

## **LAMPIRAN**

**LAMPIRAN 1**

## Daftar Nama Perusahaan Manufaktur Yang Masuk Kriteria Sampel

<b>No.</b>	<b>Kode Perusahaan</b>	<b>Nama Perusahaan</b>
1	SMBR	Semen Baturaja Tbk
2	WTON	Wijaya Karya Beton Tbk
3	AUTO	Astra Otoparts Tbk
4	IMAS	Indomobil Sukses Internasional Tbk
5	ROTI	Nippon Indosari Corpindo Tbk
6	HMSP	Hanjaya Mandala Sampoerna Tbk
7	RMBA	Bentoel Internasional Investama Tbk
8	KAEF	Kimia Farma Tbk
9	KLBF	Kalbe Farma Tbk
10	TSPC	Tempo Scan Pacific Tbk
11	WIIM	Wismilak Inti Makmur Tbk
12	KINO	Kino Indonesia Tbk
13	WOOD	Integra Indocabinet Tbk

**LAMPIRAN 2**Pengukuran *Financial Hedging*

Kode Perusahaan	Tahun				
	2017	2018	2019	2020	2021
SMBR	1	1	1	1	1
WTON	1	1	1	1	1
AUTO	0	0	0	0	0
IMAS	1	1	1	1	1
ROTI	1	1	1	1	1
HMSP	1	1	1	1	1
RMBA	1	1	1	1	1
KAEF	0	0	0	0	0
KLBF	0	0	0	0	0
TSPC	0	0	0	0	0
WIIM	1	1	1	1	1
KINO	0	0	0	0	0
WOOD	0	0	0	0	0

**LAMPIRAN 3**Pengukuran *Financial Performance (ROE)*

Kode Perusahaan	Tahun	Laba Bersih Setelah Pajak	Modal Sendiri	ROE
SMBR	2017	146,648,432.00	992,479,728.00	0.1478
	2018	76,074,721.00	993,253,434.00	0.0766
	2019	30,073,855.00	993,253,434.00	0.0303
	2020	10,981,673.00	993,253,434.00	0.0111
	2021	51,817,305.00	993,253,434.00	0.0522
WTON	2017	340,458,859,391.00	871,546,660,000.00	0.3906
	2018	486,640,174,453.00	871,546,660,000.00	0.5584
	2019	510,711,733,403.00	871,546,660,000.00	0.5860
	2020	123,147,079,420.00	871,546,660,000.00	0.1413
	2021	81,433,957,569.00	871,546,660,000.00	0.0934

<b>AUTO</b>	2017	547,781.00	481,973.00	1.1365
	2018	680,801.00	481,973.00	1.4125
	2019	816,971.00	481,973.00	1.6951
	2020	(37,864.00)	481,973.00	-0.0786
	2021	634,931.00	481,973.00	1.3174
<b>IMAS</b>	2017	(64,296,811,100.00)	691,319,603,000.00	-0.0930
	2018	112,707,388,192.00	691,319,603,000.00	0.1630
	2019	155,830,717,982.00	691,319,603,000.00	0.2254
	2020	(675,711.00)	998,573.00	-0.6767
	2021	(255,340.00)	998,573.00	-0.2557
<b>ROTI</b>	2017	135,364,021,139.00	123,729,777,760.00	1.0940
	2018	127,171,436,363.00	123,729,777,760.00	1.0278
	2019	236,518,557,420.00	123,729,777,760.00	1.9116
	2020	168,610,282,478.00	123,729,777,760.00	1.3627
	2021	281,340,682,456.00	123,729,777,760.00	2.2738
<b>HMSP</b>	2017	12,670,534.00	465,272.00	27.2325
	2018	13,538,418.00	465,272.00	29.0979
	2019	13,721,513.00	465,272.00	29.4914
	2020	8,581,378.00	465,272.00	18.4438
	2021	7,137,097.00	465,272.00	15.3396
<b>RMBA</b>	2017	(480,063.00)	1,820,057.00	-0.2638
	2018	(608,463.00)	1,820,057.00	-0.3343
	2019	50,612.00	1,820,057.00	0.0278
	2020	(2,666,991.00)	1,820,057.00	-1.4653
	2021	7,971.00	1,820,057.00	0.0044
<b>KAEF</b>	2017	331,707,917,461.00	555,400,000,000.00	0.5972
	2018	535,085,322.00	555,400,000,000.00	0.0010
	2019	15,890,439.00	555,400,000,000.00	0.0000
	2020	20,425,757.00	555,400,000,000.00	0.0000
	2021	289,888,789.00	555,400,000,000.00	0.0005
<b>KLBF</b>	2017	2,453,251,410,604.00	4,668,751,221,100.00	0.5255
	2018	2,497,261,964,757.00	4,668,751,221,100.00	0.5349
	2019	2,537,601,823,645.00	4,668,751,221,100.00	0.5435

