The Effect of Access to Toll Road Construction on Interest in Buying Housing
(Housing Case Study at Bukit Cimanggu Bogor)

Ecin Kuraesin

Universitas Ibn Khaldun

Jl. Sholeh Iskandar, RT.01/RW.10, Kedungbadak, Kec. Tanah Sereal, Kota Bogor, Jawa Barat 16162, Indonesia

Info Artikel	Abstract
Keywords: Service Quality Dimension, Success Aspects of Business, Modern Retail Minimarket, Traditional Retail Business, Traditional Approach ISSN (print): 1978-6387 ISSN (online): 2623-050X	This study aims to analyze the effect of access to the construction of the BORR Toll Road Access 3 on the interest in buying housing in Bukit Cimanggu, Bogor. The source of this research data is primary data that comes from the sample, namely respondents who are buyers and will buy houses in housing areas in the Bogor area around the toll road construction. Data was collected by distributing questionnaires to 100 respondents. The data analysis method used is the technique of multiple linear regression analysis using the SPSS 23.0 program. The results of the study show that transactional, referential, preferential, and exploratory consumer interest in consumer decisions to buy houses near the construction of the BORR toll road as faster and easier transportation access shows a high or strong relationship. And the type of consumer interest also has a positive and significant impact or influence on consumer decisions to buy houses in the BCC housing.

Author Correspondence:
Ecin Kuraesin
ecin@uika-bogor.ac.id

1. Introduction

Background Problem

The construction of the Bogor Outer Ring Road (BORR) toll road started since 2005. The Bogor Ring Road Toll Road is divided into three sections which are built in stages. The construction of the toll road is divided into three parts, namely Section 1 with a length of 3.8 km from West Sentul to Kedunghalang. Then Sections 2A and 2B are 4.1 km long, connecting Kedunghalang to Simpang Yasmin. Then proceed to Salabenda

located in West Bogor District, Bogor City, specifically Jalan Soleh Iskandar-Simpang Yasmin-Salabenda. This corridor is passed by the 11 km BORR toll road. It is hoped that the construction of the toll road in the Sholeh Iskandar area will attract the mobilization of visitors and residents to carry out economic transactions in this

area. Previously, in the initial plan, the BORR Section 3 toll road alignment would cross Jalan KH Sholeh Iskandar and then head for Dramaga via the Yasmin area. However, in line with developments in the West Bogor and North Bogor areas, the Bogor City government proposed a change in the section 3 route towards Salabenda, where this toll road crosses the Bukit Cimanggu Bogor residential area (Detikfinance.com, 2018).

The main consideration when looking for a home is accessibility. In general, accessibility is one of the drivers of someone's interest in buying a house. This ease of accessibility can help a person to do their activities, such as speeding up travel from home to the office, to places of business, or other places of activity. Previous research by Lamudi Indonesia (Polman, 2020) showed that 8 out of 10 people are looking for a house with accessibility near toll roads. Because toll roads are very helpful for daily mobility. This research investigates in the context of consumer buying interest in Bukit Cimanggu Bogor housing with the construction of the BORR toll road which has reached access stage 3.

Consumer interest in deciding to buy is categorized into several types of interest, including transactional interest, referential interest, preferential interest, and minute exploratory. The purpose of this study is to analyze consumer interest based on these categories in the decision to buy a house close to the construction of a toll road.

Problem Formulation

The formulation of the research problem is:
a) How does the construction of section 3 of the BORR toll road affect the transactional interest of BCB housing consumers?
b) How does the construction of section 3 of the BORR toll road affect the referential interest of BCB housing consumers?
c) How does the construction of section 3 of the BORR toll road affect the preferential interest of BCB housing consumers?
d) How does the construction of section 3 of the BORR toll road affect the exploratory interest of BCB housing consumers?

Purpose and Benefits of Research

The main objectives of this research are:
a) Analyze the effect of the construction of section 3 of the BORR toll road on the transactional interest of BCB housing consumers.
b) Analyze the effect of the construction of section 3 of the BORR toll road on the referential interest of BCB housing consumers.
c) Analyze the effect of the construction of section 3 of the BORR toll road on the preferential interest of BCB housing consumers.

d) Analyzing the effect of the construction of section 3 of the BORR toll road on the exploratory interest of BCB housing consumers.

