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An Analysis of the Factors Affecting Home Prices: A Comparison of Denpasar City and Badung-Bali

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This study uses a quantitative research method. The variables in this study consist of the dependent variable, namely, the price of a house and the independent variables of land area, building area, land width, road width, occupancy design, electricity, view, water, garage, and building type. The samples used in this study are houses for sale in Badung Regency and Denpasar City, Bali.

Keywords: Home Price & Comparison, Badung Bali

Introduction

The city is a geographical area where residents live with a relatively high density compared to rural areas (Asmara, 2019). The concentration of population in the city is increasingly dense, this raises quantitative needs, such as the need for housing. Housing and settlements are important aspects of regional and urban economic analysis. This is reasonable because housing and settlement activities are one of the basic needs in people's lives which determine the level of prosperity and social welfare. Even developments simultaneously reflect the progress of the civilisation level of a society or nation (Sjafrizal, 239: 2014). One island that has a city that has a high level of density after Java is Bali. The total area of Bali Province is 5,636.66 km2 or 0.29 percent of the total area of the Indonesian archipelago. The Province of Bali is divided into eight districts and one municipality including Jembrana, Tabanan, Badung, Gianyar, Klungkung, Bangli, Buleleng, Karangasem, and Denpasar, (Humanitarian Response, 2019). Of the eight districts and one municipality owned by the Province of Bali, two cities have a population density above the average of other cities, namely, Denpasar City and Badung Regency (hereinafter referred to as "Denpasar and Badung").

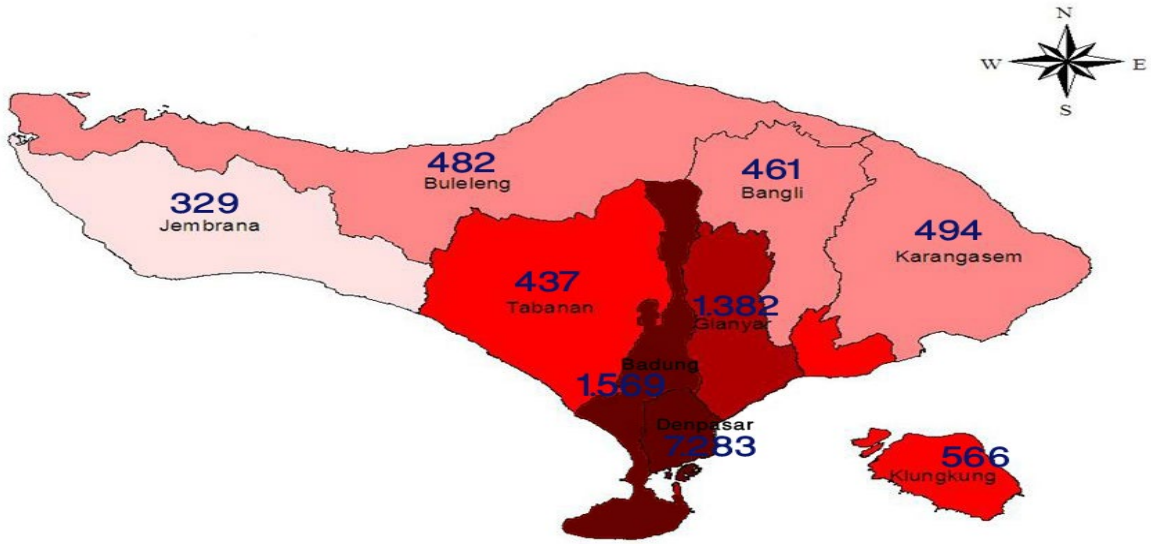
Based on the preliminary figures of the Bali Provincial Statistics Agency (updated 24 September 2019) there were 1,569 people / km2 and 7,283 people / km2. This number is very different compared to seven other cities which have an average of 593 inhabitants / km2. The statistical data on Regency/City Population Density in Bali can be seen in Table 1. For relevant maps, please see Figure 1.

