

LAMPIRAN

Lampiran Output Uji Statistik Deskriptif, Pemilihan Model Regresi data Panel, Uji Asumsi Klasik

Hasil Uji Statistik Deskriptif

	PBV	DER	GROWTH	NPM
Mean	2.426000	1.809500	0.111000	0.000344
Median	0.735000	1.600000	0.040000	0.000265
Maximum	12.99000	3.920000	1.090000	0.001640
Minimum	0.160000	0.450000	-0.260000	-0.002990
Std. Dev.	3.496755	1.192757	0.288461	0.000912
Skewness	1.857674	0.565720	2.282629	-2.373322
Kurtosis	5.437244	1.914455	8.224689	10.21024
Jarque-Bera Probability	16.45331 0.000267	2.048806 0.359011	40.11579 0.000000	62.09855 0.000000
Sum	48.52000	36.19000	2.220000	0.006870
Sum Sq. Dev.	232.3187	27.03069	1.580980	1.58E-05
Observations	20	20	20	20

Hasil Uji Hausman

Correlated Random Effects - Hausman Test

Equation: RANDOM

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	71.845756	3	0.0000

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
DER	-0.447775	0.229401	1.062754	0.5113
GROWTH	0.713839	-1.139364	0.129434	0.0000
			119145.25360	
NPM	1053.519560	-395.857993	9	0.0000

Cross-section random effects test equation:

Dependent Variable: PBV

Method: Panel Least Squares

Date: 02/10/17 Time: 22:34

Sample: 2011 2015

Periods included: 5

Cross-sections included: 4

Total panel (balanced) observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.795128	2.125128	1.315275	0.2111
DER	-0.447775	1.094150	-0.409244	0.6890
GROWTH	0.713839	1.345869	0.530393	0.6048
NPM	1053.520	590.1605	1.785141	0.0976

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.851861	Mean dependent var	2.426000
Adjusted R-squared	0.783490	S.D. dependent var	3.496755
S.E. of regression	1.627064	Akaike info criterion	4.080649
Sum squared resid	34.41539	Schwarz criterion	4.429155
Log likelihood	-33.80649	Hannan-Quinn criter.	4.148681
F-statistic	12.45927	Durbin-Watson stat	2.627419
Prob(F-statistic)	0.000099		

Hasil Uji LM

Lagrange Multiplier Tests for Random Effects

Null hypotheses: No effects

Alternative hypotheses: Two-sided (Breusch-Pagan) and one-

(all others) alternatives

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	14.78324 (0.0001)	1.848957 (0.1739)	16.63220 (0.0000)
Honda	3.844898 (0.0001)	-1.359764 --	1.757256 (0.0394)
King-Wu	3.844898 (0.0001)	-1.359764 --	2.016296 (0.0219)
Standardized Honda	5.808819 (0.0000)	-1.214262 --	-0.064848 --
Standardized King-	5.808819 (0.0000)	-1.214262 --	0.323343 (0.3732)
Gourierioux, et al.*	--	--	14.78324 (< 0.01)

*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2.952

Hasil Uji Chow

Redundant Fixed Effects Tests

Equation: FIXED

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	23.948585	(3,13)	0.0000
Cross-section Chi-square	37.517712	3	0.0000

Cross-section fixed effects test equation:

Dependent Variable: PBV

Method: Panel Least Squares

Date: 02/10/17 Time: 22:39

Sample: 2011 2015

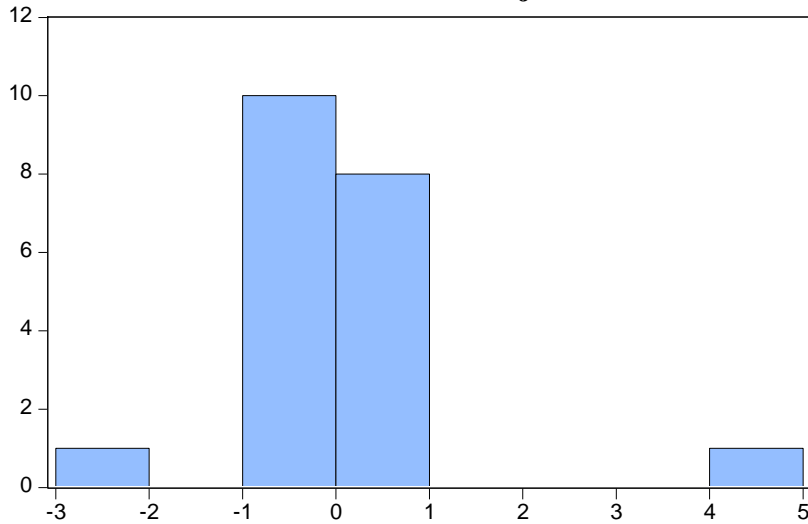
Periods included: 5

Cross-sections included: 4

Total panel (balanced) observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	0.229401	0.844247	0.271723	0.7893
GROWTH	-1.139364	2.986475	-0.381508	0.7078
NPM	-395.8580	1102.325	-0.359112	0.7242
C	2.273346	1.952658	1.164231	0.2614
R-squared	0.033158	Mean dependent var		2.426000
Adjusted R-squared	-0.148124	S.D. dependent var		3.496755
S.E. of regression	3.746793	Akaike info criterion		5.656534
Sum squared resid	224.6153	Schwarz criterion		5.855681
Log likelihood	-52.56534	Hannan-Quinn criter.		5.695410
F-statistic	0.182910	Durbin-Watson stat		0.918219
Prob(F-statistic)	0.906445			

Hasil Uji Normalitas

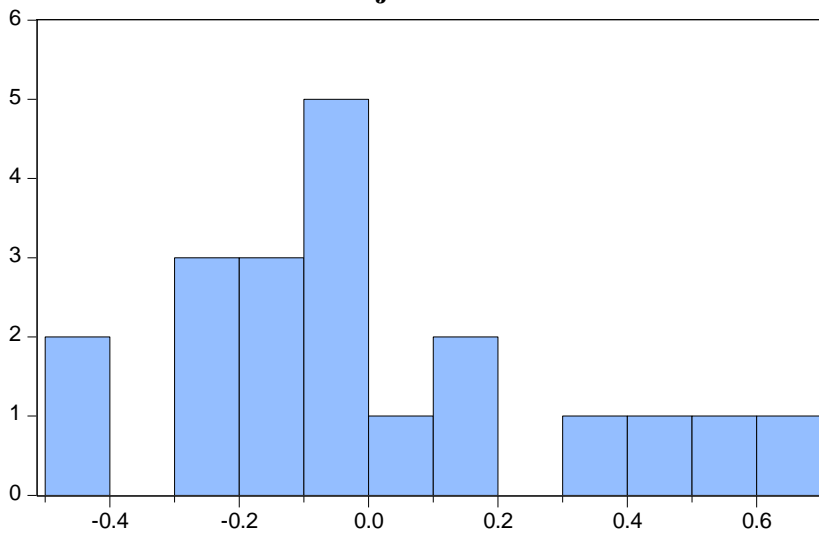


Series: Standardized Residuals
Sample 2011 2015
Observations 20

Mean 3.33e-17
Median -0.019849
Maximum 4.876817
Minimum -2.246000
Std. Dev. 1.345859
Skewness 2.259188
Kurtosis 10.04583

Jarque-Bera 58.38289
Probability 0.000000

Hasil Uji Normalitas setelah transformasi



Series: Standardized Residuals
Sample 2011 2015
Observations 20

Mean 3.05e-17
Median -0.041974
Maximum 0.650232
Minimum -0.456629
Std. Dev. 0.300932
Skewness 0.571029
Kurtosis 2.646166

