

## **BAB V**

### **PENUTUP**

#### **5.1. Kesimpulan**

Setelah melakukan analisis dan pembahasan, maka dapat diambil kesimpulan sebagai berikut:

1. Konsumsi listrik berpengaruh signifikan terhadap penggunaan internet. Listrik merupakan faktor pendukung dalam pengaksesan internet melalui alat teknologi yang digunakan dalam pengoperasiannya. Hasil penelitian menunjukkan bahwa konsumsi listrik mempengaruhi kelancaran dan ketersediaan jaringan internet. Peningkatan kecepatan jaringan dan koneksi internet dipengaruhi oleh ketersediaan listrik. Semakin baik ketersediaan listrik ke depannya maka semakin mendukung aktifitas yang seluruhnya berkaitan dengan digital. Untuk penggunaan internet tidak mempengaruhi konsumsi listrik disebabkan oleh penggunaan internet belum tentu mempengaruhi penggunaan listrik baik di rumah tangga maupun industri. Ketika di rumah tangga menggunakan satu jenis modem internet tetapi tidak pernah digunakan maka penggunaan listrik tidak akan bertambah secara drastis, bisa bertambah tetapi sangat kecil pengaruhnya.
2. Terdapat hubungan jangka panjang antara konsumsi listrik dengan penggunaan internet. Ketersediaan listrik harus tetap terjaga untuk

memperlancar segala kegiatan perekonomian maupun kegiatan sehari-hari yang berkaitan dengan digital.

## 5.2. Saran

Berdasarkan kesimpulan yang telah dikemukakan di atas, maka saran yang diajukan dalam penelitian ini adalah sebagai berikut:

1. Penggunaan internet dan alat-alat teknologi digital harus dilakukan dengan optimal, karena pembangkit energi listrik yang digunakan masih mengandalkan pada sumber daya yang tidak bisa diperbarui. Hampir seluruh pembangkit listrik di Indonesia masih sangat mengandalkan batu bara sebagai sumber daya utama pembangkit listrik. Apabila hal ini terus berlanjut secara terus menerus akan mempengaruhi ketersediaan energi di masa mendatang karena batu bara merupakan salah satu sumber daya yang tidak bisa diperbarui sehingga semakin lama akan terkikis dan bahkan akan habis.
2. Bagi peneliti lain yang ingin lebih mendalami tentang pengaruh konsumsi listrik terhadap penggunaan internet, diharapkan bisa lebih dalam mengupas tentang hal lain yang mungkin berpengaruh terhadap konsumsi listrik.

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## LAMPIRAN

### LAMPIRAN I DATA PENELITIAN

<b>Tahun</b>	<b>Konsumsi listrik perkapita (kwh/kapita)</b>	<b>Pengguna Internet (juta orang)</b>
1994	240,01	0,0
1995	263,59	0,0
1996	297,18	0,10
1997	331,30	0,20
1998	331,13	0,50
1999	357,03	1,00
2000	390,37	1,90
2001	411,32	4,20
2002	417,21	4,50
2003	428,40	8,00
2004	473,68	11,20
2005	499,72	16,00
2006	514,87	20,00
2007	544,71	20,00
2008	568,40	25,00
2009	592,16	30,00
2010	634,18	54,00
2011	678,64	55,00
2012	732,10	63,00
2013	773,29	82,00

2014	811,90	88,10
2015	918,00	110,20
2016	956,36	132,70
2017	1021,00	143,26
2018	1064,00	171,17





**LAMPIRAN 2**  
**HASIL UJI STASIONERITAS *AUGMENTED DICKEY FULLER***  
**TINGKAT LEVEL**

Variabel Konsumsi Listrik (EC)

Null Hypothesis: EC has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 0 (Automatic - based on AIC, maxlag=2)

	t-Statistic	Prob.*
<b>Augmented Dickey-Fuller test statistic</b>	<b>-4.698662</b>	<b>0.0059</b>
Test critical values: 1% level	-4.440739	
5% level	-3.632896	
10% level	-3.254671	

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

Variabel Konsumsi Internet (IC)