2.   Literature/Theory Review

a. Definition of Consumer Purchase Interest

Definition of Purchase Interest One form of consumer behavior is interest or desire to buy a product or service. The consumer form of buying interest is a potential consumer, namely a consumer who has not made a purchase action at present and can be referred to as a potential buyer. Kotler and Keller (in Adi, 2015) state that consumer buying interest is a consumer behavior where consumers have the desire to choose, use, and consume or even want a product offered.

b. Development of Toll Road Infrastructure

Development is a process of planned social change covering various dimensions to strive for progress in the context of economic welfare, modernization, national progress, environmental awareness and even improving human quality to improve quality of life (Bintoro Tjokroamidjoyo, 1980). So development is all efforts made to improve people's welfare both in the context of the economic and social fields which aim to reduce poverty without destroying the environment or social life.

c. Road infrastructure

Given how important efficiency and effectiveness are, the low cost of travel or transportation is a reference for a good transportation system. With reliable transportation, the delivery time of goods and services from one place to another can be planned and scheduled properly, the time can be arranged as short as possible and the safety and comfort of goods and services are guaranteed.

d. Definition of Toll Roads

According to PP No. 15 of 2005 concerning Toll Roads, the definition of a toll road is a public road that is part of the road network system and is a national road whose users are required to pay. Toll roads as part of the public road network system are alternative routes, but in certain circumstances toll roads may not constitute alternative routes. The imposition of the obligation to pay tolls for users is because the money paid by users will be used for return on investment, maintenance, and development of toll roads.

e. Purpose and Benefits of Toll Road Development

The implementation of toll roads has the aim of increasing the efficiency of distribution services which in turn can support increased economic growth in an area.

Based on Law no. 38/2004 concerning Roads, it is stated that the authority to administer toll roads rests with the government which includes regulation, guidance, exploitation, and supervision. Toll roads have a very significant role in the development of an area. In addition, toll roads are freeways and national roads that can support increased economic growth. Procurement of the Toll Road itself is intended to realize equitable development and balance in regional development.

3. Data and Research Methodology

This study uses a quantitative descriptive method, and the data is used to answer the problem formulation and complete the research objectives.

a. Population and Sample

a) Population

The population in this study were all consumers who were willing to fill out a questionnaire and were interested in buying or who had credit for housing at Bukit Cimanggu Bogor (BCB) housing in March, April, May, and June with a total of 103 consumers who were interested in buying or lending to housing developers. BCB. Sugiyono (2012: 115)

b) Sample

Due to the uncertain population or the number of product sales, the researchers used a sampling method with the Saturated Sampling technique in which the entire population was sampled, namely how many people bought houses and housing loans for BCB in mid-June. The sample in this study is how many respondents who filled out the questionnaire and were interested in buying or housing loans in BCB housing in mid-June, namely 100 consumers.

b. Data Collection Techniques

a) Observation method

In this study, the researcher took the participant observation technique where the researcher was directly involved in the daily activities being observed.

b) Questionnaire method

In this study, the researcher distributed questionnaires directly to the respondents to be answered by the respondents themselves without any external coercion. After the questionnaire was filled out by the respondents the questionnaire was returned directly to the researcher for further processing. (Sugiono, 2012: 199)

c. Multiple regression analysis

Multiple linear regression analysis techniques are used to measure the strength of the relationship between two or more variables, it also shows the direction of the

relationship between the dependent variable and the independent variable (Umar, 2014). This research model can be explained with a linear model as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + E$$

d. Hypothesis Test

Hypothesis testing is intended to determine whether a hypothesis should be accepted or rejected. According to Sugiyono (2016: 213) "The hypothesis is a temporary answer to the formulation of a research problem, therefore the formulation of a research problem is usually arranged in the form of a question sentence." Thus the research hypothesis can be interpreted as a temporary answer to the research problem until it is proven through the data collected and must be tested empirically.