Table 1: Density by Regency/Municipality in Bali, 2010-2018

Kabupaten/ Kota *Regency/ Municipality*	**Tahun**								
	2010	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Jembrana	312	314	316	318	321	323	325	327	329
Tabanan	417	419	422	425	427	430	432	435	437
Badung	1 306	1 340	1 374	1 407	1 440	1 472	1 505	1 537	1 569
Gianyar	1 282	1 295	1 308	1 321	1 333	1 345	1 358	1 369	1 381
Klungkung	543	546	549	552	555	558	561	563	566
Bangli	440	443	446	448	451	454	456	459	461
Karangasem	474	476	479	482	484	487	489	492	494
Buleleng	459	462	465	468	471	474	476	479	482
Denpasar	6 206	6 346	6 487	6 622	6 758	6 892	7 022	7 155	7 283
B A L I :	**676**	**685**	**693**	**702**	**710**	**718**	**727**	**735**	**743**

Source: BPS- Statistics of Bali Province

Figure 1:



Source: BPS- Statistics of Bali Province

Population densities in Denpasar and Badung, due to the current urbanisation of residents from other districts (rural areas) increased rapidly because Denpasar and Badung, have a very strong appeal in the industrial sector and the economy of the Balinese people. As a consequence, to compensate for the current urbanisation of residents related to housing and settlement, development is needed. The aim of this paper to examine factors that influence housing prices and price comparison in Denpasar and Badung. This paper is expected to be a consideration in buying housing and for developers to be considered in providing housing in Denpasar and Badung.

Some previous studies show the factors that influence the demand for housing. Mahardini (2012) found that price, income, location, and facilities affect the demand for housing. The results of the analysis found 77.2% of the variations that occur in the variable demand for housing together influenced by the variable price, income, location, and facilities. While the remaining 22.8% is influenced by other factors. Whereas Zaidin (2017) found that the socio-economic conditions of the indigenous coastal communities of the observed variables indicate that the level of income and employment opportunities has a very strong influence on home demand. Asmara (2019) found that the variables that influence consumer considerations in housing purchases have the highest ideal achievement in the home product quality sub-variable by 85.6 percent, the price sub-variable by 82.4 percent, the income sub-variable consumers by 75.8 percent, housing service quality sub-variables by 73.7 percent, and housing location sub-variables by 70.5 percent.

Literature Review

The hierarchy of needs, established by Maslow (1943) states that the needs at the lower level must be met or at least sufficiently met before the higher-level needs become motivating. The following levels of needs according to Maslow:

a. Physiological needs are the most basic needs of every person, the need to sustain his life. Needs such as the need for food, drink, shelter, sleep (clothing, food, shelter) to be satisfied.
b. The need for security is the need after feeling sufficiently satisfied, comes the need for security including physical security, stability, dependency, protection, and freedom. This need cannot be fulfilled totally.
c. The need for belonging and affection is able to be fulfilled only if the physiological needs and the need for security have been fulfilled. After this, the need for love, affection, and belonging is born. These needs include encouragement and to be needed by others so that a person is considered a member of their social community. Forms of meeting these needs include making friends, the desire to have a partner and offspring, the need to be close to family and interpersonal needs such as the need to give and receive love. For Maslow, love involves a healthy and loving relationship between two people, including mutual trust.
d. The need for appreciation comes after the needs of being loved is fulfilled. From here, humans will be free to pursue their ego needs for the desire to excel and have prestige.
e. The need for self-actualisation is the last level of Maslow's basic needs is self-actualisation, namely the need to prove and show himself to others. At this stage, a person develops as much as possible all the potential he has. The need for self-actualisation is a need that does not involve balance but involves an ongoing desire to fulfill potential.

