

## BAB V

### PENUTUP

#### 5.1. Kesimpulan

Berdasarkan hasil analisis yang telah dilakukan peneliti menggunakan metode *Error Correction Model* (ECM) peneliti memperoleh kesimpulan bahwa:

- 1) *Bi Rate* dalam jangka pendek tidak berpengaruh dan arahnya positif. Sedangkan dalam jangka panjang berpengaruh positif signifikan terhadap penyaluran kredit.
- 2) Dalam jangka pendek CAR berpengaruh positif terhadap penyaluran kredit. Sedangkan dalam jangka panjang CAR berpengaruh positif terhadap penyaluran kredit
- 3) Dalam jangka pendek NPL berpengaruh negatif terhadap penyaluran kredit. Sedangkan dalam jangka panjang NPL berpengaruh positif terhadap penyaluran kredit
- 4) Dalam jangka pendek DPK berpengaruh positif terhadap penyaluran kredit. Sedangkan dalam jangka panjang DPK tidak berpengaruh dan arahnya negatif terhadap penyaluran kredit.

#### 5.2. Saran

Berdasarkan hasil penelitian yang telah dilakukan oleh peneliti, peneliti sadar bahwa masih banyak kekurangan dari penelitian ini. Oleh karena itu peneliti memberikan beberapa saran kepada pihak yang melakukan penelitian sejenis

dengan topik yang peneliti lakukan sekarang di masa yang akan datang, bagi pihak perbankan dan bagi masyarakat umum lainnya. Adapun saran itu adalah:

- 1) Bagi Bank Indonesia, dalam menentukan tingkat *BI rate* dapat melihat bagaimana dampak dan implikasi *Bi rate* dalam mempengaruhi perekonomian, khususnya penyaluran kredit. Apabila tingkat penyaluran kredit berkurang maka bank Indonesia dapat menurunkan tingkat *Bi rate* agar tingkat suku bunga pinjaman juga turun.
- 2) Bagi Lembaga Keuangan (BPR), dapat lebih memperhatikan pelaksanaan kebijakan mengenai nilai CAR yang harus dimiliki oleh perbankan, sehingga BPR dapat mengantisipasi jumlah minimal CAR yang harus dimiliki agar terhindar dari kebangkrutan.
- 3) Bagi pihak perbankan, NPL mempengaruhi penyaluran kredit, sehingga perbankan perlu memperhatikan tingkat NPL agar tidak melebihi batas yang telah ditentukan Bank Indonesia. NPL yang tinggi dapat dikurangi dengan mengurangi jumlah kredit yang disalurkan.
- 4) Bagi pihak perbankan, DPK memberikan pengaruh yang cukup besar dalam penyaluran kredit. Agar DPK tetap tinggi, maka perbankan perlu melakukan sosialisasi kepada masyarakat tentang pentingnya menabung di bank. Sehingga DPK yang dihimpun akan semakin tinggi dan dapat digunakan untuk menyalurkan kredit.
- 5) Bagi peneliti di masa yang akan datang, diharapkan menambah variabel independen didalam melakukan penelitian agar semakin banyak variabel yang dapat dianalisis yang sesuai dengan keadaan perekonomian saat ini.

Dan Periode penelitian ini adalah tahun 2011-2016 dimohon peneliti selanjutnya dapat menambah jumlah periode, sehingga variabel yang diteliti dapat lebih akurat dan sesuai dengan keadaan perekonomian saat ini. Metode dalam penelitian ini adalah ECM, diharapkan peneliti selanjutnya dapat menggunakan metode lainnya yang lebih baik sehingga hasil yang diperoleh juga lebih baik.



## DAFTAR PUSTAKA

### a. Jurnal/Majalah Ilmiah

Darmawan, K., (2004), “Analisis Rasio - Rasio Bank”, *Info Bank*, Juli, hal 18-21

Domowitz, dan Elbadawi, (1987), “An Error-Correction Approach To Money Demand: The Case of Sudan”, *Jurnal of Development Economics*, XXVI (1), hal 257-275

Insukindro, (1999), “Pemilihan Model Ekonomi Empirik dengan Pendekatan Koreksi Kesalahan”, *Jurnal Ekonomi dan Bisnis Indonesia*, XIV (1), hal 1-8

Muhammad, M., (2014), “Kointegrasi dan Estimasi ECM Pada Data Time Series”, *Jurnal Konvergensi*, IV (1) April, hal. 1-11.

Pratiwi, Susan dan Hindasah, Lela, (2014), “Pengaruh Dana Pihak Ketiga, *Capital Adequacy Ratio*, *Return On Asset*, *Net Interest Margin* Dan *Non Performing Loan* Terhadap Penyaluran Kredit Bank Umum Di Indonesia “, *Jurnal Manajemen dan Bisnis*, V (2) September, hal 1-17.

Sari, Ni Made Junita dan Abundanti, Nyoman, (2016), “ Pengaruh Dpk, Roa, Inflasi Dan Suku Bunga Sbi Terhadap Penyaluran Kredit Pada Bank Umum”, *Jurnal Manajemen Unud*, V (11), hal 1-29.

Wijayanti, D.R., (2015), “Analisis Pengaruh Kinerja Keuangan Bank Terhadap Penyaluran Kredit (Studi Kasus Bank Perkreditan Rakyat Jawa Timur)”, *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, III (1), hal 1-20.

Yuliana, A., (2014), "Pengaruh LDR, CAR, ROA Dan NPL Terhadap Penyaluran Kredit Pada Bank Umum Di Indonesia Periode 2008–2013", *Jurnal dinamika manajemen*, II (3), Juli-September, hal 1-18.

**b. Buku**

Arifin, Z., (2009), *Dasar-Dasar Manajemen Bank Syariah*, Azkia Publisher, Jakarta.

Gujarati, D.N., dan Dawn C. P., (2009), *Basic Econometrics*, 5<sup>th</sup> Edition, MCGraw-Hill Internasional Edition, New York.

Ismail, (2010), *Manajemen Perbankan*, Kencana, Jakarta.

Kasmir, (2012), "*Manajemen Perbankan*", Edisi Revisi, Penerbit PT. Raja Pers, Jakarta.

Kuncoro, Mudrajad dan Suhardjono, (2011), *Manajemen Perbankan Teori dan Aplikasi*, BPFE, Yogyakarta.

Mankiw, N. G., (2013), "*Macroeconomics*", Edisi 8, Worth Publisher, New York.

Nopirin, (2012), *Ekonomi Moneter*, Cetakan Keduabelas, BPFE, Yogyakarta.

Rivai, Veithzal dan Andriana Permata Vethzal, (2014), *Credit Manajemen Handbook*, Rajawali Pers, Jakarta.

Riyadi, S., (2011), *Banking Assets and Liability Management*, Edisi Ketiga, LP-FEUI, Jakarta.

Siamat, D., (2005), *Manajemen Lembaga Keuangan; kebijakan moneter dan Perbankan*, edisi kelima, Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia, Jakarta.

Sudirman, W., (2013), *Manajemen Perbankan*, Kencana Prenada Media Group, Jakarta.

Suliyanto, (2011), *Ekonometrika Terapan, Teori dan Aplikasi dengan SPSS*, CV. Andi Offset, Yogyakarta.

Taswan, (2010), *Manajemen Perbankan*, Edisi Kedua, UPP STIM YKPN, Yogyakarta.

Thomas, R.L., (1997), *Modern Econometrics an introduction*, Edisi kedua, Addison Wesley Longman Limited, London.

Triandaru, Sigit, dan Santoso, T.B., (2009), *Bank dan Lembaga Keuangan Lain*, Salemba Empat, Jakarta.

Widarjono, A., (2013), *Ekonometrika Pengantar dan Aplikasinya Disertai Panduan Eviews*, Edisi keempat, UPP STIM YKPN, Yogyakarta.

Winarno, W.W., (2007), *Analisis Ekonometrika dan Statistik dengan Eviews*, Sekolah Tinggi ilmu Manajemen YKPN, Yogyakarta.

### **c. Makalah/Skripsi**

Astuti, A., (2013), "Pengaruh Inflasi, Bi Rate, Dana Pihak Ketiga (Dpk), *Non Performing Loan* (Npl) Dan *Capital Adequacy Ratio* (Car) Terhadap Penyaluran Kredit (Studi Kasus Pada 10 Bank Terbesar Di Indonesia

Berdasarkan Kredit)”, *Skripsi*, Fakultas Ekonomi Dan Bisnis Universitas Islam Negeri Syarif Hidayatullah Jakarta. (tidak dipublikasikan).

Musaddad, F., (2010), “Analisis Pengaruh DPK, CAR, Suku Bunga SBI, dan Inflasi terhadap Penyaluran Kredit serta Implikasinya terhadap Profitabilitas pada Bank Umum”, *Skripsi*, Fakultas Ekonomi dan Bisnis Universitas Syarif Hidayatullah, Jakarta. (tidak dipublikasikan).

Parmawati, L.M., (2015), “Analisis Pengaruh Dana Pihak Ketiga (Dpk), Tingkat Suku Bunga Kredit, *Capital Adequacy Ratio* (Car), *NonPerforming Loan* (Npl) Dan *Return On Assets* (Roa) Terhadap Penyaluran Kredit Bank Pada Pt. Bank Tabungan Pensiunan Nasional (Btpn) Tbk Cabang Surakarta”, *Skripsi*, Fakultas Ekonomi Dan Bisnis Universitas Muhammadiyah Surakarta. (tidak dipublikasikan).

Pratama, B.A., (2010), “Analisis Faktor - Faktor Yang Mempengaruhi Kebijakan Penyaluran Kredit Perbankan (Studi Pada Bank Umum Di Indonesia Periode Tahun 2005 - 2009)”, *Skripsi*, Program Studi Magister Manajemen Program Pasca Sarjana Universitas Diponegoro, Semarang. (tidak dipublikasikan).

Ramadhan, S.B., (2013), “Analisis Faktor-Faktor Yang Mempengaruhi Penyaluran Kredit Perbankan”, *Skripsi*, Fakultas Ekonomika dan Bisnis Universitas Diponegoro. (tidak dipublikasikan).

Sappewali, B., (2001), “Pengaruh Perubahan Tingkat Bunga Terhadap Kredit Perbankan Di Sulawesi Selatan”, *Skripsi*, Fakultas Ekonomi Unhas, Makassar. (tidak dipublikasikan).

**d. Referensi yang diakses dari internet**

Badan Pusat Statistik, (2016), “Data IHK dan Inflasi Jawa Tengah”. diakses dari <https://jateng.bps.go.id/site/resultTab> pada tanggal 5 Maret 2017.

Bank Indonesia, (1998), “Surat Keputusan Direksi Bank Indonesia Tentang Kualitas Aktiva Tetap”. Diakses dari [www.bi.go.id/id/peraturan/arsip-peraturan/Perbankan1998/skdir31147.pdf](http://www.bi.go.id/id/peraturan/arsip-peraturan/Perbankan1998/skdir31147.pdf) pada tanggal 12 September 2016.

Bank Indonesia, (2004), “Peraturan Bank Indonesia Nomor 6/10/PBI/2004”. Diakses dari [http://www.bi.go.id/id/peraturan/perbankan/documents/pbi\\_151213rev.pdf](http://www.bi.go.id/id/peraturan/perbankan/documents/pbi_151213rev.pdf) pada tanggal 12 September 2016.

Bank Indonesia, (2008), “Peraturan Perbankan Nomor 10/15/PBI/2008 pasal 2 ayat 1”. Diakses dari [http://www.bi.go.id/id/peraturan/perbankan/documents/pbi\\_151213rev.pdf](http://www.bi.go.id/id/peraturan/perbankan/documents/pbi_151213rev.pdf) pada tanggal 12 September 2016 .

Bank Indonesia, (2008), “Laporan Perekonomian Indonesia tahun 2008”. Diakses dari [http://www.bi.go.id/id/publikasi/laporan-tahunan/perekonomian/Pages/lpi\\_2008.aspx](http://www.bi.go.id/id/publikasi/laporan-tahunan/perekonomian/Pages/lpi_2008.aspx) pada tanggal 4 Desember 2016.

Bank Indonesia, (2008), “Statistik Perbankan Indonesia Vol 7 No 1 Desember 2008”, diakses dari [www.bi.go.id/id/statistik/perbankan/indonesia/Documents/SPI%20Juni%202015.pdf](http://www.bi.go.id/id/statistik/perbankan/indonesia/Documents/SPI%20Juni%202015.pdf) pada tanggal 10 Maret 2017.



Bank Indonesia, (2012), “Peraturan Bank Indonesia Nomor 14/ 15 /Pbi/2012 Tentang Penilaian Kualitas Aset Bank Umum”, diakses dari [http://www.bi.go.id/id/peraturan/perbankan/Pages/pbi\\_141512.aspx](http://www.bi.go.id/id/peraturan/perbankan/Pages/pbi_141512.aspx) pada tanggal 10 Maret 2017.

Bank Indonesia, (2016), “Data Inflasi”. Diakses dari <http://www.bi.go.id/id/moneter/inflasi/data/Default.aspx> pada tanggal 4 Desember 2016

Bank Indonesia, (2016), “Statistik perbankan BPR Konvensional Jawa Tengah”. Diakses dari <http://www.bi.go.id/id/statistik/perbankan/bpr-konvensional/indikatorutama/Default.aspx> pada tanggal 19 Februari 2017.

Bank indonesia, (2017), “Data Tingkat NPL BPR”. Diakses dari <http://www.bi.go.id/id/statistik/perbankan/bpr-konvensional/indikatorutama/Default.aspx> pada tanggal 4 Maret 2017.

Bank Indonesia, (2017), “Bi rate”. Diakses dari <http://www.bi.go.id/id/moneter/bi-rate/penjelasan/Contents/Default.aspx> pada tanggal 5 Maret 2017.

Kamus Besar Bank Indonesia (KBBI), (2017), “Pengertian Stasioner”, diakses dari <http://kbbi.web.id/stasioner> pada tanggal 19 Februari 2017.

Otoritas Jasa Keuangan (OJK), (2016), “Statistik Perbankan Indonesia September 2016”,diakses dari <http://www.ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/Documents/Pages/Statistik-Perbank>

[an-Indonesia---September-2016/SPI%20September%202016.pdf](#) pada tanggal 4 Desember 2016.

Republik Indonesia, (1967), “Undang-Undang Nomor 14 Tahun 1967 Tentang Pokok-Pokok Perbankan, Pasal 1 Butir 2, diakses dari [www.dpr.go.id/dokjdih/document/uu/UU\\_1967\\_14.pdf](http://www.dpr.go.id/dokjdih/document/uu/UU_1967_14.pdf) pada tanggal 1 Maret 2017.

Republik Indonesia, (1998), “Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan, Pasal 1 Butir 1, diakses dari <http://www.jdih.kemenkeu.go.id/fullText/1998/10Tahun~1998UU.htm> pada tanggal 28 Februari 2017.

Republik Indonesia, (1998), “Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan, Pasal 1 Butir 2, diakses dari <http://www.jdih.kemenkeu.go.id/fullText/1998/10Tahun~1998UU.htm> pada tanggal 28 Februari 2017.

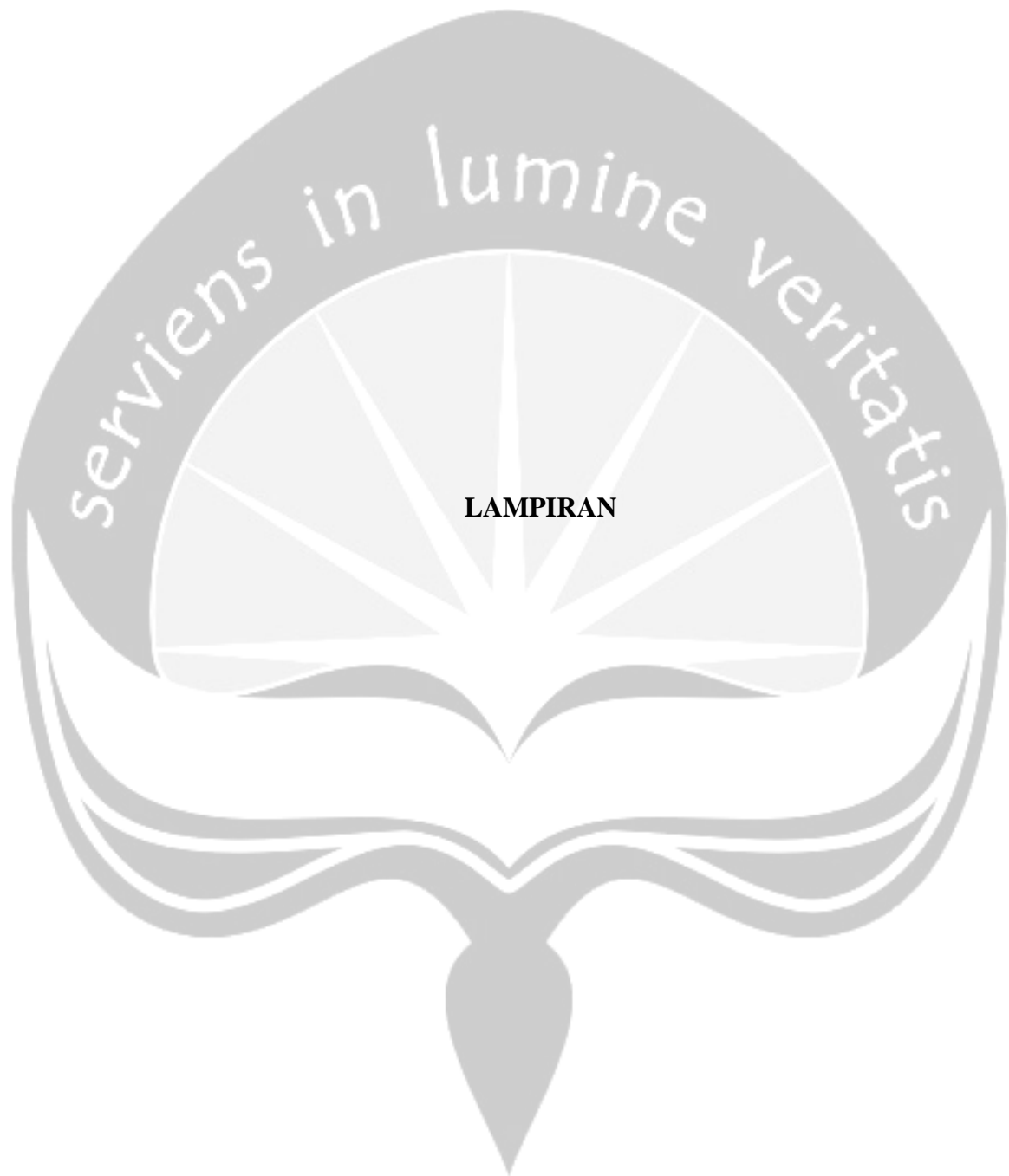
Republik Indonesia, (1998), “Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan, Pasal 1 Butir 3, diakses dari <http://www.jdih.kemenkeu.go.id/fullText/1998/10Tahun~1998UU.htm> pada tanggal 28 Februari 2017.

Republik Indonesia, (1998), “Undang-Undang Nomor 10 Tahun 1998 Tentang Perbankan, Pasal 1 Butir 4, diakses dari <http://www.jdih.kemenkeu.go.id/fullText/1998/10Tahun~1998UU.htm> pada tanggal 28 Februari 2017.

Sismanto, A., (2016), “Kinerja BPR di Jawa Tengah Meningkat”, SindoNews, 26 Agustus 2016 diakses dari <http://ekbis.sindonews.com/read/1134123/178/kinerja-bpr-di-jawa-tengah-meningkat-1472138612> pada tanggal 4 Desember 2016.

Zuraya, N., (2016), “Kredit Macet BPR di Jawa Tengah Meningkat”,  
RepublikaNews, 26 Agustus 2016 diakses dari [http://nasional  
.republika.co.id/berita/nasional/daerah/16/08/26/ocibuu383-kredit-macet-  
bpr-di-jateng-meningkat](http://nasional.republika.co.id/berita/nasional/daerah/16/08/26/ocibuu383-kredit-macet-bpr-di-jateng-meningkat) pada tanggal 26 Februari 2017





## LAMPIRAN

### Lampiran 1 : Data Variabel penelitian (Sebelum diolah)

Tahun	Bulan	Penyaluran Kredit (Y)	CAR (X <sub>1</sub> )	NPL (X <sub>2</sub> )	DPK (X <sub>3</sub> )	Bi Rate (X <sub>4</sub> )
2011	Januari	Rp 8.539.652.588	21,35%	8,38%	Rp 7.701.031.813	6,50%
	Februari	Rp 8.609.335.280	21,53%	8,70%	Rp 7.729.264.616	6,75%
	Maret	Rp 8.774.931.241	20,43%	8,70%	Rp 7.812.443.960	6,75%
	April	Rp 8.945.809.339	20,30%	8,74%	Rp 7.940.283.657	6,75%
	Mei	Rp 9.131.426.999	20,34%	7,73%	Rp 8.045.480.703	6,75%
	Juni	Rp 9.349.687.841	22,76%	8,25%	Rp 8.004.235.823	6,75%
	Juli	Rp 9.525.738.096	22,46%	8,18%	Rp 8.119.113.617	6,75%
	Agustus	Rp 9.698.681.992	21,82%	8,06%	Rp 8.037.083.005	6,75%
	September	Rp 9.586.356.529	20,25%	8,42%	Rp 8.447.561.448	6,75%
	Oktober	Rp 9.651.447.593	19,85%	8,21%	Rp 8.633.640.329	6,50%
	November	Rp 9.696.869.965	19,68%	8,03%	Rp 8.119.113.617	6,00%
	Desember	Rp 9.788.154.388	19,52%	7,87%	Rp 9.052.220.517	6,00%
2012	Januari	Rp 9.808.691.750	19,57%	7,88%	Rp 9.103.612.207	6,00%
	Februari	Rp 10.035.382.333	19,85%	7,93%	Rp 9.190.766.195	5,75%
	Maret	Rp 10.295.969.562	19,71%	7,86%	Rp 9.215.450.727	5,75%
	April	Rp 10.497.161.703	19,74%	7,66%	Rp 9.335.763.153	5,75%
	Mei	Rp 10.734.621.653	19,68%	6,90%	Rp 9.420.299.300	5,75%
	Juni	Rp 10.948.698.901	22,39%	7,33%	Rp 9.371.189.551	5,75%
	Juli	Rp 11.167.363.743	21,78%	7,32%	Rp 9.445.001.659	5,75%
	Agustus	Rp 11.189.348.800	21,06%	7,26%	Rp 9.570.544.464	5,75%
	September	Rp 11.224.719.402	19,57%	7,40%	Rp 9.880.151.702	5,75%
	Oktober	Rp 11.202.178.916	19,09%	7,16%	Rp 10.073.320.564	5,75%
	November	Rp 11.248.537.271	19,02%	7,07%	Rp 10.333.371.129	5,75%
	Desember	Rp 11.328.567.001	18,80%	6,92%	Rp 10.585.238.537	5,75%
2013	Januari	Rp 11.313.634.391	18,90%	7,03%	Rp 10.644.251.200	5,75%
	Februari	Rp 11.523.904.355	19,08%	6,91%	Rp 10.616.364.020	5,75%
	Maret	Rp 11.731.329.781	19,30%	6,87%	Rp 10.690.596.452	5,75%
	April	Rp 11.973.255.860	19,41%	6,77%	Rp 10.801.877.088	5,75%
	Mei	Rp 12.272.657.281	19,60%	6,06%	Rp 10.831.438.477	5,75%
	Juni	Rp 12.560.091.686	22,30%	6,49%	Rp 10.733.938.688	6,00%
	Juli	Rp 12.844.184.787	21,94%	6,48%	Rp 10.732.096.781	6,50%
	Agustus	Rp 12.835.837.606	21,41%	6,51%	Rp 11.045.888.026	7,00%
	September	Rp 12.944.475.367	19,91%	6,50%	Rp 11.302.747.182	7,25%
	Oktober	Rp 13.038.974.516	19,65%	6,39%	Rp 11.562.680.347	7,25%
	November	Rp 13.029.988.112	19,28%	6,26%	Rp 11.794.921.539	7,50%
	Desember	Rp 13.138.525.060	19,25%	6,05%	Rp 12.088.151.924	7,50%
2014	Januari	Rp 13.146.719.328	19,10%	6,24%	Rp 12.143.020.986	7,50%
	Februari	Rp 13.371.359.274	19,22%	6,09%	Rp 12.220.797.010	7,50%
	Maret	Rp 13.659.955.635	19,40%	6,17%	Rp 12.311.821.158	7,50%
	April	Rp 13.804.289.186	19,57%	6,13%	Rp 12.323.932.996	7,50%
	Mei	Rp 14.179.441.006	19,82%	5,36%	Rp 12.431.671.786	7,50%
	Juni	Rp 14.541.851.362	22,09%	6,03%	Rp 12.361.070.082	7,50%
	Juli	Rp 14.758.725.709	21,84%	6,11%	Rp 12.383.737.670	7,50%
	Agustus	Rp 14.735.529.169	20,77%	5,99%	Rp 12.765.540.931	7,50%
	September	Rp 14.887.443.876	20,27%	6,10%	Rp 12.954.241.785	7,50%
	Oktober	Rp 14.799.788.278	19,85%	6,20%	Rp 13.261.896.380	7,50%
	November	Rp 14.927.340.634	19,79%	6,11%	Rp 13.486.317.391	7,75%
	Desember	Rp 14.967.376.637	19,81%	6,22%	Rp 13.909.131.944	7,75%
2015	Januari	Rp 14.972.235.578	19,92%	6,39%	Rp 14.092.854.498	7,75%
	Februari	Rp 15.211.602.211	19,91%	6,30%	Rp 14.193.719.611	7,50%
	Maret	Rp 15.471.297.224	20,14%	6,35%	Rp 14.299.768.676	7,50%
	April	Rp 15.734.797.683	20,02%	6,32%	Rp 14.568.188.655	7,50%
	Mei	Rp 16.058.397.278	20,06%	5,51%	Rp 14.671.633.096	7,50%
	Juni	Rp 16.467.283.649	22,37%	6,07%	Rp 14.504.998.140	7,50%
	Juli	Rp 16.487.593.425	22,03%	6,30%	Rp 14.867.788.429	7,50%
	Agustus	Rp 16.585.263.017	21,13%	6,29%	Rp 15.179.989.310	7,50%
	September	Rp 16.624.311.670	20,16%	6,37%	Rp 15.507.624.705	7,50%
	Oktober	Rp 16.593.082.345	19,70%	6,59%	Rp 15.913.696.704	7,50%
	November	Rp 16.653.159.754	19,50%	6,53%	Rp 16.111.738.625	7,50%
	Desember	Rp 16.636.271.839	19,58%	6,75%	Rp 16.395.469.335	7,50%
2016	Januari	Rp 16.620.969.930	19,46%	6,79%	Rp 16.587.439.636	7,25%
	Februari	Rp 16.825.067.257	19,65%	6,87%	Rp 16.759.616.833	7,00%
	Maret	Rp 17.055.866.366	19,68%	6,96%	Rp 16.917.647.327	6,75%
	April	Rp 17.374.397.225	19,78%	6,85%	Rp 17.156.350.060	6,75%
	Mei	Rp 17.717.532.846	20,17%	5,93%	Rp 17.517.813.247	6,75%
	Juni	Rp 18.245.966.282	22,44%	6,50%	Rp 17.218.005.083	6,50%
	Juli	Rp 18.098.269.094	22,18%	6,72%	Rp 17.669.219.015	6,50%
	Agustus	Rp 18.241.123.254	22,00%	6,75%	Rp 17.826.501.476	5,25%
	September	Rp 18.249.748.617	20,46%	6,97%	Rp 18.044.489.134	5,00%
	Oktober	Rp 18.230.560.622	20,13%	7,12%	Rp 18.347.298.298	4,75%
	November	Rp 18.415.398.247	19,82%	6,79%	Rp 18.461.541.028	4,75%
	Desember	-	-	-	-	-

**Lampiran 2 : Data IHK Jawa Tengah (persentase)**

Bulan	Tahun					
	2011	2012	2013	2014	2015	2016
<b>Januari</b>	124,19	127,29	133,57	110,68	118,19	122,42
<b>Februari</b>	123,93	127,63	134,65	111,05	117,45	122,12
<b>Maret</b>	123,63	127,9	135,89	111,32	117,65	122,6
<b>april</b>	123,06	128	135,43	111,19	117,85	122,04
<b>Mei</b>	123,11	128,48	135,07	111,45	118,45	122,2
<b>juni</b>	123,67	129,34	136,37	112,27	119,18	122,7
<b>Juli</b>	124,57	130,26	141,02	113,07	120,27	123,93
<b>Agustus</b>	125,29	131,66	142,64	113,59	120,61	123,58
<b>September</b>	125,8	131,46	141,61	113,84	120,42	123,69
<b>Oktober</b>	125,66	131,61	141,9	114,43	120,38	123,75
<b>November</b>	126,29	131,6	142,32	115,99	120,65	124,45
<b>Desember</b>	126,76	132,13	142,68	118,6	121,84	-

### Lampiran 3 : Data Variabel Penelitian (Sesudah di Riilkan)

Tahun	Bulan	Penyaluran Kredit (Y)	CAR (X <sub>1</sub> )	NPL (X <sub>2</sub> )	DPK (X <sub>3</sub> )	Bi Rate (X <sub>4</sub> )
2011	Januari	Rp 68.762.804	21,35%	8,38%	Rp 62.010.080	6,50%
	Februari	Rp 69.469.340	21,53%	8,70%	Rp 62.367.987	6,75%
	Maret	Rp 70.977.362	20,43%	8,70%	Rp 63.192.138	6,75%
	April	Rp 72.694.696	20,30%	8,74%	Rp 64.523.677	6,75%
	Mei	Rp 74.172.910	20,34%	7,73%	Rp 65.351.967	6,75%
	Juni	Rp 75.601.907	22,76%	8,25%	Rp 64.722.534	6,75%
	Juli	Rp 76.468.958	22,46%	8,18%	Rp 65.177.118	6,75%
	Agustus	Rp 77.409.865	21,82%	8,06%	Rp 64.147.841	6,75%
	September	Rp 76.203.152	20,25%	8,42%	Rp 67.150.727	6,75%
	Oktober	Rp 76.806.045	19,85%	8,21%	Rp 68.706.353	6,50%
	November	Rp 76.782.564	19,68%	8,03%	Rp 69.806.939	6,00%
	Desember	Rp 77.218.006	19,52%	7,87%	Rp 71.412.279	6,00%
2012	Januari	Rp 77.057.834	19,57%	7,88%	Rp 71.518.676	6,00%
	Februari	Rp 78.628.711	19,85%	7,93%	Rp 72.011.018	5,75%
	Maret	Rp 80.500.153	19,71%	7,86%	Rp 72.051.999	5,75%
	April	Rp 82.009.076	19,74%	7,66%	Rp 72.935.650	5,75%
	Mei	Rp 83.550.916	19,68%	6,90%	Rp 73.321.134	5,75%
	Juni	Rp 84.650.525	22,39%	7,33%	Rp 72.453.916	5,75%
	Juli	Rp 85.731.335	21,78%	7,32%	Rp 72.508.841	5,75%
	Agustus	Rp 84.986.699	21,06%	7,26%	Rp 72.691.360	5,75%
	September	Rp 85.385.056	19,57%	7,40%	Rp 75.157.095	5,75%
	Oktober	Rp 85.116.472	19,09%	7,16%	Rp 76.539.173	5,75%
	November	Rp 85.475.207	19,02%	7,07%	Rp 78.521.057	5,75%
	Desember	Rp 85.738.038	18,80%	6,92%	Rp 80.112.303	5,75%
2013	Januari	Rp 84.701.912	18,90%	7,03%	Rp 79.690.433	5,75%
	Februari	Rp 85.584.139	19,08%	6,91%	Rp 78.844.144	5,75%
	Maret	Rp 86.329.603	19,30%	6,87%	Rp 78.670.958	5,75%
	April	Rp 88.409.185	19,41%	6,77%	Rp 79.759.854	5,75%
	Mei	Rp 90.861.459	19,60%	6,06%	Rp 80.191.297	5,75%
	Juni	Rp 92.103.041	22,30%	6,49%	Rp 78.711.877	6,00%
	Juli	Rp 91.080.590	21,94%	6,48%	Rp 76.103.367	6,50%
	Agustus	Rp 89.987.644	21,41%	6,51%	Rp 77.438.923	7,00%
	September	Rp 91.409.331	19,91%	6,50%	Rp 79.816.024	7,25%
	Oktober	Rp 91.888.474	19,65%	6,39%	Rp 81.484.710	7,25%
	November	Rp 91.554.160	19,28%	6,26%	Rp 82.876.065	7,50%
	Desember	Rp 92.083.859	19,25%	6,05%	Rp 84.722.119	7,50%
2014	Januari	Rp 118.781.346	19,10%	6,24%	Rp 109.712.875	7,50%
	Februari	Rp 120.408.458	19,22%	6,09%	Rp 110.047.699	7,50%
	Maret	Rp 122.708.908	19,40%	6,17%	Rp 110.598.465	7,50%
	April	Rp 124.150.456	19,57%	6,13%	Rp 110.836.703	7,50%
	Mei	Rp 127.226.927	19,82%	5,36%	Rp 111.544.834	7,50%
	Juni	Rp 129.525.709	22,09%	6,03%	Rp 110.101.274	7,50%
	Juli	Rp 130.527.334	21,84%	6,11%	Rp 109.522.753	7,50%
	Agustus	Rp 129.725.585	20,77%	5,99%	Rp 112.382.612	7,50%
	September	Rp 130.775.157	20,27%	6,10%	Rp 113.793.410	7,50%
	Oktober	Rp 129.334.862	19,85%	6,20%	Rp 115.895.276	7,50%
	November	Rp 128.695.065	19,79%	6,11%	Rp 116.271.380	7,75%
	Desember	Rp 126.200.478	19,81%	6,22%	Rp 117.277.672	7,75%
2015	Januari	Rp 126.679.377	19,92%	6,39%	Rp 119.238.975	7,75%
	Februari	Rp 129.515.557	19,91%	6,30%	Rp 120.849.039	7,50%
	Maret	Rp 131.502.739	20,14%	6,35%	Rp 121.544.995	7,50%
	April	Rp 133.515.466	20,02%	6,32%	Rp 123.616.365	7,50%
	Mei	Rp 135.571.104	20,06%	5,51%	Rp 123.863.513	7,50%
	Juni	Rp 138.171.536	22,37%	6,07%	Rp 121.706.647	7,50%
	Juli	Rp 137.088.164	22,03%	6,30%	Rp 123.620.092	7,50%
	Agustus	Rp 137.511.508	21,13%	6,29%	Rp 125.860.122	7,50%
	September	Rp 138.052.746	20,16%	6,37%	Rp 128.779.478	7,50%
	Oktober	Rp 137.839.195	19,70%	6,59%	Rp 132.195.520	7,50%
	November	Rp 138.028.676	19,50%	6,53%	Rp 133.541.141	7,50%
	Desember	Rp 136.541.955	19,58%	6,75%	Rp 134.565.572	7,50%
2016	Januari	Rp 135.770.053	19,46%	6,79%	Rp 135.496.158	7,25%
	Februari	Rp 137.774.871	19,65%	6,87%	Rp 137.238.919	7,00%
	Maret	Rp 139.117.996	19,68%	6,96%	Rp 137.990.598	6,75%
	April	Rp 142.366.414	19,78%	6,85%	Rp 140.579.728	6,75%
	Mei	Rp 144.987.994	20,17%	5,93%	Rp 143.353.627	6,75%
	Juni	Rp 148.703.882	22,44%	6,50%	Rp 140.326.040	6,50%
	Juli	Rp 146.036.223	22,18%	6,72%	Rp 142.574.187	6,50%
	Agustus	Rp 147.605.788	22,00%	6,75%	Rp 144.250.700	5,25%
	September	Rp 147.544.253	20,46%	6,97%	Rp 145.884.786	5,00%
	Oktober	Rp 147.317.662	20,13%	7,12%	Rp 148.260.996	4,75%
	November	Rp 147.974.273	19,82%	6,79%	Rp 148.345.046	4,75%
	Desember	-	-	-	-	-

### Lampiran 4 : Data Variabel Penelitian (Setelah Diolah)

Tahun	Bulan	Penyaluran Kredit (logY)	CAR (X <sub>1</sub> )	NPL (X <sub>2</sub> )	DPK (logX <sub>3</sub> )	Bi Rate (X <sub>4</sub> )
2011	Januari	18,04617%	21,35%	8,38%	17,94281%	6,50%
	Februari	18,05640%	21,53%	8,70%	17,94856%	6,75%
	Maret	18,07787%	20,43%	8,70%	17,96169%	6,75%
	April	18,10178%	20,30%	8,74%	17,98254%	6,75%
	Mei	18,12191%	20,34%	7,73%	17,99530%	6,75%
	Juni	18,14099%	22,76%	8,25%	17,98562%	6,75%
	Juli	18,15240%	22,46%	8,18%	17,99262%	6,75%
	Agustus	18,16462%	21,82%	8,06%	17,97670%	6,75%
	September	18,14891%	20,25%	8,42%	18,02245%	6,75%
	Oktober	18,15679%	19,85%	8,21%	18,04535%	6,50%
	November	18,15649%	19,68%	8,03%	18,06124%	6,00%
	Desember	18,16214%	19,52%	7,87%	18,08398%	6,00%
2012	Januari	18,16007%	19,57%	7,88%	18,08547%	6,00%
	Februari	18,18025%	19,85%	7,93%	18,09233%	5,75%
	Maret	18,20377%	19,71%	7,86%	18,09290%	5,75%
	April	18,22234%	19,74%	7,66%	18,10509%	5,75%
	Mei	18,24097%	19,68%	6,90%	18,11036%	5,75%
	Juni	18,25404%	22,39%	7,33%	18,09846%	5,75%
	Juli	18,26673%	21,78%	7,32%	18,09922%	5,75%
	Agustus	18,25801%	21,06%	7,26%	18,10173%	5,75%
	September	18,26268%	19,57%	7,40%	18,13509%	5,75%
	Oktober	18,25953%	19,09%	7,16%	18,15331%	5,75%
	November	18,26374%	19,02%	7,07%	18,17888%	5,75%
	Desember	18,26681%	18,80%	6,92%	18,19894%	5,75%
2013	Januari	18,25465%	18,90%	7,03%	18,19366%	5,75%
	Februari	18,26501%	19,08%	6,91%	18,18298%	5,75%
	Maret	18,27368%	19,30%	6,87%	18,18078%	5,75%
	April	18,29749%	19,41%	6,77%	18,19453%	5,75%
	Mei	18,32485%	19,60%	6,06%	18,19993%	5,75%
	Juni	18,33842%	22,30%	6,49%	18,18130%	6,00%
	Juli	18,32726%	21,94%	6,48%	18,14760%	6,50%
	Agustus	18,31518%	21,41%	6,51%	18,16500%	7,00%
	September	18,33086%	19,91%	6,50%	18,19523%	7,25%
	Oktober	18,33609%	19,65%	6,39%	18,21593%	7,25%
	November	18,33244%	19,28%	6,26%	18,23286%	7,50%
	Desember	18,33821%	19,25%	6,05%	18,25489%	7,50%
2014	Januari	18,59279%	19,10%	6,24%	18,51338%	7,50%
	Februari	18,60640%	19,22%	6,09%	18,51642%	7,50%
	Maret	18,62533%	19,40%	6,17%	18,52142%	7,50%
	April	18,63700%	19,57%	6,13%	18,52357%	7,50%
	Mei	18,66148%	19,82%	5,36%	18,52994%	7,50%
	Juni	18,67939%	22,09%	6,03%	18,51691%	7,50%
	Juli	18,68709%	21,84%	6,11%	18,51164%	7,50%
	Agustus	18,68093%	20,77%	5,99%	18,53742%	7,50%
	September	18,68899%	20,27%	6,10%	18,54990%	7,50%
	Oktober	18,67792%	19,85%	6,20%	18,56820%	7,50%
	November	18,67296%	19,79%	6,11%	18,57144%	7,75%
	Desember	18,65338%	19,81%	6,22%	18,58005%	7,75%
2015	Januari	18,65717%	19,92%	6,39%	18,59664%	7,75%
	Februari	18,67931%	19,91%	6,30%	18,61005%	7,50%
	Maret	18,69454%	20,14%	6,35%	18,61580%	7,50%
	April	18,70973%	20,02%	6,32%	18,63269%	7,50%
	Mei	18,72501%	20,06%	5,51%	18,63469%	7,50%
	Juni	18,74401%	22,37%	6,07%	18,61712%	7,50%
	Juli	18,73613%	22,03%	6,30%	18,63272%	7,50%
	Agustus	18,73922%	21,13%	6,29%	18,65068%	7,50%
	September	18,74315%	20,16%	6,37%	18,67361%	7,50%
	Oktober	18,74160%	19,70%	6,59%	18,69979%	7,50%
	November	18,74297%	19,50%	6,53%	18,70992%	7,50%
	Desember	18,73214%	19,58%	6,75%	18,71756%	7,50%
2016	Januari	18,72647%	19,46%	6,79%	18,72445%	7,25%
	Februari	18,74113%	19,65%	6,87%	18,73723%	7,00%
	Maret	18,75083%	19,68%	6,96%	18,74270%	6,75%
	April	18,77391%	19,78%	6,85%	18,76129%	6,75%
	Mei	18,79216%	20,17%	5,93%	18,78083%	6,75%
	Juni	18,81747%	22,44%	6,50%	18,75948%	6,50%
	Juli	18,79937%	22,18%	6,72%	18,77537%	6,50%
	Agustus	18,81006%	22,00%	6,75%	18,78706%	5,25%
	September	18,80964%	20,46%	6,97%	18,79833%	5,00%
	Oktober	18,80810%	20,13%	7,12%	18,81448%	4,75%
	November	18,81255%	19,82%	6,79%	18,81505%	4,75%
	Desember	-	-	-	-	-



## Lampiran 5 : Model Regresi

### 1) Regresi Linear Berganda

Dependent Variable: LOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:51				
Sample: 2011M01 2016M11				
Included observations: 71				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.265900	0.227525	14.35403	0.0000
X1	0.019392	0.002215	8.755628	0.0000
X2	-0.034721	0.004277	-8.118772	0.0000
LOGX3	0.814884	0.011129	73.21900	0.0000
X4	0.011191	0.003213	3.482701	0.0009
R-squared	0.994553	Mean dependent var	18.46774	
Adjusted R-squared	0.994223	S.D. dependent var	0.259971	
S.E. of regression	0.019759	Akaike info criterion	-4.942611	
Sum squared resid	0.025767	Schwarz criterion	-4.783267	
Log likelihood	180.4627	Hannan-Quinn criter.	-4.879245	
F-statistic	3012.960	Durbin-Watson stat	0.689542	
Prob(F-statistic)	0.000000			

2) Regresi *Error Correction Model* (ECM) (Jangka Pendek)

Dependent Variable: DLOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:53				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000135	0.001719	0.078423	0.9377
DX1	0.014596	0.002013	7.252164	0.0000
DX2	-0.016980	0.005359	-3.168200	0.0024
DLOGX3	0.862090	0.052154	16.52977	0.0000
DX4	0.002031	0.007550	0.269006	0.7888
ECT(-1)	-0.302552	0.088930	-3.402137	0.0012
R-squared	0.839487	Mean dependent var	0.010948	
Adjusted R-squared	0.826947	S.D. dependent var	0.031821	
S.E. of regression	0.013237	Akaike info criterion	-5.729730	
Sum squared resid	0.011215	Schwarz criterion	-5.537002	
Log likelihood	206.5406	Hannan-Quinn criter.	-5.653176	
F-statistic	66.94449	Durbin-Watson stat	1.755616	
Prob(F-statistic)	0.000000			

3) *Error Corection Model (ECM) Jangka Panjang*

Variabel	C	X1	X2	X3	X4
Koefisien	0,999554377	0,951756312	1,05612189	-1,849389083	0,993286756
Standar Error	3265511,818	0,001282496	0,000965569	3392040,627	0,000985808
T-statistik	29,89402077	2,459991793	9,196936991	-3,1209398	6,857892668
T-tabel (one tailed) (df=66)	1,668	1,668	1,668	1,668	1,668
P -Value	0,00000000	0,00000060	0,00000000	0,00132986	0,00000000
Alpha	0,05	0,05	0,05	0,05	0,05
Interpretasi	HO ditolak/signifikan	HO ditolak/signifikan	HO ditolak/signifikan	HO ditolak/signifikan	HO ditolak/signifikan

## 4) Uji Stasioner Akar Unit Philips Perron (level)

Null Hypothesis: Unit root (individual unit root process)			
Series: LOGY, X1, X2, LOGX3, X4			
Date: 04/25/17 Time: 11:49			
Sample: 2011M01 2016M11			
Exogenous variables: Individual effects			
Newey-West automatic bandwidth selection and Bartlett kernel			
Total (balanced) observations: 350			
Cross-sections included: 5			
Method	Statistic	Prob.**	
PP - Fisher Chi-square	12.6097	0.2463	
PP - Choi Z-stat	0.08212	0.5327	
** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.			
Intermediate Phillips-Perron test results UNTITLED			
Series	Prob.	Bandwidth	Obs
LOGY	0.7673	0.0	70
X1	0.0109	6.0	70
X2	0.2852	3.0	70
LOGX3	0.8984	1.0	70
X4	0.8512	4.0	70

5) Uji Stasioner Akar Unit Philips Perron (*First Difference*)

Null Hypothesis: Unit root (individual unit root process)			
Series: LOGY, X1, X2, LOGX3, X4			
Date: 04/25/17 Time: 11:49			
Sample: 2011M01 2016M11			
Exogenous variables: Individual effects			
Newey-West automatic bandwidth selection and Bartlett kernel			
Total (balanced) observations: 345			
Cross-sections included: 5			
Method	Statistic	Prob.**	
PP - Fisher Chi-square	133.519	0.0000	
PP - Choi Z-stat	-10.3556	0.0000	
** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.			
Intermediate Phillips-Perron test results D(UNTITLED)			
Series	Prob.	Bandwidth	Obs
D(LOGY)	0.0000	0.0	69
D(X1)	0.0000	18.0	69
D(X2)	0.0001	4.0	69
D(LOGX3)	0.0000	1.0	69
D(X4)	0.0000	2.0	69

6) Penentuan *Lag optimum*

## a. Lag 1.1

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-75.83796	NA	6.93e-06	2.309656	2.470263	2.373451
1	293.6029	675.5491*	3.70e-10*	-7.531513*	-6.567872*	-7.148743*

\* 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

## b. Lag 1.2

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-71.64708	NA	6.35e-06	2.221655	2.383546	2.285882
1	289.9888	660.3785	3.68e-10	-7.535906	-6.564555*	-7.150539
2	342.3646	88.05214*	1.68e-10*	-8.329409*	-6.548599	-7.622902*

\* 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

## c. Lag 1.3

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-68.83154	NA	6.04e-06	2.171516	2.334715	2.236180
1	285.4559	646.0535	3.76e-10	-7.513408	-6.534214*	-7.125421
2	337.3804	87.04994	1.73e-10	-8.305306	-6.510116	-7.593997*
3	366.6933	44.83141*	1.57e-10*	-8.432154*	-5.820969	-7.397523

\* 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

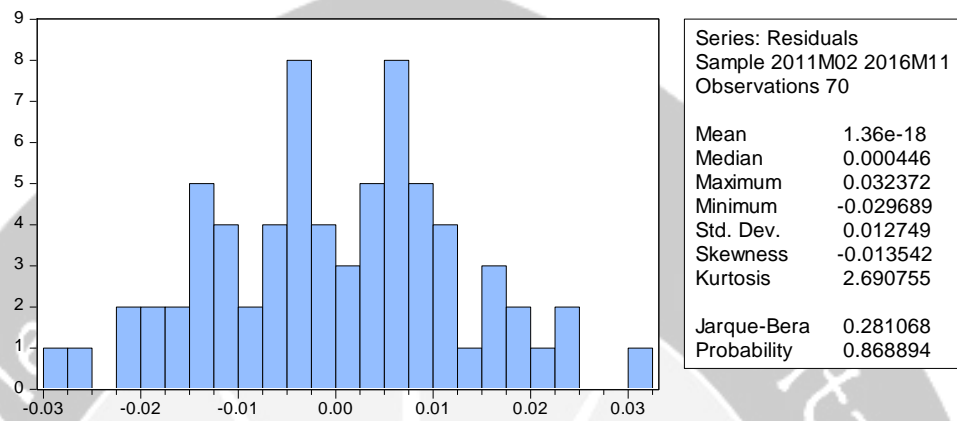


## 7) Uji Kointegrasi Johansen

Date: 04/25/17 Time: 11:49				
Sample (adjusted): 2011M05 2016M11				
Included observations: 67 after adjustments				
Trend assumption: Linear deterministic trend				
Series: LOGY X1 X2 LOGX3 X4				
Lags interval (in first differences): 1 to 3				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.584746	135.0509	69.81889	0.0000
At most 1 *	0.439374	76.16702	47.85613	0.0000
At most 2 *	0.334924	37.39405	29.79707	0.0055
At most 3	0.126632	10.06781	15.49471	0.2755
At most 4	0.014758	0.996123	3.841466	0.3182
Trace test indicates 3 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 6 : Uji Asumsi Klasik

### 1) Uji Normalitas Jangka Pendek



## 2) Uji Multikolinearitas Jangka Pendek

## a. Regresi awal

Dependent Variable: DLOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:53				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000135	0.001719	0.078423	0.9377
DX1	0.014596	0.002013	7.252164	0.0000
DX2	-0.016980	0.005359	-3.168200	0.0024
DLOGX3	0.862090	0.052154	16.52977	0.0000
DX4	0.002031	0.007550	0.269006	0.7888
ECT(-1)	-0.302552	0.088930	-3.402137	0.0012
R-squared	0.839487	Mean dependent var	0.010948	
Adjusted R-squared	0.826947	S.D. dependent var	0.031821	
S.E. of regression	0.013237	Akaike info criterion	-5.729730	
Sum squared resid	0.011215	Schwarz criterion	-5.537002	
Log likelihood	206.5406	Hannan-Quinn criter.	-5.653176	
F-statistic	66.94449	Durbin-Watson stat	1.755616	
Prob(F-statistic)	0.000000			

b. Regresi *Auxiliary* ( $\Delta x_1$ )

Dependent Variable: DX1				
Method: Least Squares				
Date: 04/25/17 Time: 12:17				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.098376	0.105244	0.934744	0.3534
DX2	0.758765	0.316594	2.396652	0.0194
DLOGX3	-8.263511	3.046260	-2.712675	0.0085
DX4	0.051007	0.465265	0.109631	0.9130
ECT(-1)	-6.809448	5.415008	-1.257514	0.2131
R-squared	0.198013	Mean dependent var	-0.021857	
Adjusted R-squared	0.148660	S.D. dependent var	0.884138	
S.E. of regression	0.815777	Akaike info criterion	2.499397	
Sum squared resid	43.25696	Schwarz criterion	2.660004	
Log likelihood	-82.47890	Hannan-Quinn criter.	2.563192	
F-statistic	4.012183	Durbin-Watson stat	1.452786	
Prob(F-statistic)	0.005711			

c. Regresi *Auxiliary* ( $\Delta x_2$ )

Dependent Variable: DX2				
Method: Least Squares				
Date: 04/25/17 Time: 12:18				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.024634	0.039670	-0.620972	0.5368
DX1	0.107007	0.044649	2.396652	0.0194
DLOGX3	0.340391	1.206265	0.282186	0.7787
DX4	0.023233	0.174717	0.132976	0.8946
ECT(-1)	-3.269177	2.017785	-1.620181	0.1100
R-squared	0.141045	Mean dependent var	-0.022714	
Adjusted R-squared	0.088186	S.D. dependent var	0.320827	
S.E. of regression	0.306355	Akaike info criterion	0.540603	
Sum squared resid	6.100458	Schwarz criterion	0.701210	
Log likelihood	-13.92110	Hannan-Quinn criter.	0.604398	
F-statistic	2.668332	Durbin-Watson stat	2.171437	
Prob(F-statistic)	0.039901			

d. Regresi Auxiliary ( $\Delta \log x_3$ )

Dependent Variable: DLOGX3				
Method: Least Squares				
Date: 04/25/17 Time: 12:18				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.012185	0.003799	3.207353	0.0021
DX1	-0.012307	0.004537	-2.712675	0.0085
DX2	0.003595	0.012738	0.282186	0.7787
DX4	-0.000740	0.017957	-0.041215	0.9673
ECT(-1)	-0.381382	0.206140	-1.850112	0.0688
R-squared	0.134301	Mean dependent var	0.012461	
Adjusted R-squared	0.081028	S.D. dependent var	0.032840	
S.E. of regression	0.031482	Akaike info criterion	-4.010066	
Sum squared resid	0.064422	Schwarz criterion	-3.849459	
Log likelihood	145.3523	Hannan-Quinn criter.	-3.946271	
F-statistic	2.520966	Durbin-Watson stat	1.973032	
Prob(F-statistic)	0.049428			

e. Regresi Auxiliary ( $\Delta x_4$ )

Dependent Variable: DX4				
Method: Least Squares				
Date: 04/25/17 Time: 12:19				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.023906	0.028086	-0.851160	0.3978
DX1	0.003624	0.033060	0.109631	0.9130
DX2	0.011706	0.088031	0.132976	0.8946
DLOGX3	-0.035310	0.856747	-0.041215	0.9673
ECT(-1)	1.690013	1.445786	1.168923	0.2467
R-squared	0.022282	Mean dependent var	-0.025000	
Adjusted R-squared	-0.037885	S.D. dependent var	0.213452	
S.E. of regression	0.217457	Akaike info criterion	-0.144879	
Sum squared resid	3.073701	Schwarz criterion	0.015728	
Log likelihood	10.07075	Hannan-Quinn criter.	-0.081084	
F-statistic	0.370333	Durbin-Watson stat	1.269850	
Prob(F-statistic)	0.828937			

## 3) Uji Autokorelasi Jangka Pendek

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	2.072275	Prob. F(4,60)	0.0956	
Obs*R-squared	8.496774	Prob. Chi-Square(4)	0.0750	
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 04/25/17 Time: 16:25				
Sample: 2011M02 2016M11				
Included observations: 70				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000348	0.001671	-0.208117	0.8358
DX1	-0.001235	0.002041	-0.605310	0.5473
DX2	0.001609	0.005427	0.296480	0.7679
DLOGX3	0.016799	0.050992	0.329448	0.7430
DX4	-0.005941	0.007936	-0.748640	0.4570
ECT(-1)	-0.259211	0.146672	-1.767280	0.0823
RESID(-1)	0.369123	0.188588	1.957297	0.0550
RESID(-2)	0.379763	0.152938	2.483111	0.0158
RESID(-3)	-0.001570	0.137003	-0.011460	0.9909
RESID(-4)	-0.060056	0.134373	-0.446932	0.6565
R-squared	0.121382	Mean dependent var	1.36E-18	
Adjusted R-squared	-0.010410	S.D. dependent var	0.012749	
S.E. of regression	0.012815	Akaike info criterion	-5.744850	
Sum squared resid	0.009853	Schwarz criterion	-5.423636	
Log likelihood	211.0697	Hannan-Quinn criter.	-5.617260	
F-statistic	0.921011	Durbin-Watson stat	2.050012	
Prob(F-statistic)	0.513544			



## 4) Uji Heteroskedastisitas Jangka Pendek

Heteroskedasticity Test: White				
F-statistic	0.997540	Prob. F(5,64)	0.4265	
Obs*R-squared	5.060888	Prob. Chi-Square(5)	0.4085	
Scaled explained SS	3.576360	Prob. Chi-Square(5)	0.6119	
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 04/25/17 Time: 11:55				
Sample: 2011M02 2016M11				
Included observations: 70				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000188	3.56E-05	5.286484	0.0000
DX1^2	-1.73E-05	1.49E-05	-1.162664	0.2493
DX2^2	-6.72E-05	0.000124	-0.541414	0.5901
DLOGX3^2	0.005554	0.003829	1.450372	0.1518
DX4^2	-8.08E-05	0.000137	-0.587812	0.5587
ECT(-1)^2	-0.030307	0.062458	-0.485234	0.6292
R-squared	0.072298	Mean dependent var	0.000160	
Adjusted R-squared	-0.000178	S.D. dependent var	0.000210	
S.E. of regression	0.000210	Akaike info criterion	-14.01864	
Sum squared resid	2.82E-06	Schwarz criterion	-13.82591	
Log likelihood	496.6523	Hannan-Quinn criter.	-13.94208	
F-statistic	0.997540	Durbin-Watson stat	1.844712	
Prob(F-statistic)	0.426497			

### Lampiran 7: Uji Hipotesis

#### 1) Uji F ECM Jangka Pendek

Dependent Variable: DLOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:53				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000135	0.001719	0.078423	0.9377
DX1	0.014596	0.002013	7.252164	0.0000
DX2	-0.016980	0.005359	-3.168200	0.0024
DLOGX3	0.862090	0.052154	16.52977	0.0000
DX4	0.002031	0.007550	0.269006	0.7888
ECT(-1)	-0.302552	0.088930	-3.402137	0.0012
R-squared	0.839487	Mean dependent var	0.010948	
Adjusted R-squared	0.826947	S.D. dependent var	0.031821	
S.E. of regression	0.013237	Akaike info criterion	-5.729730	
Sum squared resid	0.011215	Schwarz criterion	-5.537002	
Log likelihood	206.5406	Hannan-Quinn criter.	-5.653176	
F-statistic	66.94449	Durbin-Watson stat	1.755616	
Prob(F-statistic)	0.000000			

## 2) Uji T ECM jangka Pendek

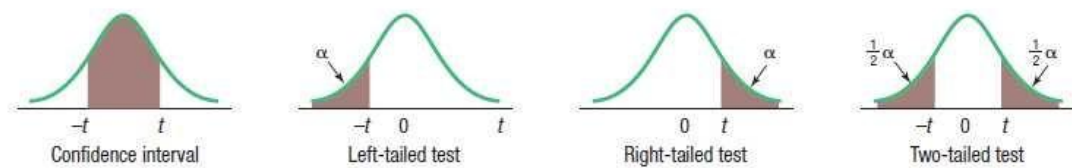
Dependent Variable: DLOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:53				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000135	0.001719	0.078423	0.9377
DX1	0.014596	0.002013	7.252164	0.0000
DX2	-0.016980	0.005359	-3.168200	0.0024
DLOGX3	0.862090	0.052154	16.52977	0.0000
DX4	0.002031	0.007550	0.269006	0.7888
ECT(-1)	-0.302552	0.088930	-3.402137	0.0012
R-squared	0.839487	Mean dependent var	0.010948	
Adjusted R-squared	0.826947	S.D. dependent var	0.031821	
S.E. of regression	0.013237	Akaike info criterion	-5.729730	
Sum squared resid	0.011215	Schwarz criterion	-5.537002	
Log likelihood	206.5406	Hannan-Quinn criter.	-5.653176	
F-statistic	66.94449	Durbin-Watson stat	1.755616	
Prob(F-statistic)	0.000000			

Lampiran 8 : Tabel

1) T- tabel

# Appendix B

## B.2 Student's t Distribution



Confidence Intervals, <i>c</i>						
<i>df</i>	80%	90%	95%	98%	99%	99.9%
	Level of Significance for One-Tailed Test, $\alpha$					
	0.10	0.05	0.025	0.01	0.005	0.0005
	Level of Significance for Two-Tailed Test, $\alpha$					
	0.20	0.10	0.05	0.02	0.01	0.001
1	3.078	6.314	12.706	31.821	63.657	636.619
2	1.886	2.920	4.303	6.965	9.925	31.599
3	1.638	2.353	3.182	4.541	5.841	12.924
4	1.533	2.132	2.776	3.747	4.604	8.610
5	1.476	2.015	2.571	3.365	4.032	6.869
6	1.440	1.943	2.447	3.143	3.707	5.959
7	1.415	1.895	2.365	2.998	3.499	5.408
8	1.397	1.860	2.306	2.896	3.355	5.041
9	1.383	1.833	2.262	2.821	3.250	4.781
10	1.372	1.812	2.228	2.764	3.169	4.587
11	1.363	1.796	2.201	2.718	3.106	4.437
12	1.356	1.782	2.179	2.681	3.055	4.318
13	1.350	1.771	2.160	2.650	3.012	4.221
14	1.345	1.761	2.145	2.624	2.977	4.140
15	1.341	1.753	2.131	2.602	2.947	4.073
16	1.337	1.746	2.120	2.583	2.921	4.015
17	1.333	1.740	2.110	2.567	2.898	3.965
18	1.330	1.734	2.101	2.552	2.878	3.922
19	1.328	1.729	2.093	2.539	2.861	3.883
20	1.325	1.725	2.086	2.528	2.845	3.850
21	1.323	1.721	2.080	2.518	2.831	3.819
22	1.321	1.717	2.074	2.508	2.819	3.792
23	1.319	1.714	2.069	2.500	2.807	3.768
24	1.318	1.711	2.064	2.492	2.797	3.745
25	1.316	1.708	2.060	2.485	2.787	3.725
26	1.315	1.706	2.056	2.479	2.779	3.707
27	1.314	1.703	2.052	2.473	2.771	3.690
28	1.313	1.701	2.048	2.467	2.763	3.674
29	1.311	1.699	2.045	2.462	2.756	3.659
30	1.310	1.697	2.042	2.457	2.750	3.646
31	1.309	1.696	2.040	2.453	2.744	3.633
32	1.309	1.694	2.037	2.449	2.738	3.622
33	1.308	1.692	2.035	2.445	2.733	3.611
34	1.307	1.691	2.032	2.441	2.728	3.601
35	1.306	1.690	2.030	2.438	2.724	3.591

Confidence Intervals, <i>c</i>						
<i>df</i>	80%	90%	95%	98%	99%	99.9%
	Level of Significance for One-Tailed Test, $\alpha$					
	0.10	0.05	0.025	0.01	0.005	0.0005
	Level of Significance for Two-Tailed Test, $\alpha$					
	0.20	0.10	0.05	0.02	0.01	0.001
36	1.306	1.688	2.028	2.434	2.719	3.582
37	1.305	1.687	2.026	2.431	2.715	3.574
38	1.304	1.686	2.024	2.429	2.712	3.566
39	1.304	1.685	2.023	2.426	2.708	3.558
40	1.303	1.684	2.021	2.423	2.704	3.551
41	1.303	1.683	2.020	2.421	2.701	3.544
42	1.302	1.682	2.018	2.418	2.698	3.538
43	1.302	1.681	2.017	2.416	2.695	3.532
44	1.301	1.680	2.015	2.414	2.692	3.526
45	1.301	1.679	2.014	2.412	2.690	3.520
46	1.300	1.679	2.013	2.410	2.687	3.515
47	1.300	1.678	2.012	2.408	2.685	3.510
48	1.299	1.677	2.011	2.407	2.682	3.505
49	1.299	1.677	2.010	2.405	2.680	3.500
50	1.299	1.676	2.009	2.403	2.678	3.496
51	1.298	1.675	2.008	2.402	2.676	3.492
52	1.298	1.675	2.007	2.400	2.674	3.488
53	1.298	1.674	2.006	2.399	2.672	3.484
54	1.297	1.674	2.005	2.397	2.670	3.480
55	1.297	1.673	2.004	2.396	2.668	3.476
56	1.297	1.673	2.003	2.395	2.667	3.473
57	1.297	1.672	2.002	2.394	2.665	3.470
58	1.296	1.672	2.002	2.392	2.663	3.466
59	1.296	1.671	2.001	2.391	2.662	3.463
60	1.296	1.671	2.000	2.390	2.660	3.460
61	1.296	1.670	2.000	2.389	2.659	3.457
62	1.295	1.670	1.999	2.388	2.657	3.454
63	1.295	1.669	1.998	2.387	2.656	3.452
64	1.295	1.669	1.998	2.386	2.655	3.449
65	1.295	1.669	1.997	2.385	2.654	3.447
66	1.295	1.668	1.997	2.384	2.652	3.444
67	1.294	1.668	1.996	2.383	2.651	3.442
68	1.294	1.668	1.995	2.382	2.650	3.439
69	1.294	1.667	1.995	2.382	2.649	3.437
70	1.294	1.667	1.994	2.381	2.648	3.435