SURVEY

FACTORS THAT AFFECT ON SHOPPING CENTERS SELECTION

Y=SS0+ SS1X1+ SS2X2+ SS3X3+ SS4X4+ SS5X5+ SS6X6+ SS7X7+ SS8X8+ SS9X9
THERE ARE:

- Y-your favorite shopping center
- X1-age
- X2-location
- X3-raiting
- X4-number of boutiques
- X5-advice from friends
- X6-design

X7-game library

X8-area

X9-price

REGRESSION

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      Source |       SS       df       MS              Number of obs =      51
-------------+------------------------------           F(  3,    47) =    1.23
       Model |  7.26303807     3  2.42101269            Prob > F      =  0.3089
    Residual |  92.4232364    47  1.96645184            R-squared     =  0.0729
-------------+------------------------------           Adj R-squared =  0.0137
       Total |  99.6862745    50  1.99372549            Root MSE      =  1.4023
```

Y	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
X2	0.2046206	0.2961503	-0.69	0.493	-.8003982	.391157
X5	0.1337833	0.1293437	-1.03	0.306	-.3939893	.1264227
X8	0.2717567	0.1853627	-1.47	0.149	-.6446583	.1011449
_cons	4.694907	1.465329	3.20	0.002	1.747045	7.642769

Y= 4.694907 +0.204*X2+0,133*X5+0,271*X8

When all the independent variables are equal to zero, the intercept of the model is 4.694907
When 1 increase in X2 and hold second independent constant, satisfaction rate will increase by 0.2046206

When 1 increase in X5 and hold another independent constant, dependent variable will increase by 0,1337833

When 1 increase in X6 and hold second independent constant,satisfaction rate will increase by 0,2717567.

T-TEST

a)H0: $\beta 2=0$ no linear relationship

H1: $\beta 2 \neq 0$ linear relationship does exist between x and y

$t= (\beta 2-0)/se(\beta 2)= 0.2046206/0.2961503= 0.69$

T=(0,025,3)=3,182

t<T, therefore we fail reject at 5% significance level and conclude that $\beta 2$ is statistically insignificance at 10% level

T-TEST

b) H0: $\beta 5=0$ no linear relationship

H1: $\beta 3 \neq 0$ linear relationship does exist between xj and y

t= | 0.1337833/0.1293437= 1,0343

T(0,025,2)=3,182