Furthermore, consumer behaviour theory describes how individuals make decisions to utilise their available resources (time, money and effort) to buy goods related to consumption (Schiffman and Kanuk, 2008: 6). According to Kotler (2008), consumer behaviour is the study of how individuals, groups, and organisations choose, buy, and place goods, services, and ideas or experiences to satisfy their wants and needs. Factors that influence consumer behaviour for decision making, according to Kotler (2008), are:

1. Cultural Factors. Cultural factors have a wide and deep influence on consumer behaviour. Cultural factors consist of culture, sub-culture, social class.
2. Social Factors. In addition to cultural factors, consumer behaviour is influenced by social factors such as reference groups, family, and social status.
3. Personal Factors. Personal factors contributing to consumer behaviour consist of age and life cycle stages, work and economic environment, and lifestyle.

4. Psychological Factors. In the choice of purchasing, someone is influenced by four main factors, namely, motivation, perception, learning, and conviction of the establishment.

Purchase Decision Theory states that two factors can be between purchase intention and purchase decision (Kotler and Armstrong, 2008). The first factor is the attitude of other people. The attitudes of other people can influence what should be purchased. The second factor is an unexpected situational factor, where consumers might form purchase intentions based on factors unexpected things that can change purchase intentions such as income, prices, and expected product benefits.

Demand Theory explains that demand is sourced from marginal utilities that are determined by the subjective judgments of consumers. This is reflected in the demand price (demand price) in the market-determined by the buyers as consumers. The asking price is located at a certain price level, the goods will be requested in a certain amount by the buyer. Sukirno (2005) states demand is the desire of consumers to buy an item at various price levels for a certain period. According to Mankiw (2014),the demand is the number of goods consumers want to buy and can afford to buy at various price levels, times, certain places. The factors that affect demand are:

a. Income:
   A decrease in income means that there is less money available to spend. If the demand for an item decreases when income decreases, the item is called normal goods.
b. Prices of related items:
   The price of other goods can also affect the demand for an item, but the two types of goods must have a substitute and complementary relationship.
c. Taste or habit:
   Taste is the most important thing that influences the demand for an item.
d. Expectations:
   If one predicts that the price of an item will rise, it is better to buy the item now to encourage people to buy more now to save in the future.
e. The number of buyers:
   According to Mankiw, the law of demand is when the price of an item rises, the amount of demand for that item will go down. Conversely, when the price drops, the number of requests rises assuming ceteris paribus.

Hypothesis

The aspects of land prices, location of housing, and the availability of public facilities are the main focus of Wen, et. al's (2013) research. The wider the land, the more it will raise the selling price of the house. It is undeniable that the area of land will be considered by the

seller and buyer of the house to determine the price of the house. The increasingly narrow urban land will significantly increase the price of land as residential land. Wen (2013) claims that house prices rise because of a lack of land supply, and rising land prices also increase housing prices. As a component of housing costs, land prices greatly affect housing prices (Yang,2003; Bao 2004). In addition to the area of land Wen (DATE) also uses building area as a factor influencing house prices. As Wen (2014) revealed in her other research, facilities had a significant effect on determining housing prices. For example, the wider the residential road facilities, the more it will increase the selling price of the house. Road access is a concern for home developers, besides increasing the selling price of road access, it will also facilitate developers in building the house. In other words, the profit of the developer with a wide access road will save development costs and at the same time increase the selling price. This is supported by research by Hastia (2010) and Mahardini (2012). While William et. al (2019) focused on the marketing methods and costs included (land and land preparation costs, material costs, design costs, and engineering) and determined that these factors have the greatest contribution to the determination of housing prices. This paper focuses on the factors that affect home prices in the form of land conditions, costs and facilities provided.

