Analysis of Consumer Decision to Purchase on Subsidized House (Type 36) in Banjarmasin and Banjarbaru City

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ABSTRACT

Limited land in big cities to build housing causes land prices to increase, so the government has a House Ownership Credit Program, but it has not been supported by quality and facilities. There is dissatisfaction from consumers with subsidized houses that have been built, so it is necessary to analyze the influence the factors of home safety, home comfort, home health, and home investment opportunities on community decisions (consumers) in buying subsidized houses in Banjarmasin and Banjarbaru city. The research aims to determine the factors that most influence the decision of the community (consumers) in buying subsidized houses and strategies to increase consumer decisions in buying subsidized houses (type 36) in Banjarmasin and Banjarbaru city. Analysis in this study using multiple linear regression method and partial correlation test. The results of the t test and multiple linear regression obtained several factors that have an influence on the decision to purchase subsidized houses are home safety factor and home comfort factor. From the results of the partial correlation test, it was found that the home comfort factor, especially from the home care indicator, had the most dominant influence. The easier it is to maintain subsidized houses, the higher the decision to purchase subsidized house in Banjarmasin and Banjarbaru city will be. The strategy to improve consumer decisions in buying subsidized house is to pay more attention to material selection, supervision, and work methods of building subsidized houses.

KEYWORDS:*House Purchase Decision, Multiple Linear Regression, Partial Correlation*

I. INTRODUCTION

The high rate of urbanization and natural growth of the population have led to an increase in the intensity of urban development. The price of land and residential buildings that increase every year causes not all people to be able to own their own houses. Therefore, the government has a program of One Million Houses in the form of subsidized House Ownership Creditthat can make it easier for low-income people to own a house. Developers are increasingly building subsidized houses, especially in Banjarmasin and Banjarbaru city. The problem that commonly occurs is that the subsidized house is not in accordance with the quality of the building and its facilities. There are consumer complaints/dissatisfaction with the subsidized house that has been built, both in factor of home safety, home comfort, and the health of the house so that it requires repairthe part of subsidized house which results in additional costs. The investment opportunity factor can also be considered in the decision to have a subsidized house. The purpose of this study is to find out which factors have the greatest influence among the factors of home safety, home comfort, home health, and investment opportunities on consumer decisions in buying subsidized houses and to know the strategies for increasing consumer decisions to buy subsidized houses through the most influential factors. The research limitation is located in Grand Melati Indah Residence in Banjarmasin city and KampoengSafwah Asri Residence in Banjarbarucity on type 36 and the respondents are the owners and residents of the house. The research was conducted by distributing questionnaires to residents and owners. Analysis using multiple linear regression test method and partial correlation test with SPSS 25.0 program.

II.   LITERATURE REVIEW

Decision making, according to Engel (Mafruchah, 2011) is influenced by environmental, individual and psychological process. House Ownership Credit is a loan or home ownership financing that is given assistance or convenience to obtain a house from the government in the form of low-cost funds for the long term and subsidies in obtaining a house. The subsidized house has a minimum land area minimum 60 m^2 and maximum of 200 m^2 with building area in 21 m^2 and 36 m^2.

According to the Decree of the Minister of Settlement and Regional Infrastructure No. 403 (2002), general requirements for healthy simple house include:

a.   Minimum Time and Space Requirements
b.   Health and Comfort Requirements
c.   Minimum Security and Safety Requirements

According to Herlianto (2013), investment is a fund investment or capital that can generate wealth and provide benefits with a good rate of return at this time or later.

The analytical methods in this study include:

a.   Classic Assumption Test
1)   Normality Test

Normality test is useful to find out the residual variable in regression model has a normal distribution value. The normality test was also carried out by the Komogorov-Smirnov and Graph tests.

2)   Multicollinearity Test

According to Ghozali (2018), this test aims to find a correlation between independent variables in the regression model. There should be no correlation between independent variables in a good regression model.

b.   Statistic Test
1)   Coefficient of Determination Test

This test is to find out how far the ability of a model to explain the variation of the dependent variable (Ghozali, 2018).

