Lampiran 1

Perbandingan NPL di 5 negara ASEAN

	Thailand	Malaysia	Indonesia	Singapore	Philippines
2012	2.43	2.02	1.77	1.04	2.22
2013	2.3	1.85	1.69	0.87	2.44
2014	2.31	1.65	2.07	0.76	2.02
2015	2.68	1.6	2.43	0.92	1.89
2016	2.99	1.61	2.9	1.22	1.72
2017	3.07	1.55	2.56	1.4	1.58

Perbandingan NPL Perbankan Nasional dan Kelompok Bank Campuran Periode 2012 2018						
Tahun	**NPL Perbankan Nasional**			**NPL Bank Campuran**		
	Kredit Bermasalah (Jutaan Rupiah)	**Total Kredit (Jutaan Rupiah)**	**NPL (Persen)**	**Kredit Bermasalah (Jutaan Rupiah)**	**Total Kredit (Jutaan Rupiah)**	**NPL (Persen)**
2012	121986	3294626	3.70	2680	150368	1.78
2013	114956	3589641	3.20	3658	194356	1.88
2014	92726	3197526	2.90	4458	195925	2.28
2015	90329	4098254	2.20	5135	216535	2.37
2016	96953	4355256	2.23	5294	220921	2.40
2017	133259	4489562	2.97	5563	223651	2.49
2018	90159	4353694	2.07	6344	236591	2.68
Rata - Rata	**105767**	**3911223**	**2.75**	**4733**	**205478**	**2.27**

Perbandingan LDR Perbankan Nasional dan Kelompok Bank Campuran Periode 2012 2018						
Tahun	LDR Perbankan Nasional			LDR Bank Campuran		
	Kredit yang diberikan (Jutaan Rupiah)	Dana pihak ketiga (Jutaan Rupiah)	LDR (Persen)	Kredit yang diberikan (Jutaan Rupiah)	Dana pihak ketiga (Jutaan Rupiah)	LDR (Persen)
2012	2,342,315	2,782,142	81.98	137,941	125,891	109.48
2013	2,853,051	3,269,254	87.18	173,912	145,320	119.54
2014	3,310,280	3,673,715	90.14	206,607	163,675	123.55
2015	3,674,164	4,128,975	88.97	227,673	178,274	119.54
2016	3,969,074	4,388,687	90.43	241,134	192,238	123.55
2017	4,292,540	4,814,021	89.17	223,924	182,036	127.76
2018	4,758,409	5,158,953	92.13	246,030	185,428	128.47

Lampiran2

Data Input Variabel per Tahun

Tahun	NPL (%)	LDR (%)	CAR (%)	SIZE (%)	BOPO (%)
2012	1.78	109.48	19.24	16.20	79.29
2013	1.88	119.54	20.04	16.45	78.66
2014	2.28	123.55	19.97	16.67	80.94
2015	2.37	119.54	20.11	16.89	87.11
2016	2.40	123.55	21.11	16.81	89.83
2017	2.49	127.76	22.14	16.90	81.82
2018	2.68	128.47	21.45	17.00	88.91
Rata - Rata	2.27	121.70	20.58	16.70	83.79

Lampiran3

Data Input Variabel Untuk Pengolahan STATA 15.0

KODE BANK	TAHUN	TRIWULAN	NPL	LDR	CAR	SIZE	BOPO	INFLASI	SBI
CMTH	2012	1	1.000	72.460	16.618	95.253	**16.286**	4.000	5.830
CMTH		2	0.910	85.565	16.536	90.889	16.767	4.500	5.750
CMTH		3	1.030	79.730	16.561	91.459	16.834	4.300	5.750
CMTH		4	0.840	87.640	16.483	90.537	17.326	4.300	5.750
CMTH	2013	1	0.900	84.116	16.663	87.431	32.614	5.900	5.750
CMTH		2	0.780	106.633	16.638	85.231	31.244	5.900	5.830
CMTH		3	0.770	95.009	16.731	79.115	29.391	8.400	6.910
CMTH		4	0.720	94.534	16.841	80.795	27.452	8.400	7.410
CMTH	2014	1	0.860	94.793	16.809	90.095	27.245	7.320	7.250
CMTH		2	0.760	102.263	16.836	89.323	26.328	6.700	7.250
CMTH		3	0.860	105.981	16.933	88.026	25.348	4.500	7.250
CMTH		4	0.800	102.392	16.919	87.166	24.966	8.400	7.670
CMTH	2015	1	0.740	101.925	16.945	90.819	24.793	6.380	7.650
CMTH		2	1.670	102.853	17.026	108.000	23.225	7.260	7.310
CMTH		3	2.070	106.276	17.048	100.772	22.164	6.800	7.080
CMTH		4	3.490	89.960	16.922	104.607	25.413	3.400	6.750
CMTH	2016	1	3.920	88.063	16.875	103.211	27.156	4.450	6.750
CMTH		2	3.400	86.473	16.794	120.017	28.758	3.450	6.500
CMTH		3	3.960	90.664	16.726	119.543	28.879	3.100	6.500
CMTH		4	3.640	88.377	16.752	128.271	29.446	3.000	6.250
CMTH	2017	1	3.560	87.952	16.816	92.338	28.283	3.610	6.250
CMTH		2	3.910	83.701	16.843	93.162	27.940	4.370	6.250
CMTH		3	3.960	83.304	16.841	93.434	27.876	3.720	4.560
CMTH		4	3.860	89.380	16.816	95.134	27.778	3.610	4.560
CMTH	2018	1	2.420	89.913	16.831	96.562	27.487	3.400	4.250

CMTH		2	2.560	87.904	16.910	99.188	25.441	3.120	4.250
CMTH		3	2.770	94.355	16.859	98.859	25.828	2.880	4.787
CMTH		4	3.190	97.905	16.886	98.765	26.742	3.130	4.436
AGR	2012	1	0.380	57.343	13.953	95.527	**42.546**	4.000	5.830
AGR		2	0.060	57.769	13.888	95.678	42.757	4.500	5.750
AGR		3	0.050	57.515	13.844	93.309	39.075	4.300	5.750
AGR		4	0.080	87.690	14.010	93.509	32.863	4.300	5.750
AGR	2013	1	0.070	99.461	14.154	91.384	27.488	5.900	5.750
AGR		2	0.060	73.455	14.488	93.342	25.723	5.900	5.830
AGR		3	0.500	70.393	14.640	94.386	23.343	8.400	6.910
AGR		4	0.340	85.470	14.736	92.468	18.018	8.400	7.410
AGR	2014	1	0.330	70.780	14.930	97.082	17.027	7.320	7.250
AGR		2	0.970	79.489	14.930	98.838	15.514	6.700	7.250
AGR		3	1.060	80.473	14.996	98.916	14.557	4.500	7.250
AGR		4	0.670	71.375	15.229	97.941	18.024	8.400	7.670
AGR	2015	1	1.280	85.149	15.106	99.788	18.080	6.380	7.650
AGR		2	1.960	81.676	15.212	97.526	17.481	7.260	7.310
AGR		3	3.500	78.733	15.247	98.682	16.414	6.800	7.080
AGR		4	1.750	78.492	15.255	99.197	18.773	3.400	6.750
AGR	2016	1	1.860	70.997	15.301	98.340	19.157	4.450	6.750
AGR		2	0.030	71.970	15.217	98.098	19.786	3.450	6.500
AGR		3	2.820	80.111	12.857	98.346	19.409	3.100	6.500
AGR		4	3.560	84.538	15.217	98.163	17.324	3.000	6.250
AGR	2017	1	3.220	73.539	15.281	98.526	18.075	3.610	6.250
AGR		2	3.390	74.379	15.250	98.497	19.082	4.370	6.250
AGR		3	3.630	74.239	15.238	98.633	18.555	3.720	4.560
AGR		4	5.450	84.463	15.175	102.107	18.283	3.610	4.560
AGR	2018	1	5.490	82.335	15.202	102.593	16.737	3.400	4.250
AGR		2	5.290	82.252	15.252	103.352	16.387	3.120	4.250