H1a : Land area affects the selling price of houses in Denpasar.
H1b : Land area affects the selling price of houses in Badung.
H2a : Building area affects the selling price of houses in Denpasar.
H2b : Building area affects the selling price of houses in Badung.
H3a : Land width affects the selling price of houses in Denpasar.
H3b : Land width affects the selling price of houses in Badung.
H4a : Road width affects the selling price of houses in Denpasar.
H4b : Road width affects the selling price of houses in Badung.
H5a : Occupancy design affects the selling price of homes in Denpasar.
H5b : Occupancy design affects the selling price of houses in Badung.
H6a : Electricity affects the selling price of homes in Denpasar.
H6b : Electricity affects the selling price of houses in Badung.
H7a : View influences the selling price of houses in Denpasar.
H7b : View influences the selling price of houses in Badung.
H8a : Water affects the selling price of houses in Denpasar.
H8b : Water affects the selling price of houses in Badung.
H9a : Garage affects the selling price of houses in Denpasar.
H9b : Garage affects the selling price of houses in Badung.
H10a : Building type affects the selling price of houses in Denpasar.
H10b : Building type has a positive effect on the selling price of houses in Badung.
H11 : There are significant differences in housing prices in Denpasar and Badung.

Methods

This study uses a quantitative research method in which the variables in this study consist of the dependent variable, namely, the price of a house and the independent variables: land area, building area, land width, road width, occupancy design, electricity, view, water, garage, and building type. The samples used in this study are houses for sale in Badung Regency and Denpasar City, Bali. Data was obtained by accessing the site Buying and Selling homes (www.balirealproperty.com, DATE) . Data analysis techniques used in this study are (1) Multiple linear regression test and (2) Mann-Whitney different tests with the Minitab v.19 application.

Equation Model:

$$Y_1 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + e..(1)$$

$$Y_2 = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + e..(2)$$

Information:

Y_1 = House Prices in Badung
Y_2 = House Prices in Denpasar
α = Constant
β_1- β_{10} = Regression Coefficient of the Independent Variable
X_1 = Land Area
X_2 = Building Area
X_3 = Land Width
X_4 = Road Width
X_5 = Residential Design
X_6 = Electricity
X_7 = View
X_8 = Water
X_9 = Garage
X_{10} = Building Type
e = error term

Discussion

The following is a discussion of the results of processing statistical data with the help of the Minitab v.19 application.

1. Descriptive statistics of each city, the following are the results of descriptive statistics as shown in Table 2 below:

Table 2: Descriptive statistics

Badung

Variable	Mean	SE Mean	StDev	Variance	Minimum	Maximum
Y1	1354.3	96.7	683.6	467359.2	550.0	3300.0
X1	147.08	8.23	58.19	3386.48	60.00	320.00
X2	134.48	9.34	66.04	4361.85	45.00	295.00
X3	9.886	0.390	2.757	7.604	5.700	17.000
X4	6.020	0.329	2.328	5.418	2.500	15.000
X5	0.8400	0.0524	0.3703	0.1371	0.0000	1.0000
X6	2236	142	1007	1013371	900	5500
X7	2.500	0.157	1.111	1.235	1.000	4.000
X8	1.4800	0.0714	0.5047	0.2547	1.0000	2.0000
X9	0.0400	0.0280	0.1979	0.0392	0.0000	1.0000
X10	0.4000	0.0700	0.4949	0.2449	0.0000	1.0000

Denpasar

Variable	Mean	SE Mean	StDev	Variance	Minimum	Maximum
Y2	1259	160	1133	1284092	300	5500
X21	159.0	15.9	112.6	12676.9	70.0	689.0
X22	122.5	12.1	85.3	7270.1	36.0	436.0
X23	13.24	2.02	14.30	204.35	5.00	100.00
X24	5.580	0.259	1.830	3.351	2.000	10.000
X25	0.8800	0.0464	0.3283	0.1078	0.0000	1.0000
X26	2536	254	1796	3224392	900	7700
X27	2.660	0.173	1.222	1.494	1.000	4.000
X28	1.2800	0.0641	0.4536	0.2057	1.0000	2.0000
X29	0.0200	0.0200	0.1414	0.0200	0.0000	1.0000
X210	0.6000	0.0700	0.4949	0.2449	0.0000	1.0000

Source: Data processed with Minitab v.19.

