COMMON EFFECT MODEL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: MSME? | | |  |  |
| Method: Pooled Least Squares | | |  |  |
| Date: 08/31/21 Time: 16:19 | | |  |  |
| Sample: 2020M03 2021M05 | | |  |  |
| Included observations: 15 | | |  |  |
| Cross-sections included: 3 | | |  |  |
| Total pool (balanced) observations: 45 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 7255.168 | 1752.130 | 4.140770 | 0.0002 |
| MD? | -12.24254 | 0.754006 | -16.23667 | 0.0000 |
| MS? | 1.171446 | 0.052621 | 22.26206 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.927318 | Mean dependent var | | 25574.19 |
| Adjusted R-squared | 0.923857 | S.D. dependent var | | 23900.71 |
| S.E. of regression | 6595.170 | Akaike info criterion | | 20.49040 |
| Sum squared resid | 1.83E+09 | Schwarz criterion | | 20.61085 |
| Log likelihood | -458.0341 | Hannan-Quinn criter. | | 20.53530 |
| F-statistic | 267.9298 | Durbin-Watson stat | | 0.275160 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**FIXED EFFECT MODEL**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: MSME? | | |  |  |
| Method: Pooled Least Squares | | |  |  |
| Date: 08/31/21 Time: 16:20 | | |  |  |
| Sample: 2020M03 2021M05 | | |  |  |
| Included observations: 15 | | |  |  |
| Cross-sections included: 3 | | |  |  |
| Total pool (balanced) observations: 45 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 40483.68 | 14809.81 | 2.733572 | 0.0093 |
| MD? | 0.705018 | 1.162731 | 0.606347 | 0.5477 |
| MS? | -0.321295 | 0.205832 | -1.560961 | 0.1264 |
| Fixed Effects (Cross) |  |  |  |  |
| \_BUS--C | 43061.65 |  |  |  |
| \_UUS--C | -8500.302 |  |  |  |
| \_BPRS--C | -34561.35 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed (dummy variables) | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.996475 | Mean dependent var | | 25574.19 |
| Adjusted R-squared | 0.996122 | S.D. dependent var | | 23900.71 |
| S.E. of regression | 1488.287 | Akaike info criterion | | 17.55308 |
| Sum squared resid | 88599967 | Schwarz criterion | | 17.75382 |
| Log likelihood | -389.9443 | Hannan-Quinn criter. | | 17.62791 |
| F-statistic | 2826.879 | Durbin-Watson stat | | 1.095534 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

RANDOM EFFECT MODEL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: MSME? | | |  |  |
| Method: Pooled EGLS (Cross-section random effects) | | | | |
| Date: 08/31/21 Time: 16:22 | | |  |  |
| Sample: 2020M03 2021M05 | | |  |  |
| Included observations: 15 | | |  |  |
| Cross-sections included: 3 | | |  |  |
| Total pool (balanced) observations: 45 | | | |  |
| Swamy and Arora estimator of component variances | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 7255.168 | 395.3914 | 18.34933 | 0.0000 |
| MD? | -12.24254 | 0.170151 | -71.95088 | 0.0000 |
| MS? | 1.171446 | 0.011875 | 98.65170 | 0.0000 |
| Random Effects (Cross) |  |  |  |  |
| \_BUS--C | 0.000000 |  |  |  |
| \_UUS--C | 0.000000 |  |  |  |
| \_BPRS--C | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification | |  |  |
|  |  |  | S.D. | Rho |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random | | | 0.000000 | 0.0000 |
| Idiosyncratic random | | | 1488.287 | 1.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Weighted Statistics | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.927318 | Mean dependent var | | 25574.19 |
| Adjusted R-squared | 0.923857 | S.D. dependent var | | 23900.71 |
| S.E. of regression | 6595.170 | Sum squared resid | | 1.83E+09 |
| F-statistic | 267.9298 | Durbin-Watson stat | | 0.275160 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Unweighted Statistics | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.927318 | Mean dependent var | | 25574.19 |
| Sum squared resid | 1.83E+09 | Durbin-Watson stat | | 0.275160 |
|  |  |  |  |  |
|  |  |  |  |  |

UJI CHOW (CEM DAN FEM)

Ho : CEM (PROB > 0.05)

Ha: **FEM** (PROB < 0,05)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Redundant Fixed Effects Tests | | |  |  |
| Pool: POOL | |  |  |  |
| Test cross-section fixed effects | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Effects Test | | Statistic | d.f. | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section F | | 392.380124 | (2,40) | 0.0000 |
| Cross-section Chi-square | | 136.179598 | 2 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed effects test equation: | | | |  |
| Dependent Variable: SME? | | |  |  |
| Method: Panel Least Squares | | |  |  |
| Date: 08/31/21 Time: 16:21 | | |  |  |
| Sample: 2020M03 2021M05 | | |  |  |
| Included observations: 15 | | |  |  |
| Cross-sections included: 3 | | |  |  |
| Total pool (balanced) observations: 45 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 7255.168 | 1752.130 | 4.140770 | 0.0002 |
| MD? | -12.24254 | 0.754006 | -16.23667 | 0.0000 |
| MS? | 1.171446 | 0.052621 | 22.26206 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.927318 | Mean dependent var | | 25574.19 |
| Adjusted R-squared | 0.923857 | S.D. dependent var | | 23900.71 |
| S.E. of regression | 6595.170 | Akaike info criterion | | 20.49040 |
| Sum squared resid | 1.83E+09 | Schwarz criterion | | 20.61085 |
| Log likelihood | -458.0341 | Hannan-Quinn criter. | | 20.53530 |
| F-statistic | 267.9298 | Durbin-Watson stat | | 0.275160 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

UJI HAUSMAN (FEM & REM)

Ho = REM (>0.05)

Ha = **FEM** (< 0.05)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Correlated Random Effects - Hausman Test | | | |  |
| Pool: POOL | |  |  |  |
| Test cross-section random effects | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Test Summary | | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random | | 784.760247 | 2 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* WARNING: estimated cross-section random effects variance is zero. | | | | |
|  |  |  |  |  |
| Cross-section random effects test comparisons: | | | | |
|  |  |  |  |  |
| Variable | Fixed | Random | Var(Diff.) | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| MD? | 0.705018 | -12.242541 | 1.322991 | 0.0000 |
| MS? | -0.321295 | 1.171446 | 0.042226 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random effects test equation: | | | |  |
| Dependent Variable: MSME? | | |  |  |
| Method: Panel Least Squares | | |  |  |
| Date: 08/31/21 Time: 16:22 | | |  |  |
| Sample: 2020M03 2021M05 | | |  |  |
| Included observations: 15 | | |  |  |
| Cross-sections included: 3 | | |  |  |
| Total pool (balanced) observations: 45 | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| C | 40483.68 | 14809.81 | 2.733572 | 0.0093 |
| MD? | 0.705018 | 1.162731 | 0.606347 | 0.5477 |
| MS? | -0.321295 | 0.205832 | -1.560961 | 0.1264 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed (dummy variables) | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.996475 | Mean dependent var | | 25574.19 |
| Adjusted R-squared | 0.996122 | S.D. dependent var | | 23900.71 |
| S.E. of regression | 1488.287 | Akaike info criterion | | 17.55308 |
| Sum squared resid | 88599967 | Schwarz criterion | | 17.75382 |
| Log likelihood | -389.9443 | Hannan-Quinn criter. | | 17.62791 |
| F-statistic | 2826.879 | Durbin-Watson stat | | 1.095534 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

UJI LM (CEM & REM), no need anymore