

LAMPIRAN

Lampiran 1. Data Mentah Penelitian

| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|-------|------|-------|------|--------|--------|--------|------|------|
| 11/1/2014 | 810 | 1135 | 985 | 814.8 | 6775 | 323.6 | 4200 | 600 | 5449.8 | 5525 | 3790 | 6825 |
| 12/1/2014 | 805 | 1080 | 930 | 823.2 | 7125 | 313.1 | 4110 | 600 | 5030.6 | 5625 | 3985 | 6700 |
| 1/1/2015 | 785 | 1040 | 824 | 894.6 | 7425 | 274.7 | 3780 | 780 | 4798.8 | 6550 | 3625 | 6750 |
| 2/1/2015 | 740 | 1000 | 939 | 894.6 | 7850 | 244.2 | 3955 | 950 | 4734.7 | 7250 | 3450 | 7550 |
| 3/1/2015 | 845 | 960 | 974 | 844.2 | 7850 | 200.6 | 3785 | 1100 | 4729.7 | 7150 | 3525 | 7400 |
| 4/1/2015 | 735 | 950 | 1025 | 726.6 | 8575 | 129.1 | 3545 | 1180 | 4290.8 | 7337.5 | 3235 | 7450 |
| 5/1/2015 | 645 | 875 | 1040 | 667.8 | 6850 | 133.4 | 2835 | 1160 | 3980.1 | 6600 | 2795 | 6750 |
| 6/1/2015 | 690 | 860 | 1095 | 638.4 | 7300 | 111.6 | 3140 | 1142.5 | 4231.6 | 7050 | 3120 | 7300 |
| 7/1/2015 | 645 | 760 | 1185 | 571.2 | 7075 | 79.4 | 2750 | 1110 | 3634.8 | 6237.5 | 2710 | 6575 |
| 8/1/2015 | 640 | 590 | 1150 | 399.0 | 6650 | 44.5 | 2535 | 1160 | 2924.6 | 6150 | 1960 | 6100 |
| 9/1/2015 | 595 | 595 | 1215 | 420.0 | 5925 | 43.6 | 1870 | 1050 | 2959.2 | 6375 | 1545 | 5300 |
| 10/1/2015 | 505 | 535 | 1170 | 408.2 | 5225 | 43.6 | 2000 | 1100 | 2579.4 | 6200 | 2185 | 5500 |
| 11/1/2015 | 670 | 595 | 1180 | 378.0 | 5900 | 43.6 | 2500 | 1000 | 3072.6 | 6600 | 2235 | 5525 |
| 12/1/2015 | 765 | 550 | 1220 | 315.0 | 5925 | 43.6 | 3165 | 990 | 3412.9 | 6312.5 | 1645 | 4875 |
| 1/1/2016 | 825 | 515 | 1435 | 314.0 | 6000 | 43.6 | 2600 | 1030 | 3600.3 | 6737.5 | 1635 | 5175 |
| 2/1/2016 | 800 | 525 | 1470 | 329.0 | 6450 | 43.6 | 3345 | 950 | 3625.0 | 7225 | 1445 | 6200 |
| 3/1/2016 | 915 | 605 | 1635 | 364.0 | 6800 | 43.6 | 3380 | 950 | 3846.9 | 7875 | 1535 | 7050 |
| 4/1/2016 | 895 | 645 | 1390 | 464.0 | 7250 | 43.6 | 3590 | 945 | 3945.6 | 7600 | 1750 | 7225 |
| 5/1/2016 | 925 | 730 | 1300 | 760.0 | 6725 | 44.5 | 3715 | 900 | 3472.1 | 7637.5 | 1860 | 7125 |
| 6/1/2016 | 830 | 710 | 1280 | 650.0 | 6600 | 43.6 | 3500 | 922.5 | 3530 | 8100 | 1655 | 6925 |

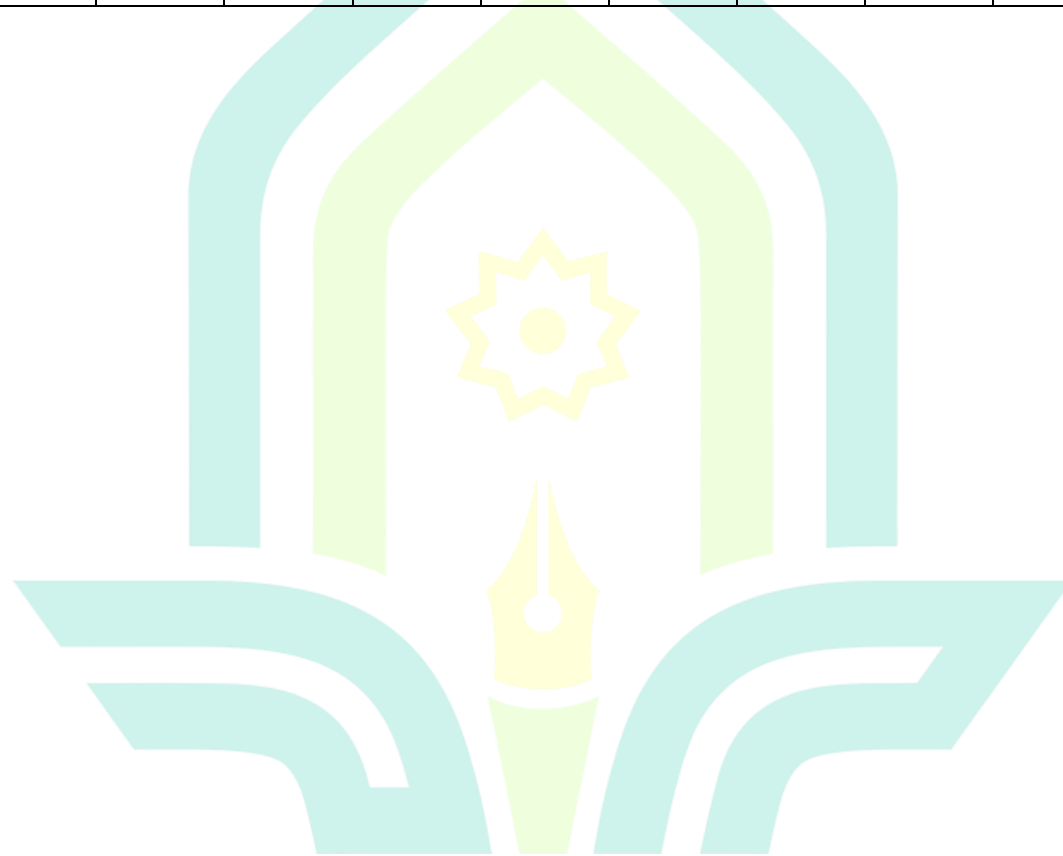
| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|-------|------|-------|------|--------|------|--------|------|------|
| 7/1/2016 | 925 | 850 | 1280 | 725.0 | 7400 | 45.4 | 3750 | 980 | 3670 | 8612.5 | 1820 | 7250 |
| 8/1/2016 | 970 | 1040 | 1350 | 795.0 | 7725 | 43.6 | 3750 | 970 | 3710 | 8600 | 2560 | 8325 |
| 9/1/2016 | 1000 | 1150 | 1335 | 720.0 | 8150 | 43.6 | 3730 | 900 | 2840 | 9975 | 2640 | 7925 |
| 10/1/2016 | 875 | 1205 | 1290 | 820.0 | 8250 | 43.6 | 3500 | 965 | 2700 | 9475 | 2950 | 8700 |
| 11/1/2016 | 855 | 1585 | 1420 | 895.0 | 8225 | 70.6 | 3700 | 880 | 2200 | 9400 | 2720 | 8500 |
| 12/1/2016 | 865 | 1530 | 1335 | 970.0 | 7550 | 61.9 | 3150 | 820 | 2300 | 8650 | 3380 | 7575 |
| 1/1/2017 | 835 | 1695 | 1200 | 895.0 | 8275 | 58.4 | 3090 | 997.5 | 2310 | 8575 | 2820 | 7925 |
| 2/1/2017 | 745 | 1695 | 1335 | 800.0 | 7950 | 120.4 | 3100 | 910 | 2910 | 8400 | 2370 | 7925 |
| 3/1/2017 | 770 | 1695 | 1270 | 745.0 | 8200 | 82.0 | 3100 | 885 | 2990 | 8325 | 2550 | 8125 |
| 4/1/2017 | 825 | 1750 | 1250 | 730.0 | 8625 | 68.0 | 3200 | 880 | 3060 | 8150 | 2390 | 8000 |
| 5/1/2017 | 935 | 1775 | 1355 | 695.0 | 8950 | 66.3 | 3190 | 1000 | 3210 | 8775 | 2220 | 8375 |
| 6/1/2017 | 1055 | 1520 | 1325 | 775.0 | 8750 | 63.7 | 3170 | 1090 | 2960 | 8700 | 1905 | 8750 |
| 7/1/2017 | 1060 | 1580 | 1305 | 695.0 | 8925 | 61.9 | 3180 | 1150 | 3410 | 8800 | 1850 | 8600 |
| 8/1/2017 | 1110 | 1785 | 1380 | 690.0 | 7975 | 54.1 | 2670 | 1150 | 3360 | 8350 | 2420 | 8375 |
| 9/1/2017 | 1090 | 1825 | 1355 | 740.0 | 7875 | 56.7 | 2770 | 930 | 3600 | 8725 | 2970 | 8375 |
| 10/1/2017 | 1215 | 1825 | 1420 | 640.0 | 7900 | 51.5 | 2740 | 1020 | 3740 | 8725 | 2590 | 8425 |
| 11/1/2017 | 1255 | 1825 | 1490 | 645.0 | 8000 | 55.8 | 3300 | 820 | 3380 | 8800 | 2940 | 8200 |
| 12/1/2017 | 1190 | 1700 | 1270 | 665.0 | 7975 | 64.5 | 2920 | 910 | 3080 | 8450 | 2760 | 7325 |
| 1/1/2018 | 1155 | 1860 | 1270 | 625.0 | 8300 | 57.6 | 3000 | 950 | 2960 | 8900 | 2890 | 7625 |
| 2/1/2018 | 1350 | 2450 | 1245 | 915.0 | 8500 | 70.6 | 3450 | 1037.5 | 2990 | 8725 | 3750 | 7750 |
| 3/1/2018 | 1330 | 2350 | 1220 | 955.0 | 8075 | 84.6 | 3440 | 872.5 | 2950 | 8975 | 3390 | 7575 |
| 4/1/2018 | 1330 | 2130 | 1135 | 775.0 | 7300 | 73.3 | 3450 | 857.5 | 2520 | 8275 | 2790 | 7200 |
| 5/1/2018 | 1300 | 1835 | 980 | 845.0 | 7150 | 64.5 | 3680 | 897.5 | 2120 | 8675 | 3160 | 6975 |
| 6/1/2018 | 1250 | 1885 | 984 | 865.0 | 6900 | 59.3 | 3680 | 895 | 2100 | 8700 | 3860 | 7075 |

| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|--------|------|------|------|-------|------|-------|------|------|
| 7/1/2018 | 1270 | 1790 | 860 | 890.0 | 6600 | 56.7 | 3680 | 895 | 2520 | 8850 | 4040 | 6650 |
| 8/1/2018 | 1310 | 1905 | 842 | 915.0 | 7150 | 56.7 | 4520 | 890 | 2750 | 8725 | 4370 | 6350 |
| 9/1/2018 | 1360 | 1865 | 722 | 870.0 | 7250 | 53.2 | 4980 | 885 | 3180 | 8675 | 3800 | 6375 |
| 10/1/2018 | 1440 | 1835 | 734 | 845.0 | 7350 | 55.8 | 5075 | 885 | 2760 | 8825 | 3710 | 5900 |
| 11/1/2018 | 1370 | 1650 | 692 | 680.0 | 7900 | 43.6 | 5500 | 855 | 2620 | 8925 | 2920 | 5975 |
| 12/1/2018 | 1615 | 1285 | 780 | 615.0 | 8550 | 43.6 | 5950 | 882.5 | 2040 | 9850 | 3030 | 6600 |
| 1/1/2019 | 1490 | 1215 | 858 | 765.0 | 8225 | 43.6 | 7225 | 840 | 1980 | 10450 | 3260 | 7450 |
| 2/1/2019 | 1700 | 1390 | 1050 | 965.0 | 8450 | 45.4 | 7400 | 870 | 2170 | 10775 | 3850 | 7750 |
| 3/1/2019 | 1755 | 1310 | 1110 | 1015.0 | 7150 | 43.6 | 7300 | 845 | 2400 | 10225 | 3740 | 7075 |
| 4/1/2019 | 1785 | 1340 | 946 | 885.0 | 7300 | 43.6 | 6375 | 770 | 2680 | 9325 | 3390 | 6375 |
| 5/1/2019 | 1650 | 1305 | 890 | 865.0 | 7625 | 43.6 | 5275 | 825 | 2920 | 9725 | 3050 | 6950 |
| 6/1/2019 | 1735 | 1295 | 796 | 725.0 | 7450 | 43.6 | 4900 | 790 | 2860 | 9800 | 2700 | 6600 |
| 7/1/2019 | 1810 | 1360 | 818 | 845.0 | 7450 | 43.6 | 4730 | 770 | 2980 | 10150 | 3120 | 7025 |
| 8/1/2019 | 1835 | 1270 | 800 | 935.0 | 7000 | 43.6 | 5375 | 727.5 | 3230 | 10700 | 3030 | 7075 |
| 9/1/2019 | 1725 | 1125 | 854 | 1070.0 | 6675 | 45.4 | 5025 | 695 | 3480 | 12050 | 3530 | 7925 |
| 10/1/2019 | 1770 | 1290 | 760 | 975.0 | 6600 | 43.6 | 5350 | 545 | 3440 | 12025 | 3510 | 7700 |
| 11/1/2019 | 1690 | 1310 | 792 | 890.0 | 6950 | 47.1 | 6300 | 602.5 | 3550 | 11625 | 3710 | 7700 |
| 12/1/2019 | 1580 | 1230 | 680 | 750.0 | 6500 | 43.6 | 6725 | 560 | 3340 | 11325 | 3000 | 7950 |
| 1/1/2020 | 1495 | 1555 | 790 | 840.0 | 6925 | 45.4 | 6500 | 557.5 | 3150 | 11150 | 3640 | 7925 |
| 2/1/2020 | 1720 | 1225 | 662 | 720.0 | 6350 | 43.6 | 6650 | 557.5 | 2900 | 11375 | 3160 | 7825 |
| 3/1/2020 | 1515 | 1155 | 530 | 575.0 | 5525 | 43.6 | 5700 | 502.5 | 2590 | 10275 | 2450 | 6500 |
| 4/1/2020 | 1300 | 990 | 395 | 450.0 | 3900 | 43.6 | 4940 | 500 | 2000 | 10225 | 2160 | 6350 |
| 5/1/2020 | 1520 | 920 | 480 | 510.0 | 3850 | 43.6 | 4600 | 560 | 2540 | 9875 | 2570 | 6525 |
| 6/1/2020 | 1555 | 1100 | 470 | 535.0 | 4770 | 43.6 | 5775 | 499 | 2590 | 8150 | 2780 | 5750 |

| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|--------|------|-------|------|-------|------|-------|------|------|
| 7/1/2020 | 1510 | 995 | 508 | 605.0 | 4800 | 43.6 | 5575 | 490 | 2770 | 9350 | 2800 | 6525 |
| 8/1/2020 | 1750 | 1085 | 576 | 730.0 | 5150 | 43.6 | 6225 | 450 | 2500 | 9200 | 3420 | 6450 |
| 9/1/2020 | 1545 | 1085 | 580 | 820.0 | 5100 | 43.6 | 6300 | 545 | 2440 | 10225 | 3790 | 7625 |
| 10/1/2020 | 1595 | 1135 | 510 | 705.0 | 4460 | 48.0 | 5675 | 750 | 2030 | 10075 | 3560 | 7150 |
| 11/1/2020 | 1565 | 1125 | 536 | 1055.0 | 5425 | 44.5 | 5850 | 800 | 2030 | 9650 | 4050 | 7000 |
| 12/1/2020 | 1585 | 1390 | 582 | 1145.0 | 5300 | 52.3 | 6075 | 832.5 | 2410 | 9900 | 4610 | 7100 |
| 1/1/2021 | 1715 | 1430 | 636 | 1935.0 | 6025 | 72.4 | 6525 | 1400 | 2730 | 9575 | 5100 | 6850 |
| 2/1/2021 | 1560 | 1200 | 568 | 2220.0 | 6100 | 74.1 | 5750 | 1900 | 2220 | 9100 | 5500 | 6050 |
| 3/1/2021 | 1525 | 1180 | 674 | 2840.0 | 5400 | 71.5 | 6150 | 2110 | 2200 | 8575 | 6075 | 6050 |
| 4/1/2021 | 1525 | 1175 | 644 | 2250.0 | 5275 | 68.7 | 7000 | 2270 | 2090 | 9200 | 4380 | 6600 |
| 5/1/2021 | 1480 | 1245 | 654 | 2490.0 | 5500 | 86.3 | 7050 | 2240 | 2090 | 8700 | 4610 | 6525 |
| 6/1/2021 | 1495 | 1190 | 648 | 2450.0 | 5250 | 89.1 | 6750 | 2350 | 2460 | 8200 | 4730 | 6350 |
| 7/1/2021 | 1250 | 1205 | 630 | 2300.0 | 4940 | 110.5 | 6250 | 2500 | 2670 | 8150 | 4610 | 6175 |
| 8/1/2021 | 1320 | 1335 | 720 | 2520.0 | 4720 | 89.1 | 6125 | 2750 | 2690 | 8125 | 5500 | 6075 |
| 9/1/2021 | 1390 | 1260 | 778 | 2390.0 | 5225 | 80.8 | 6400 | 2170 | 2670 | 8425 | 5075 | 6175 |
| 10/1/2021 | 1270 | 1760 | 872 | 2290.0 | 5500 | 86.3 | 6425 | 1740 | 3040 | 8350 | 4590 | 6350 |
| 11/1/2021 | 1410 | 1680 | 854 | 2340.0 | 6025 | 91.0 | 6200 | 1925 | 3080 | 8800 | 4850 | 6350 |
| 12/1/2021 | 1305 | 1700 | 794 | 2300.0 | 5775 | 107.7 | 6075 | 1925 | 3070 | 8450 | 4790 | 6300 |
| 1/1/2022 | 1280 | 2250 | 822 | 2250.0 | 5700 | 116.0 | 5950 | 2280 | 3170 | 8700 | 4680 | 6325 |
| 2/1/2022 | 1235 | 2240 | 730 | 1770.0 | 5475 | 139.0 | 6300 | 1795 | 3320 | 8725 | 4710 | 6325 |
| 3/1/2022 | 1070 | 2450 | 755 | 2220.0 | 5800 | 184.0 | 5800 | 2070 | 2860 | 8500 | 5400 | 6200 |
| 4/1/2022 | 1025 | 2690 | 910 | 2440.0 | 6575 | 198.0 | 5650 | 2450 | 2650 | 7350 | 6700 | 5950 |
| 5/1/2022 | 1045 | 3340 | 1070 | 2600.0 | 7575 | 224.0 | 5150 | 2990 | 3190 | 7625 | 7300 | 6300 |
| 6/1/2022 | 960 | 3270 | 1120 | 2510.0 | 7350 | 228.0 | 5400 | 1915 | 2640 | 8575 | 8225 | 6600 |

| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|--------|------|-------|------|------|------|-------|------|------|
| 7/1/2022 | 770 | 2860 | 1030 | 1800.0 | 6625 | 246.0 | 6000 | 1605 | 2600 | 9550 | 5650 | 7050 |
| 8/1/2022 | 710 | 3250 | 1250 | 1955.0 | 6325 | 234.0 | 5600 | 1875 | 2370 | 8825 | 6100 | 6800 |
| 9/1/2022 | 720 | 3540 | 1200 | 1990.0 | 6975 | 248.0 | 5875 | 1910 | 2630 | 8300 | 6100 | 6225 |
| 10/1/2022 | 610 | 3960 | 1350 | 1940.0 | 6625 | 140.0 | 5650 | 1520 | 2460 | 8650 | 6400 | 6025 |
| 11/1/2022 | 565 | 3980 | 1560 | 1845.0 | 6650 | 181.0 | 5575 | 1545 | 2520 | 9725 | 6500 | 6450 |
| 12/1/2022 | 500 | 3870 | 1385 | 1985.0 | 6050 | 183.0 | 5700 | 1290 | 2170 | 10100 | 7375 | 6450 |
| 1/1/2023 | 496 | 3850 | 1400 | 1985.0 | 5700 | 159.0 | 5650 | 1030 | 2140 | 10000 | 7100 | 6725 |
| 2/1/2023 | 490 | 2960 | 1310 | 2310.0 | 6000 | 184.0 | 5825 | 1080 | 2300 | 10100 | 7425 | 6725 |
| 3/1/2023 | 505 | 2990 | 1385 | 1990.0 | 6100 | 163.0 | 5375 | 950 | 2090 | 10125 | 6825 | 6475 |
| 4/1/2023 | 478 | 2900 | 1550 | 2090.0 | 6000 | 170.0 | 4990 | 790 | 1980 | 9975 | 6650 | 6200 |
| 5/1/2023 | 450 | 3130 | 1620 | 2100.0 | 6750 | 162.0 | 4590 | 705 | 1750 | 10575 | 6975 | 6450 |
| 6/1/2023 | 630 | 2040 | 1365 | 1895.0 | 6450 | 116.0 | 4950 | 595 | 1985 | 11700 | 6300 | 7100 |
| 7/1/2023 | 675 | 2230 | 1420 | 1950.0 | 6775 | 136.0 | 5275 | 710 | 1955 | 11325 | 6300 | 7350 |
| 8/1/2023 | 720 | 2410 | 1385 | 1985.0 | 6850 | 171.0 | 5175 | 650 | 2270 | 11200 | 6875 | 7325 |
| 9/1/2023 | 730 | 2670 | 1400 | 1990.0 | 6450 | 195.0 | 5175 | 570 | 2500 | 11200 | 5900 | 7100 |
| 10/1/2023 | 750 | 2850 | 1545 | 1815.0 | 6225 | 212.0 | 5425 | 585 | 2380 | 11075 | 5650 | 6625 |
| 11/1/2023 | 800 | 2560 | 1490 | 1705.0 | 5775 | 194.0 | 5800 | 500 | 2270 | 10350 | 4950 | 6650 |
| 12/1/2023 | 755 | 2620 | 1435 | 1740.0 | 5400 | 202.0 | 5200 | 645 | 2120 | 11550 | 4500 | 6425 |
| 1/1/2024 | 720 | 2380 | 1475 | 1705.0 | 5650 | 170.0 | 5025 | 590 | 2000 | 10575 | 4310 | 6450 |
| 2/1/2024 | 850 | 2400 | 1620 | 1550.0 | 5125 | 155.0 | 4480 | 464 | 2320 | 11775 | 3870 | 6375 |
| 3/1/2024 | 835 | 2420 | 1700 | 1460.0 | 5225 | 144.0 | 4840 | 470 | 2380 | 11550 | 4050 | 6625 |
| 4/1/2024 | 880 | 2700 | 1720 | 1600.0 | 5150 | 150.0 | 5250 | 436 | 2260 | 11600 | 4070 | 6375 |
| 5/1/2024 | 935 | 2710 | 1675 | 1640.0 | 5150 | 153.0 | 4950 | 386 | 2470 | 10875 | 4250 | 6250 |
| 6/1/2024 | 820 | 2770 | 1600 | 1465.0 | 4290 | 155.0 | 5200 | 424 | 2310 | 9750 | 4970 | 5875 |

| | ACES | ADRO | AKRA | ANTM | ASII | BRMS | CPIN | EMTK | EXCL | ICBP | INCO | INDF |
|-----------|------|------|------|--------|------|-------|------|------|------|-------|------|------|
| 7/1/2024 | 855 | 2790 | 1620 | 1250.0 | 4460 | 146.0 | 5075 | 388 | 2160 | 10300 | 4220 | 6075 |
| 8/1/2024 | 800 | 3220 | 1515 | 1315.0 | 4720 | 157.0 | 5225 | 408 | 2170 | 10925 | 3740 | 6125 |
| 9/1/2024 | 730 | 3520 | 1480 | 1410.0 | 4700 | 158.0 | 5200 | 392 | 2160 | 11000 | 3720 | 6075 |
| 10/1/2024 | 715 | 3590 | 1495 | 1400.0 | 5100 | 163.0 | 4860 | 400 | 2250 | 11400 | 3800 | 6825 |



lanjutan...

| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|------|-------|-------|------|-------|------|------|----------|------|-------|-------|------|
| 11/1/2014 | 1150 | 24000 | 21175 | 1705 | 530 | 5950 | 2590 | 15830.96 | 2750 | 157.1 | 18375 | 6080 |
| 12/1/2014 | 1175 | 24675 | 19025 | 1750 | 560 | 5950 | 2630 | 15955.61 | 2825 | 147.2 | 18325 | 6360 |
| 1/1/2015 | 1045 | 25000 | 15375 | 1830 | 507.5 | 6000 | 2500 | 16155.05 | 2865 | 147.2 | 17350 | 6460 |
| 2/1/2015 | 1090 | 23000 | 16750 | 1865 | 587.5 | 5050 | 2275 | 14534.56 | 2830 | 147.2 | 17900 | 7165 |
| 3/1/2015 | 930 | 24050 | 16900 | 1805 | 547.5 | 5200 | 2135 | 14833.73 | 2935 | 148.7 | 20750 | 7200 |
| 4/1/2015 | 995 | 21925 | 16900 | 1865 | 525 | 4800 | 2150 | 13612.13 | 2890 | 147.2 | 21800 | 7930 |
| 5/1/2015 | 1120 | 21000 | 12600 | 1795 | 557.5 | 4100 | 1870 | 12465.32 | 2615 | 154.6 | 21400 | 8520 |
| 6/1/2015 | 1000 | 22400 | 13500 | 1840 | 580 | 4295 | 1965 | 13412.68 | 2845 | 172.3 | 20300 | 8660 |
| 7/1/2015 | 895 | 20875 | 12850 | 1675 | 552.5 | 4315 | 1680 | 11966.71 | 2930 | 164.4 | 20375 | 7900 |
| 8/1/2015 | 960 | 20025 | 9725 | 1745 | 465 | 4000 | 1200 | 10071.98 | 2940 | 171.8 | 20200 | 8000 |
| 9/1/2015 | 780 | 19625 | 9350 | 1675 | 400 | 2780 | 1170 | 9224.336 | 2870 | 171.3 | 19125 | 7945 |
| 10/1/2015 | 790 | 16450 | 9875 | 1375 | 300 | 2530 | 1125 | 9024.891 | 2645 | 177.9 | 17475 | 7600 |
| 11/1/2015 | 825 | 18000 | 8475 | 1430 | 345 | 3000 | 1460 | 9772.81 | 2680 | 168.1 | 18100 | 7400 |
| 12/1/2015 | 950 | 18700 | 6750 | 1335 | 410 | 2655 | 1120 | 10595.52 | 2930 | 166.9 | 16300 | 7350 |
| 1/1/2016 | 955 | 22325 | 5725 | 1320 | 379.5 | 2745 | 905 | 11368.37 | 3105 | 169.1 | 16950 | 7400 |
| 2/1/2016 | 935 | 19700 | 4810 | 1335 | 374.5 | 2405 | 890 | 11019.34 | 3340 | 171.8 | 17400 | 7340 |
| 3/1/2016 | 885 | 20025 | 6750 | 1300 | 425 | 2635 | 1015 | 10221.56 | 3250 | 171.8 | 15525 | 8905 |
| 4/1/2016 | 960 | 19725 | 6625 | 1445 | 480 | 2615 | 1255 | 10146.77 | 3325 | 174.2 | 15300 | 8585 |
| 5/1/2016 | 1000 | 19725 | 7800 | 1375 | 420 | 2620 | 1410 | 9872.532 | 3550 | 230.7 | 15000 | 8515 |
| 6/1/2016 | 900 | 16650 | 8750 | 1430 | 378 | 2480 | 1275 | 8975.029 | 3700 | 220.9 | 14200 | 8620 |

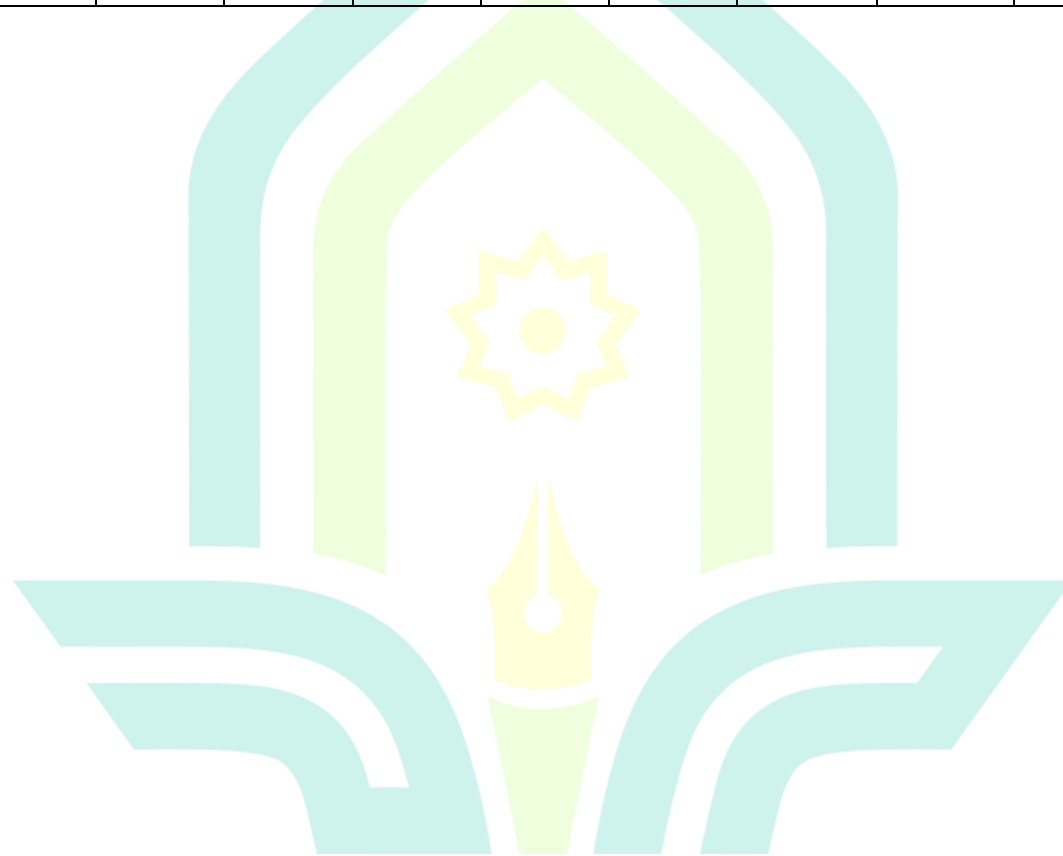
| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|-------|-------|-------|------|-------|------|------|----------|------|--------|-------|-------|
| 7/1/2016 | 920 | 16875 | 9375 | 1530 | 415 | 2340 | 1540 | 9324.059 | 3980 | 225.8 | 14800 | 9015 |
| 8/1/2016 | 1050 | 17075 | 12575 | 1675 | 475 | 3290 | 1970 | 9348.989 | 4230 | 299.4 | 15750 | 9010 |
| 9/1/2016 | 1040 | 17700 | 11375 | 1795 | 460 | 3020 | 1985 | 9872.532 | 4210 | 535.0 | 18750 | 9130 |
| 10/1/2016 | 985 | 17350 | 10900 | 1715 | 460 | 2870 | 1925 | 10071.98 | 4310 | 677.3 | 17700 | 8910 |
| 11/1/2016 | 1060 | 16450 | 14325 | 1740 | 550 | 2560 | 2380 | 9822.671 | 4220 | 876.1 | 21625 | 8895 |
| 12/1/2016 | 975 | 15975 | 16000 | 1500 | 527.5 | 2650 | 2360 | 8850.376 | 3780 | 980.4 | 21000 | 8105 |
| 1/1/2017 | 955 | 15400 | 16875 | 1515 | 540 | 2700 | 2500 | 9149.544 | 3980 | 1013.5 | 21250 | 7760 |
| 2/1/2017 | 1045 | 15025 | 15000 | 1450 | 552.5 | 2880 | 2320 | 8999.96 | 3870 | 1088.4 | 21850 | 8240 |
| 3/1/2017 | 1260 | 15150 | 17600 | 1530 | 537.5 | 2830 | 2235 | 9598.296 | 3850 | 1157.1 | 24650 | 8435 |
| 4/1/2017 | 1310 | 16600 | 20200 | 1540 | 597.5 | 2530 | 2640 | 8975.029 | 4130 | 1176.7 | 26500 | 8665 |
| 5/1/2017 | 2080 | 16950 | 19125 | 1585 | 632.5 | 2430 | 2535 | 8800.515 | 4370 | 1301.9 | 26900 | 8900 |
| 6/1/2017 | 2530 | 18500 | 15200 | 1540 | 627.5 | 2400 | 2180 | 9423.781 | 4350 | 1295.8 | 27775 | 9235 |
| 7/1/2017 | 2550 | 18450 | 17300 | 1625 | 680 | 2250 | 2390 | 9972.255 | 4520 | 1279.8 | 27450 | 9760 |
| 8/1/2017 | 2770 | 17500 | 20000 | 1735 | 630 | 2250 | 2620 | 9922.394 | 4690 | 1330.1 | 30100 | 9790 |
| 9/1/2017 | 3080 | 19800 | 19450 | 1710 | 700 | 2120 | 2475 | 10445.94 | 4690 | 1057.5 | 30300 | 10110 |
| 10/1/2017 | 4190 | 18900 | 20250 | 1665 | 700 | 1575 | 2090 | 10096.91 | 4680 | 1191.3 | 32000 | 9795 |
| 11/1/2017 | 5275 | 22450 | 22200 | 1600 | 655 | 1840 | 2295 | 10869.76 | 4030 | 1420.0 | 34675 | 9920 |
| 12/1/2017 | 5225 | 18425 | 21150 | 1600 | 692.5 | 1700 | 2250 | 9373.92 | 4150 | 1368.8 | 33500 | 9860 |
| 1/1/2018 | 5400 | 21950 | 20700 | 1690 | 620 | 1750 | 2460 | 9872.532 | 4440 | 1500.0 | 35400 | 11180 |
| 2/1/2018 | 9375 | 21800 | 30300 | 1665 | 730 | 2610 | 3400 | 11119.06 | 3990 | 1631.3 | 38900 | 10880 |
| 3/1/2018 | 10750 | 21975 | 30800 | 1600 | 760 | 2670 | 3170 | 11094.13 | 4000 | 1537.5 | 35600 | 10780 |
| 4/1/2018 | 11000 | 16000 | 28500 | 1500 | 777.5 | 2300 | 2940 | 10321.28 | 3600 | 1556.3 | 32000 | 9905 |
| 5/1/2018 | 13200 | 17725 | 23650 | 1505 | 825 | 1985 | 3240 | 9623.227 | 3830 | 1512.5 | 34100 | 9270 |
| 6/1/2018 | 18700 | 17625 | 25825 | 1370 | 842.5 | 2070 | 3800 | 8376.694 | 3520 | 1462.5 | 35050 | 9120 |

| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|-------|-------|-------|------|------|------|------|----------|------|--------|-------|-------|
| 7/1/2018 | 18600 | 13650 | 22375 | 1220 | 900 | 1995 | 3970 | 7105.232 | 3750 | 1400.0 | 31600 | 9220 |
| 8/1/2018 | 19200 | 14125 | 28475 | 1295 | 885 | 1700 | 4480 | 7578.914 | 3570 | 1250.0 | 35250 | 8650 |
| 9/1/2018 | 19100 | 17725 | 28300 | 1345 | 835 | 2140 | 4050 | 9423.781 | 3490 | 1375.0 | 34400 | 8770 |
| 10/1/2018 | 17350 | 18500 | 25850 | 1380 | 825 | 2250 | 4320 | 9897.463 | 3640 | 1230.0 | 33000 | 9405 |
| 11/1/2018 | 12725 | 17300 | 24900 | 1370 | 800 | 2220 | 4250 | 8975.029 | 3850 | 1202.5 | 33500 | 8645 |
| 12/1/2018 | 10500 | 19100 | 21250 | 1525 | 875 | 1955 | 4020 | 11991.64 | 3680 | 1331.3 | 27500 | 8450 |
| 1/1/2019 | 11550 | 18450 | 20250 | 1520 | 805 | 2120 | 4300 | 11468.09 | 3750 | 1481.3 | 27350 | 9080 |
| 2/1/2019 | 13000 | 19225 | 22800 | 1600 | 1005 | 2570 | 4310 | 12639.83 | 3900 | 1468.8 | 25725 | 10000 |
| 3/1/2019 | 11025 | 19225 | 21375 | 1495 | 1060 | 2540 | 3980 | 12614.9 | 3860 | 1425.0 | 26500 | 9735 |
| 4/1/2019 | 8675 | 21350 | 23925 | 1520 | 955 | 2360 | 4210 | 13836.5 | 3960 | 1387.5 | 27000 | 9840 |
| 5/1/2019 | 7400 | 22000 | 19225 | 1545 | 995 | 2320 | 3960 | 13462.54 | 3790 | 1275.0 | 27175 | 9100 |
| 6/1/2019 | 7750 | 21200 | 17525 | 1405 | 880 | 2060 | 3060 | 11517.96 | 3900 | 1275.0 | 25350 | 8900 |
| 7/1/2019 | 9375 | 20000 | 17550 | 1460 | 900 | 2110 | 2960 | 11542.88 | 4140 | 1242.5 | 28200 | 9000 |
| 8/1/2019 | 7475 | 22475 | 16825 | 1470 | 945 | 2050 | 2740 | 12839.28 | 4300 | 1568.8 | 24925 | 8720 |
| 9/1/2019 | 6850 | 21725 | 13000 | 1690 | 990 | 1920 | 2470 | 13213.24 | 4450 | 2206.3 | 20925 | 9770 |
| 10/1/2019 | 6475 | 18725 | 12400 | 1675 | 1030 | 2100 | 2260 | 11517.96 | 4310 | 2050.0 | 20575 | 9300 |
| 11/1/2019 | 7275 | 20000 | 13300 | 1595 | 1000 | 2110 | 2250 | 12614.9 | 4110 | 2375.0 | 21675 | 8745 |
| 12/1/2019 | 6800 | 19400 | 10225 | 1525 | 1015 | 1920 | 2420 | 11418.23 | 3930 | 2337.5 | 20925 | 8360 |
| 1/1/2020 | 7700 | 19025 | 11475 | 1620 | 1055 | 2170 | 2660 | 11966.71 | 3970 | 2593.8 | 21525 | 8400 |
| 2/1/2020 | 6750 | 16475 | 10050 | 1430 | 960 | 1705 | 2210 | 11916.84 | 3800 | 2193.8 | 19200 | 7950 |
| 3/1/2020 | 5625 | 14925 | 11300 | 1220 | 800 | 1280 | 2240 | 10445.94 | 3490 | 2000.0 | 16600 | 6825 |
| 4/1/2020 | 4010 | 12500 | 8100 | 1200 | 472 | 775 | 2180 | 7603.845 | 3160 | 1312.5 | 16900 | 7250 |
| 5/1/2020 | 5550 | 11650 | 7200 | 1440 | 655 | 855 | 1875 | 7927.943 | 3500 | 2243.8 | 16300 | 8275 |
| 6/1/2020 | 5250 | 12100 | 8100 | 1415 | 725 | 860 | 1945 | 9772.81 | 3150 | 1831.3 | 15700 | 7750 |

| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|-------|-------|-------|------|------|------|------|----------|------|--------|-------|------|
| 7/1/2020 | 5975 | 11800 | 7100 | 1460 | 780 | 1135 | 2020 | 9598.296 | 3050 | 1643.8 | 16550 | 7900 |
| 8/1/2020 | 7800 | 12375 | 7900 | 1565 | 685 | 1265 | 2030 | 9199.405 | 3050 | 1831.3 | 21350 | 8400 |
| 9/1/2020 | 9300 | 11875 | 8275 | 1580 | 680 | 1255 | 2040 | 10520.73 | 2860 | 1781.3 | 23000 | 8225 |
| 10/1/2020 | 8975 | 10400 | 8150 | 1550 | 570 | 925 | 1970 | 9149.544 | 2560 | 1800.0 | 22800 | 8100 |
| 11/1/2020 | 9125 | 12225 | 8125 | 1525 | 655 | 1075 | 1960 | 9548.435 | 2620 | 2000.0 | 21125 | 7825 |
| 12/1/2020 | 8675 | 14300 | 13100 | 1505 | 805 | 1390 | 2360 | 11667.54 | 3230 | 2325.0 | 23000 | 7725 |
| 1/1/2021 | 10425 | 14475 | 13850 | 1480 | 790 | 1655 | 2810 | 12390.53 | 3310 | 2268.8 | 26600 | 7350 |
| 2/1/2021 | 12900 | 13375 | 12250 | 1465 | 770 | 1345 | 2580 | 10570.59 | 3110 | 2543.8 | 22850 | 6925 |
| 3/1/2021 | 13175 | 12500 | 12200 | 1470 | 805 | 1440 | 2710 | 10171.7 | 3490 | 2437.5 | 22550 | 7000 |
| 4/1/2021 | 10450 | 12225 | 11425 | 1570 | 740 | 1315 | 2620 | 10396.08 | 3420 | 2781.3 | 22125 | 6575 |
| 5/1/2021 | 9100 | 12850 | 11875 | 1440 | 800 | 1225 | 2370 | 10396.08 | 3200 | 2518.8 | 21175 | 6000 |
| 6/1/2021 | 8500 | 12100 | 12925 | 1450 | 700 | 1115 | 2210 | 9673.088 | 3440 | 1981.3 | 22550 | 5850 |
| 7/1/2021 | 7450 | 10300 | 14200 | 1400 | 625 | 1005 | 2000 | 9473.643 | 3150 | 2456.3 | 20250 | 4950 |
| 8/1/2021 | 6800 | 8800 | 16950 | 1260 | 620 | 975 | 2230 | 7678.636 | 3240 | 2350.0 | 19550 | 4220 |
| 9/1/2021 | 7900 | 11250 | 16000 | 1345 | 740 | 1035 | 2110 | 9224.336 | 3400 | 1962.5 | 20075 | 4050 |
| 10/1/2021 | 8575 | 10500 | 20800 | 1430 | 780 | 1190 | 2760 | 8177.249 | 3690 | 1800.0 | 26000 | 3950 |
| 11/1/2021 | 8475 | 11825 | 21600 | 1600 | 880 | 1510 | 2680 | 9074.752 | 3800 | 1900.0 | 23550 | 4420 |
| 12/1/2021 | 7550 | 10575 | 21550 | 1600 | 740 | 1500 | 2600 | 7977.804 | 3990 | 1768.8 | 21350 | 4480 |
| 1/1/2022 | 7825 | 12100 | 20400 | 1615 | 710 | 1375 | 2710 | 7229.885 | 4040 | 1831.3 | 22150 | 4110 |
| 2/1/2022 | 7600 | 10950 | 21650 | 1640 | 780 | 1380 | 2850 | 6706.341 | 4190 | 2206.3 | 23125 | 4030 |
| 3/1/2022 | 8075 | 10950 | 26675 | 1645 | 785 | 1440 | 3140 | 7180.023 | 4340 | 2256.3 | 24900 | 3680 |
| 4/1/2022 | 7900 | 10775 | 28550 | 1610 | 880 | 1405 | 3290 | 6631.55 | 4580 | 2525.0 | 25550 | 3660 |
| 5/1/2022 | 7575 | 10475 | 28400 | 1640 | 900 | 1450 | 3820 | 6382.243 | 4620 | 2512.5 | 30275 | 3890 |
| 6/1/2022 | 8250 | 9725 | 35000 | 1675 | 900 | 1800 | 4530 | 7279.746 | 4310 | 2556.3 | 31300 | 4730 |

| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|-------|-------|-------|------|------|------|------|----------|------|------|-------|------|
| 7/1/2022 | 7600 | 9475 | 30675 | 1660 | 980 | 1590 | 3820 | 7105.232 | 4000 | 2250 | 28400 | 4770 |
| 8/1/2022 | 7600 | 9300 | 39600 | 1620 | 890 | 1680 | 4300 | 6506.896 | 4230 | 2375 | 32300 | 4510 |
| 9/1/2022 | 8325 | 9450 | 39300 | 1680 | 1010 | 1840 | 4250 | 6581.688 | 4560 | 2440 | 33850 | 4590 |
| 10/1/2022 | 9050 | 9500 | 41425 | 1830 | 1060 | 1755 | 4170 | 7454.261 | 4460 | 2400 | 32825 | 4830 |
| 11/1/2022 | 9600 | 9275 | 45050 | 2050 | 1205 | 1975 | 3910 | 7927.943 | 4390 | 2440 | 32300 | 4640 |
| 12/1/2022 | 10000 | 9950 | 41750 | 2070 | 1450 | 1880 | 3800 | 7578.914 | 4040 | 2390 | 30800 | 4800 |
| 1/1/2023 | 8725 | 9900 | 39025 | 2090 | 1445 | 1760 | 3690 | 6575 | 3750 | 2570 | 26075 | 4700 |
| 2/1/2023 | 8325 | 10000 | 36200 | 2060 | 1300 | 1545 | 3400 | 7400 | 3850 | 2310 | 24550 | 4660 |
| 3/1/2023 | 7925 | 11125 | 37200 | 2110 | 1510 | 1565 | 3860 | 7225 | 3880 | 2310 | 27900 | 4180 |
| 4/1/2023 | 7500 | 10525 | 39400 | 2100 | 1510 | 1380 | 3990 | 6300 | 4060 | 2340 | 29100 | 4350 |
| 5/1/2023 | 7775 | 10850 | 33300 | 2120 | 1370 | 1430 | 4140 | 5950 | 4250 | 2360 | 28900 | 4400 |
| 6/1/2023 | 6900 | 9900 | 22125 | 2030 | 1775 | 1430 | 3060 | 5800 | 4040 | 2140 | 22225 | 4530 |
| 7/1/2023 | 8500 | 9925 | 24125 | 2050 | 1690 | 1305 | 2680 | 6075 | 4000 | 2100 | 23275 | 4260 |
| 8/1/2023 | 9150 | 10425 | 27200 | 1915 | 1980 | 1365 | 2770 | 6975 | 3720 | 2120 | 27525 | 3850 |
| 9/1/2023 | 9100 | 10700 | 28925 | 1815 | 1935 | 1375 | 2860 | 6800 | 3730 | 2180 | 26000 | 3670 |
| 10/1/2023 | 11100 | 9950 | 28975 | 1755 | 1820 | 1375 | 2800 | 6425 | 3750 | 2530 | 28250 | 3740 |
| 11/1/2023 | 9600 | 9275 | 26525 | 1690 | 1735 | 1255 | 2480 | 6100 | 3490 | 2980 | 25125 | 3620 |
| 12/1/2023 | 8775 | 10200 | 24550 | 1615 | 1745 | 1115 | 2420 | 6500 | 3760 | 2950 | 21900 | 3650 |
| 1/1/2024 | 8325 | 9400 | 25650 | 1610 | 1790 | 1130 | 2440 | 6400 | 3950 | 5250 | 22625 | 3530 |
| 2/1/2024 | 7825 | 9025 | 27050 | 1510 | 1955 | 1165 | 2610 | 6200 | 3960 | 5400 | 22950 | 3100 |
| 3/1/2024 | 8725 | 9075 | 26200 | 1490 | 1920 | 1090 | 2560 | 6100 | 4000 | 4580 | 23525 | 2730 |
| 4/1/2024 | 9575 | 8750 | 26700 | 1475 | 1820 | 1360 | 2970 | 5900 | 3470 | 5825 | 24175 | 2700 |
| 5/1/2024 | 9375 | 7750 | 25225 | 1455 | 1575 | 1470 | 3030 | 4670 | 3170 | 7575 | 24825 | 2620 |
| 6/1/2024 | 9100 | 6475 | 24975 | 1490 | 1270 | 1580 | 2490 | 3490 | 2900 | 9175 | 22075 | 3120 |

| | INKP | INTP | ITMG | KLBF | MAPI | PGAS | PTBA | SMGR | TLKM | TPIA | UNTR | UNVR |
|-----------|------|------|-------|------|------|------|------|------|------|------|-------|------|
| 7/1/2024 | 8900 | 7250 | 23900 | 1525 | 1475 | 1540 | 2450 | 3730 | 3130 | 9225 | 21975 | 3020 |
| 8/1/2024 | 8350 | 7250 | 26300 | 1590 | 1450 | 1600 | 2680 | 3910 | 2880 | 9650 | 25800 | 2440 |
| 9/1/2024 | 8425 | 7200 | 26350 | 1590 | 1450 | 1600 | 2700 | 3780 | 2890 | 9650 | 25800 | 2240 |
| 10/1/2024 | 8125 | 6925 | 27600 | 1650 | 1500 | 1540 | 2740 | 4030 | 3090 | 9975 | 27300 | 2280 |