	2020	2,799,622,515,814.00	4,668,751,221,100.00	0.5997
	2021	3,232,007,683,281.00	4,668,751,221,100.00	0.6923
<b>TSPC</b>	2017	557,339,581,996.00	225,000,000,000.00	2.4771
	2018	540,378,145,887.00	225,000,000,000.00	2.4017
	2019	595,154,912,874.00	225,000,000,000.00	2.6451
	2020	834,369,751,682.00	225,000,000,000.00	3.7083
	2021	877,817,637,643.00	225,493,215,000.00	3.8929
<b>WIIM</b>	2017	40,589,790,851.00	209,987,376,000.00	0.1933
	2018	51,142,850,919.00	209,987,376,000.00	0.2436
	2019	27,328,091,481.00	209,987,376,000.00	0.1301
	2020	172,506,562,986.00	209,987,376,000.00	0.8215
	2021	176,877,010,231.00	209,987,376,000.00	0.8423
<b>KINO</b>	2017	109,696,001,798.00	142,857,150,000.00	0.7679
	2018	150,116,045,042.00	142,857,150,000.00	1.0508
	2019	515,603,339,649.00	142,857,150,000.00	3.6092
	2020	113,665,219,638.00	142,857,150,000.00	0.7957
	2021	100,649,538,230.00	142,857,150,000.00	0.7045
<b>WOOD</b>	2017	171,431,807,795.00	636,250,000,000.00	0.2694
	2018	242,010,106,249.00	636,250,000,000.00	0.3807
	2019	218,064,313,042.00	636,250,000,000.00	0.3427
	2020	314,366,052,372.00	636,250,000,000.00	0.4941
	2021	535,295,612,635.00	636,250,000,000.00	0.8413

#### **LAMPIRAN 4**

##### *Pengukuran Research and Development Expenditure*

<b>Kode Perusahaan</b>	<b>Tahun</b>	<b>Pengeluaran R&amp;D</b>	<b>Total Ekuitas</b>	<b>R&amp;D</b>
<b>SMBR</b>	2017	1,183,038.00	3,412,859,859.00	0.0003
	2018	1,122,165.00	3,473,671,056.00	0.0003
	2019	3,037,711.00	3,482,293,092.00	0.0009
	2020	2,070,433.00	3,407,888,607.00	0.0006
	2021	675,357.00	3,466,244,521.00	0.0002

<b>WTON</b>	2017	880,464,820.00	2,747,935,334,085.00	0.0003
	2018	1,182,908,261.00	3,136,812,010,205.00	0.0004
	2019	1,073,840,487.00	3,508,445,940,007.00	0.0003
	2020	1,284,211,596.00	3,390,572,999,124.00	0.0004
	2021	3,941,400,041.00	3,447,884,344,237.00	0.0011
<b>AUTO</b>	2017	2,447.00	10,759,076.00	0.0002
	2018	5,403.00	11,263,635.00	0.0005
	2019	1,793.00	11,650,534.00	0.0002
	2020	2,731.00	11,270,791.00	0.0002
	2021	15,468.00	11,845,631.00	0.0013
<b>IMAS</b>	2017	217,271,964.00	9,281,252,344,712.00	0.0000
	2018	540,540,775.00	10,200,251,031,046.00	0.0000
	2019	275,604,911.00	9,408,137,619,709.00	0.0000
	2020	25,189.00	12,716,336.00	0.0020
	2021	4,132.00	12,846,217.00	0.0003
<b>ROTI</b>	2017	5,812,770,028.00	2,820,105,715,429.00	0.0021
	2018	5,363,288,723.00	2,916,901,120,111.00	0.0018
	2019	5,479,089,045.00	3,092,597,379,097.00	0.0018
	2020	4,183,249,075.00	3,227,671,047,731.00	0.0013
	2021	3,945,080,031.00	2,849,419,530,726.00	0.0014
<b>HMSP</b>	2017	54,404.00	34,112,985.00	0.0016
	2018	49,495.00	35,358,253.00	0.0014
	2019	43,972.00	35,679,730.00	0.0012
	2020	56,918.00	30,241,426.00	0.0019
	2021	53,546.00	29,191,406.00	0.0018
<b>RMBA</b>	2017	115,381.00	8,923,670.00	0.0129
	2018	56,573.00	8,365,971.00	0.00677
	2019	57,211.00	8,401,643.00	0.0068
	2020	58,459.00	5,708,950.00	0.0102
	2021	55,476.00	5,791,478.00	0.0096
<b>KAEF</b>	2017	8,714,453,071.00	2,572,520,755,127.00	0.0034
	2018	14,416,791.00	4,146,258,067.00	0.0035
	2019	15,323,732.00	7,412,926,828.00	0.0021

	2020	15,527,142.00	7,105,672,046.00	0.0022
	2021	41,348,200.00	7,231,872,635.00	0.0057
<b>KLBF</b>	2017	20,900,742,587.00	13,894,031,782,689.00	0.0015
	2018	16,484,622,183.00	15,294,594,796,354.00	0.0011
	2019	26,273,049,389.00	16,705,582,476,031.00	0.0016
	2020	21,988,044,592.00	18,276,082,144,080.00	0.0012
	2021	36,938,539,821.00	21,265,877,793,123.00	0.0017
<b>TSPC</b>	2017	4,282,162,613.00	5,082,008,409,145.00	0.0008
	2018	4,903,077,043.00	5,432,848,070,494.00	0.0009
	2019	4,302,736,164.00	5,791,035,969,893.00	0.0007
	2020	4,014,197,320.00	6,377,235,707,755.00	0.0006
	2021	3,878,157,087.00	6,875,303,997,165.00	0.00057
<b>WIIM</b>	2017	2,941,442,533.00	978,091,361,111.00	0.0030
	2018	4,270,540,398.00	1,005,236,802,665.00	0.0042
	2019	5,290,144,484.00	1,033,170,577,477.00	0.0051
	2020	2,521,876,021.00	1,185,851,841,509.00	0.0021
	2021	1,852,155,270.00	1,318,385,158,595.00	0.0014
<b>KINO</b>	2017	2,164,786,490.00	2,055,170,880,109.00	0.0010
	2018	1,670,009,943.00	2,186,900,126,396.00	0.0008
	2019	2,598,338,998.00	2,702,862,179,552.00	0.0010
	2020	3,533,240,732.00	2,577,235,546,221.00	0.0014
	2021	2,481,660,267.00	2,663,631,503,097.00	0.0009
<b>WOOD</b>	2017	2,674,447,503.00	1,912,624,105,680.00	0.0014
	2018	3,246,112,221.00	2,450,039,514,752.00	0.0013
	2019	4,155,529,257.00	2,703,608,388,082.00	0.0015
	2020	3,752,826,550.00	2,959,921,468,593.00	0.0013
	2021	5,472,439,420.00	3,642,537,753,968.00	0.0015

**LAMPIRAN 5***Pengukuran Other Comprehensive Income*

Kode Perusahaan	Tahun	Income Comprehensive	Total Comp.OCI	OCI
<b>SMBR</b>	2017	208,947,154.00	134,717,866.00	1.5510
	2018	145,356,709.00	73,564,912.00	1.9759
	2019	86,572,265.00	27,593,178.00	3.1375
	2020	36,467,602.00	1,189,571.00	30.6561
	2021	68,354,164.00	58,355,914.00	1.1713
<b>WTON</b>	2017	419,501,620,158.00	338,417,312,541.00	1.2396
	2018	619,251,303,685.00	490,020,360,035.00	1.2637
	2019	626,270,544,710.00	517,571,726,078.00	1.2100
	2020	130,504,809,969.00	120,990,297,330.00	1.0786
	2021	78,646,542,746.00	82,944,688,133.00	0.9482
<b>AUTO</b>	2017	711,936.00	452,879.00	1.5720
	2018	861,563.00	747,442.00	1.1527
	2019	1,119,858.00	730,113.00	1.5338
	2020	116,071.00	(138,731.00)	-0.8367
	2021	755,129.00	710,808.00	1.0624
<b>IMAS</b>	2017	117,560,110,761.00	2,619,777,972,185.00	0.0449
	2018	121,393,072,113.00	913,075,153,433.00	0.1329
	2019	372,272,598,200.00	65,180,072,693.00	5.7114
	2020	(484,893.00)	1,929,374.00	-0.2513
	2021	(22,575.00)	243,403.00	-0.0927
<b>ROTI</b>	2017	186,147,334,530.00	124,467,558,054.00	1.4955
	2018	186,936,324,915.00	136,301,090,897.00	1.37150
	2019	347,098,820,613.00	221,853,474,024.00	1.5645
	2020	160,357,537,779.00	145,493,328,513.00	1.1022
	2021	376,045,893,335.00	292,023,143,596.00	1.2877
<b>HMSP</b>	2017	16,894,806.00	12,483,134.00	1.3534
	2018	17,961,269.00	13,629,251.00	1.3178
	2019	18,259,423.00	13,932,030.00	1.3106



	2020	11,161,466.00	8,478,305.00	1.3165
	2021	9,152,166.00	7,363,668.00	1.2429
<b>RMBA</b>	2017	(400,127.00)	(517,697.00)	0.7729
	2018	(324,590.00)	(557,699.00)	0.5820
	2019	29,138.00	35,672.00	0.8168
	2020	(2,649,762.00)	(2,692,693.00)	0.9846
	2021	57,667.00	82,528.00	0.6988
<b>KAEF</b>	2017	449,709,762,422.00	323,866,692,681.00	1.3886
	2018	755,296,047.00	931,548,379.00	0.8108
	2019	38,315,488.00	4,780,373,522.00	0.0080
	2020	73,359,099.00	(65,354,455.00)	-1.1224
	2021	392,883,409.00	(1,208,269.00)	-325.1622
<b>KLBF</b>	2017	3,241,186,725,992.00	2,442,945,312,378.00	1.3268
	2018	3,306,399,669,021.00	2,552,706,945,624.00	1.2953
	2019	3,402,616,824,533.00	2,513,242,403,090.00	1.3539
	2020	3,627,632,574,744.00	2,865,987,119,268.00	1.2658
	2021	4,143,264,634,774.00	3,208,499,314,413.00	1.2913
<b>TSPC</b>	2017	744,090,262,873.00	461,697,432,471.00	1.6116
	2018	727,700,178,905.00	553,039,101,876.00	1.3158
	2019	796,220,911,472.00	568,499,070,298.00	1.4006
	2020	1,064,448,534,874.00	843,904,265,909.00	1.2613
	2021	1,098,370,417,471.00	874,709,848,707.00	1.2557
<b>WIIM</b>	2017	54,491,308,212.00	19,591,392,031.00	2.7814
	2018	70,730,637,719.00	27,145,441,554.00	2.6056
	2019	42,874,167,628.00	33,195,826,162.00	1.2916
	2020	215,214,468,586.00	160,077,904,492.00	1.3444
	2021	214,884,126,122.00	175,641,152,146.00	1.2234
<b>KINO</b>	2017	140,964,951,060.00	121,129,837,575.00	1.1638
	2018	200,385,373,873.00	179,025,676,787.00	1.1193
	2019	636,096,776,179.00	534,040,428,097.00	1.1911
	2020	135,159,940,052.00	110,904,948,290.00	1.2187
	2021	127,135,975,585.00	122,401,609,250.00	1.0387
<b>WOOD</b>	2017	233,877,590,428.00	169,621,061,001.00	1.3788
	2018	324,612,407,710.00	530,726,375,398.00	0.6116

	2019	283,704,289,385.00	253,568,873,330.00	1.1188
	2020	433,714,455,615.00	329,025,348,834.00	1.3182
	2021	704,423,183,701.00	546,030,571,018.00	1.2901

