**Analisis Data**

1. Analisis Deskripsi Statistik

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | PRF | UP | LVRG | COH | NP |
| Mean | 13.28390 | 28.93598 | 261.9431 | 13.23263 | 226.6613 |
| Median | 9.605551 | 29.33117 | 72.71183 | 13.31419 | 180.8792 |
| Maximum | 54.24701 | 32.22463 | 3405.558 | 20.18026 | 619.1077 |
| Minimum | -8.072215 | 23.66882 | 16.06180 | 6.196444 | 3.247988 |
| Std. Dev. | 14.32070 | 2.092425 | 607.6597 | 3.431649 | 190.0918 |
| Skewness | 0.873761 | -0.843245 | 4.364186 | 0.263956 | 0.490684 |
| Kurtosis | 3.540050 | 3.522901 | 22.56038 | 2.964680 | 1.892745 |
|  |  |  |  |  |  |
| Jarque-Bera | 4.739436 | 4.416706 | 649.9569 | 0.396581 | 3.101221 |
| Probability | 0.093507 | 0.109881 | 0.000000 | 0.820132 | 0.212118 |
|  |  |  |  |  |  |
| Sum | 451.6526 | 983.8234 | 8906.066 | 449.9095 | 7706.485 |
| Sum Sq. Dev. | 6767.722 | 144.4820 | 12185262 | 388.6150 | 1192452. |
|  |  |  |  |  |  |
| Observations | 34 | 34 | 34 | 34 | 34 |

1. Pengujian Hipotesis
2. Uji Asumsi Klasik
3. Uji Normalitas

Profitabilitas



Ukuran perusahaan



Leverage



Cash on Hand



Nilai perusahaan



1. Uji Multikolinearitas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | PRF | UP | LVRG | COH |
| PRF | 1 | 0.1160187179336258 | -0.3779630385075226 | -0.1766167550607456 |
| UP | 0.1160187179336258 | 1 | 0.1556619750372322 | 0.3058773971627054 |
| LVRG | -0.3779630385075226 | 0.1556619750372322 | 1 | 0.02960472813691877 |
| COH | -0.1766167550607456 | 0.3058773971627054 | 0.02960472813691877 | 1 |

1. Uji Heterokedastisitas

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Heteroskedasticity Test: White | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 2.562408 | Prob. F(14,19) | | 0.0290 |
| Obs\*R-squared | 22.22751 | Prob. Chi-Square(14) | | 0.0741 |
| Scaled explained SS | 12.42354 | Prob. Chi-Square(14) | | 0.5723 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Equation: | |  |  |  |
| Dependent Variable: RESID^2 | | |  |  |
| Method: Least Squares | | |  |  |
| Date: 02/28/20 Time: 21:28 | | |  |  |
| Sample: 1 34 | |  |  |  |
| Included observations: 34 | | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1870315. | 807779.9 | -2.315378 | 0.0319 |
| PRF^2 | 87.53419 | 29.67658 | 2.949606 | 0.0082 |
| PRF\*UP | -1013.860 | 473.3706 | -2.141790 | 0.0454 |
| PRF\*LVRG | 7.556975 | 5.369940 | 1.407274 | 0.1755 |
| PRF\*COH | 36.57249 | 239.7642 | 0.152535 | 0.8804 |
| PRF | 24091.35 | 11567.74 | 2.082633 | 0.0510 |
| UP^2 | -2405.640 | 1266.892 | -1.898852 | 0.0729 |
| UP\*LVRG | -15.29199 | 46.35863 | -0.329863 | 0.7451 |
| UP\*COH | 1528.126 | 1223.486 | 1.248994 | 0.2268 |
| UP | 133399.4 | 64007.45 | 2.084123 | 0.0509 |
| LVRG^2 | 0.037244 | 0.017020 | 2.188226 | 0.0414 |
| LVRG\*COH | -26.52127 | 29.33153 | -0.904190 | 0.3772 |
| LVRG | 731.3678 | 1734.889 | 0.421565 | 0.6781 |
| COH^2 | -317.0026 | 467.8721 | -0.677541 | 0.5062 |
| COH | -33229.01 | 29104.64 | -1.141709 | 0.2678 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.653750 | Mean dependent var | | 17997.98 |
| Adjusted R-squared | 0.398619 | S.D. dependent var | | 22645.37 |
| S.E. of regression | 17561.20 | Akaike info criterion | | 22.68520 |
| Sum squared resid | 5.86E+09 | Schwarz criterion | | 23.35860 |
| Log likelihood | -370.6484 | Hannan-Quinn criter. | | 22.91485 |
| F-statistic | 2.562408 | Durbin-Watson stat | | 1.730621 |
| Prob(F-statistic) | 0.028961 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

1. Analisis Korelasi

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | PRF | UP | LVRG | COH | NP |
| PRF | 1 | 0.1160187179336258 | -0.3779630385075226 | -0.1766167550607456 | 0.4337275516525333 |
| UP | 0.1160187179336258 | 1 | 0.1556619750372322 | 0.3058773971627054 | 0.5151680420292776 |
| LVRG | -0.3779630385075226 | 0.1556619750372322 | 1 | 0.02960472813691877 | -0.324263500461615 |
| COH | -0.1766167550607456 | 0.3058773971627054 | 0.02960472813691877 | 1 | 0.08911270239711436 |
| NP | 0.4337275516525333 | 0.5151680420292776 | -0.324263500461615 | 0.08911270239711436 | 1 |