Lampiran 2. Uji Regresi OLS

1. ACES

Dependent Variable: ACES_RETURN
 Method: Least Squares
 Date: 10/15/24 Time: 15:00
 Sample (adjusted): 1 95
 Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | -0.080852 | 0.044346 | -1.823212 | 0.0715 |
| ACES_MACD | 8.11E-05 | 4.29E-05 | 1.889213 | 0.0620 |
| R-squared | 0.036959 | Mean dependent var | | 0.001079 |
| Adjusted R-squared | 0.026604 | S.D. dependent var | | 0.091511 |
| S.E. of regression | 0.090286 | Akaike info criterion | | -1.950845 |
| Sum squared resid | 0.758092 | Schwarz criterion | | -1.897079 |
| Log likelihood | 94.66515 | Hannan-Quinn criter. | | -1.929120 |
| F-statistic | 3.569125 | Durbin-Watson stat | | 2.257982 |
| Prob(F-statistic) | 0.061979 | | | |

2. ADRO

Dependent Variable: ADRO_RETURN
 Method: Least Squares
 Date: 10/15/24 Time: 15:01
 Sample (adjusted): 1 95
 Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.019253 | 0.014284 | 1.347830 | 0.1810 |
| ADRO_MACD | 3.97E-06 | 3.82E-05 | 0.104026 | 0.9174 |
| R-squared | 0.000116 | Mean dependent var | | 0.019989 |
| Adjusted R-squared | -0.010635 | S.D. dependent var | | 0.120282 |
| S.E. of regression | 0.120920 | Akaike info criterion | | -1.366555 |
| Sum squared resid | 1.359803 | Schwarz criterion | | -1.312789 |
| Log likelihood | 66.91134 | Hannan-Quinn criter. | | -1.344829 |
| F-statistic | 0.010821 | Durbin-Watson stat | | 1.990991 |
| Prob(F-statistic) | 0.917373 | | | |

3. AKRA

Dependent Variable: AKRA_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:02
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.009048 | 0.010125 | 0.893619 | 0.3738 |
| AKRA_MACD | 0.000106 | 5.60E-05 | 1.901629 | 0.0603 |
| R-squared | 0.037428 | Mean dependent var | | 0.008278 |
| Adjusted R-squared | 0.027078 | S.D. dependent var | | 0.099974 |
| S.E. of regression | 0.098611 | Akaike info criterion | | -1.774441 |
| Sum squared resid | 0.904343 | Schwarz criterion | | -1.720675 |
| Log likelihood | 86.28593 | Hannan-Quinn criter. | | -1.752715 |
| F-statistic | 3.616195 | Durbin-Watson stat | | 2.102856 |
| Prob(F-statistic) | 0.060315 | | | |

4. ANTM

Dependent Variable: ANTM_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:03
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.019868 | 0.019211 | 1.034185 | 0.3037 |
| ANTM_MACD | 1.88E-05 | 6.91E-05 | 0.271561 | 0.7866 |
| R-squared | 0.000792 | Mean dependent var | | 0.021971 |
| Adjusted R-squared | -0.009952 | S.D. dependent var | | 0.170506 |
| S.E. of regression | 0.171352 | Akaike info criterion | | -0.669365 |
| Sum squared resid | 2.730622 | Schwarz criterion | | -0.615599 |
| Log likelihood | 33.79484 | Hannan-Quinn criter. | | -0.647640 |
| F-statistic | 0.073745 | Durbin-Watson stat | | 1.800341 |
| Prob(F-statistic) | 0.786562 | | | |

5. ASII

Dependent Variable: ASII_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:03
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.004459 | 0.010442 | 0.427017 | 0.6704 |
| ASII_MACD | 4.07E-06 | 1.98E-05 | 0.205932 | 0.8373 |
| R-squared | 0.000456 | Mean dependent var | | 0.003211 |
| Adjusted R-squared | -0.010292 | S.D. dependent var | | 0.082454 |
| S.E. of regression | 0.082878 | Akaike info criterion | | -2.122073 |
| Sum squared resid | 0.638790 | Schwarz criterion | | -2.068308 |
| Log likelihood | 102.7985 | Hannan-Quinn criter. | | -2.100348 |
| F-statistic | 0.042408 | Durbin-Watson stat | | 1.953529 |
| Prob(F-statistic) | 0.837294 | | | |

6. BRMS

Dependent Variable: BRMS_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:04
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.000776 | 0.019386 | 0.040046 | 0.9681 |
| BRMS_MACD | 0.000971 | 0.000762 | 1.273288 | 0.2061 |
| R-squared | 0.017134 | Mean dependent var | | 0.006241 |
| Adjusted R-squared | 0.006566 | S.D. dependent var | | 0.184870 |
| S.E. of regression | 0.184262 | Akaike info criterion | | -0.524086 |
| Sum squared resid | 3.157588 | Schwarz criterion | | -0.470320 |
| Log likelihood | 26.89409 | Hannan-Quinn criter. | | -0.502361 |
| F-statistic | 1.621262 | Durbin-Watson stat | | 2.000241 |
| Prob(F-statistic) | 0.206089 | | | |

7. CPIN

Dependent Variable: CPIN_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:05

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.007604 | 0.011320 | 0.671756 | 0.5034 |
| CPIN_MACD | 5.25E-06 | 2.16E-05 | 0.243389 | 0.8082 |
| R-squared | 0.000637 | Mean dependent var | | 0.008440 |
| Adjusted R-squared | -0.010109 | S.D. dependent var | | 0.104608 |
| S.E. of regression | 0.105136 | Akaike info criterion | | -1.646304 |
| Sum squared resid | 1.027975 | Schwarz criterion | | -1.592538 |
| Log likelihood | 80.19943 | Hannan-Quinn criter. | | -1.624578 |
| F-statistic | 0.059238 | Durbin-Watson stat | | 1.992416 |
| Prob(F-statistic) | 0.808240 | | | |

8. EMTK

Dependent Variable: EMTK_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:06

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.017412 | 0.014547 | 1.196922 | 0.2344 |
| EMTK_MACD | -4.63E-05 | 4.40E-05 | -1.051074 | 0.2959 |
| R-squared | 0.011740 | Mean dependent var | | 0.019010 |
| Adjusted R-squared | 0.001113 | S.D. dependent var | | 0.141091 |
| S.E. of regression | 0.141012 | Akaike info criterion | | -1.059114 |
| Sum squared resid | 1.849251 | Schwarz criterion | | -1.005348 |
| Log likelihood | 52.30790 | Hannan-Quinn criter. | | -1.037388 |
| F-statistic | 1.104757 | Durbin-Watson stat | | 1.672717 |
| Prob(F-statistic) | 0.295948 | | | |

9. EXCL

Dependent Variable: EXCL_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:06

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | -0.001488 | 0.014720 | -0.101116 | 0.9197 |
| EXCL_MACD | 4.49E-06 | 4.38E-05 | 0.102509 | 0.9186 |
| R-squared | 0.000113 | Mean dependent var | | -0.002470 |
| Adjusted R-squared | -0.010638 | S.D. dependent var | | 0.108415 |
| S.E. of regression | 0.108990 | Akaike info criterion | | -1.574292 |
| Sum squared resid | 1.104731 | Schwarz criterion | | -1.520527 |
| Log likelihood | 76.77889 | Hannan-Quinn criter. | | -1.552567 |
| F-statistic | 0.010508 | Durbin-Watson stat | | 1.855954 |
| Prob(F-statistic) | 0.918573 | | | |

10. ICBP

Dependent Variable: ICBP_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:07

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.008661 | 0.006818 | 1.270379 | 0.2071 |
| ICBP_MACD | -1.12E-05 | 1.21E-05 | -0.922325 | 0.3587 |
| R-squared | 0.009064 | Mean dependent var | | 0.006683 |
| Adjusted R-squared | -0.001591 | S.D. dependent var | | 0.063027 |
| S.E. of regression | 0.063077 | Akaike info criterion | | -2.668097 |
| Sum squared resid | 0.370019 | Schwarz criterion | | -2.614331 |
| Log likelihood | 128.7346 | Hannan-Quinn criter. | | -2.646371 |
| F-statistic | 0.850684 | Durbin-Watson stat | | 2.131688 |
| Prob(F-statistic) | 0.358746 | | | |

11. INCO

Dependent Variable: INCO_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:08
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.011345 | 0.016742 | 0.677636 | 0.4997 |
| INCO_MACD | 2.03E-05 | 2.77E-05 | 0.732031 | 0.4660 |
| R-squared | 0.005729 | Mean dependent var | | 0.016361 |
| Adjusted R-squared | -0.004962 | S.D. dependent var | | 0.148515 |
| S.E. of regression | 0.148883 | Akaike info criterion | | -0.950479 |
| Sum squared resid | 2.061463 | Schwarz criterion | | -0.896713 |
| Log likelihood | 47.14774 | Hannan-Quinn criter. | | -0.928753 |
| F-statistic | 0.535870 | Durbin-Watson stat | | 2.036315 |
| Prob(F-statistic) | 0.465990 | | | |

12. INDF

Dependent Variable: INDF_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:08
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | -0.007413 | 0.009098 | -0.814832 | 0.4173 |
| INDF_MACD | -4.52E-05 | 3.05E-05 | -1.481106 | 0.1420 |
| R-squared | 0.023044 | Mean dependent var | | 0.001048 |
| Adjusted R-squared | 0.012539 | S.D. dependent var | | 0.069449 |
| S.E. of regression | 0.069012 | Akaike info criterion | | -2.488252 |
| Sum squared resid | 0.442924 | Schwarz criterion | | -2.434487 |
| Log likelihood | 120.1920 | Hannan-Quinn criter. | | -2.466527 |
| F-statistic | 2.193674 | Durbin-Watson stat | | 2.002535 |
| Prob(F-statistic) | 0.141959 | | | |

13. INKP

Dependent Variable: INKP_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:09

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.040526 | 0.018527 | 2.187363 | 0.0312 |
| INKP_MACD | -7.71E-06 | 8.66E-06 | -0.890237 | 0.3756 |
| R-squared | 0.008450 | Mean dependent var | | 0.034088 |
| Adjusted R-squared | -0.002212 | S.D. dependent var | | 0.166076 |
| S.E. of regression | 0.166260 | Akaike info criterion | | -0.729706 |
| Sum squared resid | 2.570727 | Schwarz criterion | | -0.675940 |
| Log likelihood | 36.66103 | Hannan-Quinn criter. | | -0.707980 |
| F-statistic | 0.792522 | Durbin-Watson stat | | 1.590016 |
| Prob(F-statistic) | 0.375636 | | | |

14. INTP

Dependent Variable: INTP_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:10

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.003963 | 0.016016 | 0.247423 | 0.8051 |
| INTP_MACD | 5.63E-06 | 7.89E-06 | 0.714041 | 0.4770 |
| R-squared | 0.005452 | Mean dependent var | | -0.004870 |
| Adjusted R-squared | -0.005242 | S.D. dependent var | | 0.098890 |
| S.E. of regression | 0.099149 | Akaike info criterion | | -1.763560 |
| Sum squared resid | 0.914237 | Schwarz criterion | | -1.709794 |
| Log likelihood | 85.76908 | Hannan-Quinn criter. | | -1.741834 |
| F-statistic | 0.509854 | Durbin-Watson stat | | 2.430147 |
| Prob(F-statistic) | 0.476990 | | | |

15. ITMG

Dependent Variable: ITMG_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:11

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.015335 | 0.017522 | 0.875180 | 0.3837 |
| ITMG_MACD | 2.36E-06 | 3.79E-06 | 0.624410 | 0.5339 |
| R-squared | 0.004175 | Mean dependent var | | 0.018974 |
| Adjusted R-squared | -0.006533 | S.D. dependent var | | 0.160538 |
| S.E. of regression | 0.161062 | Akaike info criterion | | -0.793230 |
| Sum squared resid | 2.412502 | Schwarz criterion | | -0.739464 |
| Log likelihood | 39.67843 | Hannan-Quinn criter. | | -0.771505 |
| F-statistic | 0.389888 | Durbin-Watson stat | | 2.131075 |
| Prob(F-statistic) | 0.533887 | | | |

16. KLBF

Dependent Variable: KLBF_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:12

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.002071 | 0.006573 | 0.315099 | 0.7534 |
| KLBF_MACD | -2.51E-05 | 5.50E-05 | -0.455317 | 0.6499 |
| R-squared | 0.002224 | Mean dependent var | | 0.002686 |
| Adjusted R-squared | -0.008505 | S.D. dependent var | | 0.062435 |
| S.E. of regression | 0.062700 | Akaike info criterion | | -2.680075 |
| Sum squared resid | 0.365613 | Schwarz criterion | | -2.626309 |
| Log likelihood | 129.3035 | Hannan-Quinn criter. | | -2.658349 |
| F-statistic | 0.207313 | Durbin-Watson stat | | 2.000182 |
| Prob(F-statistic) | 0.649943 | | | |

17. MAPI

Dependent Variable: MAPI_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:12

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.009366 | 0.014681 | 0.637969 | 0.5251 |
| MAPI_MACD | 4.62E-05 | 8.68E-05 | 0.531782 | 0.5961 |
| R-squared | 0.003032 | Mean dependent var | | 0.014012 |
| Adjusted R-squared | -0.007689 | S.D. dependent var | | 0.114557 |
| S.E. of regression | 0.114997 | Akaike info criterion | | -1.466996 |
| Sum squared resid | 1.229858 | Schwarz criterion | | -1.413230 |
| Log likelihood | 71.68230 | Hannan-Quinn criter. | | -1.445270 |
| F-statistic | 0.282792 | Durbin-Watson stat | | 2.176651 |
| Prob(F-statistic) | 0.596145 | | | |

18. PGAS

Dependent Variable: PGAS_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:13

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.014715 | 0.020616 | 0.713768 | 0.4772 |
| PGAS_MACD | 5.75E-05 | 4.76E-05 | 1.206998 | 0.2305 |
| R-squared | 0.015423 | Mean dependent var | | -0.002790 |
| Adjusted R-squared | 0.004837 | S.D. dependent var | | 0.143151 |
| S.E. of regression | 0.142804 | Akaike info criterion | | -1.033858 |
| Sum squared resid | 1.896551 | Schwarz criterion | | -0.980092 |
| Log likelihood | 51.10825 | Hannan-Quinn criter. | | -1.012132 |
| F-statistic | 1.456845 | Durbin-Watson stat | | 1.944891 |
| Prob(F-statistic) | 0.230494 | | | |

19. PTBA

Dependent Variable: PTBA_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:13
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.011694 | 0.013192 | 0.886410 | 0.3777 |
| PTBA_MACD | 6.84E-06 | 3.08E-05 | 0.222336 | 0.8245 |
| R-squared | 0.000531 | Mean dependent var | | 0.012411 |
| Adjusted R-squared | -0.010216 | S.D. dependent var | | 0.124042 |
| S.E. of regression | 0.124674 | Akaike info criterion | | -1.305399 |
| Sum squared resid | 1.445558 | Schwarz criterion | | -1.251633 |
| Log likelihood | 64.00645 | Hannan-Quinn criter. | | -1.283674 |
| F-statistic | 0.049433 | Durbin-Watson stat | | 1.905259 |
| Prob(F-statistic) | 0.824540 | | | |

20. SMGR

Dependent Variable: SMGR_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:14
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.008224 | 0.014246 | 0.577251 | 0.5652 |
| SMGR_MACD | 1.39E-05 | 1.22E-05 | 1.140159 | 0.2571 |
| R-squared | 0.013785 | Mean dependent var | | -0.002825 |
| Adjusted R-squared | 0.003181 | S.D. dependent var | | 0.101946 |
| S.E. of regression | 0.101784 | Akaike info criterion | | -1.711107 |
| Sum squared resid | 0.963471 | Schwarz criterion | | -1.657341 |
| Log likelihood | 83.27760 | Hannan-Quinn criter. | | -1.689382 |
| F-statistic | 1.299962 | Durbin-Watson stat | | 2.166626 |
| Prob(F-statistic) | 0.257148 | | | |

21. TLKM

Dependent Variable: TLKM_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:15
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.006288 | 0.006356 | 0.989434 | 0.3250 |
| TLKM_MACD | -2.93E-05 | 2.68E-05 | -1.090071 | 0.2785 |
| R-squared | 0.012616 | Mean dependent var | | 0.006976 |
| Adjusted R-squared | 0.001999 | S.D. dependent var | | 0.061702 |
| S.E. of regression | 0.061640 | Akaike info criterion | | -2.714168 |
| Sum squared resid | 0.353358 | Schwarz criterion | | -2.660403 |
| Log likelihood | 130.9230 | Hannan-Quinn criter. | | -2.692443 |
| F-statistic | 1.188255 | Durbin-Watson stat | | 2.084098 |
| Prob(F-statistic) | 0.278498 | | | |

22. TPIA

Dependent Variable: TPIA_RETURN
Method: Least Squares
Date: 10/15/24 Time: 15:16
Sample (adjusted): 1 95
Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| C | 0.044891 | 0.019890 | 2.256936 | 0.0264 |
| TPIA_MACD | -1.15E-05 | 2.51E-05 | -0.456578 | 0.6490 |
| R-squared | 0.002237 | Mean dependent var | | 0.039769 |
| Adjusted R-squared | -0.008492 | S.D. dependent var | | 0.159410 |
| S.E. of regression | 0.160085 | Akaike info criterion | | -0.805395 |
| Sum squared resid | 2.383333 | Schwarz criterion | | -0.751629 |
| Log likelihood | 40.25624 | Hannan-Quinn criter. | | -0.783669 |
| F-statistic | 0.208463 | Durbin-Watson stat | | 1.925546 |
| Prob(F-statistic) | 0.649039 | | | |

23. UNTR

Dependent Variable: UNTR_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:16

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------|-------------|------------|-------------|--------|
| C | 0.009816 | 0.009285 | 1.057139 | 0.2932 |
| UNTR_MACD | 2.45E-07 | 3.21E-06 | 0.076389 | 0.9393 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.000063 | Mean dependent var | 0.009913 |
| Adjusted R-squared | -0.010689 | S.D. dependent var | 0.089168 |
| S.E. of regression | 0.089644 | Akaike info criterion | -1.965118 |
| Sum squared resid | 0.747349 | Schwarz criterion | -1.911352 |
| Log likelihood | 95.34308 | Hannan-Quinn criter. | -1.943392 |
| F-statistic | 0.005835 | Durbin-Watson stat | 2.016127 |
| Prob(F-statistic) | 0.939274 | | |

24. UNVR

Dependent Variable: UNVR_RETURN

Method: Least Squares

Date: 10/15/24 Time: 15:17

Sample (adjusted): 1 95

Included observations: 95 after adjustments

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|-----------|-------------|------------|-------------|--------|
| C | 0.006654 | 0.009938 | 0.669625 | 0.5048 |
| UNVR_MACD | 1.10E-05 | 1.14E-05 | 0.959269 | 0.3399 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.009798 | Mean dependent var | -0.000287 |
| Adjusted R-squared | -0.000850 | S.D. dependent var | 0.066364 |
| S.E. of regression | 0.066392 | Akaike info criterion | -2.565654 |
| Sum squared resid | 0.409934 | Schwarz criterion | -2.511888 |
| Log likelihood | 123.8685 | Hannan-Quinn criter. | -2.543928 |
| F-statistic | 0.920197 | Durbin-Watson stat | 1.701958 |
| Prob(F-statistic) | 0.339910 | | |

Lampiran 3. Hasil Uji GARCH

1. ACES

Dependent Variable: ACES
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 14:54
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Failure to improve likelihood (non-zero gradients) after 68 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 875.5525 | 16.53006 | 52.96730 | 0.0000 |
| AR(1) | 1.012442 | 2.54E-13 | 3.99E+12 | 0.0000 |
| MA(1) | 0.795079 | 0.058389 | 13.61692 | 0.0000 |

| Variance Equation | | | | |
|-------------------|-----------|----------|-----------|--------|
| C | 0.231829 | 0.139108 | 1.666540 | 0.0956 |
| RESID(-1)^2 | 1.236178 | 0.443861 | 2.785060 | 0.0054 |
| GARCH(-1) | -0.081603 | 0.047658 | -1.712251 | 0.0869 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.998380 | Mean dependent var | 1012.130 |
| Adjusted R-squared | 0.998345 | S.D. dependent var | 216.8076 |
| S.E. of regression | 8.820659 | Akaike info criterion | 6.012372 |
| Sum squared resid | 7080.167 | Schwarz criterion | 6.174710 |
| Log likelihood | -276.5815 | Hannan-Quinn criter. | 6.077945 |
| Durbin-Watson stat | 0.032335 | | |

| | | |
|-------------------|------|---------------------------------------|
| Inverted AR Roots | 1.01 | |
| | | Estimated AR process is nonstationary |
| Inverted MA Roots | -.80 | |



2. ADRO

Dependent Variable: ADRO
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:10
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 44 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 331.4236 | 379.2042 | 0.873998 | 0.3821 |
| AR(1) | 0.981505 | 0.020239 | 48.49638 | 0.0000 |
| MA(1) | 0.639795 | 0.100878 | 6.342250 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| | | | | |
| C | 94.10976 | 72.22568 | 1.302996 | 0.1926 |
| RESID(-1)^2 | 0.147222 | 0.081035 | 1.816787 | 0.0692 |
| GARCH(-1) | 0.822773 | 0.105799 | 7.776716 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.982137 | Mean dependent var | 185.8063 |
| Adjusted R-squared | 0.981745 | S.D. dependent var | 328.4514 |
| S.E. of regression | 44.37790 | Akaike info criterion | 10.31946 |
| Sum squared resid | 179215.2 | Schwarz criterion | 10.48180 |
| Log likelihood | -479.0147 | Hannan-Quinn criter. | 10.38503 |
| Durbin-Watson stat | 1.467059 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .98 |
| Inverted MA Roots | -.64 |



3. AKRA

Dependent Variable: AKRA
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:13
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 49 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 123.9510 | 114.7690 | 1.080004 | 0.2801 |
| AR(1) | 0.973743 | 0.014869 | 65.48696 | 0.0000 |
| MA(1) | 0.544195 | 0.116168 | 4.684566 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 31.95511 | 34.71634 | 0.920463 | 0.3573 |
| RESID(-1)^2 | 0.223445 | 0.176564 | 1.265523 | 0.2057 |
| GARCH(-1) | 0.654279 | 0.248943 | 2.628229 | 0.0086 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.992930 | Mean dependent var | -6.213723 |
| Adjusted R-squared | 0.992775 | S.D. dependent var | 182.4364 |
| S.E. of regression | 15.50741 | Akaike info criterion | 8.323992 |
| Sum squared resid | 21883.65 | Schwarz criterion | 8.486330 |
| Log likelihood | -385.2276 | Hannan-Quinn criter. | 8.389565 |
| Durbin-Watson stat | 1.356048 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .97 |
| Inverted MA Roots | -.54 |



4. ANTM

Dependent Variable: ANTM
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:15
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 41 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -139.0033 | 158.4837 | -0.877082 | 0.3804 |
| AR(1) | 0.958755 | 0.029242 | 32.78711 | 0.0000 |
| MA(1) | 0.505248 | 0.142510 | 3.545354 | 0.0004 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 43.18960 | 18.48032 | 2.337060 | 0.0194 |
| RESID(-1)^2 | 0.278519 | 0.081712 | 3.408555 | 0.0007 |
| GARCH(-1) | 0.727744 | 0.070853 | 10.27114 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.981180 | Mean dependent var | 113.0412 |
| Adjusted R-squared | 0.980767 | S.D. dependent var | 257.0933 |
| S.E. of regression | 35.65488 | Akaike info criterion | 9.489212 |
| Sum squared resid | 115685.6 | Schwarz criterion | 9.651550 |
| Log likelihood | -439.9930 | Hannan-Quinn criter. | 9.554784 |
| Durbin-Watson stat | 1.249955 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .96 |
| Inverted MA Roots | -.51 |



5. ASII

Dependent Variable: ASII
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:19
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 48 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -246.0933 | 186.4511 | -1.319881 | 0.1869 |
| AR(1) | 0.937747 | 0.026241 | 35.73648 | 0.0000 |
| MA(1) | 0.508700 | 0.135318 | 3.759304 | 0.0002 |

| Variance Equation | | | | |
|-------------------|-----------|----------|-----------|--------|
| C | 3909.406 | 2112.853 | 1.850297 | 0.0643 |
| RESID(-1)^2 | 0.382422 | 0.144626 | 2.644206 | 0.0082 |
| GARCH(-1) | -0.054680 | 0.339848 | -0.160896 | 0.8722 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.969660 | Mean dependent var | -303.7885 |
| Adjusted R-squared | 0.968993 | S.D. dependent var | 433.7436 |
| S.E. of regression | 76.37714 | Akaike info criterion | 11.50839 |
| Sum squared resid | 530845.6 | Schwarz criterion | 11.67073 |
| Log likelihood | -534.8943 | Hannan-Quinn criter. | 11.57396 |
| Durbin-Watson stat | 1.186147 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .94 |
| Inverted MA Roots | -.51 |



6. BRMS

Dependent Variable: BRMS
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:21
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 65 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 3.647342 | 7.509898 | 0.485671 | 0.6272 |
| AR(1) | 0.953042 | 0.019520 | 48.82467 | 0.0000 |
| MA(1) | 0.763533 | 0.022965 | 33.24747 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 0.037402 | 0.076201 | 0.490838 | 0.6235 |
| RESID(-1)^2 | 0.906178 | 0.338442 | 2.677498 | 0.0074 |
| GARCH(-1) | 0.512808 | 0.112095 | 4.574776 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.981454 | Mean dependent var | 6.107708 |
| Adjusted R-squared | 0.981046 | S.D. dependent var | 24.62361 |
| S.E. of regression | 3.390009 | Akaike info criterion | 4.461763 |
| Sum squared resid | 1045.787 | Schwarz criterion | 4.624101 |
| Log likelihood | -203.7028 | Hannan-Quinn criter. | 4.527335 |
| Durbin-Watson stat | 2.142745 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .95 |
| Inverted MA Roots | -.76 |



7. CPIN

Dependent Variable: CPIN
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:23
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 44 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -251.3231 | 188.1041 | -1.336086 | 0.1815 |
| AR(1) | 0.947533 | 0.024373 | 38.87577 | 0.0000 |
| MA(1) | 0.587731 | 0.112285 | 5.234255 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| | | | | |
| C | 599.3175 | 469.2758 | 1.277111 | 0.2016 |
| RESID(-1)^2 | 0.493473 | 0.302410 | 1.631802 | 0.1027 |
| GARCH(-1) | 0.416015 | 0.279507 | 1.488388 | 0.1366 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.979928 | Mean dependent var | 164.7282 |
| Adjusted R-squared | 0.979487 | S.D. dependent var | 503.0870 |
| S.E. of regression | 72.05456 | Akaike info criterion | 11.12798 |
| Sum squared resid | 472459.2 | Schwarz criterion | 11.29032 |
| Log likelihood | -517.0152 | Hannan-Quinn criter. | 11.19356 |
| Durbin-Watson stat | 1.184432 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .95 |
| Inverted MA Roots | -.59 |



8. EMTK

Dependent Variable: EMTK
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:25
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 59 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -104.7243 | 52.77052 | -1.984522 | 0.0472 |
| AR(1) | 0.969168 | 0.010972 | 88.32965 | 0.0000 |
| MA(1) | 0.452359 | 0.118838 | 3.806524 | 0.0001 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 18.51861 | 9.592827 | 1.930465 | 0.0535 |
| RESID(-1)^2 | 0.925917 | 0.236313 | 3.918173 | 0.0001 |
| GARCH(-1) | 0.316686 | 0.126966 | 2.494254 | 0.0126 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.986891 | Mean dependent var | -32.95354 |
| Adjusted R-squared | 0.986603 | S.D. dependent var | 331.6618 |
| S.E. of regression | 38.38789 | Akaike info criterion | 8.990661 |
| Sum squared resid | 134100.3 | Schwarz criterion | 9.152999 |
| Log likelihood | -416.5611 | Hannan-Quinn criter. | 9.056234 |
| Durbin-Watson stat | 0.894844 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .97 |
| Inverted MA Roots | -.45 |



9. EXCL

Dependent Variable: EXCL
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:28
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 46 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -99.78499 | 85.31393 | -1.169621 | 0.2422 |
| AR(1) | 0.902973 | 0.028021 | 32.22442 | 0.0000 |
| MA(1) | 0.545040 | 0.126347 | 4.313829 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| | | | | |
| C | 137.2343 | 159.7071 | 0.859287 | 0.3902 |
| RESID(-1)^2 | 0.100985 | 0.121662 | 0.830049 | 0.4065 |
| GARCH(-1) | 0.820619 | 0.168887 | 4.858968 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.972084 | Mean dependent var | -209.5788 |
| Adjusted R-squared | 0.971471 | S.D. dependent var | 242.5405 |
| S.E. of regression | 40.96668 | Akaike info criterion | 10.33213 |
| Sum squared resid | 152722.5 | Schwarz criterion | 10.49447 |
| Log likelihood | -479.6103 | Hannan-Quinn criter. | 10.39771 |
| Durbin-Watson stat | 1.399784 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .90 |
| Inverted MA Roots | -.55 |



10. ICBP

Dependent Variable: ICBP
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:29
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 42 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 221.6072 | 629.7797 | 0.351880 | 0.7249 |
| AR(1) | 0.976951 | 0.022387 | 43.63917 | 0.0000 |
| MA(1) | 0.446128 | 0.125015 | 3.568584 | 0.0004 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 4331.359 | 1212.609 | 3.571934 | 0.0004 |
| RESID(-1)^2 | 0.550933 | 0.223109 | 2.469345 | 0.0135 |
| GARCH(-1) | 0.031457 | 0.138713 | 0.226779 | 0.8206 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.972567 | Mean dependent var | 180.1803 |
| Adjusted R-squared | 0.971964 | S.D. dependent var | 538.6293 |
| S.E. of regression | 90.18822 | Akaike info criterion | 11.86022 |
| Sum squared resid | 740186.3 | Schwarz criterion | 12.02256 |
| Log likelihood | -551.4303 | Hannan-Quinn criter. | 11.92579 |
| Durbin-Watson stat | 1.471310 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .98 |
| Inverted MA Roots | -.45 |



11. INCO

Dependent Variable: INCO
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:32
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 45 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -112.8993 | 494.5223 | -0.228300 | 0.8194 |
| AR(1) | 0.968243 | 0.022051 | 43.90878 | 0.0000 |
| MA(1) | 0.430615 | 0.118740 | 3.626544 | 0.0003 |

| Variance Equation | | | | |
|-------------------|-----------|----------|-----------|--------|
| C | 4138.229 | 1763.633 | 2.346422 | 0.0190 |
| RESID(-1)^2 | 0.485380 | 0.280792 | 1.728611 | 0.0839 |
| GARCH(-1) | -0.053879 | 0.298559 | -0.180463 | 0.8568 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.974801 | Mean dependent var | 253.0682 |
| Adjusted R-squared | 0.974248 | S.D. dependent var | 555.5242 |
| S.E. of regression | 89.14797 | Akaike info criterion | 11.71524 |
| Sum squared resid | 723209.8 | Schwarz criterion | 11.87757 |
| Log likelihood | -544.6160 | Hannan-Quinn criter. | 11.78081 |
| Durbin-Watson stat | 1.355575 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .97 |
| Inverted MA Roots | -.43 |



12. INDF

Dependent Variable: INDF
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:33
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 28 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -98.11494 | 87.58278 | -1.120254 | 0.2626 |
| AR(1) | 0.907774 | 0.044390 | 20.44988 | 0.0000 |
| MA(1) | 0.598439 | 0.112561 | 5.316566 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| | | | | |
| C | 295.9858 | 355.1061 | 0.833514 | 0.4046 |
| RESID(-1)^2 | 0.127675 | 0.124377 | 1.026519 | 0.3046 |
| GARCH(-1) | 0.793559 | 0.187981 | 4.221474 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.935575 | Mean dependent var | -185.3643 |
| Adjusted R-squared | 0.934160 | S.D. dependent var | 233.7060 |
| S.E. of regression | 59.96755 | Akaike info criterion | 11.04412 |
| Sum squared resid | 327245.7 | Schwarz criterion | 11.20646 |
| Log likelihood | -513.0737 | Hannan-Quinn criter. | 11.10969 |
| Durbin-Watson stat | 1.640910 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .91 |
| Inverted MA Roots | -.60 |



13. INKP

Dependent Variable: INKP
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:35
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 37 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -168.2226 | 345.8153 | -0.486452 | 0.6266 |
| AR(1) | 0.910507 | 0.035584 | 25.58786 | 0.0000 |
| MA(1) | 0.674982 | 0.100837 | 6.693789 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 1391.902 | 1986.123 | 0.700813 | 0.4834 |
| RESID(-1)^2 | 0.523662 | 0.220494 | 2.374954 | 0.0176 |
| GARCH(-1) | 0.544242 | 0.166384 | 3.270990 | 0.0011 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.982405 | Mean dependent var | 845.4575 |
| Adjusted R-squared | 0.982019 | S.D. dependent var | 1988.854 |
| S.E. of regression | 266.6946 | Akaike info criterion | 13.38308 |
| Sum squared resid | 6472467. | Schwarz criterion | 13.54542 |
| Log likelihood | -623.0048 | Hannan-Quinn criter. | 13.44865 |
| Durbin-Watson stat | 0.675282 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .91 |
| Inverted MA Roots | -.67 |



14. INTP

Dependent Variable: INTP
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:36
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 36 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -1115.491 | 630.0403 | -1.770507 | 0.0766 |
| AR(1) | 0.949537 | 0.025084 | 37.85478 | 0.0000 |
| MA(1) | 0.442562 | 0.123273 | 3.590099 | 0.0003 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| | | | | |
| C | 1255.627 | 1336.735 | 0.939324 | 0.3476 |
| RESID(-1)^2 | 0.294007 | 0.129819 | 2.264753 | 0.0235 |
| GARCH(-1) | 0.705477 | 0.097130 | 7.263209 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.964480 | Mean dependent var | -1532.609 |
| Adjusted R-squared | 0.963699 | S.D. dependent var | 1257.101 |
| S.E. of regression | 239.5124 | Akaike info criterion | 13.54264 |
| Sum squared resid | 5220323. | Schwarz criterion | 13.70498 |
| Log likelihood | -630.5040 | Hannan-Quinn criter. | 13.60821 |
| Durbin-Watson stat | 1.561760 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .95 |
| Inverted MA Roots | -.44 |