Jarque-Bera 1.191246
Probability 0.551219

Hasil Uji Heteroskedastisitas Tanpa Pembobotan

Dependent Variable: LOG(PBV)

Method: Panel Least Squares

Date: 02/08/17 Time: 12:03

Sample: 2011 2015

Periods included: 5

Cross-sections included: 4

Total panel (balanced) observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.195687	0.244650	-0.799867	0.4382
GROWTH	0.870894	0.300934	2.893971	0.0126
NPM	170.9577	131.9588	1.295538	0.2177
C	0.305094	0.475175	0.642068	0.5320

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.937989	Mean dependent var	0.106391
Adjusted R-squared	0.909369	S.D. dependent var	1.208464
S.E. of regression	0.363808	Akaike info criterion	1.084839
Sum squared resid	1.720636	Schwarz criterion	1.433345
Log likelihood	-3.848388	Hannan-Quinn criter.	1.152871
F-statistic	32.77341	Durbin-Watson stat	2.156048
Prob(F-statistic)	0.000000		

Hasil Uji Heteroskedastisitas Dengan Pembobotan

Dependent Variable: LOG(PBV)
 Method: Panel EGLS (Cross-section weights)
 Date: 02/08/17 Time: 12:06
 Sample: 2011 2015
 Periods included: 5
 Cross-sections included: 4
 Total panel (balanced) observations: 20
 Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.030765	0.108163	-0.284434	0.7806
GROWTH	0.772002	0.212913	3.625902	0.0031
NPM	226.1542	98.31399	2.300325	0.0386
C	-0.001315	0.207981	-0.006323	0.9951

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

R-squared	0.960341	Mean dependent var	0.005777
Adjusted R-squared	0.942037	S.D. dependent var	1.413458
S.E. of regression	0.334609	Sum squared resid	1.455521
F-statistic	52.46573	Durbin-Watson stat	2.190125
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.935514	Mean dependent var	0.106391
Sum squared resid	1.789326	Durbin-Watson stat	2.215615

Hasil Uji Multikolinearitas

	DER	GROWTH	NPM
DER	1.000000	0.056677	-0.517790
GROWTH	0.056677	1.000000	0.000406
NPM	-0.517790	0.000406	1.000000

Hasil Uji Model Regresi Berganda dengan estimasi model LSDV

Dependent Variable: LOG(PBV)

Method: Panel Least Squares

Date: 02/08/17 Time: 12:03

Sample: 2011 2015

Periods included: 5

Cross-sections included: 4

Total panel (balanced) observations: 20

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER	-0.195687	0.244650	-0.799867	0.4382
GROWTH	0.870894	0.300934	2.893971	0.0126
NPM	170.9577	131.9588	1.295538	0.2177
C	0.305094	0.475175	0.642068	0.5320

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.937989	Mean dependent var	0.106391
Adjusted R-squared	0.909369	S.D. dependent var	1.208464
S.E. of regression	0.363808	Akaike info criterion	1.084839
Sum squared resid	1.720636	Schwarz criterion	1.433345
Log likelihood	-3.848388	Hannan-Quinn criter.	1.152871
F-statistic	32.77341	Durbin-Watson stat	2.156048
Prob(F-statistic)	0.000000		