## LAMPIRAN 6

### Pengukuran Nilai Perusahaan (Tobin's Q)

Kode Perusahaan	Tahun	EMV + DEBT	EBV + DEBT	Ln NP
<b>SMBR</b>	2017	3,771,424,615,017,390.00	6,707,814,635.00	13.2396
	2018	1,738,195,573,208,450.00	7,602,487,950.00	12.3398
	2019	437,033,599,761,112.00	7,660,247,316.00	10.951
	2020	1,057,817,236,070,950.00	8,066,462,513.00	11.784
	2021	615,819,480,333,098.00	8,169,246,717.00	11.2303
<b>WTON</b>	2017	8,677,774,060,958.00	11,388,016,856,001.00	0.7620
	2018	9,021,981,731,067.00	14,626,744,589,139.00	0.6168
	2019	10,751,409,117,200.00	17,167,344,234,407.00	0.6263
	2020	8,482,614,408,070.00	13,627,461,600,064.00	0.6225
	2021	7,624,303,932,283.00	14,408,482,641,603.00	0.5292
<b>AUTO</b>	2017	24,416,892,821,222.00	53,469,370,254,996.00	13.1789
	2018	36,817,061,629,638.00	71,888,371,550,482.00	12.7523
	2019	38,484,421,534,783.00	79,989,187,557,555.00	12.5887
	2020	6,051,386,616,449.00	84,101,064.00	12.548
	2021	3,495,042,836,516.00	89,200,999.00	12.4391
<b>IMAS</b>	2017	9,928,653,983,233.00	18,765,542.00	0.4567
	2018	7,085,012,136,013.00	20,515,661.00	0.5121
	2019	5,976,473,285,175.00	20,380,884.00	0.4811
	2020	5,374,006,204,303.00	19,089,397.00	11.1838
	2021	5,566,796,716,517.00	22,048,665.00	10.576
<b>ROTI</b>	2017	9,627,241,326,182.00	6,299,041,703,393.00	1.5284
	2018	8,900,695,926,372.00	5,870,719,641,655.00	1.5161
	2019	9,631,922,020,254.00	6,271,570,310,805.00	1.5358

	2020	9,638,120,511,934.00	5,676,662,296,239.00	1.6978
	2021	9,755,489,779,631.00	5,533,149,314,628.00	1.7631
<b>HMSP</b>	2017	550,184,512,765,078.00	52,169,141.00	16.1713
	2018	431,540,076,543,167.00	57,846,587.00	15.8251
	2019	244,267,976,713,076.00	66,125,882.00	15.1222
	2020	175,058,725,167,104.00	69,106,634.00	14.7450
	2021	112,246,968,107,522.00	76,989,450.00	14.1925
<b>RMBA</b>	2017	13,832,436,934,928.00	19,243,526.00	13.4854
	2018	11,866,776,931,118.00	21,393,207.00	13.2262
	2019	11,502,767,653,687.00	25,599,017.00	13.0155
	2020	12,376,393,080,055.00	19,219,060.00	13.3754
	2021	11,138,751,293,537.00	12,993,552.00	13.6615
<b>KAEF</b>	2017	18,519,428,217,406.00	9,619,777,189,939.00	1.9251
	2018	14,447,582,832,797.00	18,511,923,661.00	6.6599
	2019	6,953,439,950,304.00	29,292,827,436.00	5.4696
	2020	23,614,957,144,628.00	28,019,961,302.00	6.7367
	2021	13,506,748,322,405.00	28,288,517,445.00	6.1685
<b>KLBF</b>	2017	81,941,163,999,546.00	19,338,447,049,981.00	4.2372
	2018	74,101,796,956,215.00	20,997,817,494,384.00	3.5290
	2019	79,496,842,204,753.00	23,823,871,249,137.00	3.3369
	2020	73,663,398,896,094.00	26,852,518,490,668.00	2.7436
	2021	80,104,079,570,798.00	30,067,392,519,419.00	2.6642
<b>TSPC</b>	2017	10,452,891,899,876.00	9,787,792,208,897.00	1.0678
	2018	8,692,126,989,832.00	10,307,102,050,158.00	0.8433
	2019	8,859,233,610,850.00	10,954,503,191,593.00	0.8087
	2020	9,027,421,825,611.00	11,832,079,358,977.00	0.7623
	2021	9,533,819,115,619.00	12,413,349,328,403.00	0.7680
<b>WIIM</b>	2017	856,584,122,330.00	1,473,332,824,971.00	0.5814
	2018	546,419,312,053.00	1,505,911,026,451.00	0.3628
	2019	619,129,822,759.00	1,565,872,639,635.00	0.3954
	2020	1,562,521,996,419.00	2,043,032,173,547.00	0.7648
	2021	1,471,530,541,887.00	2,463,954,303,809.00	0.5972
<b>KINO</b>	2017	4,210,995,919,165.00	4,420,019,558,439.00	0.9527
	2018	5,405,264,279,012.00	4,997,428,284,420.00	1.0816
	2019	6,892,903,024,331.00	6,688,667,738,214.00	1.0305