AGR		3	5.120	86.366	15.192	101.897	15.816	2.880	4.787
AGR		4	6.440	85.462	15.239	108.129	16.225	3.130	4.436
ANZ	2012	1	2.000	99.216	17.138	86.612	**13.729**	4.000	5.830
ANZ		2	2.000	101.953	17.176	82.596	13.775	4.500	5.750
ANZ		3	2.000	89.551	17.229	80.568	13.987	4.300	5.750
ANZ		4	2.000	97.036	17.162	77.792	15.651	4.300	5.750
ANZ	2013	1	2.000	95.820	17.207	84.295	15.423	5.900	5.750
ANZ		2	1.000	98.671	17.243	85.674	15.564	5.900	5.830
ANZ		3	1.000	97.271	17.301	80.957	15.122	8.400	6.910
ANZ		4	2.000	89.033	17.286	82.505	22.748	8.400	7.410
ANZ	2014	1	2.000	94.307	17.337	81.361	16.221	7.320	7.250
ANZ		2	2.000	108.234	17.361	84.094	16.868	6.700	7.250
ANZ		3	2.000	97.598	17.354	84.571	17.311	4.500	7.250
ANZ		4	2.000	102.775	17.419	82.031	18.049	8.400	7.670
ANZ	2015	1	2.710	103.427	17.460	88.483	18.409	6.380	7.650
ANZ		2	2.870	100.604	17.527	90.569	18.161	7.260	7.310
ANZ		3	3.100	97.718	17.629	93.573	17.016	6.800	7.080
ANZ		4	3.980	98.192	17.560	95.722	17.777	3.400	6.750
ANZ	2016	1	4.410	107.338	17.257	102.073	19.483	4.450	6.750
ANZ		2	6.380	99.339	17.465	96.448	18.234	3.450	6.500
ANZ		3	6.560	101.328	17.279	95.790	21.369	3.100	6.500
ANZ		4	6.350	98.707	17.257	93.156	22.607	3.000	6.250
ANZ	2017	1	6.780	92.125	17.234	79.149	24.107	3.610	6.250
ANZ		2	5.930	98.683	17.100	79.315	23.392	4.370	6.250
ANZ		3	3.160	92.442	17.218	79.627	22.615	3.720	4.560
ANZ		4	3.240	87.625	17.255	80.232	22.824	3.610	4.560
ANZ	2018	1	3.020	101.423	16.870	93.987	32.835	3.400	4.250
ANZ		2	2.890	118.628	16.849	90.213	34.262	3.120	4.250
ANZ		3	2.720	122.710	16.886	89.674	33.421	2.880	4.787

ANZ		4	1.310	130.906	16.974	87.073	32.111	3.130	4.436
BNP	2012	1	0.000	95.035	15.161	72.710	**59.118**	4.000	5.830
BNP		2	0.000	106.379	15.201	64.484	50.773	4.500	5.750
BNP		3	0.000	139.209	15.122	67.680	57.164	4.300	5.750
BNP		4	0.000	178.181	15.254	66.725	43.847	4.300	5.750
BNP	2013	1	0.000	99.011	15.268	73.969	44.949	5.900	5.750
BNP		2	0.000	84.362	15.400	180.331	37.597	5.900	5.830
BNP		3	0.000	82.000	15.659	96.615	29.469	8.400	6.910
BNP		4	0.000	105.815	15.403	68.305	26.138	8.400	7.410
BNP	2014	1	0.000	91.932	15.615	73.512	27.990	7.320	7.250
BNP		2	0.000	141.330	15.762	58.625	26.012	6.700	7.250
BNP		3	0.000	191.349	15.819	39.475	25.451	4.500	7.250
BNP		4	0.000	124.710	16.092	49.851	22.805	8.400	7.670
BNP	2015	1	0.000	212.016	16.098	88.612	26.128	6.380	7.650
BNP		2	0.000	189.779	16.325	89.696	22.233	7.260	7.310
BNP		3	0.000	199.182	16.524	88.941	20.693	6.800	7.080
BNP		4	0.000	232.048	16.375	63.468	24.386	3.400	6.750
BNP	2016	1	0.000	135.006	16.442	77.410	24.683	4.450	6.750
BNP		2	0.000	154.713	16.374	83.993	25.166	3.450	6.500
BNP		3	0.000	142.570	16.595	78.398	23.797	3.100	6.500
BNP		4	0.000	155.254	16.733	58.707	22.912	3.000	6.250
BNP	2017	1	0.000	117.963	16.709	78.227	25.362	3.610	6.250
BNP		2	0.000	117.668	16.702	76.344	25.054	4.370	6.250
BNP		3	0.000	149.650	16.653	75.913	25.484	3.720	4.560
BNP		4	0.000	132.690	16.690	54.586	22.476	3.610	4.560
BNP	2018	1	0.000	120.170	16.775	92.031	24.143	3.400	4.250
BNP		2	0.000	185.192	16.825	99.494	19.441	3.120	4.250
BNP		3	0.000	192.200	16.913	96.360	33.279	2.880	4.787
BNP		4	0.000	150.573	16.944	94.651	29.818	3.130	4.436