Tabel Uji *t*

Tabel t

Pr	0.25	0.10	0.05	0.025	0.01	0.005	0.001
	0.50	0.20	0.10	0.050	0.02	0.010	0.002
1	1.00000	3.07768	6.31375	12.70620	31.82052	63.65674	318.30884
2	0.81650	1.88562	2.91999	4.30265	6.96456	9.92484	22.32712
3	0.76489	1.63774	2.35336	3.18245	4.54070	5.84091	10.21453
4	0.74070	1.53321	2.13185	2.77645	3.74695	4.60409	7.17318
5	0.72669	1.47588	2.01505	2.57058	3.36493	4.03214	5.89343
6	0.71756	1.43976	1.94318	2.44691	3.14267	3.70743	5.20763
7	0.71114	1.41492	1.89458	2.36462	2.99795	3.49948	4.78529
8	0.70639	1.39682	1.85955	2.30600	2.89646	3.35539	4.50079
9	0.70272	1.38303	1.83311	2.26216	2.82144	3.24984	4.29681
10	0.69981	1.37218	1.81246	2.22814	2.76377	3.16927	4.14370
11	0.69745	1.36343	1.79588	2.20099	2.71808	3.10581	4.02470
12	0.69548	1.35622	1.78229	2.17881	2.68100	3.05454	3.92963
13	0.69383	1.35017	1.77093	2.16037	2.65031	3.01228	3.85198
14	0.69242	1.34503	1.76131	2.14479	2.62449	2.97684	3.78739
15	0.69120	1.34061	1.75305	2.13145	2.60248	2.94671	3.73283
16	0.69013	1.33676	1.74588	2.11991	2.58349	2.92078	3.68615
17	0.68920	1.33338	1.73961	2.10982	2.56693	2.89823	3.64577
18	0.68836	1.33039	1.73406	2.10092	2.55238	2.87844	3.61048
19	0.68762	1.32773	1.72913	2.09302	2.53948	2.86093	3.57940
20	0.68695	1.32534	1.72472	2.08596	2.52798	2.84534	3.55181
21	0.68635	1.32319	1.72074	2.07961	2.51765	2.83136	3.52715
22	0.68581	1.32124	1.71714	2.07387	2.50832	2.81876	3.50499
23	0.68531	1.31946	1.71387	2.06866	2.49987	2.80734	3.48496
24	0.68485	1.31784	1.71088	2.06390	2.49216	2.79694	3.46678
25	0.68443	1.31635	1.70814	2.05954	2.48511	2.78744	3.45019
26	0.68404	1.31497	1.70562	2.05553	2.47863	2.77871	3.43500
27	0.68368	1.31370	1.70329	2.05183	2.47266	2.77068	3.42103
28	0.68335	1.31253	1.70113	2.04841	2.46714	2.76326	3.40816
29	0.68304	1.31143	1.69913	2.04523	2.46202	2.75639	3.39624
30	0.68276	1.31042	1.69726	2.04227	2.45726	2.75000	3.38518
31	0.68249	1.30946	1.69552	2.03951	2.45282	2.74404	3.37490
32	0.68223	1.30857	1.69389	2.03693	2.44868	2.73848	3.36531
33	0.68200	1.30774	1.69236	2.03452	2.44479	2.73328	3.35634
34	0.68177	1.30695	1.69092	2.03224	2.44115	2.72839	3.34793
35	0.68156	1.30621	1.68957	2.03011	2.43772	2.72381	3.34005
36	0.68137	1.30551	1.68830	2.02809	2.43449	2.71948	3.33262
37	0.68118	1.30485	1.68709	2.02619	2.43145	2.71541	3.32563
38	0.68100	1.30423	1.68595	2.02439	2.42857	2.71156	3.31903
39	0.68083	1.30364	1.68488	2.02269	2.42584	2.70791	3.31279
40	0.68067	1.30308	1.68385	2.02108	2.42326	2.70446	3.30688

41	0.68052	1.30254	1.68288	2.01954	2.42080	2.70118	3.30127
42	0.68038	1.30204	1.68195	2.01808	2.41847	2.69807	3.29595
43	0.68024	1.30155	1.68107	2.01669	2.41625	2.69510	3.29089
44	0.68011	1.30109	1.68023	2.01537	2.41413	2.69228	3.28607
45	0.67998	1.30065	1.67943	2.01410	2.41212	2.68959	3.28148
46	0.67986	1.30023	1.67866	2.01290	2.41019	2.68701	3.27710
47	0.67975	1.29982	1.67793	2.01174	2.40835	2.68456	3.27291
48	0.67964	1.29944	1.67722	2.01063	2.40658	2.68220	3.26891
49	0.67953	1.29907	1.67655	2.00958	2.40489	2.67995	3.26508
50	0.67943	1.29871	1.67591	2.00856	2.40327	2.67779	3.26141
51	0.67933	1.29837	1.67528	2.00758	2.40172	2.67572	3.25789
52	0.67924	1.29805	1.67469	2.00665	2.40022	2.67373	3.25451
53	0.67915	1.29773	1.67412	2.00575	2.39879	2.67182	3.25127
54	0.67906	1.29743	1.67356	2.00488	2.39741	2.66998	3.24815
55	0.67898	1.29713	1.67303	2.00404	2.39608	2.66822	3.24515
56	0.67890	1.29685	1.67252	2.00324	2.39480	2.66651	3.24226
57	0.67882	1.29658	1.67203	2.00247	2.39357	2.66487	3.23948
58	0.67874	1.29632	1.67155	2.00172	2.39238	2.66329	3.23680
59	0.67867	1.29607	1.67109	2.00100	2.39123	2.66176	3.23421
60	0.67860	1.29582	1.67065	2.00030	2.39012	2.66028	3.23171
61	0.67853	1.29558	1.67022	1.99962	2.38905	2.65886	3.22930
62	0.67847	1.29536	1.66980	1.99897	2.38801	2.65748	3.22696
63	0.67840	1.29513	1.66940	1.99834	2.38701	2.65615	3.22471
64	0.67834	1.29492	1.66901	1.99773	2.38604	2.65485	3.22253
65	0.67828	1.29471	1.66864	1.99714	2.38510	2.65360	3.22041
66	0.67823	1.29451	1.66827	1.99656	2.38419	2.65239	3.21837
67	0.67817	1.29432	1.66792	1.99601	2.38330	2.65122	3.21639
68	0.67811	1.29413	1.66757	1.99547	2.38245	2.65008	3.21446
69	0.67806	1.29394	1.66724	1.99495	2.38161	2.64898	3.21260
70	0.67801	1.29376	1.66691	1.99444	2.38081	2.64790	3.21079

Tabel Uji F

Tabel f 5 % = 0,05

DF ₁		1	2	3	4	5
DF ₂	1	161,447,639	199,500,000	215,707,345	224,583,241	230,161,878
	2	18,512,821	19,000,000	19,164,292	19,246,794	19,296,410
	3	10,127,964	9,552,094	9,276,628	9,117,182	9,013,455
	4	7,708,647	6,944,272	6,591,382	6,388,233	6,256,057
	5	6,607,891	5,786,135	5,409,451	5,192,168	5,050,329
	6	5,987,378	5,143,253	4,757,063	4,533,677	4,387,374
	7	5,591,448	4,737,414	4,346,831	4,120,312	3,971,523
	8	5,317,655	4,458,970	4,066,181	3,837,853	3,687,499
	9	5,117,355	4,256,495	3,862,548	3,633,089	3,481,659
	10	4,964,603	4,102,821	3,708,265	3,478,050	3,325,835
	11	4,844,336	3,982,298	3,587,434	3,356,690	3,203,874
	12	4,747,225	3,885,294	3,490,295	3,259,167	3,105,875
	13	4,667,193	3,805,565	3,410,534	3,179,117	3,025,438
	14	4,600,110	3,738,892	3,343,889	3,112,250	2,958,249
	15	4,543,077	3,682,320	3,287,382	3,055,568	2,901,295
	16	4,493,998	3,633,723	3,238,872	3,006,917	2,852,409
	17	4,451,322	3,591,531	3,196,777	2,964,708	2,809,996
	18	4,413,873	3,554,557	3,159,908	2,927,744	2,772,853
	19	4,380,750	3,521,893	3,127,350	2,895,107	2,740,058
	20	4,351,244	3,492,828	3,098,391	2,866,081	2,710,890
	21	4,324,794	3,466,800	3,072,467	2,840,100	2,684,781
	22	4,300,950	3,443,357	3,049,125	2,816,708	2,661,274
	23	4,279,344	3,422,132	3,027,998	2,795,539	2,639,999
	24	4,259,677	3,402,826	3,008,787	2,776,289	2,620,654
	25	4,241,699	3,385,190	2,991,241	2,758,710	2,602,987
	26	4,225,201	3,369,016	2,975,154	2,742,594	2,586,790
	27	4,210,008	3,354,131	2,960,351	2,727,765	2,571,886
	28	4,195,972	3,340,386	2,946,685	2,714,076	2,558,128
	29	4,182,964	3,327,654	2,934,030	2,701,399	2,545,386
	30	4,170,877	3,315,830	2,922,277	2,689,628	2,533,555
	31	4,159,615	3,304,817	2,911,334	2,678,667	2,522,538
	32	4,149,097	3,294,537	2,901,120	2,668,437	2,512,255
	33	4,139,252	3,284,918	2,891,564	2,658,867	2,502,635
	34	4,130,018	3,275,898	2,882,604	2,649,894	2,493,616

