

# LAMPIRAN

DATA

TAHUN	Impor (Juta Rp)	Kurs (Rp)	Pendapatan Perkapita (Juta Rp)	PRODUKSI (Juta Unit)	Suku Bunga Kredit (%)
1987	1172160,00	1650	2,40	1,17	21,67
1988	1334615,10	1729	2,70	1,07	22,10
1989	1165852,50	1795	2,90	1,18	21,70
1990	2667483,20	1901	3,20	1,31	20,83
1991	2603344,80	1992	3,60	1,49	25,53
1992	2144480,00	2062	3,90	1,59	24,03
1993	2793851,00	2110	4,20	1,70	20,59
1994	4340380,00	2200	4,60	1,89	17,76
1995	6886379,60	2308	5,10	2,11	18,85
1996	6371188,80	2383	5,60	2,41	19,22
1997	12056985,00	4650	11,30	2,64	21,82
1998	3180307,50	8025	16,70	2,77	32,15
1999	5024670,00	7100	14,70	2,90	27,66
2000	17768021,00	9595	20,60	3,04	18,46
2001	19422000,00	10400	22,80	8,19	18,55
2002	14908344,00	8940	20,20	2,61	18,95
2003	16001389,50	8465	19,70	3,12	16,94
2004	22510599,00	9290	22,50	4,32	14,12
2005	29378005,50	9705	24,50	5,61	14,05
2006	21549146,00	9164	24,00	4,75	15,98
2007	22138908,00	9140	25,10	5,13	13,86
2008	56592532,70	9691	27,90	6,86	13,60
2009	32796648,80	10408	30,90	6,35	14,50
2010	52135753,80	9087	28,30	8,07	13,25
2011	66144360,00	8700	28,40	8,84	12,40
2012	91588959,00	9387	32,10	8,13	11,80
2013	82798815,00	10461	37,20	8,94	11,66
2014	74191845,00	11865	43,80	9,22	12,61
2015	71544121,50	13389	44,60	7,81	12,66
2016	71544295,20	13503	47,50	7,11	11,89
2017	90751656,00	13560	51,50	8,29	11,07

## UJI STASIONARITAS DATA

### A. IMPOR

#### Level

Null Hypothesis: IMPOR has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.257724	0.6357
Test critical values: 1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

\*MacKinnon (1996) one-sided p-values.

#### 1st Different

Null Hypothesis: D(IMPOR) has a unit root  
Exogenous: Constant  
Lag Length: 1 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.441111	0.0000
Test critical values: 1% level	-3.689194	
5% level	-2.971853	
10% level	-2.625121	

\*MacKinnon (1996) one-sided p-values.

### B. KURS

#### Level

Null Hypothesis: KURS has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.215326	0.6545
Test critical values: 1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

\*MacKinnon (1996) one-sided p-values.

### 1st Different

Null Hypothesis: D(KURS) has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.068922	0.0039
Test critical values: 1% level	-3.679322	
5% level	-2.967767	
10% level	-2.622989	

\*MacKinnon (1996) one-sided p-values.

### C. Pendapatan Perkapita

#### Level

Null Hypothesis: PP has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.317357	0.6083
Test critical values: 1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

\*MacKinnon (1996) one-sided p-values.

#### 1st Different

Null Hypothesis: D(PP) has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.499611	0.0013
Test critical values: 1% level	-3.679322	
5% level	-2.967767	
10% level	-2.622989	

\*MacKinnon (1996) one-sided p-values.

## D. Volume Produksi

### Level

Null Hypothesis: PRODUKSI has a unit root  
Exogenous: Constant  
Lag Length: 3 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.733536	0.4038
Test critical values:		
1% level	-3.699871	
5% level	-2.976263	
10% level	-2.627420	

\*MacKinnon (1996) one-sided p-values.