2)   Simultaneous Significance Test (F Statistics Test)

This test is to determine the overall significance of analyzed regression lines, whether the Y variable is linearly related to X_1, X_2, and X_3 (Ghozali, 2018).

3)   Individual Parameter Significance Test (Test Statistical t)

This test isused to determine the extent of influence one explanatory/independent variable individually in explaining the variation of the dependent variable.

c.   Multiple Linear Regression Test

According to Budiarto (2019), the most widely used analytical test in quantitative research is multiple linear regression test and this analysis is used to determine whether one variable can affect other variables.

d.   Partial Correlation Test

According to Sulistiyono (2013), partial correlation is a test to learn the relationship between an independent variable and the dependent variable by controlling other independent variables that are thought to have an influence.

III.   RESEARCH METHODS

a.   Research Sites

The research was carried out in the subsidized houses area (type 36) in Grand Melati Indah Residence in Banjarmasin city andKampoengShafwah Asri Residence in Banjarbarucity.

b.   Data Collection

In this study, because it consists of 4 independent variablesand 1 dependent variable, the minimum sample used is 50 questionnaires. It will be separated to 2 sections and each 25 questionnaires will be distributed in both locations of subsidized house. Observations are carried out by observing directly to the research location to observe conditions in the field and directly reviewing the suitability of the variables that are factors in consumer decisions. Secondary data are population data from BPS and housing location plans and site plans from developers.

c.   Research Variable

The independent variables used in this study are Home Safety Factor (X_1), Home Comfort Factor (X_2), Home Health Factor (X_3) and Home Investment Opportunity Factor (X_4). Dependent variable is the Decision to Purchase a House (Y). Indicators of the variables in this study include:

Table 1. Variables in Research

No.	Variable
a.	**Home Safety Factor (X_1)**
1.	The condition of the foundation of the house is in good condition and strong.
2.	The condition of the walls of the house is in good condition and strong.
3.	The condition of the floor of the house is in good condition and strong.
4.	The condition of the ceiling of the house is in good and strong condition.
5.	The roof of the house is in good condition and strong.
6.	Conditions of doors, windows, and ventilation in good and strong condition.
7.	The condition of the frame of the house is in good and strong condition.
8.	Security guards guard around the house.
b.	**Home Comfort Factor (X_2)**
1.	The size of the room in the house according to the conditions of the family at home.
2.	The number of rooms in the house is in accordance with the number of families.
3.	The lighting (sun) of each room is appropriate in every room.
4.	Air vents are appropriate and functioning properly.
5.	The ceiling height (floor-ceiling) of the house is in accordance with the activities of all family members.
6.	The area of the home page is suitable for the activities of all family members.
7.	The layout of each room is in accordance with the activities of family members.
8.	Electrical installation is installed properly.

Continued Table 1

No.	Variable
9.	Road facilities and infrastructure to the house are appropriate and functioning properly.
10.	Easy home maintenance.
c.	**Home Health Factors (X_3)**
1.	Distribution of clean water for daily needs.
2.	Drainage system.
3.	Bathroom.
4.	Waste management around the house is functioning well.
5.	There are cleaners around the house.
d.	**Investment Opportunity Factor (X_4)**
1.	Strategic housing location, close to the city center (offices, markets, schools, hospitals, etc.) and entertainment (malls, tourist attractions, etc.).
2.	The location of housing is available/close to public facilities (parks, prayer rooms/mosques, etc.)
3.	Good transportation infrastructure (roads).
4.	Available environmental security systems, such as security guards and CCTV.
5.	House prices according to financial income (money).
6.	Easy requirements in doing credit / buying a house.
e.	**Home Purchase Decision (Y)**
1.	Home safety factor influence the purchase of a house.
2.	The comfort factor of the house influences the purchase of a house.
3.	Home health factor influence the purchase of a house.
4.	The investment opportunity factor influences the purchase of a house.