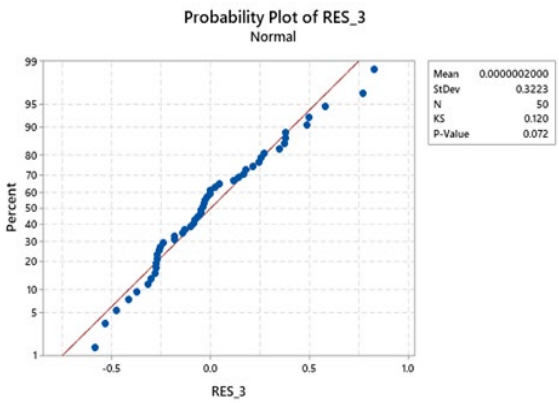
Based on the data in Table 2, the average house price in Denpasar City is 1.3 billion rupiah, with the lowest price of 550 million rupiah and the highest price of 3.3 billion rupiah. While the average house price in Badung is 1,259 billion rupiahs with the lowest price of 300 million rupiahs and the highest is 5.5 billion rupiahs. The average land area for sale is 147 m2 in Denpasar City with an average building area of 134 m2 and a land area of 159 m2 in Badung with an average building area of 122 m2. For the width of the land and the width of the access road, the average house is 9.8m and 6m in Denpasar City, 13m and 5.5m for Badung.

Classical Assumptions Test for each city is presented as follows:

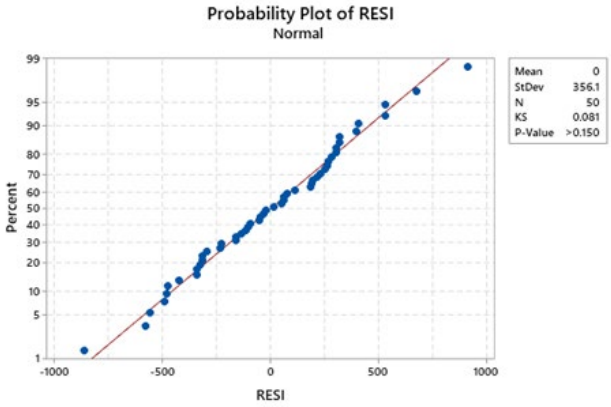
Normality test. Graph 1

Kolmogorov-Smirnov Test

Denpasar



Badung



The assumption of normality in multiple linear regression is that the residual variable must be normally distributed. In Graph 1 it is shown that the variable residuals of Denpasar and Badung cities are normally distributed. This is indicated by the plot following the diagonal line and the magnitude of KS and P-Value values> 0.05. Denpasar has a KS value of 0.081 with a P-Value of 0.150 and Badung has a KS value of 0.120 with a P-Value of 0.072.

Table 3: Heteroscedasticity Test

Denpasar

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	-76	222	-0.34	0.735	
X1	-0.064	0.867	-0.07	0.942	3.39
X2	2.01	1.02	1.96	0.058	6.13
X3	9.5	16.8	0.56	0.577	2.90
X4	-0.3	14.0	-0.02	0.984	1.39
X5	1.7	85.2	0.02	0.985	1.34
X6	-0.0089	0.0428	-0.21	0.835	2.51
X7	-33.8	31.0	-1.09	0.282	1.54
X8	52.0	64.4	0.81	0.424	1.40
X9	-109	148	-0.73	0.467	1.16
X10	94.1	78.3	1.20	0.236	1.97

Badung

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	0.633	0.257	2.46	0.018	
X21	-0.000434	0.000511	-0.85	0.402	4.41
X22	-0.000353	0.000763	-0.46	0.646	5.63
X23	-0.00037	0.00217	-0.17	0.866	1.28
X24	-0.0378	0.0193	-1.96	0.057	1.66
X25	0.0809	0.0991	0.82	0.419	1.41
X26	0.000018	0.000022	0.80	0.429	2.06
X27	-0.0357	0.0248	-1.44	0.158	1.22
X28	-0.0300	0.0681	-0.44	0.662	1.27
X29	-0.120	0.209	-0.57	0.570	1.17
X210	-0.0518	0.0955	-0.54	0.591	2.97

Symptoms of heteroscedasticity can be determined by looking at the P-Value of the Y variable predicted (Fits) and the residual variance. From Table 3, it can be seen that the P-Value for each variable is above 0.05. It can be concluded that there are no symptoms of heteroscedasticity.