CTBC	2012	1	2.000	124.623	15.586	87.403	**39.974**	4.000	5.830
CTBC		2	2.000	133.864	15.628	86.162	37.363	4.500	5.750
CTBC		3	2.000	137.119	15.597	85.548	37.065	4.300	5.750
CTBC		4	2.000	122.168	15.715	83.780	37.111	4.300	5.750
CTBC	2013	1	2.000	123.503	15.803	80.258	35.618	5.900	5.750
CTBC		2	2.000	134.815	15.813	81.950	32.938	5.900	5.830
CTBC		3	1.000	137.521	15.930	84.551	32.701	8.400	6.910
CTBC		4	2.000	126.503	15.994	84.015	33.240	8.400	7.410
CTBC	2014	1	1.000	121.951	16.022	81.472	36.565	7.320	7.250
CTBC		2	1.000	119.301	16.080	79.763	31.892	6.700	7.250
CTBC		3	1.000	133.990	16.150	78.323	31.216	4.500	7.250
CTBC		4	1.000	112.484	16.327	80.278	30.701	8.400	7.670
CTBC	2015	1	1.790	119.924	16.313	85.017	27.437	6.380	7.650
CTBC		2	2.680	136.160	16.255	88.136	27.531	7.260	7.310
CTBC		3	3.170	112.471	16.424	87.227	25.861	6.800	7.080
CTBC		4	2.880	118.138	16.367	90.325	27.137	3.400	6.750
CTBC	2016	1	3.580	105.314	16.364	83.612	29.781	4.450	6.750
CTBC		2	2.690	108.200	16.298	81.382	30.486	3.450	6.500
CTBC		3	3.110	107.617	16.224	83.584	30.125	3.100	6.500
CTBC		4	4.900	107.136	16.293	88.795	29.034	3.000	6.250
CTBC	2017	1	5.060	99.702	16.284	95.234	29.200	3.610	6.250
CTBC		2	3.430	100.705	16.344	95.513	27.759	4.370	6.250
CTBC		3	1.900	104.966	16.370	98.145	31.034	3.720	4.560
CTBC		4	1.740	108.841	16.429	96.298	24.980	3.610	4.560
CTBC	2018	1	1.700	108.530	16.461	89.185	25.972	3.400	4.250
CTBC		2	2.090	111.245	16.534	95.494	35.862	3.120	4.250
CTBC		3	2.220	117.038	16.546	93.922	24.980	2.880	4.787
CTBC		4	2.540	115.012	16.516	95.328	25.913	3.130	4.436
DBS	2012	1	1.000	99.403	17.398	86.645	13.154	4.000	5.830

DBS		2	1.000	101.490	17.494	77.073	12.172	4.500	5.750
DBS		3	1.000	95.019	17.557	78.166	11.855	4.300	5.750
DBS		4	1.000	96.299	17.546	79.235	12.676	4.300	5.750
DBS	2013	1	1.000	91.650	17.588	78.156	11.891	5.900	5.750
DBS		2	0.000	101.778	17.672	83.680	11.478	5.900	5.830
DBS		3	1.000	98.468	17.716	88.937	12.844	8.400	6.910
DBS		4	1.000	104.187	17.827	82.955	13.651	8.400	7.410
DBS	2014	1	1.000	97.415	17.817	86.680	14.586	7.320	7.250
DBS		2	3.000	101.141	17.871	87.898	14.198	6.700	7.250
DBS		3	3.000	100.579	17.911	81.093	13.968	4.500	7.250
DBS		4	4.000	92.826	18.000	86.317	15.954	8.400	7.670
DBS	2015	1	3.090	80.486	18.112	88.683	15.123	6.380	7.650
DBS		2	3.250	103.575	17.970	99.792	15.018	7.260	7.310
DBS		3	3.950	103.114	18.022	100.751	13.772	6.800	7.080
DBS		4	4.160	102.934	17.956	95.283	14.608	3.400	6.750
DBS	2016	1	4.200	100.420	17.959	89.455	15.081	4.450	6.750
DBS		2	3.780	100.243	17.960	89.037	15.416	3.450	6.500
DBS		3	3.630	110.138	17.963	88.490	15.948	3.100	6.500
DBS		4	3.740	90.310	18.008	88.840	15.225	3.000	6.250
DBS	2017	1	1.300	95.009	18.037	80.396	14.974	3.610	6.250
DBS		2	3.900	91.114	18.038	82.755	15.785	4.370	6.250
DBS		3	3.360	83.067	18.075	87.782	16.081	3.720	4.560
DBS		4	3.220	92.263	17.997	90.801	15.306	3.610	4.560
DBS	2018	1	3.290	90.418	18.217	91.510	13.240	3.400	4.250
DBS		2	3.770	91.729	18.349	90.801	13.060	3.120	4.250
DBS		3	3.140	87.701	18.377	99.046	12.875	2.880	4.787
DBS		4	3.120	91.954	18.329	97.111	13.415	3.130	4.436
MZH	2012	1	2.000	201.799	16.930	55.991	**18.082**	4.000	5.830
MZH		2	2.000	206.699	16.998	53.592	16.619	4.500	5.750

MZH		3	2.000	234.432	16.996	61.773	16.309	4.300	5.750
MZH		4	1.000	223.908	17.099	55.172	17.922	4.300	5.750
MZH	2013	1	1.000	194.912	17.211	69.502	26.425	5.900	5.750
MZH		2	1.000	215.446	17.282	62.761	24.395	5.900	5.830
MZH		3	1.000	208.654	17.479	56.046	20.062	8.400	6.910
MZH		4	1.000	236.891	17.523	78.434	19.584	8.400	7.410
MZH	2014	1	0.000	225.541	17.469	49.780	20.795	7.320	7.250
MZH		2	2.000	240.389	17.505	55.996	20.071	6.700	7.250
MZH		3	0.000	286.334	17.476	45.719	20.792	4.500	7.250
MZH		4	2.000	256.350	17.536	45.721	19.921	8.400	7.670
MZH	2015	1	2.170	226.368	17.563	46.203	21.497	6.380	7.650
MZH		2	2.120	242.743	17.604	44.749	20.576	7.260	7.310
MZH		3	2.300	220.192	17.675	47.008	19.669	6.800	7.080
MZH		4	2.450	212.664	17.561	47.409	21.431	3.400	6.750
MZH	2016	1	1.900	222.413	17.503	54.275	22.370	4.450	6.750
MZH		2	1.930	183.613	17.541	56.338	22.382	3.450	6.500
MZH		3	3.140	198.317	17.544	53.559	21.841	3.100	6.500
MZH		4	1.160	182.865	17.544	51.068	21.706	3.000	6.250
MZH	2017	1	1.140	163.973	17.581	47.414	22.149	3.610	6.250
MZH		2	1.150	157.379	17.610	50.158	22.697	4.370	6.250
MZH		3	0.920	191.024	17.640	49.551	16.821	3.720	4.560
MZH		4	0.820	187.277	17.695	52.213	16.109	3.610	4.560
MZH	2018	1	0.700	160.387	17.753	52.541	13.314	3.400	4.250
MZH		2	0.670	185.650	17.834	58.851	13.456	3.120	4.250
MZH		3	0.640	176.511	17.991	60.804	19.017	2.880	4.787
MZH		4	0.580	195.278	17.937	63.065	19.744	3.130	4.436
RBB	2012	1	2.000	96.752	16.428	92.726	**11.042**	4.000	5.830
RBB		2	3.000	105.063	16.438	95.345	10.622	4.500	5.750
RBB		3	4.000	105.669	16.425	97.998	10.160	4.300	5.750

RBB		4	4.000	108.776	16.444	95.636	10.511	4.300	5.750
RBB	2013	1	4.000	98.199	16.457	90.644	10.596	5.900	5.750
RBB		2	4.000	102.500	16.428	95.420	10.228	5.900	5.830
RBB		3	1.000	108.470	16.465	94.650	10.355	8.400	6.910
RBB		4	2.000	104.774	16.421	97.522	10.806	8.400	7.410
RBB	2014	1	2.000	110.549	16.476	96.832	54.460	7.320	7.250
RBB		2	2.000	113.403	16.538	98.481	9.592	6.700	7.250
RBB		3	2.000	97.505	16.626	99.504	9.543	4.500	7.250
RBB		4	3.000	88.513	16.593	96.045	51.323	8.400	7.670
RBB	2015	1	4.070	86.206	16.631	100.839	9.777	6.380	7.650
RBB		2	6.280	104.905	16.585	125.506	10.830	7.260	7.310
RBB		3	6.450	98.966	16.600	114.636	10.288	6.800	7.080
RBB		4	8.410	103.514	16.543	147.496	16.527	3.400	6.750
RBB	2016	1	8.860	86.500	16.581	11.974	17.756	4.450	6.750
RBB		2	5.590	90.792	16.541	95.839	17.802	3.450	6.500
RBB		3	6.860	96.383	16.480	95.022	19.010	3.100	6.500
RBB		4	4.460	92.194	16.387	96.725	21.654	3.000	6.250
RBB	2017	1	5.350	97.884	16.257	100.806	24.631	3.610	6.250
RBB		2	3.100	87.081	16.226	102.052	24.880	4.370	6.250
RBB		3	2.860	101.851	16.210	102.041	23.531	3.720	4.560
RBB		4	2.450	102.615	16.291	98.387	22.218	3.610	4.560
RBB	2018	1	2.730	96.157	16.325	112.277	21.812	3.400	4.250
RBB		2	2.850	119.046	16.497	119.086	23.061	3.120	4.250
RBB		3	3.580	124.695	16.348	119.276	17.406	2.880	4.787
RBB		4	5.820	137.964	16.441	163.219	14.902	3.130	4.436
RSP	2012	1	2.000	138.237	16.147	65.157	**19.623**	4.000	5.830
RSP		2	3.000	145.156	16.127	61.618	19.077	4.500	5.750
RSP		3	3.000	148.415	16.151	60.203	19.750	4.300	5.750
RSP		4	1.000	151.603	16.279	59.793	19.616	4.300	5.750

RSP	2013	1	1.000	139.112	16.240	61.211	22.968	5.900	5.750
RSP		2	1.000	146.523	16.249	71.316	21.834	5.900	5.830
RSP		3	1.000	145.139	16.342	72.331	21.163	8.400	6.910
RSP		4	1.000	142.242	16.444	72.186	20.899	8.400	7.410
RSP	2014	1	1.000	142.242	16.444	72.186	20.899	7.320	7.250
RSP		2	3.000	155.345	16.404	67.523	20.237	6.700	7.250
RSP		3	2.000	142.551	16.523	71.347	19.565	4.500	7.250
RSP		4	2.000	162.533	16.515	76.555	19.296	8.400	7.670
RSP	2015	1	3.470	163.568	16.553	78.314	18.931	6.380	7.650
RSP		2	3.330	145.018	16.620	76.447	18.648	7.260	7.310
RSP		3	2.590	143.030	16.669	78.848	18.105	6.800	7.080
RSP		4	1.150	139.932	16.628	82.920	19.399	3.400	6.750
RSP	2016	1	1.170	135.846	16.587	69.665	20.876	4.450	6.750
RSP		2	1.190	145.305	16.506	72.173	21.629	3.450	6.500
RSP		3	2.480	156.461	16.455	74.525	22.628	3.100	6.500
RSP		4	0.160	239.399	16.535	82.024	21.899	3.000	6.250
RSP	2017	1	0.170	182.242	16.543	82.350	22.331	3.610	6.250
RSP		2	0.140	213.197	16.517	80.031	22.809	4.370	6.250
RSP		3	2.080	128.183	16.493	83.133	19.391	3.720	4.560
RSP		4	1.980	124.487	16.473	78.263	19.039	3.610	4.560
RSP	2018	1	2.700	117.804	16.521	94.540	18.659	3.400	4.250
RSP		2	2.540	115.610	16.549	108.650	17.401	3.120	4.250
RSP		3	3.350	123.920	16.621	106.907	15.753	2.880	4.787
RSP		4	2.540	117.186	16.700	96.763	15.475	3.130	4.436
SMTM	2012	1	0.660	146.743	17.006	77.406	**33.691**	4.000	5.830
SMTM		2	0.570	211.399	16.980	74.220	28.912	4.500	5.750
SMTM		3	0.540	198.659	17.113	72.983	27.410	4.300	5.750
SMTM		4	0.700	183.933	17.285	69.097	25.104	4.300	5.750
SMTM	2013	1	0.430	208.944	17.248	63.839	25.592	5.900	5.750

SMTM		2	0.280	199.462	17.330	66.332	22.637	5.900	5.830
SMTM		3	0.290	202.092	17.534	78.609	20.533	8.400	6.910
SMTM		4	0.380	185.041	17.662	75.259	19.352	8.400	7.410
SMTM	2014	1	0.280	204.105	17.593	79.497	20.101	7.320	7.250
SMTM		2	0.890	254.512	17.561	79.834	18.757	6.700	7.250
SMTM		3	0.760	277.954	17.593	72.275	18.903	4.500	7.250
SMTM		4	0.660	251.095	17.675	67.733	17.360	8.400	7.670
SMTM	2015	1	0.500	242.056	17.779	71.479	17.868	6.380	7.650
SMTM		2	0.540	286.988	17.757	72.086	17.832	7.260	7.310
SMTM		3	0.460	287.579	17.887	69.999	16.481	6.800	7.080
SMTM		4	0.430	250.150	17.876	72.233	17.471	3.400	6.750
SMTM	2016	1	0.380	245.544	17.878	92.683	17.737	4.450	6.750
SMTM		2	0.300	236.051	17.945	87.910	36.693	3.450	6.500
SMTM		3	0.170	234.732	18.005	84.252	15.946	3.100	6.500
SMTM		4	2.060	239.394	18.107	83.984	15.469	3.000	6.250
SMTM	2017	1	1.740	182.228	18.171	83.133	15.535	3.610	6.250
SMTM		2	1.520	213.436	18.044	78.263	16.859	4.370	6.250
SMTM		3	0.170	239.452	18.043	79.003	15.968	3.720	4.560
SMTM		4	0.150	223.220	18.154	78.663	14.708	3.610	4.560
SMTM	2018	1	0.140	229.847	18.242	83.613	14.252	3.400	4.250
SMTM		2	0.150	269.399	18.234	80.031	13.014	3.120	4.250
SMTM		3	0.150	244.464	18.310	83.726	12.519	2.880	4.787
SMTM		4	0.180	231.470	18.293	85.042	12.435	3.130	4.436
WOORI	2012	1	2.090	88.001	15.408	82.952	16.691	4.000	5.830
WOORI		2	2.020	91.039	15.520	84.329	18.641	4.500	5.750
WOORI		3	2.180	93.203	15.605	82.151	13.897	4.300	5.750
WOORI		4	1.990	84.067	15.846	81.484	22.857	4.300	5.750
WOORI	2013	1	2.250	97.088	15.771	82.938	22.063	5.900	5.750
WOORI		2	2.910	97.742	15.793	85.159	19.304	5.900	5.830