Null Hypothesis: IC has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 2 (Automatic - based on AIC, maxlag=2)

	t-Statistic	Prob.*
<b>Augmented Dickey-Fuller test statistic</b>	<b>2.579797</b>	<b>1.0000</b>
Test critical values: 1% level	-4.498307	
5% level	-3.658446	
10% level	-3.268973	

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

### LAMPIRAN 3

#### HASIL UJI STASIONERITAS *AUGMENTED DICKEY FULLER* TINGKAT *FIRST DIFFERENCE*

Variabel Konsumsi Listrik (EC)

Null Hypothesis: D(EC) has a unit root  
Exogenous: Constant, Linear Trend  
Lag Length: 1 (Automatic - based on AIC, maxlag=2)

	t-Statistic	Prob.*
<i>Augmented Dickey-Fuller test statistic</i>	-4.919772	0.0044
Test critical values:		
1% level	-4.498307	
5% level	-3.658446	
10% level	-3.268973	

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

Variabel Konsumsi Internet (EC)

Null Hypothesis: D(IC) has a unit root  
Exogenous: Constant, Linear Trend  
Lag Length: 0 (Automatic - based on AIC, maxlag=2)

	t-Statistic	Prob.*
<i>Augmented Dickey-Fuller test statistic</i>	-6.265072	0.0003
Test critical values:		
1% level	-4.467895	
5% level	-3.644963	
10% level	-3.261452	

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

## LAMPIRAN 4

### HASIL UJI KOINTEGRASI

Date: 11/05/19 Time: 22:14  
 Sample (adjusted): 1999 2018  
 Included observations: 20 after adjustments  
 Trend assumption: Linear deterministic trend  
 Series: EC IC  
 Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. Of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.565461	16.68300	15.49471	0.0330
At most 1	0.000680	0.013605	3.841466	0.9070

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. Of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.565461	16.66940	14.26460	0.0204
At most 1	0.000680	0.013605	3.841466	0.9070

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

## LAMPIRAN 5

### HASIL PENGUJIAN *LAG LENGTH CRITERIA*

Roots of Characteristic Polynomial  
Endogenous variables: D(DEC) D(DIC)  
Exogenous variables: C  
Lag specification: 1 2  
Date: 11/05/19 Time: 22:10

Root	Modulus
-0.606001 - 0.659573i	0.895697
-0.606001 + 0.659573i	0.895697
-0.210566 - 0.538320i	0.578037
-0.210566 + 0.538320i	0.578037

No root lies outside the unit circle.  
VAR satisfies the stability condition.

Roots of Characteristic Polynomial  
Endogenous variables: D(EC) D(IC)  
Exogenous variables: C  
Lag specification: 1 3  
Date: 01/13/20 Time: 21:29

Root	Modulus
1.032996	1.032996
0.441394 - 0.896770i	0.999512
0.441394 + 0.896770i	0.999512
-0.569739 - 0.667151i	0.877321
-0.569739 + 0.667151i	0.877321
-0.742393	0.742393

Warning: At least one root outside the unit circle.  
VAR does not satisfy the stability condition.

VAR Lag Order Selection Criteria  
 Endogenous variables: D(DEC) D(DIC)  
 Exogenous variables: C  
 Date: 11/05/19 Time: 22:28  
 Sample: 1996 2018  
 Included observations: 19

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-159.9962	NA	87262.05	17.05223	17.15165	17.06906
1	-148.3005	19.69798	39016.26	16.24216	16.54040	16.29263
2	-141.5593	9.934461*	29828.37*	15.95361*	16.45068*	16.03773*

\* indicates lag order selected by the criterion  
 LR: sequential modified LR test statistic (each test at 5% level)  
 FPE: Final prediction error  
 AIC: Akaike information criterion  
 SC: Schwarz information criterion  
 HQ: Hannan-Quinn information criterion



**LAMPIRAN 6**  
**HASIL UJI KAUSALITAS GRANGER**

Pairwise Granger Causality Tests

Date: 11/05/19 Time: 22:16

Sample: 1996 2018

Lags: 2

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Null Hypothesis:	Obs	F-Statistic	Prob.
IC does not Granger Cause EC	21	0.08376	0.9201
EC does not Granger Cause IC		2.89394	0.0846

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