**Attachment 1**

**Tabulated Data**

| **Company** | **Year** | **FV** | **ERM** | **BOC** | **AC** |
| --- | --- | --- | --- | --- | --- |
| APLN | 2019 | 0.6806 | 0.6400 | 2 | 3 |
| APLN | 2020 | 0.7429 | 0.7200 | 2 | 3 |
| APLN | 2021 | 0.7315 | 0.6800 | 2 | 3 |
| ASRI | 2019 | 0.6953 | 0.6000 | 5 | 3 |
| ASRI | 2020 | 0.7355 | 0.6000 | 5 | 3 |
| ASRI | 2021 | 0.6969 | 0.6400 | 5 | 3 |
| BAPA | 2019 | 0.2884 | 0.4000 | 2 | 2 |
| BAPA | 2020 | 0.2894 | 0.4400 | 2 | 3 |
| BAPA | 2021 | 0.4971 | 0.4000 | 2 | 3 |
| BCIP | 2019 | 0.5001 | 0.3600 | 4 | 3 |
| BCIP | 2020 | 0.5089 | 0.4000 | 4 | 3 |
| BCIP | 2021 | 0.4966 | 0.6400 | 3 | 3 |
| BEST | 2019 | 0.5535 | 0.6000 | 5 | 3 |
| BEST | 2020 | 0.5230 | 0.6000 | 5 | 3 |
| BEST | 2021 | 0.4574 | 0.5600 | 5 | 3 |
| BIKA | 2019 | 0.7863 | 0.3200 | 3 | 3 |
| BIKA | 2020 | 1.1407 | 0.6800 | 3 | 3 |
| BIKA | 2021 | 1.1485 | 0.6800 | 3 | 3 |
| BIPP | 2019 | 0.5985 | 0.4400 | 3 | 3 |
| BIPP | 2020 | 0.5507 | 0.4400 | 3 | 3 |
| BIPP | 2021 | 0.5630 | 0.5200 | 3 | 3 |
| BKSL | 2019 | 0.5663 | 0.4000 | 4 | 3 |
| BKSL | 2020 | 0.6246 | 0.4400 | 3 | 3 |
| BKSL | 2021 | 0.5799 | 0.4000 | 3 | 3 |
| BSDE | 2019 | 0.7780 | 0.7600 | 4 | 3 |
| BSDE | 2020 | 0.8578 | 0.7200 | 4 | 3 |
| BSDE | 2021 | 0.8956 | 0.8000 | 5 | 3 |
| CITY | 2019 | 0.8277 | 0.4800 | 3 | 3 |
| CITY | 2020 | 1.0824 | 0.5600 | 3 | 3 |
| CITY | 2021 | 0.9048 | 0.6000 | 3 | 3 |
| CPRI | 2019 | 1.0750 | 0.3600 | 3 | 3 |
| CPRI | 2020 | 1.0952 | 0.3600 | 3 | 3 |
| CPRI | 2021 | 1.1168 | 0.4000 | 3 | 3 |
| CSIS | 2019 | 0.7845 | 0.5600 | 2 | 3 |
| CSIS | 2020 | 0.6404 | 0.5600 | 2 | 3 |
| CSIS | 2021 | 0.7179 | 0.5600 | 2 | 3 |
| CTRA | 2019 | 0.9512 | 0.7200 | 8 | 3 |
| CTRA | 2020 | 0.9702 | 0.7200 | 7 | 3 |
| CTRA | 2021 | 0.9164 | 0.6800 | 7 | 3 |
| DART | 2019 | 0.6515 | 0.6000 | 3 | 3 |
| DART | 2020 | 0.6566 | 0.6000 | 3 | 3 |
| DART | 2021 | 0.1167 | 0.5600 | 3 | 3 |
| DILD | 2019 | 0.7152 | 0.6400 | 5 | 3 |
| DILD | 2020 | 0.7494 | 0.6800 | 5 | 3 |
| DILD | 2021 | 0.6468 | 0.6000 | 5 | 3 |
| DMAS | 2019 | 1.1908 | 0.5600 | 6 | 3 |
| DMAS | 2020 | 1.4717 | 0.6000 | 6 | 3 |
| DMAS | 2021 | 1.4560 | 0.5600 | 6 | 3 |
| DUTI | 2019 | 4.6590 | 0.4400 | 2 | 3 |
| DUTI | 2020 | 3.7370 | 0.4400 | 3 | 3 |
| DUTI | 2021 | 3.1056 | 0.4800 | 3 | 3 |
| ELTY | 2019 | 0.4620 | 0.7600 | 3 | 3 |
| ELTY | 2020 | 0.4706 | 0.7600 | 3 | 3 |
| ELTY | 2021 | 0.4888 | 0.7200 | 3 | 3 |