WOORI		3	3.130	94.717	15.895	84.261	14.303	8.400	6.910
WOORI		4	2.640	90.310	15.923	85.208	13.986	8.400	7.410
WOORI	2014	1	3.040	90.448	15.924	96.234	14.106	7.320	7.250
WOORI		2	2.760	87.753	15.934	96.908	13.681	6.700	7.250
WOORI		3	3.140	94.960	15.930	96.795	14.036	4.500	7.250
WOORI		4	2.510	101.442	16.615	55.645	73.982	8.400	7.670
WOORI	2015	1	2.640	102.209	16.711	74.317	54.520	6.380	7.650
WOORI		2	2.710	104.340	16.718	79.000	35.073	7.260	7.310
WOORI		3	2.380	97.767	16.777	81.017	34.150	6.800	7.080
WOORI		4	1.980	97.300	16.812	79.890	33.714	3.400	6.750
WOORI	2016	1	2.010	91.483	16.867	84.573	33.771	4.450	6.750
WOORI		2	1.060	103.691	16.850	81.263	33.159	3.450	6.500
WOORI		3	1.860	101.651	16.871	79.448	31.724	3.100	6.500
WOORI		4	1.530	110.496	16.935	79.246	30.911	3.000	6.250
WOORI	2017	1	1.420	101.216	17.010	69.798	27.918	3.610	6.250
WOORI		2	1.860	103.363	16.999	76.284	29.948	4.370	6.250
WOORI		3	2.320	103.642	17.179	76.640	12.313	3.720	4.560
WOORI		4	1.530	111.102	17.130	73.046	37.233	3.610	4.560
WOORI	2018	1	1.630	110.558	17.154	69.118	36.430	3.400	4.250
WOORI		2	1.760	133.268	17.146	68.624	34.506	3.120	4.250
WOORI		3	2.570	141.757	17.179	72.260	33.778	2.880	4.787
WOORI		4	1.720	146.376	17.204	70.018	34.223	3.130	4.436

Lampiran 4

Hasil pengolahan data pada STATA 15.0 untuk variabel Dependen *Non Performing Loan*

1. Hasil Pengolahan analisis deskriptif

```
17 . summarize npl ldr car size  bopo inflasi sbi
```

Variable	Obs	Mean	Std. Dev.	Min	Max
npl	308	2.026526	1.647458	0	8.86
ldr	308	128.9104	51.55148	57.343	287.579
car	308	22.6066	9.03861	9.543	73.982
size	308	16.70456	.9281962	12.857	18.377
bopo	308	84.11696	17.8028	11.974	180.331
inflasi	308	4.939286	1.796373	2.88	8.4
sbi	308	6.161893	1.061943	4.25	7.67

2. Hasil analisis Model Generalised Least Squares

```
18 . xtgls npl ldr car size bopo inflasi sbi

Cross-sectional time-series FGLS regression

Coefficients:  generalized least squares
Panels:        homoskedastic
Correlation:   no autocorrelation
```

Estimated covariances	=	1	Number of obs	=	308
Estimated autocorrelations	=	0	Number of groups	=	77
Estimated coefficients	=	7	Time periods	=	4
			Wald chi2(6)	=	144.38
Log likelihood	= -531.0958		Prob > chi2	=	0.0000

npl	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ldr	-.0132492	.0018856	-7.03	0.000	-.016945	-.0095534
car	-.0281428	.0092399	-3.05	0.002	-.0462527	-.0100329
size	.3267689	.0992024	3.29	0.001	.1323358	.5212021
bopo	.0155806	.0052101	2.99	0.003	.0053689	.0257922
inflasi	-.30358	.0598662	-5.07	0.000	-.4209156	-.1862444
sbi	.3454818	.1011992	3.41	0.001	.147135	.5438286
_cons	-3.027775	1.919841	-1.58	0.115	-6.790593	.7350435

3. Hasil analisis model common effect

```
20 . reg npl ldr car size bopo inflasi sbi
```

Source	SS	df	MS		
Model	265.929005	6	44.3215008	Number of obs	= 308
Residual	567.304973	301	1.88473413	F(6, 301)	= 23.52
				Prob > F	= 0.0000
				R-squared	= 0.3192
				Adj R-squared	= 0.3056
Total	833.233978	307	2.71411719	Root MSE	= 1.3729

npl	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ldr	-.0132492	.0019075	-6.95	0.000	-.0170028	-.0094956
car	-.0281428	.0093467	-3.01	0.003	-.046536	-.0097496
size	.3267689	.1003493	3.26	0.001	.1292939	.524244
bopo	.0155806	.0052703	2.96	0.003	.0052092	.0259519
inflasi	-.30358	.0605583	-5.01	0.000	-.4227513	-.1844087
sbi	.3454818	.1023692	3.37	0.001	.1440319	.5469317
_cons	-3.027775	1.942036	-1.56	0.120	-6.849462	.7939122

4. Hasil analisis model fixed effect

```
Fixed-effects (within) regression               Number of obs      =       308
Group variable: firm                            Number of groups   =        77

R-sq:                                           Obs per group:
     within  = 0.0223                                         min =         4
     between = 0.0816                                         avg =       4.0
     overall = 0.0723                                         max =         4

                                                F(6,225)           =      0.86
corr(u_i, Xb)  = 0.0132                         Prob > F           =    0.5287
```

npl	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ldr	-.0044501	.0032907	-1.35	0.178	-.0109345	.0020344
car	-.0038249	.0092112	-0.42	0.678	-.0219761	.0143263
size	-.2820966	.303617	-0.93	0.354	-.8803932	.3162
bopo	.000535	.0051589	0.10	0.918	-.009631	.010701
inflasi	-.0696388	.0532816	-1.31	0.193	-.1746336	.035356
sbi	.1447726	.11074	1.31	0.192	-.0734476	.3629928
_cons	6.805849	5.117817	1.33	0.185	-3.279135	16.89083
sigma_u	1.4577094					
sigma_e	.75158059					
rho	.78999351	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(76, 225) = 10.25                     Prob > F = 0.0000
```

5. Hasil analisis model random effect

```
Random-effects GLS regression                   Number of obs      =       308
Group variable: firm                            Number of groups   =        77

R-sq:                                           Obs per group:
     within  = 0.0139                                         min =         4
     between = 0.3757                                         avg =       4.0
     overall = 0.3003                                         max =         4