t<T, therefore we fail reject at 5% significance level and conclude that $\beta 3$ is statistically insignificance at 10% level

T-TEST

c) H0: $\beta 8=0$ no linear relationship

H1: $\beta 6 \neq 0$ linear relationship does exist between x and y

t= 0.2717567/0.1853627= 1,466088082424

t<T, therefore we fail reject at 5% significance level and conclude that $\beta 4$ is statistically insignificance at 10% level

F-TEST

H0: $\beta 2=\beta 5=\beta 8=0$

H1: at least one of the βi is not equal to zero

f-statistics=1.23

$F(3, 47) = 2.201$

R-SQUARE, R2.

The value of R2 is 0,01 means that 1% of the variation in satisfaction rate can be explained by the variation of reputation, social life rate, building, feedback, accreditation.

Auto Correlation

- Breusch-Godfrey LM test for autocorrelation
- ---
- lags(p) | chi2 df Prob > chi2
- ---+---
- 1 | 0.142 1 0.7067
- ---
- H0: no serial correlation

HETROCODECETICITY TEST

- Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
- Ho: Constant variance
- Variables: fitted values of Y

- chi2(1) = 0.04
- Prob > chi2 = 0.8364

DURBIN-WATSON TEST

Durbin-Watson d-statistic(4, 51) = 1.857508

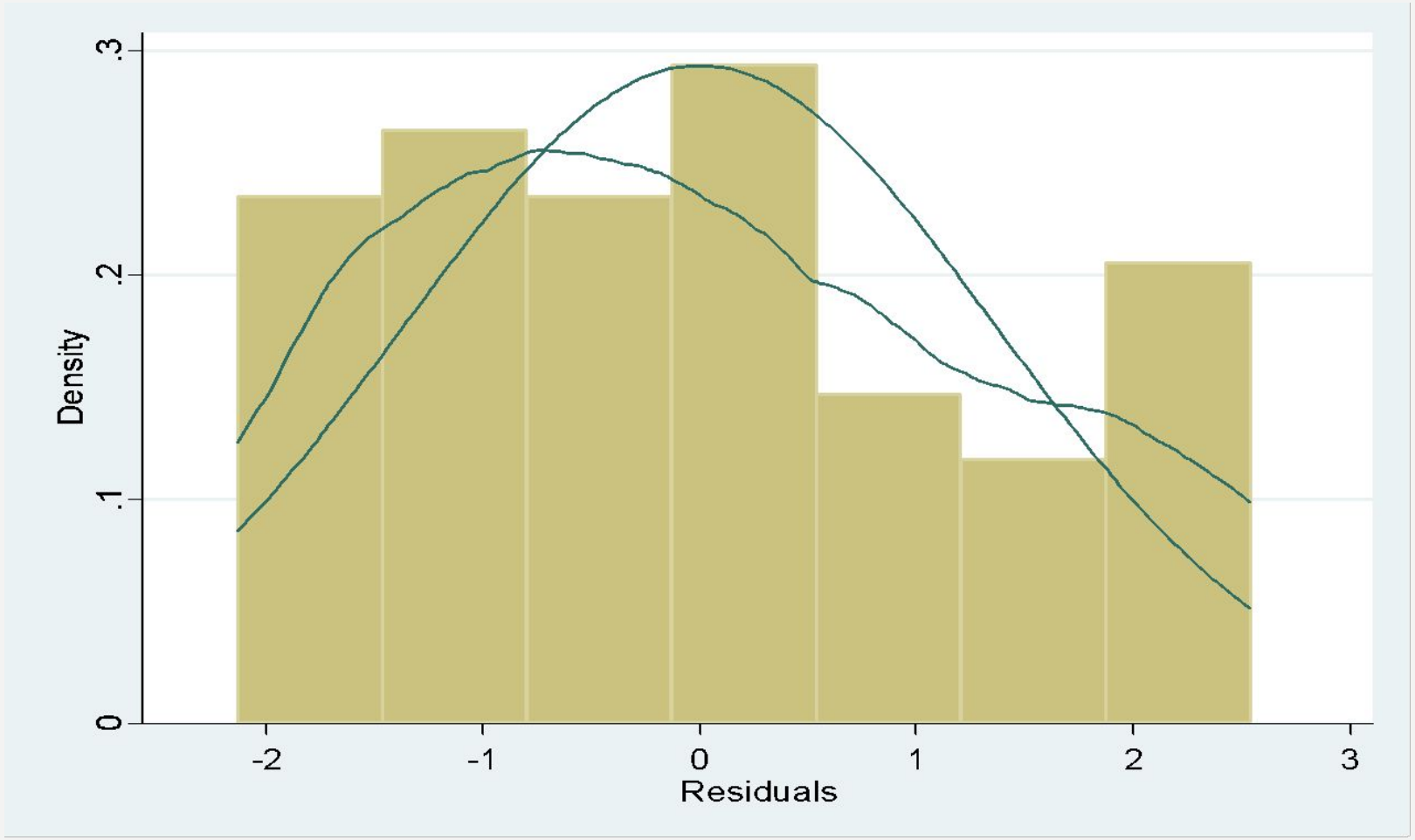
0----------dl(1.206)----------du(1.537)----------4-du(2.463)----------4-dl(2.79)----------4

- P ? Nope ? Negative

- No autocorrelation

Normality test

- Jarque-Bera normality test: 3.129 Chi(2) 0.2092



MULTICOLENARITY TEST

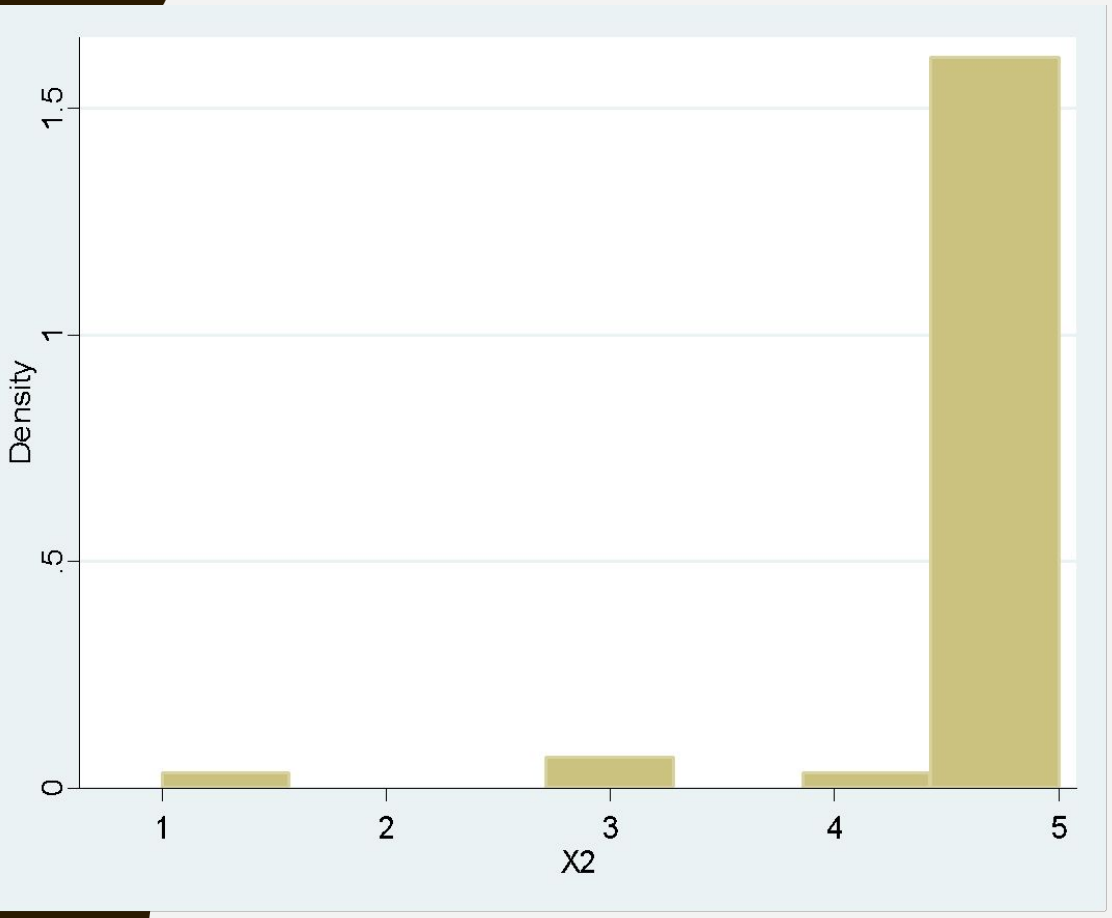
- Variable | VIF 1/VIF
- -------------+----------------------
- X5 | 1.07 0.937834
- X2 | 1.04 0.957690
- X8 | 1.02 0.978161
- -------------+----------------------
- Mean VIF | 1.04

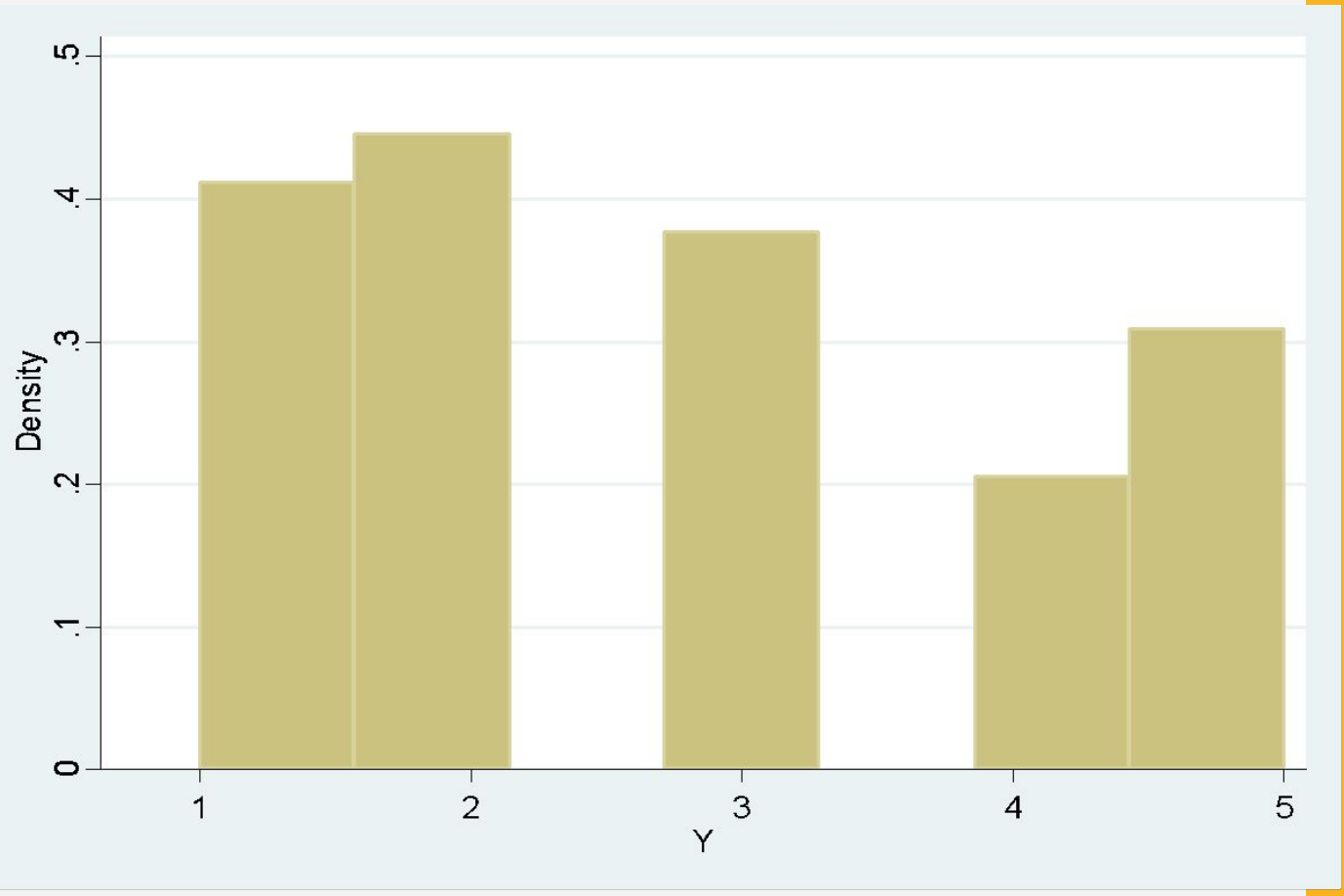
RAMSEY TEST

- Ramsey RESET test using powers of the fitted values of Y
- Ho: model has no omitted variables
- F(3, 44) = 0.01
- Prob > F = 0.9980

Independent variables	Coefficient	Standard error	T-stat	P-value
constant	4.694907	1.465329	3,182	0.002
advice	0.1337833	0.1293437	0.69	0.493
loocation	0.2046206	0.1853627	1,0343	0.306
area	0.2717567	0.2961503	1,4661	0.149
Adjusted R-square	0.0137			

HISTOGRAM





HISTOGRAM