| EMDE | 2019 | 0.9742 | 0.6400 | 5 | 2 |
| EMDE | 2020 | 1.0332 | 0.6800 | 5 | 3 |
| EMDE | 2021 | 0.6892 | 0.5600 | 4 | 3 |
| FMII | 2019 | 1.7304 | 0.4000 | 3 | 3 |
| FMII | 2020 | 2.6101 | 0.4400 | 3 | 3 |
| FMII | 2021 | 1.4583 | 0.4400 | 3 | 3 |
| GMTD | 2019 | 1.9858 | 0.7200 | 9 | 3 |
| GMTD | 2020 | 2.2536 | 0.7200 | 9 | 3 |
| GMTD | 2021 | 2.0636 | 0.7200 | 9 | 3 |
| GPRA | 2019 | 0.4993 | 0.6000 | 4 | 3 |
| GPRA | 2020 | 0.5345 | 0.6000 | 5 | 3 |
| GPRA | 2021 | 0.5517 | 0.6400 | 3 | 3 |
| GWSA | 2019 | 0.2169 | 0.4000 | 3 | 3 |
| GWSA | 2020 | 0.1910 | 0.3600 | 3 | 3 |
| GWSA | 2021 | 0.2365 | 0.4400 | 3 | 3 |
| INPP | 2019 | 1.6060 | 0.6800 | 5 | 3 |
| INPP | 2020 | 1.2392 | 0.8000 | 6 | 3 |
| INPP | 2021 | 1.1325 | 0.7200 | 6 | 3 |
| JRPT | 2019 | 0.9085 | 0.5600 | 4 | 3 |
| JRPT | 2020 | 0.9076 | 0.6000 | 3 | 3 |
| JRPT | 2021 | 0.8630 | 0.5600 | 3 | 3 |
| KIJA | 2019 | 0.9883 | 0.4800 | 4 | 3 |
| KIJA | 2020 | 0.7446 | 0.4800 | 4 | 3 |
| KIJA | 2021 | 0.7527 | 0.4400 | 3 | 3 |
| KOTA | 2019 | 2.5988 | 0.4800 | 3 | 3 |
| KOTA | 2020 | 1.7412 | 0.4800 | 3 | 3 |
| KOTA | 2021 | 0.5918 | 0.4400 | 3 | 3 |
| LAND | 2019 | 3.6729 | 0.3600 | 2 | 3 |
| LAND | 2020 | 1.1236 | 0.3600 | 2 | 3 |
| LAND | 2021 | 0.6400 | 0.3200 | 2 | 3 |
| LPCK | 2019 | 0.2620 | 0.6800 | 5 | 3 |
| LPCK | 2020 | 0.5953 | 0.7200 | 6 | 3 |
| LPCK | 2021 | 0.6712 | 0.7200 | 6 | 3 |
| LPKR | 2019 | 0.6719 | 0.6400 | 5 | 4 |
| LPKR | 2020 | 0.7847 | 0.6800 | 5 | 4 |
| LPKR | 2021 | 0.7479 | 0.7200 | 6 | 4 |
| LPLI | 2019 | 0.3256 | 0.4000 | 3 | 3 |
| LPLI | 2020 | 0.3159 | 0.4000 | 3 | 3 |
| LPLI | 2021 | 0.3009 | 0.4000 | 3 | 3 |
| MDLN | 2019 | 0.7004 | 0.7200 | 5 | 3 |
| MDLN | 2020 | 0.7589 | 0.6800 | 5 | 3 |
| MDLN | 2021 | 0.7841 | 0.6800 | 5 | 3 |
| MKPI | 2019 | 2.3090 | 0.6800 | 10 | 4 |
| MKPI | 2020 | 3.8132 | 0.7600 | 12 | 4 |
| MKPI | 2021 | 3.2110 | 0.7600 | 11 | 4 |
| MMLP | 2019 | 0.3384 | 0.5600 | 4 | 3 |
| MMLP | 2020 | 0.4423 | 0.5600 | 3 | 3 |
| MMLP | 2021 | 0.5854 | 0.6400 | 3 | 3 |
| MPRO | 2019 | 5.7725 | 0.3200 | 3 | 3 |
| MPRO | 2020 | 5.5955 | 0.2800 | 3 | 3 |
| MPRO | 2021 | 2.6887 | 0.2000 | 3 | 3 |
| MTLA | 2019 | 0.9746 | 0.5600 | 5 | 3 |
| MTLA | 2020 | 0.8300 | 0.5200 | 5 | 3 |
| MTLA | 2021 | 0.7063 | 0.5200 | 5 | 3 |
| MTSM | 2019 | 0.3982 | 0.0800 | 2 | 3 |
| MTSM | 2020 | 0.4776 | 0.1600 | 2 | 3 |
| MTSM | 2021 | 0.5429 | 0.1600 | 2 | 3 |
