.
- [5] Babawale, G.K. dan C. A. and Ajayi (2011) Variance in housing property Valuation in Lagos Nigeria, *Emeral Insight Journal Vol. 29 No. 3: 222-237 April 2011*, Department of Estate Management University of Lagos Nigeria and Department of Estate Management Obafemi Awolowo University Ile-Ife Nigeria.
- [6] Blackledge, M. (2009) *Introducing Property Valuation*, London and New York: Routledge Taylor & Francis Group.
- [7] Budihardjo, E (2009) *Perumahan & Permukiman di Indonesia*, Bandung : PT.Alumni Bandung.
- [8] Bourne, L. S. (1975) *Internal Structure of the City - Readings on Space and Environment*, Oxford: Oxford University Press Inc.
- [9] Ching, F. D. K. (1996) *Ilustrasi Desain Interior*, Jakarta : Erlangga.
- [10] Fachrudin, K A. and Hilma T. F. (2014) Tenant Satisfaction In Boarding House And Its Relationship To Renewal In Medan City Indonesia, *International Journal Of Academic Research Vol. 6 No. 2: 97-101 March 2014*, Department of Management and
- [11] French, N. (2004) The valuation of specialized property: A review of valuation methods, *Journal of Property Investment and Finance Vol. 22 No. 6: 533-541 2004*, The Department of Real Estate and Planning The University of Reading Business School Reading UK.
- [12] Garbarino, E and Mark S. J (1999) The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships, *Journal of Marketing, Vol. 63: 70-87*, The University of Manchester Library.
- [13] Ghozali, I (2006) *Aplikasi Analisis Multivariate dengan Program SPSS (Edisi Ke 4)*, Semarang : Badan Penerbit Universitas Diponegoro.
- [14] Haikal, M (2014) *Faktor-Faktor yang Mempengaruhi Nilai Properti Rumah Tinggal Pada Perumahan Alam Sutera Tangerang Banten Tahun 2014*, Tesis Program Studi Magister Ekonomika Pembangunan Fakultas Ekonomika dan Pembangunan Universitas Gadjah Mada Yogyakarta.
- [15] Harjanto, B (1999) Analisis Tingkat Kapitalisasi Sektor Perumahan dan Faktor-faktor yang Mempengaruhinya, *Jurnal Survei dan Penilaian Properti : 21-35 Juli*.
- [16] Hilman, M. (2004) Perkembangan Lokasi Perumahan di Wilayah Gedebage Kota Bandung Akibat Pemekaran Kota, *Jurnal Dimensi Teknik Arsitektur Vol. 32 No. 2 : 157-160 Desember 2004*, Fakultas Teknik Sipil dan Perencanaan Universitas Kristen Petra Surabaya.
- [17] Ismail, R. and Nuzulina I (2003) *Faktor-faktor yang Mempengaruhi Pemilihan Lokasi Perumahan di Jakarta Selatan*, Tesis Program Pascasarjana Magister Perencanaan Pembangunan Wilayah dan Kota Universitas Diponegoro Semarang.
- [18] IVSC (2003) *International Valuation Standards 6th Edition*, London :Synder, J.C. dan J.C. Anthony (2011) *Perencanaan Kota Edisi Kedua*, Jakarta :Erlangga.
- [19] Octavianus, H., Fachrudin, K. A., Sadalia, I., Silalahi, A. S., & Supriyanto. (2021). Income Diversification and Capital Structure: International Banks Evidence. *The International Journal of Business & Management*, 9(7), 121-132.
- [20] Taylor, P. C. (2014) Management Challenges and Responses, *Emerald Insight Journal Vol. 32 No. 1: 16-27 April 2014*, Mona School of Business and Management University of the West Indies Mona Kingston Jamaica.
- [21] Thompson, B. (2015) Innovation in Property Management, *Emerald Insight Journal Vol. 33 No. 5: 436-445 2015*, Remit Consulting London UK.
- [22] Tjiptono, F. (2001) *Strategi Pemasaran Edisi Kedua*, Yogyakarta : Gramedia Pustaka Utama.
- [23] Tjiptono A. (2006) *Konsep Strategi Pemasaran*, Yogyakarta : BPFU-UGM.
- [24] Pemerintah Republik Indonesia (2011) *Undang-undang Republik Indonesia Nomor 1 Tahun 2011 Tentang Perumahan dan Kawasan Permukiman* (2011), Jakarta : Sekretariat Negara.
- [25] Wahyuni, N. (2017) *Pengaruh Lokasi, Desain, Fasilitas dan Harga Terhadap Keputusan Pembelian Properti Rumah Tinggal di Kecamatan Medan Sunggal Kota Medan Provinsi Sumatera Utara (Studi Kasus Perumahan PT. Zona Property Indonesia)*, Tesis Program Pascasarjana Magister Manajemen Properti dan Penilaian Universitas Sumatera Utara Medan.
- [26] Widayanti, E. (2010) *Pengaruh Manajemen Aset Terhadap Optimalisasi Pemanfaatan Aset Tetap Pemerintah Daerah (Studi Kasus di Kabupaten Sragen)*, Tesis Program Studi Magister Ekonomi Universitas Sebelas Maret Surakarta.
- [27] Yiu, C. Y.; Wong, S. K. and Dan Y. Yau (2005) Property Management as Property Rights Governance, *Emerald Insight Journal Vol. 24 No. 2: 87-87 September 2005*, Department of Building and Construction University of Hong Kong China