### 1st Different

Null Hypothesis: D(PRODUKSI) has a unit root  
Exogenous: Constant  
Lag Length: 1 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.644485	0.0000
Test critical values:		
1% level	-3.689194	
5% level	-2.971853	
10% level	-2.625121	

\*MacKinnon (1996) one-sided p-values.

## E. SBK

### Level

Null Hypothesis: SBK has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.497109	0.5213
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

\*MacKinnon (1996) one-sided p-values.

## 1st Different

Null Hypothesis: D(SBK) has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.727985	0.0001
Test critical values:		
1% level	-3.689194	
5% level	-2.971853	
10% level	-2.625121	

\*MacKinnon (1996) one-sided p-values.

## Estimasi Persamaan Jangka Panjang

Dependent Variable: LOG(IMPOR)  
Method: Least Squares  
Date: 07/11/19 Time: 04:24  
Sample: 1987 2017  
Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.51867	2.866890	8.552357	0.0000
LOG(KURS)	-1.445647	0.457429	-3.160376	0.0040
LOG(PP)	1.959492	0.441257	4.440709	0.0001
LOG(PRODUKSI)	0.360753	0.214269	1.683647	0.1042
SBK	-0.068303	0.013512	-5.054811	0.0000
R-squared	0.978206	Mean dependent var		16.42134
Adjusted R-squared	0.974853	S.D. dependent var		1.434514
S.E. of regression	0.227482	Akaike info criterion		0.023201
Sum squared resid	1.345453	Schwarz criterion		0.254490
Log likelihood	4.640380	Hannan-Quinn criter.		0.098595
F-statistic	291.7468	Durbin-Watson stat		2.170839
Prob(F-statistic)	0.000000			

## Uji Kointegrasi

Null Hypothesis: ECT has a unit root  
Exogenous: Constant  
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.849204	0.0000
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

\*MacKinnon (1996) one-sided p-values.

## Model ECM

Dependent Variable: D(LOG(IMPOR))  
Method: Least Squares  
Date: 07/11/19 Time: 07:48  
Sample (adjusted): 1988 2017  
Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.072389	0.057726	-1.254018	0.2219
D(LOG(KURS))	-2.378416	0.954651	-2.491399	0.0200
D(LOG(PP))	3.397033	1.016393	3.342244	0.0027
D(LOG(PRODUKSI))	0.274572	0.136093	2.017533	0.0550
D(SBK)	-0.072362	0.015546	-4.654644	0.0001
ECT(-1)	-1.113626	0.209217	-5.322822	0.0000
R-squared	0.829563	Mean dependent var		0.144976
Adjusted R-squared	0.794056	S.D. dependent var		0.477109
S.E. of regression	0.216517	Akaike info criterion		-0.045435
Sum squared resid	1.125115	Schwarz criterion		0.234804
Log likelihood	6.681525	Hannan-Quinn criter.		0.044216
F-statistic	23.36296	Durbin-Watson stat		1.879621
Prob(F-statistic)	0.000000			



## Asumsi Klasik

### Uji Multikolinearitas

	Impor	Kurs	Panjang Jalan	Pendapatan perkapita	Produksi
Impor	1.000000	-0.111537	0.007717	0.298046	-0.309823
Kurs	-0.111537	1.000000	0.848277	0.190325	0.276670
Panjang Jalan	0.007717	0.848277	1.000000	0.242964	0.151372
Pendapatan perkapita	0.298046	0.190325	0.242964	1.000000	-0.068266
Produksi	-0.309823	0.276670	0.151372	-0.068266	1.000000

### UJI Heteroskedastisitas

Heteroskedasticity Test: White

F-statistic	0.395471	Prob. F(20,9)	0.9597
Obs*R-squared	14.03257	Prob. Chi-Square(20)	0.8288
Scaled explained SS	4.839981	Prob. Chi-Square(20)	0.9998