| NIRO | 2019 | 0.6227 | 0.2800 | 2 | 3 |
| NIRO | 2020 | 0.7179 | 0.3600 | 2 | 3 |
| NIRO | 2021 | 0.7351 | 0.4800 | 2 | 3 |
| OMRE | 2019 | 0.4456 | 0.6000 | 8 | 3 |
| OMRE | 2020 | 0.2806 | 0.5600 | 5 | 3 |
| OMRE | 2021 | 0.5094 | 0.6000 | 5 | 3 |
| PAMG | 2019 | 1.0672 | 0.4400 | 2 | 3 |
| PAMG | 2020 | 0.7203 | 0.4400 | 2 | 3 |
| PAMG | 2021 | 0.7519 | 0.4000 | 2 | 3 |
| PLIN | 2019 | 0.8696 | 0.5600 | 3 | 3 |
| PLIN | 2020 | 0.7802 | 0.6000 | 3 | 3 |
| PLIN | 2021 | 0.6817 | 0.6000 | 3 | 3 |
| POLI | 2019 | 1.4120 | 0.4800 | 3 | 3 |
| POLI | 2020 | 0.9944 | 0.4000 | 5 | 3 |
| POLI | 2021 | 1.4520 | 0.4000 | 5 | 3 |
| POLL | 2019 | 2.6113 | 0.6000 | 3 | 3 |
| POLL | 2020 | 2.4716 | 0.4800 | 3 | 3 |
| POLL | 2021 | 1.8480 | 0.4800 | 4 | 3 |
| POSA | 2019 | 1.1512 | 0.3200 | 3 | 3 |
| POSA | 2020 | 1.3026 | 0.3200 | 2 | 3 |
| POSA | 2021 | 1.4800 | 0.4000 | 2 | 3 |
| PPRO | 2019 | 0.8523 | 0.8400 | 5 | 4 |
| PPRO | 2020 | 0.9911 | 0.8000 | 3 | 4 |
| PPRO | 2021 | 0.6572 | 0.8000 | 3 | 3 |
| PUDP | 2019 | 0.5533 | 0.4000 | 3 | 3 |
| PUDP | 2020 | 0.5389 | 0.4800 | 3 | 3 |
| PUDP | 2021 | 0.6056 | 0.4800 | 3 | 3 |
| PWON | 2019 | 1.2576 | 0.5600 | 3 | 3 |
| PWON | 2020 | 1.2043 | 0.5600 | 3 | 3 |
| PWON | 2021 | 1.0469 | 0.5200 | 3 | 3 |
| RBMS | 2019 | 0.4747 | 0.4400 | 4 | 3 |
| RBMS | 2020 | 0.4386 | 0.4800 | 3 | 3 |
| RBMS | 2021 | 0.5612 | 0.4800 | 3 | 3 |
| RDTX | 2019 | 0.5276 | 0.3200 | 3 | 2 |
| RDTX | 2020 | 0.4808 | 0.3200 | 3 | 2 |
| RDTX | 2021 | 0.6314 | 0.4000 | 3 | 2 |
| RISE | 2019 | 2.3093 | 0.4800 | 3 | 3 |
| RISE | 2020 | 1.9997 | 0.5200 | 3 | 3 |
| RISE | 2021 | 1.7319 | 0.5200 | 3 | 3 |
| RODA | 2019 | 0.5520 | 0.4400 | 3 | 3 |
| RODA | 2020 | 0.6091 | 0.4800 | 3 | 3 |
| RODA | 2021 | 0.6870 | 0.4800 | 3 | 3 |
| SATU | 2019 | 0.7686 | 0.5600 | 4 | 3 |
| SATU | 2020 | 0.7842 | 0.5200 | 4 | 3 |
| SATU | 2021 | 1.0161 | 0.6000 | 4 | 3 |
| SMDM | 2019 | 0.3617 | 0.2400 | 3 | 3 |
| SMDM | 2020 | 0.3205 | 0.2000 | 2 | 3 |
| SMDM | 2021 | 0.3999 | 0.2000 | 2 | 3 |
| SMRA | 2019 | 1.1066 | 0.6000 | 5 | 3 |
| SMRA | 2020 | 1.0210 | 0.5600 | 5 | 3 |
| SMRA | 2021 | 0.9951 | 0.5600 | 5 | 3 |
| TARA | 2019 | 1.8346 | 0.6000 | 2 | 3 |
| TARA | 2020 | 0.5051 | 0.5600 | 2 | 3 |
| TARA | 2021 | 0.4847 | 0.5200 | 2 | 3 |
| URBN | 2019 | 2.2575 | 0.6000 | 3 | 3 |
| URBN | 2020 | 0.7603 | 0.6000 | 2 | 3 |
| URBN | 2021 | 0.8869 | 0.6000 | 2 | 3 |