Table 4: Multicollinearity Test

Denpasar

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	-206	460	-0.45	0.657	
X1	2.70	1.82	1.49	0.145	3.44
X2	3.28	2.10	1.57	0.125	5.89
X3	14.1	35.0	0.40	0.689	2.86
X4	24.5	28.6	0.86	0.398	1.36
X5	173	178	0.97	0.336	1.33
X6	0.2082	0.0891	2.34	0.025	2.48
X7	-82.3	62.5	-1.32	0.196	1.48
X8	65	135	0.48	0.633	1.43
X9	346	309	1.12	0.269	1.15
X10	-202	159	-1.27	0.211	1.90

Badung

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	967	694	1.39	0.172	
X21	3.08	1.38	2.23	0.032	4.41
X22	-2.33	2.06	-1.13	0.265	5.63
X23	6.26	5.87	1.07	0.293	1.28
X24	-103.6	52.1	-1.99	0.054	1.66
X25	-76	268	-0.28	0.778	1.41
X26	0.3403	0.0591	5.75	0.000	2.06
X27	-13.7	67.0	-0.20	0.839	1.22
X28	210	184	1.14	0.261	1.27
X29	1520	565	2.69	0.010	1.17
X210	-792	258	-3.07	0.004	2.97

To detect the presence of multicollinearity symptoms, it can be seen the VIF value in Figure 4 of the output above. It is said that there are no symptoms of multicollinearity if VIF <10. Table 4 shows that both Denpasar City and Badung all variables have a VIF value <10, so it can be concluded that there are no symptoms of multicollinearity.

The multiple linear regression test for each city is presented as follows:

Regression Equation

Regression Equation

$$Y1 = -206 + 2.70\ X1 + 3.28\ X2 + 14.1\ X3 + 24.5\ X4 + 173\ X5 + 0.2082\ X6 - 82.3\ X7 + 65\ X8 + 346\ X9 - 202\ X10$$

The above equation can be concluded as follows:

If other variables are constant, the value of Y_1 will change by itself at a constant value of -206.

If other variables are constant, the value of Y_1 will change by 2.70 per unit X_1.

If other variables are constant, the value of Y_1 will change by 3.28 per unit X_2.

If other variables are constant, the value of Y_1 will change by 14.1 per unit X_3.

If other variables are constant, the value of Y_1 will change by 24.5 per unit X_4.

If other variables are constant, the value of Y_1 will change by 173 per unit X_5.

If other variables are constant, the value of Y_1 will change by 0.2082 per unit X_6.

If other variables are constant, the value of Y_1 will change by -82.3 per unit X_7.

If other variables are constant, the value of Y_1 will change by 65 per unit X_8.

If other variables are constant, the value of Y_1 will change by 346 per unit X_9.

If other variables are constant, the value of Y_1 will change by -202 per unit X_{10}.

Model Summary

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
399.198	72.86%	65.90%	50.60%

The Summary model can be explained as follows:

R Square

The value of R Square (R-sq) output is 72.86%, meaning that variable Y_1 can be explained by a group of independent variables X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10} simultaneously or simultaneously at 72, 86% while the remaining 27.14% is explained by other variables outside the model not examined.

Standard Error of Estimate

The Standard Error of Estimate (SEE) is used to determine whether the regression model is declared valid as a prediction model. The S value on the Summary Model output is 399,198. So the value of this SEE is smaller than the standard deviation of the dependent variable or Y_1 of 683.6 (Table 2). (SEE <standard deviation value Y). thus the model is declared valid as a prediction model.