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 07/11/19 Time: 04:18

Sample: 1988 2017

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.019079	0.065501	0.291285	0.7774
D(LOG(KURS))^2	1.110760	23.89971	0.046476	0.9639
D(LOG(KURS))*D(LOG(PP))	22.35921	36.70986	0.609079	0.5575
D(LOG(KURS))*D(LOG(PRODUKSI))	-3.524983	9.813843	-0.359185	0.7277
D(LOG(KURS))*D(SBK)	-0.932926	1.076050	-0.866991	0.4085
D(LOG(KURS))*ECT(-1)	3.525852	7.258896	0.485728	0.6388
D(LOG(KURS))	-0.758528	1.206832	-0.628529	0.5453
D(LOG(PP))^2	-24.11281	21.78942	-1.106629	0.2972
D(LOG(PP))*D(LOG(PRODUKSI))	3.403582	9.053765	0.375930	0.7157
D(LOG(PP))*D(SBK)	0.961088	1.058041	0.908365	0.3874
D(LOG(PP))*ECT(-1)	-4.370721	7.101369	-0.615476	0.5535
D(LOG(PP))	1.990658	2.073050	0.960256	0.3620
D(LOG(PRODUKSI))^2	0.032262	0.268575	0.120123	0.9070

D(LOG(PRODUKSI))*D(SBK)	0.065796	0.078549	0.837643	0.4239
D(LOG(PRODUKSI))*ECT(-1)	0.101220	0.729509	0.138751	0.8927
D(LOG(PRODUKSI))	-0.186913	0.391790	-0.477076	0.6447
D(SBK)^2	-0.001221	0.003808	-0.320640	0.7558
D(SBK)*ECT(-1)	0.037692	0.072969	0.516550	0.6179
D(SBK)	-0.050709	0.054413	-0.931933	0.3757
ECT(-1)^2	-0.231975	0.306341	-0.757244	0.4683
ECT(-1)	0.147417	0.336895	0.437576	0.6720
R-squared	0.467752	Mean dependent var	0.037504	
Adjusted R-squared	-0.715020	S.D. dependent var	0.039602	
S.E. of regression	0.051862	Akaike info criterion	-2.884430	
Sum squared resid	0.024207	Schwarz criterion	-1.903592	
Log likelihood	64.26645	Hannan-Quinn criter.	-2.570651	
F-statistic	0.395471	Durbin-Watson stat	2.027496	
Prob(F-statistic)	0.959684			

### UJI Linearitas

Ramsey RESET Test

Equation: UNTITLED

Specification: D(LOG(IMPOR)) C D(LOG(KURS)) D(LOG(PP))

D(LOG(PRODUKSI)) D(SBK) ECT(-1)

Omitted Variables: Squares of fitted values

	Value	Df	Probability
t-statistic	0.286925	23	0.7767
F-statistic	0.082326	(1, 23)	0.7767
Likelihood ratio	0.107190	1	0.7434

F-test summary:

	Sum of Sq.	Df	Mean Squares
Test SSR	0.004013	1	0.004013
Restricted SSR	1.125115	24	0.046880
Unrestricted SSR	1.121102	23	0.048744
Unrestricted SSR	1.121102	23	0.048744

LR test summary:

	Value	Df
Restricted LogL	6.681525	24
Unrestricted LogL	6.735120	23

Unrestricted Test Equation:

Dependent Variable: D(LOG(IMPOR))