	2020	6,563,838,088,810.00	7,933,482,763,841.00	0.8274
	2021	5,583,168,800,955.00	8,029,968,815,007.00	0.6953
<b>WOOD</b>	2017	3,455,378,027,661.00	5,773,380,161,002.00	0.5985
	2018	6,016,801,642,658.00	6,726,955,300,068.00	0.8944
	2019	7,131,557,623,408.00	8,327,161,134,898.00	0.8564
	2020	6,428,337,453,547.00	8,753,596,375,687.00	0.7343
	2021	4,221,034,524,662.00	9,959,531,803,292.00	0.4238

## LAMPIRAN 7

### Hasil Uji Statistika Deskriptif

Date: 04/17/23

Time: 03:40

Sample: 2017 2021

	X1	X2	X3	X4	Y
Mean	0.538462	2.496678	0.001968	-3.361925	5.519974
Median	1.000000	0.543529	0.001306	1.261338	1.763099
Maximum	1.000000	29.49138	0.012930	30.65610	16.17127
Minimum	0.000000	-1.465334	2.34E-05	-325.1622	0.362850
Std. Dev.	0.502398	6.520977	0.002482	40.71171	5.690538
Skewness	-0.154303	3.362517	2.627300	-7.765803	0.599738
Kurtosis	1.023810	13.16004	10.05657	61.95512	1.596405
Jarque-Bera	10.83487	402.0588	209.6414	10066.70	9.232224
Probability	0.004439	0.000000	0.000000	0.000000	0.009891
Sum	35.00000	162.2840	0.127933	-218.5251	358.7983
Sum Sq. Dev.	16.15385	2721.481	0.000394	106076.4	2072.462
Observations	65	65	65	65	65

**LAMPIRAN 8**

## Uji Chow Test

Redundant Fixed Effects Tests  
Equation: Untitled  
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	35.140309	(12,49)	0.0000
Cross-section Chi-square	147.053792	12	0.0000

Cross-section fixed effects test equation:

Dependent Variable: Y

Method: Panel Least Squares

Date: 04/17/23 Time: 04:01

Sample: 2017 2021

Periods included: 5

Cross-sections included: 13

Total panel (balanced) observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.927523	0.823172	3.556394	0.0007
X2	0.407042	0.093667	4.345610	0.0001
X3	811.2309	250.8115	3.234425	0.0020
X4	0.006087	0.015220	0.399962	0.6906
R-squared	0.305484	Mean dependent var		5.519974
Adjusted R-squared	0.271328	S.D. dependent var		5.690538
S.E. of regression	4.857574	Akaike info criterion		6.058519
Sum squared resid	1439.357	Schwarz criterion		6.192327
Log likelihood	-192.9019	Hannan-Quinn criter.		6.111315
F-statistic	8.943665	Durbin-Watson stat		0.154735
Prob(F-statistic)	0.000054			

**LAMPIRAN 9**

## Uji Hausman Test

Correlated Random Effects - Hausman Test  
Equation: Untitled  
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.792974	3	0.6165

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
X2	0.063216	0.132867	0.003365	0.2299
X3	279.541199	347.223924	8721.758539	0.4686
X4	-0.000928	-0.000389	0.000001	0.5175

Cross-section random effects test equation:

Dependent Variable: Y

Method: Panel Least Squares

Date: 04/17/23 Time: 04:03

Sample: 2017 2021

Periods included: 5

Cross-sections included: 13

Total panel (balanced) observations: 65

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.808830	0.679347	7.078609	0.0000
X1	NA	NA	NA	NA
X2	0.063216	0.128962	0.490190	0.6262
X3	279.5412	266.5455	1.048756	0.2994
X4	-0.000928	0.006432	-0.144350	0.8858

## Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.927698	Mean dependent var	5.519974
Adjusted R-squared	0.905565	S.D. dependent var	5.690538
S.E. of regression	1.748718	Akaike info criterion	4.165383
Sum squared resid	149.8427	Schwarz criterion	4.700617
Log likelihood	-119.3750	Hannan-Quinn criter.	4.376567
F-statistic	41.91434	Durbin-Watson stat	1.176085

Prob(F-statistic) 0.000000

---

## **LAMPIRAN 10**

### Uji Lanrange Multiplier

Lagrange multiplier (LM) test for panel data

Date: 04/17/23 Time: 04:04

Sample: 2017 2021

Total panel observations: 65

Probability in ()

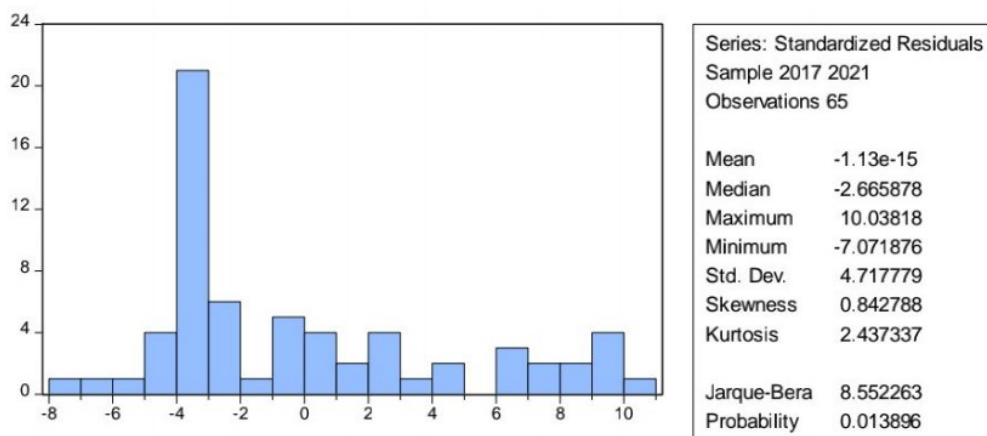
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Null (no rand. effect)	Cross-section	Period	Both
Alternative	One-sided	One-sided	
Breusch-Pagan	92.94069 (0.0000)	1.880986 (0.1702)	94.82168 (0.0000)
Honda	9.640575 (0.0000)	-1.371490 (0.9149)	5.847126 (0.0000)
King-Wu	9.640575 (0.0000)	-1.371490 (0.9149)	3.632542 (0.0001)
GHM	-- --	-- --	92.94069 (0.0000)

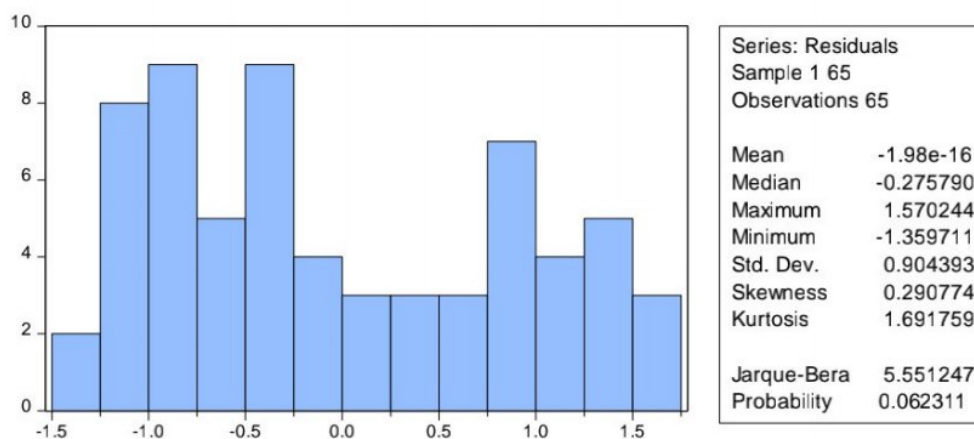
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**LAMPIRAN 11**