IV. RESULTS AND DISCUSSION

a.   Validity and Reliability Test

The results of validity testfrom item of questions obtained that the calculated r value is between 0.412-0.860, greater than 0.284, then it can be declared valid.

b.   Reliability Test

The results of reliability test from item of questions obtained that the Cronbach's Alpha value is between 0.627-0.851, then it can be categorized between 0.61 - 0.80 (Reliable) and 0.8 - 1 (Highly Reliable), so it has been reliable for further research analysis.

c.   Classic Assumption Test

1)   Normality Test

The results of normality test with Normal Probability Plot and Histogram Plot can be seen in the image below.
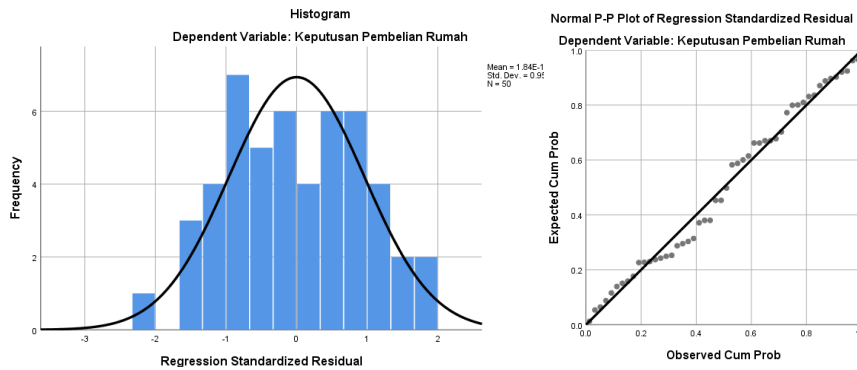

Figure 1. Results of Normality Analysis of Questionnaire Data by Using*Normal Probability Plot (Left) and Histogram Plot (Right)*

The test results can be seen in Figure 1 showing that the points are spread around the line diagonal, then the regression model is in accordance with the normality function. The following table shows the results of the Kolmogrov-Smirnov test (KS Test).

Table 2. Kolmogorov-Smirnov Test Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		50
Normal Parameters, b	mean	0.0000000
	Std. Deviation	0.65447583
Most Extreme Differences	Absolute	0.094
	Positive	0.094
	negative	-0.069
Test Statistics		**0.094**
Asymp. Sig. (2-tailed)		**0.200c,d**

The results of the Kolmogorov Smirnov test (Table 2) show that the value obtained is 0.094 with a significance level of 0.200 which is greater than 0.05 according to the required value. The conclusion is that the residual value has been normally distributed or can be said to have met the classical assumptions.

2)   Multicollinearity Test

The results of this test with the value of VIF and Tolerance in the table below.

Table 3. Results of Multicollinearity Testing of VIF and*Tolerance*

Model	Collinearity Statistics		Information
	Tolerance	**VIF**	
Home Safety Factor (X_1)	0.885	1,130	Not Multicollinear
Home Health Factors (X_2)	0.704	1,421	Not Multicollinear
Home Comfort Factor (X_3)	0.860	1,162	Not Multicollinear
Home Investment Opportunity Factor (X_4)	0.705	1.418	Not Multicollinear

Based on the test results (Table 3), it shows that all the variables used show a VIF value which is quite small than 10.00 (VIF < 10.00) and a tolerance value of more than 0.10 (Tolerance > 0.10). then these variables do not show any symptoms of multicollinearity and can be used as mutually independent variables.

d.   Statistic test
1)   Simultaneous Significance Test (F Test)
The results of the F test include:

Table 4. F Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.691	4	5,173	11,091	0.000b
	Residual	20.989	45	0.466		
	Total	41,680	49			

Based on the test results (Table 4), it shows that F_{count} 11.091 $> F_{table}$ = 2.58, so the home safety factor (X_1), home comfort factor (X_2), home health factor (X_3), and home investment opportunity factor (X_4) have a significant effect. Simultaneous and support the decision-making to buy type 36 subsidized houses in Banjarmasin and Banjarbaru city (Y).