4. Research Results

a. Descriptive Analysis Test Results

Table 10. Descriptive Analysis Test Results

Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Total_Minattransaksional	100	10.00	25.00	19.6000	.33874	3.38744
Total_Minatreferensial	100	8.00	20.00	15.7800	.26422	2.64224
Total_MinatPreferensial	100	11.00	25.00	19.1300	.34338	3.43380
Total_Minateksploratif	100	10.00	25.00	17.6700	.25226	2.52265
Total_Keputusanmembeli	100	10.00	20.00	15.8800	.25437	2.54368
Valid N (listwise)	100					

Source: Data processed in 2021

b. Statistical Approach (Kolmogorov-Smirnov Test)

Table 11. Kolmogorov Smirnov Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters [a,b]	Mean	.0000000
	Std. Deviation	1.72129071
Most Extreme Differences	Absolute	.063
	Positive	.063
	Negative	-.050
Test Statistic		.063
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: Data processed in 2021

c. Correlation Coefficient Analysis

Table 12. Correlation Coefficient Analysis Results

Correlations

			Transactional Interests	Reference interest	Preferential Interest	Explorative Interests	Unstandardized Residuals
Spearman's rho	Transactional Interests	Correlation Coefficient	1.000	.682**	.661**	.682**	.075
		Sig. (2-tailed)	.	.000	.000	.000	.461
		N	100	100	100	100	100
	Referenceal Interests	Correlation Coefficient	.682**	1.000	.688**	1.000	.056

	Sig. (2-tailed)	.000	.	.000	.	.577
	N	100	100	100	100	100
Preferential Interest	Correlation Coefficient	.661**	.688**	1.000	.688**	.069
	Sig. (2-tailed)	.000	.000	.	.000	.497
	N	100	100	100	100	100
Explorative Interests	Correlation Coefficient	.674**	.696**	.696**	1.000	.069
	Sig. (2-tailed)	.000	.000	.	.000	.497
	N	100	100	100	100	100
Unstandardized Residuals	Correlation Coefficient	.075	.056	.069	.056	1.000
	Sig. (2-tailed)	.461	.577	.497	.577	.
	N	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Data processed in 2021

The Effect of Access to Toll Road Construction on Interest in Buying Housing
(Housing Case Study at Bukit Cimanggu Bogor)

d. Multiple Linear Regression Analysis.

Table 13 Multiple Linear Regression Analysis

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	4.127	1.150		
	Minat Transaksional (X1)	.126	.079	.167	0.000
	Minat Referensional (X2)	.161	.108	.167	0.000
	Minat Preferensional (X3)	.353	.076	.476	0.000
	Minat Eksploratif (X4)	.516	.056	.234	0.000

a. Dependent Variable: Keputusan Membeli Rumah

e. Simultaneous Test (Test F)

Table 14. Simultaneous Test Results (Test f)

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	347.239	3	115.746	37.882	.000[b]
	Residual	293.321	96	3.055		
	Total	640.560	99			

a. Dependent Variable: Keputusan Membeli rumah

b. Predictors: (Constant), Minat Transaksional, Minat Referensional, Minat Preferensional, Minat Eksploratif

f. Analysis of the Coefficient of Determination (R Square).

Table 15. Results of the Coefficient of Determination

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.736[a]	.542	.528	1.74798

a. Predictors: (Constant), Minat transaksional (X_1), Minat Referensional (X_2), Minat Preferensional (X_3), dan Minat Eksploratif (X_4)

b. Dependent Variable: Keputusan Membeli rumah (Y)

g. The Effect of Transactional Interest, Referenceal Interest, Preferential Interest, and Interest on the Decision to Buy a House.

Based on the results of statistical calculations that have been carried out, it can be concluded that transactional interest (X1), reference interest (X2), preferential interest (X3), and explorative interest (X4) influence consumer decisions to buy houses in BCC housing with access to the BORR toll road. This agrees with the theory of Kotler and Armstrong (2012: 157) that "Consumer buyer behavior refers to the buying behavior of final consumers-individuals and households that buy goods and services for personal consumption," this understanding can be interpreted that purchasing decision behavior refers to the final buying behavior of consumers, both individuals, and households who buy goods and services for personal consumption.