Partial t-Test

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	-206	460	-0.45	0.657	
X1	2.70	1.82	1.49	0.145	3.44
X2	3.28	2.10	1.57	0.125	5.89
X3	14.1	35.0	0.40	0.689	2.86
X4	24.5	28.6	0.86	0.398	1.36
X5	173	178	0.97	0.336	1.33
X6	0.2082	0.0891	2.34	0.025	2.48
X7	-82.3	62.5	-1.32	0.196	1.48
X8	65	135	0.48	0.633	1.43
X9	346	309	1.12	0.269	1.15
X10	-202	159	-1.27	0.211	1.90

Partial t values can be seen through the P-Value values in the output of Table 5 above. P-Value <0.05, then the independent variable (X) has a significant effect on the dependent variable (Y). From Table 5, only one variable X (X6 = 0.025) has a significant effect on the Y variable. While the other independent variables cannot influence the Y variable.

Badung

Regression Equation

Y2 = 967 + 3.08 X21 - 2.33 X22 + 6.26 X23 - 103.6 X24 - 76 X25 + 0.3403 X26 - 13.7 X27
+ 210 X28 + 1520 X29 - 792 X210

The above equation can be concluded as follows:

If other variables are constant, the Y_2 value will change by itself at a constant value of 967.
If other variables are constant, the Y_2 value will change by 3.08 per unit X_{21}.
If other variables are constant, the Y_2 value will change by 2.33 per unit X_{22}.
If other variables are constant, the Y_2 value will change by 6.26 per unit X_{23}.
If other variables are constant, the Y_2 value will change by -103.6 for every X_{24} unit.
If other variables are constant, the Y_2 value will change by -76 per unit X_{25}.
If other variables are constant, the Y_2 value will change by 0.3403 per unit X_{26}.
If other variables are constant, the Y_2 value will change by -13.7 per unit X_{27}.
If other variables are constant, the Y_2 value will change by 210 per unit X_{28}.
If other variables are constant, the Y_2 value will change by 1520 per unit X_{29}.
If other variables are constant, the Y_2 value will change by -792 per unit X_{210}.

Model Summary

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
518,429	83.34%	79.07%	*

The Summary model can be explained as follows:

R Square

The value of R Square (R-sq) output is 83.34%, meaning that the variable Y2 can be explained by a group of independent variables X_{21}, X_{22}, X_{23}, X_{24}, X_{25}, X_{26}, X_{27}, X_{28}, X_{29}, X_{210} simultaneously or simultaneously at 83, 34% while the remaining 16.66% is explained by other variables outside the model not examined.

Standard Error of Estimate

The S value in the Summary Model output is 518,429. So the value of this SEE is smaller than the standard deviation of the dependent variable or Y_2 of 1,133 (Table 2). (SEE <standard deviation value Y). thus the model is declared valid as a prediction model.

Partial t test

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	967	694	1.39	0.172	
X21	3.08	1.38	2.23	0.032	4.41
X22	-2.33	2.06	-1.13	0.265	5.63
X23	6.26	5.87	1.07	0.293	1.28
X24	-103.6	52.1	-1.99	0.054	1.66
X25	-76	268	-0.28	0.778	1.41
X26	0.3403	0.0591	5.75	0.000	2.06
X27	-13.7	67.0	-0.20	0.839	1.22
X28	210	184	1.14	0.261	1.27
X29	1520	565	2.69	0.010	1.17
X210	-792	258	-3.07	0.004	2.97

Partial t values can be seen through the P-Value values in the output of Table 6 above. P-Value <0.05, then the independent variable (X) has a significant effect on the dependent variable (Y). From Table 6 there are four variables X (X_{21} = 0.025; X_{26} = 0.000; X_{29} = 0.010; X_{210} = 0.004) which have a significant effect on the Y variable. While the other independent variables cannot influence the Y variable.

Table 7: Mann-Whitney Test

Descriptive Statistics

Sample	N	Median
Denpasar	50	1225.0
Badung	50	842.5

Test

Null hypothesis	H_0: $\eta_1 - \eta_2 = 0$
Alternative hypothesis	H_1: $\eta_1 - \eta_2 \neq 0$

Method	W-Value	P-Value
Not adjusted for ties	2880.00	0.015
Adjusted for ties	2880.00	0.014

Based on the above Output, the value of W is 2,880 with a P-Value of 0.015 where the value is smaller than the critical limit of 0.05 and the P-Value value that takes into account. Ties also shows a value that is not much different, namely 0.014 where <0.05. The hypothesis decision is accepted or that means there are significant differences in house prices between the City of Denpasar and Badung.