Method: Least Squares

Date: 07/11/19 Time: 07:53

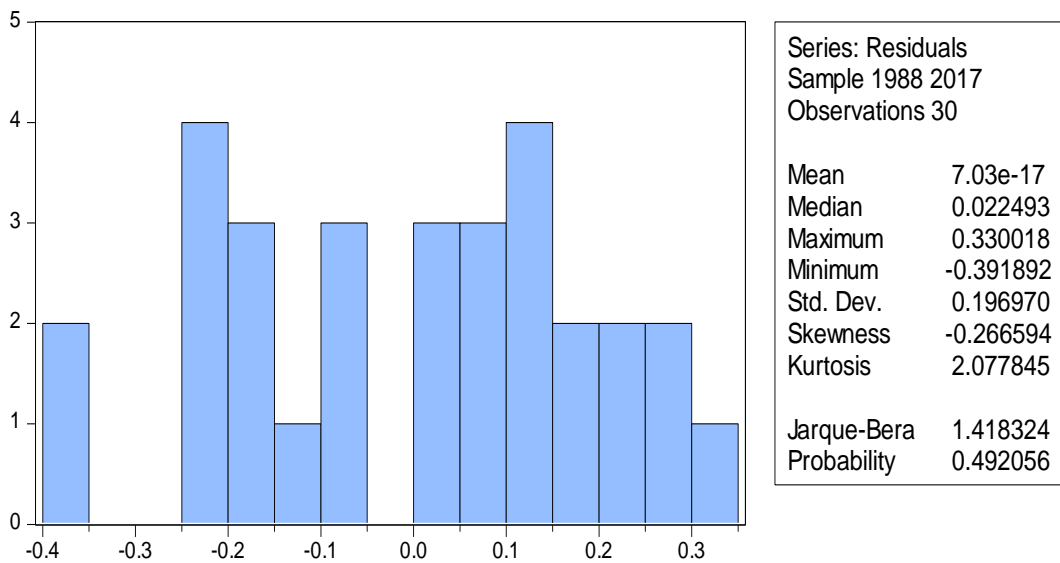
Sample: 1988 2017

Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
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C	-0.083044	0.069597	-1.193217	0.2449
D(LOG(KURS))	-2.557948	1.157197	-2.210468	0.0373
D(LOG(PP))	3.523334	1.126007	3.129053	0.0047
D(LOG(PRODUKSI))	0.279996	0.140053	1.999207	0.0575
D(SBK)	-0.071400	0.016203	-4.406633	0.0002
ECT(-1)	-1.103820	0.216056	-5.108946	0.0000
FITTED^2	0.050510	0.176039	0.286925	0.7767
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R-squared	0.830171	Mean dependent var	0.144976	
Adjusted R-squared	0.785868	S.D. dependent var	0.477109	
S.E. of regression	0.220779	Akaike info criterion	0.017659	
Sum squared resid	1.121102	Schwarz criterion	0.344605	
Log likelihood	6.735120	Hannan-Quinn criter.	0.122252	
F-statistic	18.73843	Durbin-Watson stat	1.898204	
Prob(F-statistic)	0.000000			

### UJI Normalitas



### UJI Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.674187	Prob. F(2,22)	0.5198
Obs*R-squared	1.732506	Prob. Chi-Square(2)	0.4205

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 07/11/19 Time: 07:52

Sample: 1988 2017

Included observations: 30

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.015930	0.060773	0.262119	0.7957
D(LOG(KURS))	0.596210	1.165410	0.511588	0.6140
D(LOG(PP))	-0.586252	1.219380	-0.480779	0.6354
D(LOG(PRODUKSI))	0.088734	0.188960	0.469589	0.6433
D(SBK)	0.005727	0.020484	0.279584	0.7824
ECT(-1)	-0.642053	0.936395	-0.685664	0.5001
RESID(-1)	0.674436	0.957960	0.704033	0.4888
RESID(-2)	-0.224026	0.223003	-1.004590	0.3260
R-squared	0.057750	Mean dependent var		7.03E-17
Adjusted R-squared	-0.242057	S.D. dependent var		0.196970
S.E. of regression	0.219518	Akaike info criterion		0.028413
Sum squared resid	1.060139	Schwarz criterion		0.402066
Log likelihood	7.573798	Hannan-Quinn criter.		0.147948
F-statistic	0.192625	Durbin-Watson stat		1.924288
Prob(F-statistic)	0.983923			