                                                Wald chi2(6)       =     33.02
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000
```

npl	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ldr	-.0102453	.0023385	-4.38	0.000	-.0148286	-.005662
car	-.0116071	.0085132	-1.36	0.173	-.0282926	.0050785
size	.1924841	.1466202	1.31	0.189	-.0948863	.4798544
bopo	.0061834	.0047627	1.30	0.194	-.0031513	.0155181
inflasi	-.1319618	.0505474	-2.61	0.009	-.2310329	-.0328906
sbi	.1669841	.0987413	1.69	0.091	-.0265453	.3605135
_cons	-.5029825	2.575028	-0.20	0.845	-5.549944	4.543979
sigma_u	1.1391929					
sigma_e	.75158059					
rho	.69673409	(fraction of variance due to u_i)				

6. Hasil uji chow (Memilih antara *Pooled Least Square atau Fixed Effect)*

Fixed-effects (within) regression — Number of obs = 308
Group variable: firm — Number of groups = 77

R-sq: — Obs per group:
within = 0.0223 — min = 4
between = 0.0816 — avg = 4.0
overall = 0.0723 — max = 4

F(6,225) = 0.86
corr(u_i, Xb) = 0.0132 — Prob > F = 0.5287

npl	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ldr	-.0044501	.0032907	-1.35	0.178	-.0109345	.0020344
car	-.0038249	.0092112	-0.42	0.678	-.0219761	.0143263
size	-.2820966	.303617	-0.93	0.354	-.8803932	.3162
bopo	.000535	.0051589	0.10	0.918	-.009631	.010701
inflasi	-.0696388	.0532816	-1.31	0.193	-.1746336	.035356
sbi	.1447726	.11074	1.31	0.192	-.0734476	.3629928
_cons	6.805849	5.117817	1.33	0.185	-3.279135	16.89083
sigma_u	1.4577094					
sigma_e	.75158059					
rho	.78999351	(fraction of variance due to u_i)				

F test that all u_i=0: F(76, 225) = 10.25 — Prob > F = 0.0000

7. Hasil uji LLM (Memilih antara *Pooled Least Square atau Random Effect)*

26 . xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

npl[firm,t] = Xb + u[firm] + e[firm,t]

Estimated results:

	Var	sd = sqrt(Var)
npl	2.714117	1.647458
e	.5648734	.7515806
u	1.297761	1.139193

Test: Var(u) = 0

chibar2(01) = 188.82
Prob > chibar2 = 0.0000

8. Hasil uji Hausman (Memilih antara *Fixed Effect atau Random Effect)*

29 .hausman fe Re

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
ldr	-.0044501	-.0102453	.0057952	.0023152
car	-.0038249	-.0116071	.0077821	.0035173
size	-.2820966	.1924841	-.4745807	.265868
bopo	.000535	.0061834	-.0056484	.0019828
inflasi	-.0696388	-.1319618	.062323	.016849
sbi	.1447726	.1669841	-.0222115	.0501348

b = consistent under Ho and Ha; obtained from xtreg B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 28.79
Prob>chi2 = 0.0001

9. Hasil uji Multikolonieritas untuk Model Terpilih *Fixed Effect*

37 . vif, uncentered

Variable	VIF	1/VIF
size	87.16	0.011473
sbi	62.76	0.015934
bopo	27.41	0.036489
inflasi	16.55	0.060430
ldr	11.41	0.087645
car	6.72	0.148795
Mean VIF	35.33	

10. Hasil Uji Heteroskesdatisitas untul model terpilih *Fixed Effect*

28 . xttest3

Modified Wald test for groupwise heteroskedasticity
in fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (77) = 8.1e+06
Prob>chi2 = 0.0000

11. Hasil Uji Auto Korelasi untuk Model Terpilih *Fixed Effect*

xtserial npl ldr car size bopo inflasi sbi

Wooldridge test for autocorrelation in panel data

H0: no first order autocorrelation

F(1, 76) = 12.098
Prob > F = 0.0008

12. Hasil Uji F setelah Treatment (Model GLS)

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares
Panels: homoskedastic
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	308
Estimated autocorrelations	=	0	Number of groups	=	77
Estimated coefficients	=	7	Time periods	=	4
			Wald chi2(6)	=	144.38
Log likelihood	= -531.0958		Prob > chi2	=	0.0000

13. Hasil Uji t setelah Treatment (Model GLS)

npl	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ldr	-.0132492	.0018856	-7.03	0.000	-.016945	-.0095534
car	-.0281428	.0092399	-3.05	0.002	-.0462527	-.0100329
size	.3267689	.0992024	3.29	0.001	.1323358	.5212021
bopo	.0155806	.0052101	2.99	0.003	.0053689	.0257922
inflasi	-.30358	.0598662	-5.07	0.000	-.4209156	-.1862444
sbi	.3454818	.1011992	3.41	0.001	.147135	.5438286
_cons	-3.027775	1.919841	-1.58	0.115	-6.790593	.7350435

Lampiran 5

Hasil pengolahan data pada STATA 15.0 untuk variabel Dependen *Loan to Deposit Ratio*

1. Hasil Pengolahan analisis deskriptif

   summarize ldr npl car size bopo inflasi sbi

```
16 . summarize ldr npl car size bopo inflasi   sbi
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ldr	308	128.9104	51.55148	57.343	287.579
npl	308	2.026526	1.647458	0	8.86
car	308	22.6066	9.03861	9.543	73.982
size	308	16.70456	.9281962	12.857	18.377
bopo	308	84.11696	17.8028	11.974	180.331
inflasi	308	4.939286	1.796373	2.88	8.4
sbi	308	6.161893	1.061943	4.25	7.67

2. Hasil analisis Model *Generalised Least Squares*

   xtgls ldr npl car size bopo inflasi sbi Cross-sectional time-series FGLS regression Coefficients:

   generalized least squares

Panels: **homoskedastic**

Correlation: **no autocorrelation**

Estimated covariances	= 1	Number of obs	= 308
Estimated autocorrelations	= 0	Number of groups	= 77
Estimated coefficients	= 7	Time periods	= 4
		Wald chi2(6)	= 254.85
Log likelihood	= -1557.998	Prob > chi2	= 0.0000

ldr	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
npl	-10.42678	1.483958	-7.03	0.000	-13.33528	-7.518272
car	-.3511744	.2623203	-1.34	0.181	-.8653127	.1629639
size	18.6631	2.624245	7.11	0.000	13.51968	23.80653
bopo	-.9194489	.1387013	-6.63	0.000	-1.191298	-.6475993
inflasi	-4.023645	1.733033	-2.32	0.020	-7.420327	-.6269622
sbi	4.961829	2.878309	1.72	0.085	-.6795535	10.60321
_cons	-87.13857	53.846	-1.62	0.106	-192.6748	18.39765

3. Hasil analisis model *commont effect*

```
20 . reg ldr npl  car  size bopo inflasi sbi
```

Source	SS	df	MS
Model	369414.756	6	61569.126
Residual	446454.563	301	1483.23775
Total	815869.319	307	2657.55478

Number of obs	= 308
F(6, 301)	= 41.51
Prob > F	= 0.0000
R-squared	= 0.4528
Adj R-squared	= 0.4419
Root MSE	= 38.513

ldr	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
npl	-10.42678	1.501115	-6.95	0.000	-13.38078	-7.472769
car	-.3511744	.265353	-1.32	0.187	-.8733563	.1710075
size	18.6631	2.654584	7.03	0.000	13.43921	23.887
bopo	-.9194489	.1403048	-6.55	0.000	-1.195552	-.6433463
inflasi	-4.023645	1.753069	-2.30	0.022	-7.473468	-.5738217
sbi	4.961829	2.911586	1.70	0.089	-.767812	10.69147
_cons	-87.13857	54.46852	-1.60	0.111	-194.3259	20.04875