## Hasil Uji Normalitas

**LAMPIRAN 12**

## Hasil Transformasi Normalitas





**LAMPIRAN 13**

## Hasil Uji Multikolinearitas

	X1	X2	X3	X4
X1	1.000000	0.198127	0.211956	0.148132
X2	0.198127	1.000000	-0.105715	0.044881
X3	0.211956	-0.105715	1.000000	-0.197826
X4	0.148132	0.044881	-0.197826	1.000000

**LAMPIRAN 14**

## Hasil Uji Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	26.30699	Prob. F(2,58)	0.0000
Obs*R-squared	30.91751	Prob. Chi-Square(2)	0.0000

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 04/17/23 Time: 04:17

Sample: 1 65

Included observations: 65

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.147403	0.717745	0.205369	0.8380
X1	-0.411517	0.968079	-0.425087	0.6723
X2	0.033713	0.072103	0.467574	0.6418
X3	-13.00964	192.7189	-0.067506	0.9464
X4	0.004927	0.011492	0.428780	0.6697
RESID(-1)	0.755759	0.130568	5.788224	0.0000
RESID(-2)	-0.092356	0.133055	-0.694116	0.4904

R-squared	0.475654	Mean dependent var	-9.16E-16
Adjusted R-squared	0.421411	S.D. dependent var	4.717779
S.E. of regression	3.588579	Akaike info criterion	5.494830
Sum squared resid	746.9182	Schwarz criterion	5.728995
Log likelihood	-171.5820	Hannan-Quinn criter.	5.587223
F-statistic	8.768997	Durbin-Watson stat	1.855066
Prob(F-statistic)	0.000001		

**LAMPIRAN 15**

## Hasil Uji Heteroskidastisitas

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.246475	Prob. F(4,60)	0.0746
Obs*R-squared	8.466709	Prob. Chi-Square(4)	0.0759
Scaled explained SS	5.184644	Prob. Chi-Square(4)	0.2689

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 04/17/23 Time: 04:24

Sample: 1 65

Included observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26.20553	5.091121	5.147301	0.0000
X1	7.916694	6.801590	1.163948	0.2491
X2	-1.098252	0.504912	-2.175136	0.0336
X3	-2892.121	1369.446	-2.111891	0.0389
X4	0.035426	0.081522	0.434559	0.6654
R-squared	0.130257	Mean dependent var		21.91501
Adjusted R-squared	0.072274	S.D. dependent var		26.47815
S.E. of regression	25.50337	Akaike info criterion		9.389301
Sum squared resid	39025.30	Schwarz criterion		9.556562
Log likelihood	-300.1523	Hannan-Quinn criter.		9.455296
F-statistic	2.246475	Durbin-Watson stat		0.595261
Prob(F-statistic)	0.074577			

**LAMPIRAN 16**

## Hasil Uji Analisis Regresi Data Panel

Dependent Variable: Y1  
 Method: Least Squares  
 Date: 04/17/23 Time: 04:29  
 Sample: 1 65  
 Included observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.520489	0.972675	2.591295	0.0120
X1	1.028812	1.299466	0.791719	0.4316
X2	0.389734	0.096465	4.040154	0.0002
X3	754.3574	261.6371	2.883221	0.0055
X4	0.003645	0.015575	0.234041	0.8157
R-squared	0.312665	Mean dependent var		5.519974
Adjusted R-squared	0.266843	S.D. dependent var		5.690538
S.E. of regression	4.872501	Akaike info criterion		6.078895
Sum squared resid	1424.476	Schwarz criterion		6.246156
Log likelihood	-192.5641	Hannan-Quinn criter.		6.144890
F-statistic	6.823417	Durbin-Watson stat		0.572222
Prob(F-statistic)	0.000135			

**LAMPIRAN 17**

t tabel

Jumlah Sampel	Keterangan	t-tabel
<b>65</b>	<b>65-1 = 64</b>	<b>1,669013</b>