	35	4,121,338	3,267,424	2,874,187	2,641,465	2,485,143
	36	4,113,165	3,259,446	2,866,266	2,633,532	2,477,169
	37	4,105,456	3,251,924	2,858,796	2,626,052	2,469,650
	38	4,098,172	3,244,818	2,851,741	2,618,988	2,462,548
	39	4,091,279	3,238,096	2,845,068	2,612,306	2,455,831
	40	4,084,746	3,231,727	2,838,745	2,605,975	2,449,466
	41	4,078,546	3,225,684	2,832,747	2,599,969	2,443,429
	42	4,072,654	3,219,942	2,827,049	2,594,263	2,437,693
	43	4,067,047	3,214,480	2,821,628	2,588,836	2,432,236
	44	4,061,706	3,209,278	2,816,466	2,583,667	2,427,040
	45	4,056,612	3,204,317	2,811,544	2,578,739	2,422,085
	46	4,051,749	3,199,582	2,806,845	2,574,035	2,417,356
	47	4,047,100	3,195,056	2,802,355	2,569,540	2,412,837
	48	4,042,652	3,190,727	2,798,061	2,565,241	2,408,514
	49	4,038,393	3,186,582	2,793,949	2,561,124	2,404,375
	50	4,034,310	3,182,610	2,790,008	2,557,179	2,400,409
	51	4,030,393	3,178,799	2,786,229	2,553,395	2,396,605
	52	4,026,631	3,175,141	2,782,600	2,549,763	2,392,953
	53	4,023,017	3,171,626	2,779,114	2,546,273	2,389,444
	54	4,019,541	3,168,246	2,775,762	2,542,918	2,386,070
	55	4,016,195	3,164,993	2,772,537	2,539,689	2,382,823
	56	4,012,973	3,161,861	2,769,431	2,536,579	2,379,697
	57	4,009,868	3,158,843	2,766,438	2,533,583	2,376,684
	58	4,006,873	3,155,932	2,763,552	2,530,694	2,373,780
	59	4,003,983	3,153,123	2,760,767	2,527,907	2,370,977
	60	4,001,191	3,150,411	2,758,078	2,525,215	2,368,270
	61	3,998,494	3,147,791	2,755,481	2,522,615	2,365,656
	62	3,995,887	3,145,258	2,752,970	2,520,101	2,363,128
	63	3,993,365	3,142,809	2,750,541	2,517,670	2,360,684
	64	3,990,924	3,140,438	2,748,191	2,515,318	2,358,318
	65	3,988,560	3,138,142	2,745,915	2,513,040	2,356,028
	66	3,986,269	3,135,918	2,743,711	2,510,833	2,353,809
	67	3,984,049	3,133,762	2,741,574	2,508,695	2,351,658
	68	3,981,896	3,131,672	2,739,502	2,506,621	2,349,573