**Attachment 2**

**Eviews-10 Regression Test Results**

**Descriptive Statistics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date: 05/20/23 Time: 01:03 |  |  |  |  |
| Sample: 1 168 | | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | NP | UDK | KA | ERM |
|  |  |  |  |  |
|  |  |  |  |  |
| Mean | 1.050056 | 3.779762 | 3.017857 | 0.529048 |
| Median | 0.750671 | 3.000000 | 3.000000 | 0.560000 |
| Maximum | 5.772547 | 12.00000 | 4.000000 | 0.840000 |
| Minimum | 0.116686 | 2.000000 | 2.000000 | 0.080000 |
| Std. Dev. | 0.905230 | 1.772800 | 0.278430 | 0.146738 |
| Skewness | 2.755043 | 1.888114 | 0.641493 | -0.336618 |
| Kurtosis | 12.04887 | 7.598308 | 12.84034 | 2.896215 |
|  |  |  |  |  |
| Jarque-Bera | 785.7012 | 247.8304 | 689.3487 | 3.248121 |
| Probability | 0.000000 | 0.000000 | 0.000000 | 0.197097 |
|  |  |  |  |  |
| Sum | 176.4093 | 635.0000 | 507.0000 | 88.88000 |
| Sum Sq. Dev. | 136.8467 | 524.8512 | 12.94643 | 3.595848 |
|  |  |  |  |  |
| Observations | 168 | 168 | 168 | 168 |

**The First Regression**

First Equation Regression Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: ERM | | | |  |
| Method: Least Squares | | | |  |
| Date: 04/21/23 Time: 05:18 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 0.137695 | 0.105173 | 1.309225 | 0.1923 |
| UDK | 0.039714 | 0.005755 | 6.900489 | 0.0000 |
| KA | 0.079939 | 0.036644 | 2.181506 | 0.0306 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.305584 | Mean dependent var | | 0.529048 |
| Adjusted R-squared | 0.297167 | S.D. dependent var | | 0.146738 |
| S.E. of regression | 0.123018 | Akaike info criterion | | -1.335277 |
| Sum squared resid | 2.497013 | Schwarz criterion | | -1.279492 |
| Log likelihood | 115.1633 | Hannan-Quinn criter. | | -1.312637 |
| F-statistic | 36.30492 | Durbin-Watson stat | | 0.921738 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Normality Test



Multicollinearity Test

|  |  |  |
| --- | --- | --- |
|  | UDK | KA |
| UDK | 1.000000 | 0.359823 |
| KA | 0.359823 | 1.000000 |

Heteorskedasticity Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Heteroskedasticity Test: Harvey | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 1.493322 | Prob. F(2,165) | | 0.2276 |
| Obs\*R-squared | 2.986881 | Prob. Chi-Square(2) | | 0.2246 |
| Scaled explained SS | 2.751769 | Prob. Chi-Square(2) | | 0.2526 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Equation: | | |  |  |
| Dependent Variable: LRESID2 | | | |  |
| Method: Least Squares | | | |  |
| Date: 05/22/23 Time: 02:12 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -6.847997 | 1.822996 | -3.756452 | 0.0002 |
| UDK | -0.159514 | 0.099756 | -1.599040 | 0.1117 |
| KA | 0.753929 | 0.635160 | 1.186991 | 0.2369 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.017779 | Mean dependent var | | -5.175674 |
| Adjusted R-squared | 0.005873 | S.D. dependent var | | 2.138594 |
| S.E. of regression | 2.132304 | Akaike info criterion | | 4.369979 |
| Sum squared resid | 750.2088 | Schwarz criterion | | 4.425764 |
| Log likelihood | -364.0782 | Hannan-Quinn criter. | | 4.392619 |
| F-statistic | 1.493322 | Durbin-Watson stat | | 1.288661 |
| Prob(F-statistic) | 0.227645 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Autocorrelation Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: ERM | | | |  |
| Method: ARMA Maximum Likelihood (OPG - BHHH) | | | | |
| Date: 04/21/23 Time: 05:13 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
| Convergence achieved after 12 iterations | | | | |
| Coefficient covariance computed using outer product of gradients | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 0.164196 | 0.100406 | 1.635329 | 0.1039 |
| UDK | 0.037458 | 0.006105 | 6.135931 | 0.0000 |
| KA | 0.074704 | 0.035413 | 2.109481 | 0.0364 |
| AR(1) | 0.538447 | 0.058403 | 9.219478 | 0.0000 |
| SIGMASQ | 0.010608 | 0.001046 | 10.14186 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.504401 | Mean dependent var | | 0.529048 |
| Adjusted R-squared | 0.492240 | S.D. dependent var | | 0.146738 |
| S.E. of regression | 0.104562 | Akaike info criterion | | -1.646735 |
| Sum squared resid | 1.782097 | Schwarz criterion | | -1.553759 |
| Log likelihood | 143.3257 | Hannan-Quinn criter. | | -1.609001 |
| F-statistic | 41.47382 | Durbin-Watson stat | | 1.849550 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Inverted AR Roots | .54 | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**The Second Regression**

Second Equation Regression Model

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: NP | | | |  |
| Method: Least Squares | | | |  |
| Date: 05/22/23 Time: 02:20 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1.636262 | 0.925694 | -1.767605 | 0.0790 |
| UDK | 0.115789 | 0.046281 | 2.501857 | 0.0133 |
| KA | 0.496210 | 0.264886 | 1.873293 | 0.0628 |
| LOG\_ERM | 0.932281 | 0.421927 | 2.209576 | 0.0285 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.073739 | Mean dependent var | | 1.050056 |
| Adjusted R-squared | 0.056795 | S.D. dependent var | | 0.905230 |
| S.E. of regression | 0.879148 | Akaike info criterion | | 2.603794 |
| Sum squared resid | 126.7557 | Schwarz criterion | | 2.678174 |
| Log likelihood | -214.7187 | Hannan-Quinn criter. | | 2.633981 |
| F-statistic | 4.351989 | Durbin-Watson stat | | 0.929710 |
| Prob(F-statistic) | 0.005586 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Normality Test



Multicollinearity Test

|  |  |  |  |
| --- | --- | --- | --- |
|  | UDK | KA | ERM |
| UDK | 1.000000 | 0.359823 | 0.534374 |
| KA | 0.359823 | 1.000000 | 0.324323 |
| ERM | 0.534374 | 0.324323 | 1.000000 |

Heteroscedasticity Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Heteroskedasticity Test: White | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 1.273287 | Prob. F(9,158) | | 0.2554 |
| Obs\*R-squared | 11.36088 | Prob. Chi-Square(9) | | 0.2518 |
| Scaled explained SS | 60.14197 | Prob. Chi-Square(9) | | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Equation: | | |  |  |
| Dependent Variable: RESID^2 | | | |  |
| Method: Least Squares | | | |  |
| Date: 04/21/23 Time: 14:08 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -2.463027 | 7.932049 | -0.310516 | 0.7566 |
| UDK^2 | 0.031325 | 0.071405 | 0.438695 | 0.6615 |
| UDK\*KA | -0.044774 | 0.457202 | -0.097931 | 0.9221 |
| UDK\*ERM | -0.177851 | 1.774845 | -0.100207 | 0.9203 |
| UDK | -0.033980 | 1.385250 | -0.024530 | 0.9805 |
| KA^2 | 0.147578 | 1.533394 | 0.096242 | 0.9234 |
| KA\*ERM | -2.655900 | 8.142520 | -0.326177 | 0.7447 |
| KA | 1.683558 | 5.757626 | 0.292405 | 0.7704 |
| ERM^2 | 2.547982 | 9.358223 | 0.272272 | 0.7858 |
| ERM | 1.448144 | 24.20604 | 0.059826 | 0.9524 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.067624 | Mean dependent var | | 0.749709 |
| Adjusted R-squared | 0.014514 | S.D. dependent var | | 2.506413 |
| S.E. of regression | 2.488157 | Akaike info criterion | | 4.718640 |
| Sum squared resid | 978.1659 | Schwarz criterion | | 4.904590 |
| Log likelihood | -386.3658 | Hannan-Quinn criter. | | 4.794108 |
| F-statistic | 1.273287 | Durbin-Watson stat | | 1.122480 |
| Prob(F-statistic) | 0.255360 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Autocorrelation Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: NP | | | |  |
| Method: ARMA Maximum Likelihood (OPG - BHHH) | | | | |
| Date: 04/21/23 Time: 14:03 | | | |  |
| Sample: 1 168 | | |  |  |
| Included observations: 168 | | | |  |
| Convergence achieved after 22 iterations | | | | |
| Coefficient covariance computed using outer product of gradients | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -0.333942 | 0.981465 | -0.340248 | 0.7341 |
| UDK | 0.087734 | 0.038420 | 2.283510 | 0.0237 |
| KA | 0.506115 | 0.337740 | 1.498535 | 0.1359 |
| ERM | -0.898329 | 0.548031 | -1.639194 | 0.1031 |
| AR(1) | 0.535614 | 0.050413 | 10.62451 | 0.0000 |
| SIGMASQ | 0.534855 | 0.045738 | 11.69383 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.343385 | Mean dependent var | | 1.050056 |
| Adjusted R-squared | 0.323119 | S.D. dependent var | | 0.905230 |
| S.E. of regression | 0.744758 | Akaike info criterion | | 2.285558 |
| Sum squared resid | 89.85562 | Schwarz criterion | | 2.397128 |
| Log likelihood | -185.9869 | Hannan-Quinn criter. | | 2.330839 |
| F-statistic | 16.94397 | Durbin-Watson stat | | 1.819262 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Inverted AR Roots | .54 | |  |  |
|  |  |  |  |  |