2)   Coefficient of Determination Test
The results of this test include:

Table 5. Test Test Results *Adjusted R Square*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.705a	0.496	0.452	0.683

Based on the test results (Table 5), it shows the effect of home safety factor (X_1), home comfort factor (X_2), home health factor (X_3), and home investment opportunity factor (X_4) on the dependent variable, namely the decision to purchase subsidized house (Type 36) in Banjarmasin and Banjarbaru city (Y) is 45% with an adjusted R square value of 0.452, while the remaining 55% is influenced by other factors not analyzed in this study.

3)   Individual Parameter Significance Test (t Test)
The results of the t test include:

Table 6. t Test Results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	11,679	1.532		7,622	0.000		
Home Safety Factor (X_1)	0.068	0.027	0.283	2,516	0.015	0.885	1,130
Home Comfort Factor (X_2)	0.212	0.045	0.596	4,722	0.000	0.704	1,421
Home Health Factors (X_3)	-0.314	0.067	-0.532	-4,666	0.000	0.860	1,162
Home Investment Opportunity Factor (X_4)	-0.009	0.049	-0.023	-0.186	0.853	0.705	1.418

The results of the t test based on Table 6 include:
1)   The home safety factor has a positive and significant effect on the consumer's decision to purchase subsidized house. The more safety factor of the house, especially the security guards on guard, the higher the decision to buy subsidized houses in Banjarmasin and Banjarbaru city.
2)   The home comfort factor has a positive and significant influence on the decision to purchase subsidized houses by consumers. The higher the home comfort factor, especially home care, the higher the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city.
3)   The health factor of the house has a negative and significant effect on the decision to purchase subsidized houses. Soif home health increases, the decision to buy a subsidized house will decrease. However, this is inversely proportional to the results of observations and interviews with respondents, the more often officers throw garbage and burn it on the roadside access to housing, the decision to buy subsidized houses will

decrease. In addition, if the waste is transported and managed longer, the decision to purchase subsidized houses will decrease. So that if home health increases, the decision to buy subsidized house will increase. Therefore, home health factor does not affect the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city.

4)   The housing investment opportunity factor is negative and insignificant so that it has no effect compared to the other three factors on the decision to purchase subsidized houses. The biggest positive effect is influenced by the home comfort factor.

e.   Multiple Linear Regression Test
The results of multiple linear regression testing include:

Table 7. Multiple Linear Regression Test Results

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
Model		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	11,679	1.532		7,622	0.000		
	Home Safety Factor (X_1)	0.068	0.027	0.283	2,516	0.015	0.885	1,130
	Home Comfort Factor (X_2)	0.212	0.045	0.596	4,722	0.000	0.704	1,421
	Home Health Factors (X_3)	-0.314	0.067	-0.532	-4,666	0.000	0.860	1,162
	Home Investment Opportunity Factor (X_4)	-0.009	0.049	-0.023	-0.186	0.853	0.705	1.418

The regression equation from the results of Table 7 is:

$$Y = 11.679 + 0.068X_1 + 0.212 \ X_2 - 0.314X_3 - 0.009X_4$$

Based on the above equation, it can be described as follows:

1)   The home safety factor (X_1) has a coefficient of 0.068 indicating that this variable has a positive effect on home buying decisions (Y). The higher the home safety factor, the higher the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city.

2)   The home comfort factor (X_2) has a coefficient of 0.212 indicating that this variable has a positive effect on home buying decisions (Y). The higher home comfort factor, the higher the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city.

3)   The home health factor (X_3) has a coefficient of -0.314 indicating that this variable has a negative effect on home buying decisions (Y). The higher house health factor, the lower the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city. This is inversely proportional, according to the results of observations and interviews at the research location with respondents, the worse the performance of the cleaners and waste management, the lower the decision to buy a house will be. Therefore, the health factor of the house does not affect the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city.

4)   The home investment opportunity factor (X_4) has a coefficient of -0.009 indicating that this variable has a negative effect on home buying decisions (Y). The investment opportunity factor has no effect on home buying decisions.

f.   Partial Correlation Test
1) X_2 to Y Partial Correlation Test by Controlling X_1
The results of this test can be seen in Table 8.