4. Hasil analisis model *Fixed Effect*

```
22 . xtreg ldr npl car size bopo inflasi     sbi,fe
```

Fixed-effects (within) regression
Group variable: firm

R-sq:
within = 0.0219
between = 0.3714
overall = 0.2829

corr(u_i, Xb) = 0.4907

Number of obs	= 308
Number of groups	= 77
Obs per group: min	= 4
avg	= 4.0
max	= 4
F(6,225)	= 0.84
Prob > F	= 0.5418

ldr	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
npl	-1.811773	1.339734	-1.35	0.178	-4.451803	.8282566
car	-.145987	.1856748	-0.79	0.433	-.5118709	.2198969
size	-.2111168	6.13796	-0.03	0.973	-12.30636	11.88412
bopo	-.09265	.1039137	-0.89	0.374	-.2974186	.1121185
inflasi	-1.580738	1.074006	-1.47	0.142	-3.697135	.5356583
sbi	1.231434	2.241425	0.55	0.583	-3.185436	5.648303
_cons	147.4221	103.2029	1.43	0.155	-55.94578	350.79
sigma_u	48.066936					
sigma_e	15.165024					
rho	.90947205	(fraction of variance due to u_i)				

F test that all u_i=0: F(76, 225) = 22.58 Prob > F = 0.0000

5. Hasil analisis model *Random Effect*

```
24 . xtreg ldr npl car size bopo inflasi sbi,re

Random-effects GLS regression                   Number of obs      =       308
Group variable: firm                            Number of groups   =        77
R-sq:                                           Obs per group:
     within  = 0.0138                                         min =         4
     between = 0.4463                                         avg =       4.0
     overall = 0.4007                                         max =         4
                                                Wald chi2(6)       =     38.28
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.0000
```

ldr	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
npl	-4.100553	1.274699	-3.22	0.001	-6.598918	-1.602188
car	-.2005454	.186124	-1.08	0.281	-.5653418	.164251
size	14.19999	3.848072	3.69	0.000	6.657906	21.74207
bopo	-.2631516	.1031878	-2.55	0.011	-.465396	-.0609073
inflasi	-2.12454	1.092224	-1.95	0.052	-4.265259	.0161801
sbi	1.80418	2.202707	0.82	0.413	-2.513045	6.121406
_cons	-73.93854	67.57318	-1.09	0.274	-206.3795	58.50246
sigma_u	35.066089					
sigma_e	15.165024					
rho	.84243861	(fraction of variance due to u_i)				

6. Hasil Uji Chow (Memilih antara *Pooled Least Square* atau *Fixed Effect*)

```
22 . xtreg ldr npl car size bopo inflasi sbi,fe

Fixed-effects (within) regression               Number of obs      =       308
Group variable: firm                            Number of groups   =        77

R-sq:                                           Obs per group:
     within  = 0.0219                                         min =         4
     between = 0.3714                                         avg =       4.0
     overall = 0.2829                                         max =         4

                                                F(6,225)           =      0.84
corr(u_i, Xb)  = 0.4907                         Prob > F           =    0.5418
```

ldr	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
npl	-1.811773	1.339734	-1.35	0.178	-4.451803	.8282566
car	-.145987	.1856748	-0.79	0.433	-.5118709	.2198969
size	-.2111168	6.13796	-0.03	0.973	-12.30636	11.88412
bopo	-.09265	.1039137	-0.89	0.374	-.2974186	.1121185
inflasi	-1.580738	1.074006	-1.47	0.142	-3.697135	.5356583
sbi	1.231434	2.241425	0.55	0.583	-3.185436	5.648303
_cons	147.4221	103.2029	1.43	0.155	-55.94578	350.79
sigma_u	48.066936					
sigma_e	15.165024					
rho	.90947205	(fraction of variance due to u_i)				

```
F test that all u_i=0: F(76, 225) = 22.58                     Prob > F = 0.0000
```

7. Hasil Uji LM (Memilih antara *Pooled Least Square* atau *Random Effect*)

```
26 . xttest0

Breusch and Pagan Lagrangian multiplier test for random effects

        ldr[firm,t] = Xb + u[firm] + e[firm,t]

Estimated results:
                     |       Var      sd = sqrt(Var)
---------------------+------------------------------
                 ldr |   2657.555        51.55148
                   e |   229.9779        15.16502
                   u |   1229.631        35.06609

Test:   Var(u) = 0
                              chibar2(01) =    266.41
                           Prob > chibar2 =    0.0000
```

8. Hasil Uji Hausman (Memilih antara *Fixed Effect* atau *Random Effect*)

```
29 . hausman fe re
```

	Coefficients (b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
npl	-1.811773	-4.100553	2.28878	.4123437
car	-.145987	-.2005454	.0545584	.
size	-.2111168	14.19999	-14.41111	4.781934
bopo	-.09265	-.2631516	.1705016	.0122611
inflasi	-1.580738	-2.12454	.5438012	.
sbi	1.231434	1.80418	-.5727464	.414812

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

```
Test:   Ho:  difference in coefficients not systematic

              chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                      =          33.51

            Prob>chi2 =          0.0000

            (V_b-V_B is not positive definite)
```

9. Hasil Uji Multikolonieritas untuk Model terpilih *Fixed Effect*

. vif,uncentered

Variable	VIF	1/VIF
sbi	64.34	0.015542
size	51.05	0.019588
bopo	22.60	0.044252
inflasi	17.62	0.056751
car	6.99	0.143087
npl	3.18	0.314856
Mean VIF	27.63	

10. Hasil Uji Heteroskesdarisitas untuk model terpilih *Fixxed Effect*

. xttest3

Modified Wald test for groupwise heteroskedasticity in
fixed effect regression model

H0: sigma(i)^2 = sigma^2 for all i

chi2 (77) = 71454.57
Prob>chi2 = 0.0000

11. Hasil Uji Auto Korelasi untuk Model Terpilih *Fixed Effect*

. xtserial ldr npl car size bopo inflasi sbi

Wooldridge test for autocorrelation in panel data
H0: no first order autocorrelation
F(1, 76) = 37.584
Prob > F = 0.0000