Conclusion

1. T-test results show the results of t count (P-Value) X_1 of 0.145> 0.05, then H1a is rejected, which means that the area of land does not affect the selling price of houses in Denpasar.

2. T-test results show the results of the t-count (P-Value) X_{21} of 0.032 <0.05, then H1b is accepted, which means the area of land has a significant effect on the selling price of houses in Badung.
3. T-test results show the results of t count (P-Value) X_2 of 0.125> 0.05, then H2a is rejected, which means the building area does not affect the selling price of houses in Denpasar.
4. T-test results show the results of t count (P-Value) X_{22} of 0.265> 0.05, then H2b is rejected, which means the building area does not affect the selling price of houses in Badung.
5. T-test results show the results of t count (P-Value) X_3 of 0.689> 0.05, then H3a is rejected, which means that the width of the land does not affect the selling price of houses in Denpasar.
6. T-test results show the results of t count (P-Value) X_{23} of 0.293> 0.05, then H3b is rejected, which means that the width of the land does not affect the selling price of houses in Badung.
7. T-test results show the results of t count (P-Value) X_4 of 0.398> 0.05, then H4a is rejected, which means the width of the road does not affect the selling price of houses in Denpasar.
8. T-test results show the results of t count (P-Value) X_{24} of 0.054> 0.05, then H4b is rejected, which means the width of the road does not affect the selling price of houses in Badung.
9. T-test results show the results of t count (P-Value) X_5 of 0.336> 0.05, then H5a is rejected, which means that residential design does not affect the selling price of houses in Denpasar.
10. T-test results show the results of t count (P-Value) X_{25} of 0.778> 0.05, then H5b is rejected, which means the residential design does not affect the selling price of houses in Badung.
11. T-test results show the results of t count (P-Value) X_6 of 0.025 <0.05, then H6a is accepted, which means electricity affects the selling price of houses in Denpasar.
12. T-test results show the results of t count (P-Value) X_{26} of 0,000 <0.05, then H6b is accepted, which means electricity affects the selling price of houses in Badung.
13. T-test results show the results of t count (P-Value) X_7 of 0.196> 0.05, then H7a is rejected which means the view does not affect the selling price of houses in Denpasar.
14. T-test results show the results of t count (P-Value) X_{27} of 0.893> 0.05, then H7b is rejected which means the view does not affect the selling price of houses in Badung.
15. T-test results show the results of t count (P-Value) X_8 of 0.633> 0.05, then H8a is rejected, which means water does not affect the selling price of houses in Denpasar.
16. T-test results show the results of t count (P-Value) $X2_8$ of 0.261> 0.05, then H8b is rejected, which means that water does not affect the selling price of houses in Badung.

17. T-test results show the results of t count (P-Value) X_9 of 0.269> 0.05, then H9a is rejected, which means the garage does not affect the selling price of houses in Denpasar.
18. T-test results show the results of t count (P-Value) X_{29} of 0.010 <0.05, then H9b is accepted, which means the garage affects the selling price of houses in Badung.
19. T-test results show the results of t count (P-Value) X_{10} of 0.211> 0.05, then H10a is rejected, which means the type of building does not affect the selling price of houses in Denpasar.
20. T-test results show the results of t count (P-Value) X_{210} of 0.004 <0.05, then H10b is accepted which means the type of building affects the selling price of houses in Badung.
21. The test results show a P-Value of 0.015 where the value is smaller than the critical limit of 0.05 and the P-Value that takes into account. Ties also shows a value that is not much different, namely, 0.014 where <0.05. then it can be concluded that H_{11} is accepted, which means there are significant differences in housing prices in Denpasar and Badung.

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