Table 8. Results of X_2 to Y Partial Correlation Test by Controlling X_1

Correlations

Control Variables			Home Comfort Factor	Home Purchase Decision	Home Safety Factor
Home Safety Factor	Home Comfort Factor	Correlation	1,000	**0.434**	
		Significance (2-tailed)	.	**0.002**	
		df	0	47	
	Home Purchase Decision	Correlation	**0.434**	1,000	
		Significance (2-tailed)	**0.002**	.	
		df	47	0	

From Table 8 it is found that the relationship between home comfort factor (X_2) on home purchase decisions by controlling home safety factor (X_1) is positive and significant. The positive value of the correlation coefficient shows if home comfort factor increases, the purchase decision also increases.

2) X_1 to Y Partial Correlation Test by Controlling X_2
The results of this test can be seen in Table 9.

Table 9. Results of X_1 to Y Partial Correlation Test by Controlling X_2

Correlations

Control Variables			Home Safety Factor	Home Purchase Decision	Home Comfort Factor
Home Comfort Factor	Home Safety Factor	Correlation	1,000	**0.211**	
		Significance (2-tailed)	.	**0.145**	
		df	0	47	
	Home Purchase Decision	Correlation	**0.211**	1,000	
		Significance (2-tailed)	**0.145**	.	
		df	47	0	

From Table 9 it is found the relationship between the home safety factor (X_1) on the decision to purchase a house by controlling control home comfort factor (X_2) is negative and not significant. The negative value of correlation coefficient shows that if the home safety factor decreases, the purchase decision will increase with the home comfort factor controlled (constant). In contrast to the results of observations and interviews with respondents in the field, if the quality of the walls of the house is getting worse, the purchasing decision will decrease.

g.   Purchasing Decision Improvement Strategy
Some of the improvement strategies that can be carried out include:
1)   The bricks for residential walls are selected before being used.
2)   The use of the type of paint that is adjusted to its designation, especially the outer walls of the house using waterproof paint. The proportion of water and paint is also taken into account, so the quality of the wall paint is good and resistant to rainwater.
3)   Pay attention to the selection of materials for plaster mix of walls and also the proportions so there are no cracks on the walls of the house.
4)   Supervision is carried out so that the quality of the building is in accordance with the subsidized house standards and the work methods are in accordance with the standards.
5)   After the subsidized house is built, the developer must check whether the electrical installation is properly installed.
6)   Access roads are minimal for backfill and pavement, if there is still a house construction so it is still being passed by trucks, developers need to pay attention so access road is not damaged.
7)   For consumers, it is necessary to be careful in choosing the location of housing and developers, sothe quality of the building is in accordance with the standards and home maintenance is carried out easily and inexpensively.

V.   CLOSING

a.   Conclusion
Conclusions from the results of analysis and discussion include:
1)   Based on the results of multiple linear regression and partial correlation tests, it was found that home comfort factor, especially from the home care indicator, had the greatest influence on the decision to purchase subsidized houses in Banjarmasin and Banjarbaru city. Especially on the home care indicator, the easier it is to maintain, the higher the decision to purchase subsidized house (type 36) in Banjarmasin and Banjarbaru city will increase.
2)   The strategy to improve consumer decisions in buying subsidized house is to pay more attention to material selection, supervision, and work methods of building subsidized house. Facilities and infrastructure such as access roads are a concern for developers so that subsidized houses meet consumer standards and expectations.

b.   Suggestion

Based on the results of research conducted, several suggestions were obtained, including:

1)   For further research, it is necessary to study 55% of other factors that have not been analyzed in this study such as marketing strategies, socio-economics, and developer behavior which are estimated to have the potential to influencedecision consumers in buying subsidized house (type 36) in Banjarmasin and Banjarbaru city.

2)   For further research, it is necessary to clarify the questions so that they are in accordance with the aims and objectives of the research.

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