12. Hasil Uji F setelah Treatment (Model GLS)

Cross-sectional time-series FGLS regression

Coefficients: **generalized least squares**
Panels: **homoskedastic**

Correlation: **no autocorrelation**

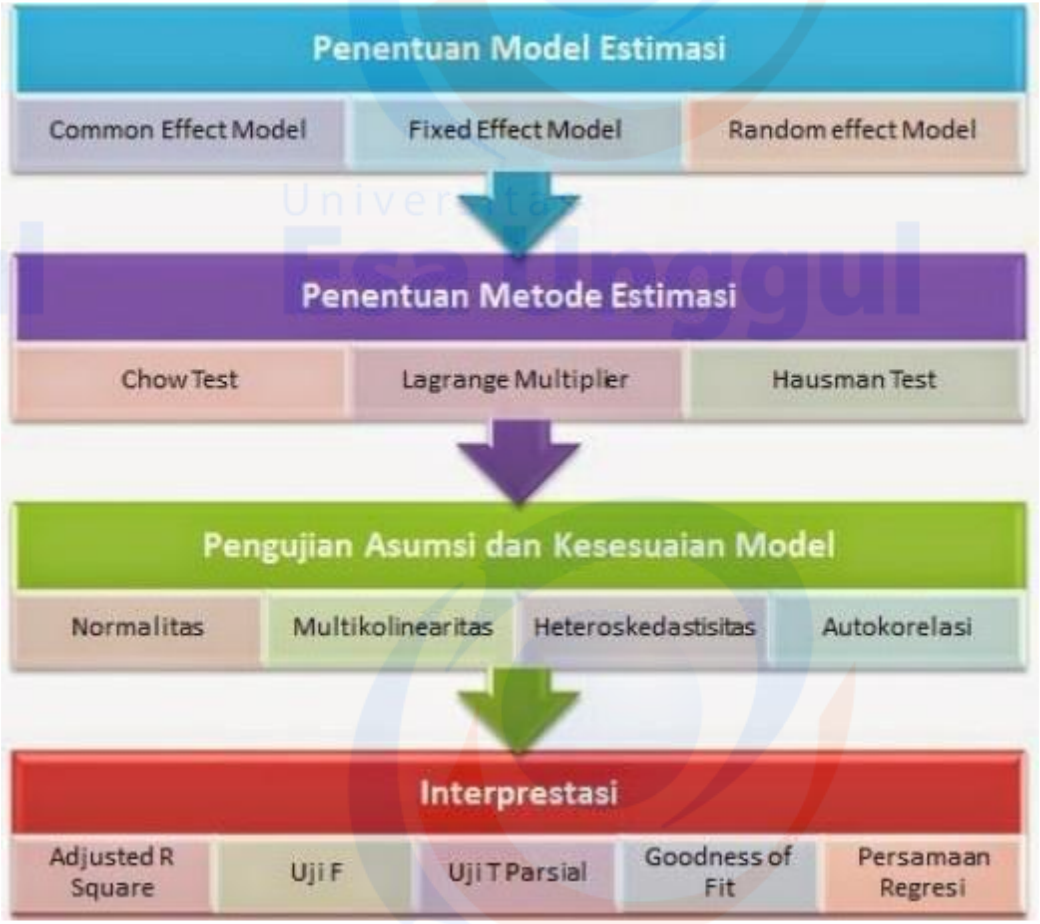
Estimated covariances	= **1**	Number of obs	= **308**
Estimated autocorrelations	= **0**	Number of groups	= **77**
Estimated coefficients	= **7**	Time periods	= **4**
		Wald chi2(**6**)	= **254.85**
Log likelihood	= **-1557.998**	Prob > chi2	= **0.0000**

13. Hasil Uji t setelah Treatment (Model GLS)

ldr	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
npl	-10.42678	1.483958	-7.03	0.000	-13.33528	-7.518272
car	-.3511744	.2623203	-1.34	0.181	-.8653127	.1629639
size	18.6631	2.624245	7.11	0.000	13.51968	23.80653
bopo	-.9194489	.1387013	-6.63	0.000	-1.191298	-.6475993
inflasi	-4.023645	1.733033	-2.32	0.020	-7.420327	-.6269622
sbi	4.961829	2.878309	1.72	0.085	-.6795535	10.60321
_cons	-87.13857	53.846	-1.62	0.106	-192.6748	18.39765

Lampiran 6

PROSEDUR STATA OLEH AKBAR SUWARDI (2011)



PENENTUAN MODEL ESTIMASI:

Dalam metode estimasi model regresi dengan menggunakan data panel dapat dilakukan melalui tiga pendekatan, antara lain:

***1. Common Effect Model* atau *Pooled Least Square* (PLS)**

Merupakan pendekatan model data panel yang paling sederhana karena hanya mengkombinasikan *data time series* dan *cross section*. Pada model ini tidak diperhatikan dimensi waktu maupun individu, sehingga diasumsikan bahwa perilaku data perusahaan sama dalam berbagai kurun waktu. Metode ini bisa menggunakan pendekatan Ordinary Least Square (OLS) atau teknik kuadrat terkecil untuk mengestimasi model data panel.

2. *Fixed Effect Model* (FE)

Model ini mengasumsikan bahwa perbedaan antar individu dapat diakomodasi dari perbedaan intersepnya. Untuk mengestimasi data panel model *Fixed Effects* menggunakan teknik variable *dummy* untuk menangkap perbedaan intersep antar perusahaan, perbedaan intersep bisa terjadi karena perbedaan budaya kerja, manajerial, dan insentif. Namun demikian slopnya sama antar

perusahaan. Model estimasi ini sering juga disebut dengan teknik *Least Squares Dummy* Variabel (LSDV).

3. *Random Effect Model* (RE)

Model ini akan mengestimasi data panel dimana variabel gangguan mungkin saling berhubungan antar waktu dan antar individu. Pada model Random Effect perbedaan intersep diakomodasi oleh error terms masing-masing perusahaan. Keuntungan menggunkan model Random Effect yakni menghilangkan heteroskedastisitas. Model ini juga disebut dengan *Error Component Model* (ECM) atau teknik *Generalized Least Square* (GLS) .

Penentuan Metode Estimasi Regresi Data Panel

Untuk memilih model yang paling tepat terdapat beberapa pengujian yang dapat dilakukan, antara lain:

1. Uji Chow

Chow test adalah pengujian untuk menentukan model apakah *Common Effect* (CE) ataukah *Fixed Effect* (FE) yang paling tepat digunakan dalam mengestimasi data panel.

Apabila Hasil:
H0: Pilih PLS (CE)
H1: Pilih FE (FE)

2. Uji Hausman

Hausman test adalah pengujian statistik untuk memilih apakah model *Fixed Effect* atau *Random Effect* yang paling tepat digunakan.

Apabila Hasil:
H0: Pilih RE
H1: Pilih FE

3. Uji Lagrange Multiplier

Uji Lagrange Multiplier (LM) adalah uji untuk mengetahui apakah model *Random Effect* lebih baik daripada metode *Common Effect* (PLS) digunakan.

Apabila Hasil:
H0: Pilih PLS
H1: Pilih RE

Dari ketiga uji untuk menentukan Metode Estimasi di atas, digambarkan dalam grafik di bawah ini:

Permasalahan-Permasalahan BLUE di Model Panel

1. Multikolinearitas

VIF dilakukan setelah melakukan regresi dengan FE atau RE

Jika nilai VIF lebih besar dari 10 atau tolerance (1/VIF) adalah .01 atau kurang mengindikasikan adanya multikolinearitas

2. Heteroskedastisitas

Uji heterokedastisitas hanya dilakukan ketika menggunakan estimasi FE dan PLS.

3. Autokorelasi

Mengatasi Permasalahan Tidak BLUE di Model Panel

Mengatasi permasalahan BLUE di Model Panel tergantung model akhir apa yang kita gunakan. **KHUSUS** Model Panel menggunakan *Random Effect* (RE) kita tidak perlu mengujiatau mengatasi permasalahan BLUE karena sudah menggunakan metode GLS. Jiika Model Panel menggunakan *Fixed Effect* kita perlu mengkaji dengan robust dan GLS. Setelah mengkaji ulang, jika hasilnya memungkinkan sama, berarti model yang paling tepat digunakan adalah metode GLS.