1. Analisis Regresi Berganda – CEM, FEM, REM

Uji Chow 🡪 nilai Prob < 0,05 --- model FEM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Redundant Fixed Effects Tests | | |  |  |
| Equation: Untitled | | |  |  |
| Test cross-section fixed effects | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Effects Test | | Statistic | d.f. | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section F | | 146.688037 | (16,13) | 0.0000 |
| Cross-section Chi-square | | 176.850020 | 16 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed effects test equation: | | | |  |
| Dependent Variable: NP | | |  |  |
| Method: Panel Least Squares | | |  |  |
| Date: 02/28/20 Time: 20:51 | | |  |  |
| Sample: 2017 2018 | | |  |  |
| Periods included: 2 | | |  |  |
| Cross-sections included: 17 | | |  |  |
| Total panel (balanced) observations: 34 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1200.301 | 356.0333 | -3.371316 | 0.0021 |
| PRF | 3.288430 | 2.008775 | 1.637033 | 0.1124 |
| UP | 49.29825 | 13.31271 | 3.703096 | 0.0009 |
| LVRG | -0.098350 | 0.046397 | -2.119759 | 0.0427 |
| COH | -1.318874 | 8.002826 | -0.164801 | 0.8702 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.486829 | Mean dependent var | | 226.6613 |
| Adjusted R-squared | 0.416047 | S.D. dependent var | | 190.0918 |
| S.E. of regression | 145.2621 | Akaike info criterion | | 12.93001 |
| Sum squared resid | 611931.4 | Schwarz criterion | | 13.15447 |
| Log likelihood | -214.8102 | Hannan-Quinn criter. | | 13.00656 |
| F-statistic | 6.877853 | Durbin-Watson stat | | 0.188025 |
| Prob(F-statistic) | 0.000507 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Uji Hausman 🡪 nilai Prob. < 0,05 --- model FEM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Correlated Random Effects - Hausman Test | | | |  |
| Equation: Untitled | | |  |  |
| Test cross-section random effects | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Summary | | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random | | 13.967063 | 4 | 0.0074 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random effects test comparisons: | | | | |
|  |  |  |  |  |
| Variable | Fixed | Random | Var(Diff.) | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| PRF | 3.066262 | 3.561069 | 0.087763 | 0.0949 |
| UP | 176.363696 | 74.977452 | 878.039471 | 0.0006 |
| LVRG | -0.022140 | -0.021252 | 0.000002 | 0.5400 |
| COH | -0.626989 | -1.698083 | 39.922872 | 0.8654 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random effects test equation: | | | |  |
| Dependent Variable: NP | | |  |  |
| Method: Panel Least Squares | | |  |  |
| Date: 02/28/20 Time: 21:06 | | |  |  |
| Sample: 2017 2018 | | |  |  |
| Periods included: 2 | | |  |  |
| Cross-sections included: 17 | | |  |  |
| Total panel (balanced) observations: 34 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -4903.231 | 974.7269 | -5.030364 | 0.0002 |
| PRF | 3.066262 | 0.888389 | 3.451484 | 0.0043 |
| UP | 176.3637 | 33.88984 | 5.204029 | 0.0002 |
| LVRG | -0.022140 | 0.008581 | -2.580122 | 0.0229 |
| COH | -0.626989 | 9.872331 | -0.063510 | 0.9503 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed (dummy variables) | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.997173 | Mean dependent var | | 226.6613 |
| Adjusted R-squared | 0.992824 | S.D. dependent var | | 190.0918 |
| S.E. of regression | 16.10255 | Akaike info criterion | | 8.669715 |
| Sum squared resid | 3370.796 | Schwarz criterion | | 9.612467 |
| Log likelihood | -126.3852 | Hannan-Quinn criter. | | 8.991220 |
| F-statistic | 229.2938 | Durbin-Watson stat | | 3.777778 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**Decision Model 🡪 FEM**

1. Koefisien Determinasi

Model FEM

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: NP | | |  |  |
| Method: Panel Least Squares | | |  |  |
| Date: 02/28/20 Time: 21:13 | | |  |  |
| Sample: 2017 2018 | | |  |  |
| Periods included: 2 | | |  |  |
| Cross-sections included: 17 | | |  |  |
| Total panel (balanced) observations: 34 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -4903.231 | 974.7269 | -5.030364 | 0.0002 |
| **PRF** | **3.066262** | **0.888389** | **3.451484** | **0.0043** |
| UP | 176.3637 | 33.88984 | 5.204029 | 0.0002 |
| **LVRG** | **-0.022140** | **0.008581** | **-2.580122** | **0.0229** |
| COH | -0.626989 | 9.872331 | -0.063510 | 0.9503 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed (dummy variables) | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.997173 | Mean dependent var | | 226.6613 |
| Adjusted R-squared | 0.992824 | S.D. dependent var | | 190.0918 |
| S.E. of regression | 16.10255 | Akaike info criterion | | 8.669715 |
| Sum squared resid | 3370.796 | Schwarz criterion | | 9.612467 |
| Log likelihood | -126.3852 | Hannan-Quinn criter. | | 8.991220 |
| F-statistic | 229.2938 | Durbin-Watson stat | | 3.777778 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |