**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 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |