

## 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 peniliti, peniliti 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.



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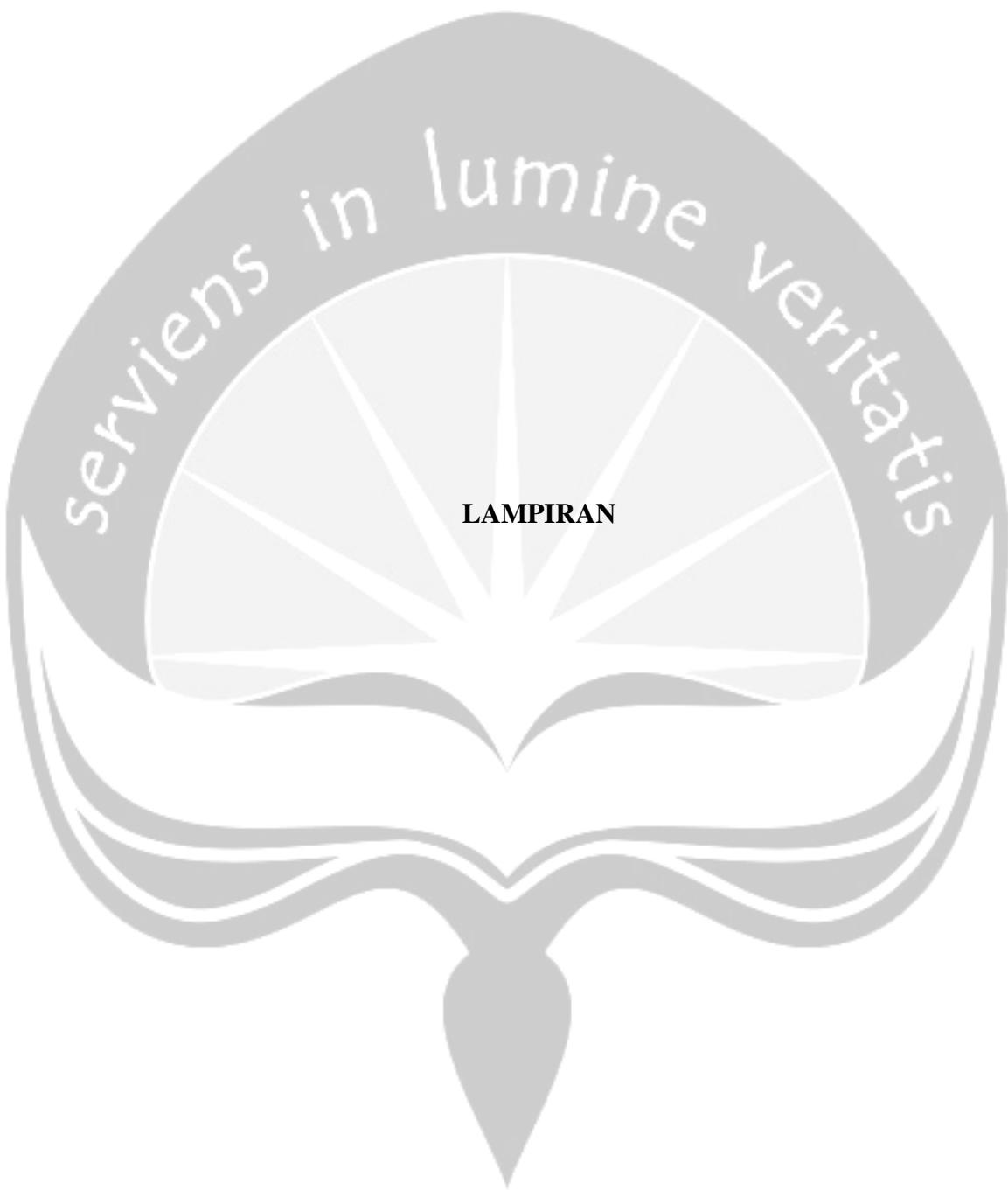
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## LAMPIRAN

### 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%
	Okttober	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 8.815.918.372	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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 ( $\log Y$ )	CAR ( $X_1$ )	NPL ( $X_2$ )	DPK ( $\log X_3$ )	Bi Rate ( $X_4$ )
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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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%
	Okttober	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	0,000000000	0,000000060	0,000000000	0,00132986	0,000000000
Alpha	0,05	0,05	0,05	0,05	0,05
Interpretasi	HO ditolak/signifikant	HO ditolak/signifikant	HO ditolak/signifikant	HO ditolak/signifikant	HO ditolak/signifikant

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

VAR Lag Order Selection Criteria						
Endogenous variables: LOGY X1 X2 LOGX3						
X4						
Exogenous variables: C						
Date: 04/25/17 Time: 11:57						
Sample: 2011M01 2016M11						
Included observations: 70						
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

VAR Lag Order Selection Criteria						
Endogenous variables: LOGY X1 X2 LOGX3						
X4						
Exogenous variables: C						
Date: 04/25/17 Time: 11:58						
Sample: 2011M01 2016M11						
Included observations: 69						
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

VAR Lag Order Selection Criteria						
Endogenous variables: LOGY X1 X2 LOGX3						
X4						
Exogenous variables: C						
Date: 04/25/17 Time: 11:58						
Sample: 2011M01 2016M11						
Included observations: 68						
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

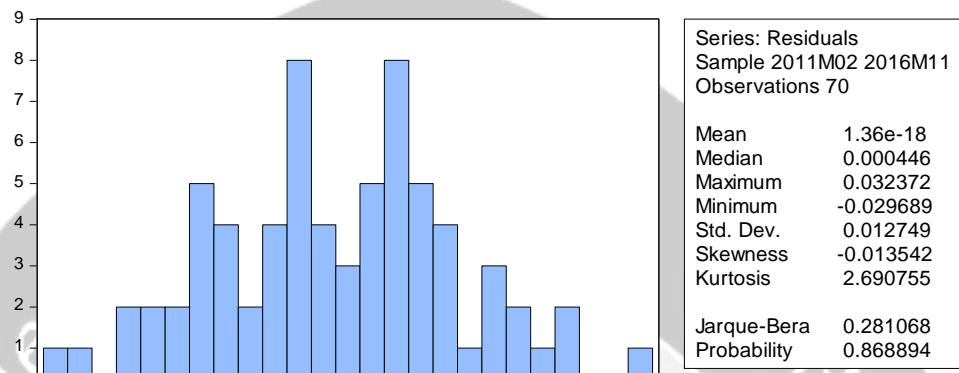
7) Uji Kointegrasi Johansen

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

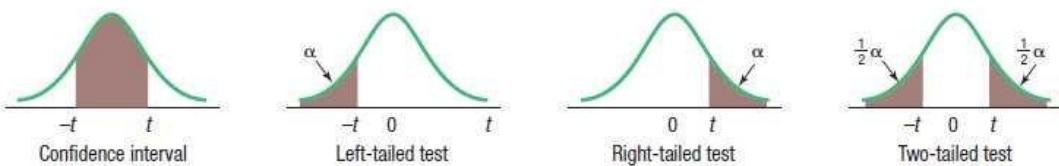
Dependent Variable: DLOGY				
Method: Least Squares				
Date: 04/25/17 Time: 11:53				
Sample (adjusted): 2011M02 2016M11				
Included observations: 70 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000135	0.001719	0.078423	0.9377
DX1	0.014596	0.002013	7.252164	0.0000
DX2	-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



$df$	Confidence Intervals, $c$						$df$	Confidence Intervals, $c$						
	Level of Significance for One-Tailed Test, $\alpha$							Level of Significance for One-Tailed Test, $\alpha$						
	0.10	0.05	0.025	0.01	0.005	0.0005		0.10	0.05	0.025	0.01	0.005	0.0005	
	0.20	0.10	0.05	0.02	0.01	0.001		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	36	1.306	1.688	2.028	2.434	2.719	3.582	
2	1.886	2.920	4.303	6.965	9.925	31.599	37	1.305	1.687	2.026	2.431	2.715	3.574	
3	1.638	2.353	3.182	4.541	5.841	12.924	38	1.304	1.686	2.024	2.429	2.712	3.566	
4	1.533	2.132	2.776	3.747	4.604	8.610	39	1.304	1.685	2.023	2.426	2.708	3.558	
5	1.476	2.015	2.571	3.365	4.032	6.869	40	1.303	1.684	2.021	2.423	2.704	3.551	
6	1.440	1.943	2.447	3.143	3.707	5.959	41	1.303	1.683	2.020	2.421	2.701	3.544	
7	1.415	1.895	2.365	2.998	3.499	5.408	42	1.302	1.682	2.018	2.418	2.698	3.538	
8	1.397	1.860	2.306	2.896	3.355	5.041	43	1.302	1.681	2.017	2.416	2.695	3.532	
9	1.383	1.833	2.262	2.821	3.250	4.781	44	1.301	1.680	2.015	2.414	2.692	3.526	
10	1.372	1.812	2.228	2.764	3.169	4.587	45	1.301	1.679	2.014	2.412	2.690	3.520	
11	1.363	1.796	2.201	2.718	3.106	4.437	46	1.300	1.679	2.013	2.410	2.687	3.515	
12	1.356	1.782	2.179	2.681	3.055	4.318	47	1.300	1.678	2.012	2.408	2.685	3.510	
13	1.350	1.771	2.160	2.650	3.012	4.221	48	1.299	1.677	2.011	2.407	2.682	3.505	
14	1.345	1.761	2.145	2.624	2.977	4.140	49	1.299	1.677	2.010	2.405	2.680	3.500	
15	1.341	1.753	2.131	2.602	2.947	4.073	50	1.299	1.676	2.009	2.403	2.678	3.496	
16	1.337	1.746	2.120	2.583	2.921	4.015	51	1.298	1.675	2.008	2.402	2.676	3.492	
17	1.333	1.740	2.110	2.567	2.898	3.965	52	1.298	1.675	2.007	2.400	2.674	3.488	
18	1.330	1.734	2.101	2.552	2.878	3.922	53	1.298	1.674	2.006	2.399	2.672	3.484	
19	1.328	1.729	2.093	2.539	2.861	3.883	54	1.297	1.674	2.005	2.397	2.670	3.480	
20	1.325	1.725	2.086	2.528	2.845	3.850	55	1.297	1.673	2.004	2.396	2.668	3.476	
21	1.323	1.721	2.080	2.518	2.831	3.819	56	1.297	1.673	2.003	2.395	2.667	3.473	
22	1.321	1.717	2.074	2.508	2.819	3.792	57	1.297	1.672	2.002	2.394	2.665	3.470	
23	1.319	1.714	2.069	2.500	2.807	3.768	58	1.296	1.672	2.002	2.392	2.663	3.466	
24	1.318	1.711	2.064	2.492	2.797	3.745	59	1.296	1.671	2.001	2.391	2.662	3.463	
25	1.316	1.708	2.060	2.485	2.787	3.725	60	1.296	1.671	2.000	2.390	2.660	3.460	
26	1.315	1.706	2.056	2.479	2.779	3.707	61	1.296	1.670	2.000	2.389	2.659	3.457	
27	1.314	1.703	2.052	2.473	2.771	3.690	62	1.295	1.670	1.999	2.388	2.657	3.454	
28	1.313	1.701	2.048	2.467	2.763	3.674	63	1.295	1.669	1.998	2.387	2.656	3.452	
29	1.311	1.699	2.045	2.462	2.756	3.659	64	1.295	1.669	1.998	2.386	2.655	3.449	
30	1.310	1.697	2.042	2.457	2.750	3.646	65	1.295	1.669	1.997	2.385	2.654	3.447	
31	1.309	1.696	2.040	2.453	2.744	3.633	66	1.295	1.668	1.997	2.384	2.652	3.444	
32	1.309	1.694	2.037	2.449	2.738	3.622	67	1.294	1.668	1.996	2.383	2.651	3.442	
33	1.308	1.692	2.035	2.445	2.733	3.611	68	1.294	1.668	1.995	2.382	2.650	3.439	
34	1.307	1.691	2.032	2.441	2.728	3.601	69	1.294	1.667	1.995	2.382	2.649	3.437	
35	1.306	1.690	2.030	2.438	2.724	3.591	70	1.294	1.667	1.994	2.381	2.648	3.435	