5. **Conclusions and Suggestions**

Based on the research that has been done, it can be concluded as follows:

1. Transactional interest as measured by an indicator of a consumer's tendency to buy a house located near toll road construction shows clear information on consumer interest in buying a house. Transactional information is revealed through direct interaction between consumers and home developers. That is, transactional interest in customer decisions in buying a house is positive and significant at 12.6%.

2. Referential interest as measured by an indicator of the tendency of a person to refer a house to other people shows a positive and significant influence on the decision to buy a house in BCC housing close to the construction of the BORR toll road by 16.1%.

3. Preferential interest as measured by the behavioral indicator of someone who has the main preference for houses in BCC housing close to access to the BORR toll

road proves a positive and significant influence on consumer decisions to buy a house of 35.3%.

4. Explorative interest as measured by an indicator of the behavior of someone who is always looking for information about the house of interest and looking for other information that supports the positive characteristics of a house in BCC housing close to access to the BORR toll road proves a positive and significant influence on consumer decisions to buy a house by 35.3%.

5. Transactional, referential, preferential, and explorative consumer interest in the consumer's decision to buy a house near the construction of the BORR toll road as faster and easier transportation access shows a high or strong relationship. As well as this type of consumer interest also has a positive and significant impact or influence on the consumer's decision to buy a house in the BCC housing.

6. References

Agustina, I. (2011). MANAJEMEN PEMASARAN. In I. A. Shinta, MANAJEMEN PEMASARAN (p. 102). Malang: Universitas Brawijaya Press.

Arikunto, S. (2006). Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.

Bawono, A. (2006). Multivariate Analysis dengan SPSS. Salatiga: STAIN Salatiga Press.

Canning, D. & Pedroni, P. 2004. The Effect of Infrastructure on Long-Run Economic Growth. JEL Classifications: O1. H4.

Gani, B. (2020). Pengaruh Kualitas Produk dan Layanan Terhadap Pengambilan Keputusan Pembelian Produk Tabungan Pada Bank Syariah Mandiri Cabang Bogor. Jurnal Pemikiran dan Penelitian Administrasi, 101-107.

https://finance.detik.com/berita-ekonomi-bisnis/d-3509031/sentul-barat-simpang-yasmin-tersambung-tol-mei-2018.

Kotler Philip dan Lanekeller Kevin. 2007. Manajemen Pemasaran. Indonesia : PT. Indeks

Kotler Philip dan Lanekeller Kevin. 2010. Manajemen Pemasaran. Indonesia : PT. Indeks

Kotler Philip dan Lanekeller Kevin. 2012 Manajemen Pemasaran. Indonesia : PT. Erlangga

Kotler Philip dan Lanekeller Kevin. 2009. Marketing Management: Analysis, Planning, Implementation and Control, Millennium Edition, New Jersey, Prentice Hall Inc.

Michael, Todaro. Pembangunan Ekonomi Dunia, (Jakarta; Erlangga, 2003), h.61-62.

Polman, Mart. Managing Director Lamudi Indonesia, Wawancara Kompas.com, Kamis, Kompas.com (30/1/2020).

Prasetyo, W. B. (2021, Februari Rabu). Minat Pembiayaan KPR Syariah Meningkat di Tengah Hadirnya BSI. From https://www.beritasatu.com/ekonomi/727757/minat-pembiayaan-kpr-syariah-meningkat-di-tengah-hadirnya-bsi: https://www.beritasatu.com/

Riduwan, & Akdon. (2008). Rumus dan Data dalam Aplikasi Statistik. Bandung: Alfabeta Bandung.

Setiawan, K. (2020, Agustus Sabtu). BTN: Milenial di Bawah 35 Tahun Dominasi Realisasi Penyaluran Rumah Bersubsidi. From https://bisnis.tempo.co/read/1380478/btn-milenial-di-bawah-35-tahun-dominasi-realisasi-penyaluran-rumah-bersubsidi/full&view=ok: https://bisnis.tempo.co/

Shinta, A. (2011). Manajemen Pemasaran. Malang: Universitas Brawijaya Press.

Sudaryono. (2016). Manajemen Pemasaran Teori dan Implementasi. Yogyakarta: Andi Press.

Sugiyono. (2015). Metode Penelitian Kuantitatif Kualitatif. Bandung: Alfabeta .