15. ITMG

Dependent Variable: ITMG
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:38
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 60 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 5083.629 | 10639.48 | 0.477808 | 0.6328 |
| AR(1) | 0.988809 | 0.023468 | 42.13391 | 0.0000 |
| MA(1) | 0.605802 | 0.112437 | 5.387927 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 83000.50 | 81339.80 | 1.020417 | 0.3075 |
| RESID(-1)^2 | 0.167831 | 0.094533 | 1.775374 | 0.0758 |
| GARCH(-1) | 0.527378 | 0.384283 | 1.372370 | 0.1699 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.986190 | Mean dependent var | 1562.824 |
| Adjusted R-squared | 0.985887 | S.D. dependent var | 4405.265 |
| S.E. of regression | 523.3421 | Akaike info criterion | 15.40803 |
| Sum squared resid | 24923711 | Schwarz criterion | 15.57037 |
| Log likelihood | -718.1775 | Hannan-Quinn criter. | 15.47360 |
| Durbin-Watson stat | 1.392325 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .99 |
| Inverted MA Roots | -.61 |



16. KLBF

Dependent Variable: KLBF
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:40
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 40 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 80.94011 | 60.29871 | 1.342319 | 0.1795 |
| AR(1) | 0.951977 | 0.020680 | 46.03351 | 0.0000 |
| MA(1) | 0.604273 | 0.104423 | 5.786793 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 91.52287 | 74.18546 | 1.233704 | 0.2173 |
| RESID(-1)^2 | 0.356623 | 0.234815 | 1.518742 | 0.1288 |
| GARCH(-1) | 0.231817 | 0.440376 | 0.526407 | 0.5986 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.983623 | Mean dependent var | -22.17283 |
| Adjusted R-squared | 0.983263 | S.D. dependent var | 115.8391 |
| S.E. of regression | 14.98625 | Akaike info criterion | 8.247410 |
| Sum squared resid | 20437.47 | Schwarz criterion | 8.409748 |
| Log likelihood | -381.6283 | Hannan-Quinn criter. | 8.312982 |
| Durbin-Watson stat | 1.081213 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .95 |
| Inverted MA Roots | -.60 |



17. MAPI

Dependent Variable: MAPI
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:41
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 45 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 346.4385 | 269.3202 | 1.286344 | 0.1983 |
| AR(1) | 0.978378 | 0.019196 | 50.96768 | 0.0000 |
| MA(1) | 0.412763 | 0.186710 | 2.210720 | 0.0271 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 29.43666 | 18.98545 | 1.550485 | 0.1210 |
| RESID(-1)^2 | 0.683069 | 0.225218 | 3.032920 | 0.0024 |
| GARCH(-1) | 0.422039 | 0.143281 | 2.945544 | 0.0032 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.981205 | Mean dependent var | 102.2314 |
| Adjusted R-squared | 0.980792 | S.D. dependent var | 136.3632 |
| S.E. of regression | 18.89892 | Akaike info criterion | 8.403292 |
| Sum squared resid | 32502.40 | Schwarz criterion | 8.565630 |
| Log likelihood | -388.9547 | Hannan-Quinn criter. | 8.468865 |
| Durbin-Watson stat | 1.205718 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .98 |
| Inverted MA Roots | -.41 |



18. PGAS

Dependent Variable: PGAS
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:43
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 44 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -9.821034 | 149.7898 | -0.065565 | 0.9477 |
| AR(1) | 0.951290 | 0.016838 | 56.49753 | 0.0000 |
| MA(1) | 0.634245 | 0.086611 | 7.322927 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 243.9324 | 168.9353 | 1.443939 | 0.1488 |
| RESID(-1)^2 | 0.236990 | 0.140435 | 1.687550 | 0.0915 |
| GARCH(-1) | 0.535821 | 0.248670 | 2.154743 | 0.0312 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.988747 | Mean dependent var | -296.8344 |
| Adjusted R-squared | 0.988500 | S.D. dependent var | 301.6949 |
| S.E. of regression | 32.35323 | Akaike info criterion | 9.810060 |
| Sum squared resid | 95252.54 | Schwarz criterion | 9.972398 |
| Log likelihood | -455.0728 | Hannan-Quinn criter. | 9.875632 |
| Durbin-Watson stat | 1.519013 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .95 |
| Inverted MA Roots | -.63 |



19. PTBA

Dependent Variable: PTBA
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:44
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 35 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 99.08445 | 314.3929 | 0.315161 | 0.7526 |
| AR(1) | 0.970231 | 0.029334 | 33.07488 | 0.0000 |
| MA(1) | 0.675830 | 0.087982 | 7.681449 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 1197.011 | 1115.421 | 1.073147 | 0.2832 |
| RESID(-1)^2 | 0.245443 | 0.221431 | 1.108439 | 0.2677 |
| GARCH(-1) | 0.376501 | 0.488739 | 0.770353 | 0.4411 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.982776 | Mean dependent var | 106.0962 |
| Adjusted R-squared | 0.982397 | S.D. dependent var | 419.7783 |
| S.E. of regression | 55.69389 | Akaike info criterion | 10.92779 |
| Sum squared resid | 282264.7 | Schwarz criterion | 11.09012 |
| Log likelihood | -507.6059 | Hannan-Quinn criter. | 10.99336 |
| Durbin-Watson stat | 1.387829 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .97 |
| Inverted MA Roots | -.68 |



20. SMGR

Dependent Variable: SMGR
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:46
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 41 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -849.5767 | 290.1632 | -2.927927 | 0.0034 |
| AR(1) | 0.924671 | 0.029127 | 31.74609 | 0.0000 |
| MA(1) | 0.528822 | 0.101831 | 5.193158 | 0.0000 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 995.7743 | 872.0626 | 1.141861 | 0.2535 |
| RESID(-1)^2 | 0.140397 | 0.094933 | 1.478913 | 0.1392 |
| GARCH(-1) | 0.824744 | 0.095616 | 8.625594 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.970447 | Mean dependent var | -773.2661 |
| Adjusted R-squared | 0.969797 | S.D. dependent var | 840.0096 |
| S.E. of regression | 145.9847 | Akaike info criterion | 12.77447 |
| Sum squared resid | 1939350. | Schwarz criterion | 12.93681 |
| Log likelihood | -594.4000 | Hannan-Quinn criter. | 12.84004 |
| Durbin-Watson stat | 1.575252 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .92 |
| Inverted MA Roots | -.53 |



21. TLKM

Dependent Variable: TLKM
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:48
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 48 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -222.7014 | 631.0976 | -0.352879 | 0.7242 |
| AR(1) | 0.985691 | 0.030511 | 32.30657 | 0.0000 |
| MA(1) | 0.627509 | 0.097205 | 6.455515 | 0.0000 |

| Variance Equation | | | | |
|-------------------|-----------|----------|-----------|--------|
| C | 278.4096 | 550.4716 | 0.505766 | 0.6130 |
| RESID(-1)^2 | -0.040092 | 0.100053 | -0.400711 | 0.6886 |
| GARCH(-1) | 0.850576 | 0.336362 | 2.528752 | 0.0114 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.974573 | Mean dependent var | -23.78125 |
| Adjusted R-squared | 0.974014 | S.D. dependent var | 238.1068 |
| S.E. of regression | 38.38297 | Akaike info criterion | 10.21994 |
| Sum squared resid | 134065.9 | Schwarz criterion | 10.38227 |
| Log likelihood | -474.3370 | Hannan-Quinn criter. | 10.28551 |
| Durbin-Watson stat | 1.470231 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .99 |
| Inverted MA Roots | -.63 |



22. TPIA

Dependent Variable: TPIA
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:49
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Convergence achieved after 52 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 691.0043 | 796.3810 | 0.867681 | 0.3856 |
| AR(1) | 1.015647 | 0.023969 | 42.37377 | 0.0000 |
| MA(1) | 0.377209 | 0.113582 | 3.321030 | 0.0009 |

| Variance Equation | | | | |
|-------------------|----------|----------|----------|--------|
| C | 123.7796 | 125.1117 | 0.989353 | 0.3225 |
| RESID(-1)^2 | 0.969484 | 0.297400 | 3.259870 | 0.0011 |
| GARCH(-1) | 0.451974 | 0.143484 | 3.149991 | 0.0016 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-squared | 0.982357 | Mean dependent var | 449.3279 |
| Adjusted R-squared | 0.981969 | S.D. dependent var | 661.0274 |
| S.E. of regression | 88.76272 | Akaike info criterion | 10.76045 |
| Sum squared resid | 716972.6 | Schwarz criterion | 10.92279 |
| Log likelihood | -499.7412 | Hannan-Quinn criter. | 10.82602 |
| Durbin-Watson stat | 0.722543 | | |

| | |
|-------------------|---------------------------------------|
| Inverted AR Roots | 1.02 |
| | Estimated AR process is nonstationary |
| Inverted MA Roots | -.38 |



23. UNTR

Dependent Variable: C
 Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)
 Date: 10/18/24 Time: 15:59
 Sample (adjusted): 2 95
 Included observations: 94 after adjustments
 Failure to improve likelihood (non-zero gradients) after 57 iterations
 Coefficient covariance computed using outer product of gradients
 MA Backcast: 1
 Presample variance: backcast (parameter = 0.7)
 GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| UNTR | 2.29E-06 | 1.69E-06 | 1.354851 | 0.1755 |
| AR(1) | 0.805717 | 1.02E-11 | 7.89E+10 | 0.0000 |
| MA(1) | 0.999304 | 1.55E-14 | 6.44E+13 | 0.0000 |

| Variance Equation | | | | |
|-------------------|-----------|----------|-----------|--------|
| C | 0.027785 | 0.015082 | 1.842281 | 0.0654 |
| RESID(-1)^2 | -0.763653 | 0.419289 | -1.821306 | 0.0686 |
| GARCH(-1) | -0.020498 | 0.076034 | -0.269582 | 0.7875 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| Mean dependent var | 1.000000 | S.D. dependent var | 0.000000 |
| S.E. of regression | 0.133429 | Akaike info criterion | -2.614855 |
| Sum squared resid | 1.620091 | Schwarz criterion | -2.452517 |
| Log likelihood | 128.8982 | Hannan-Quinn criter. | -2.549282 |
| Durbin-Watson stat | 1.792927 | | |

| | |
|-------------------|-------|
| Inverted AR Roots | .81 |
| Inverted MA Roots | -1.00 |



24. UNVR

Dependent Variable: UNVR

Method: ML ARCH - Normal distribution (BFGS / Marquardt steps)

Date: 10/18/24 Time: 15:52

Sample (adjusted): 2 95

Included observations: 94 after adjustments

Failure to improve likelihood (non-zero gradients) after 47 iterations

Coefficient covariance computed using outer product of gradients

MA Backcast: 1

Presample variance: backcast (parameter = 0.7)

GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | -1228.066 | 264.6069 | -4.641095 | 0.0000 |
| AR(1) | 0.958917 | 0.023499 | 40.80670 | 0.0000 |
| MA(1) | 0.661573 | 0.037587 | 17.60118 | 0.0000 |

Variance Equation

| | Coefficient | Std. Error | z-Statistic | Prob. |
|-------------|-------------|------------|-------------|--------|
| C | -196.3634 | 49.15821 | -3.994518 | 0.0001 |
| RESID(-1)^2 | 0.074002 | 0.041401 | 1.787450 | 0.0739 |
| GARCH(-1) | 0.952245 | 0.033015 | 28.84288 | 0.0000 |

| | | | |
|--------------------|-----------|-----------------------|-----------|
| R-squared | 0.985227 | Mean dependent var | -630.8643 |
| Adjusted R-squared | 0.984902 | S.D. dependent var | 601.9090 |
| S.E. of regression | 73.95938 | Akaike info criterion | 11.33955 |
| Sum squared resid | 497769.0 | Schwarz criterion | 11.50189 |
| Log likelihood | -526.9588 | Hannan-Quinn criter. | 11.40512 |
| Durbin-Watson stat | 1.266988 | | |

| | |
|-------------------|------|
| Inverted AR Roots | .96 |
| Inverted MA Roots | -.66 |

