Pooled Regression Models

Model 1

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel Least Squares |  |
| Date: 02/23/19 Time: 13:17 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -970.2639 | 358.8728 | -2.703643 | 0.0088 |
| EQTA | -1.373492 | 0.417694 | -3.288272 | 0.0016 |
| ETLR | 0.034532 | 0.052856 | 0.653325 | 0.5159 |
| LITA | -1.617600 | 1.088732 | -1.485764 | 0.1423 |
| OEIR | 0.016174 | 0.016158 | 1.001010 | 0.3206 |
| OIAR | 4.241466 | 4.302993 | 0.985701 | 0.3280 |
| OETA | -11.70659 | 5.415899 | -2.161523 | 0.0344 |
| TLER | -0.000451 | 7.42E-05 | -6.070154 | 0.0000 |
| TLTA | -213.6936 | 127.8434 | -1.671526 | 0.0995 |
| EM | 15.45136 | 4.339256 | 3.560832 | 0.0007 |
| SIZE | 83.80154 | 27.85557 | 3.008430 | 0.0038 |
| GDPG | -4.585169 | 10.75064 | -0.426502 | 0.6712 |
| INF | 1.909006 | 2.616393 | 0.729633 | 0.4683 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.902783 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.884555 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 117.3211 |     Akaike info criterion | 12.52045 |
| Sum squared resid | 880911.3 |     Schwarz criterion | 12.91615 |
| Log likelihood | -469.0372 |     Hannan-Quinn criter. | 12.67873 |
| F-statistic | 49.52686 |     Durbin-Watson stat | 1.786483 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Model 2

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel Least Squares |  |
| Date: 02/23/19 Time: 14:02 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -798.3643 | 329.2912 | -2.424493 | 0.0181 |
| EQTA | -0.783046 | 0.237241 | -3.300635 | 0.0016 |
| ETLR | 0.083198 | 0.044469 | 1.870907 | 0.0658 |
| OEIR | 0.013211 | 0.016271 | 0.811943 | 0.4197 |
| OIAR | 5.613274 | 4.148612 | 1.353049 | 0.1807 |
| OETA | -8.356590 | 5.138722 | -1.626200 | 0.1087 |
| TLER | -0.000404 | 6.96E-05 | -5.798285 | 0.0000 |
| EM | 12.67705 | 4.068868 | 3.115620 | 0.0027 |
| SIZE | 56.96848 | 21.10546 | 2.699229 | 0.0088 |
| GDPG | -5.667668 | 10.86289 | -0.521746 | 0.6036 |
| INF | 2.065012 | 2.604895 | 0.792743 | 0.4308 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.897344 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.881791 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 118.7175 |     Akaike info criterion | 12.52293 |
| Sum squared resid | 930193.7 |     Schwarz criterion | 12.85776 |
| Log likelihood | -471.1330 |     Hannan-Quinn criter. | 12.65686 |
| F-statistic | 57.69265 |     Durbin-Watson stat | 1.799167 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Model 3

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel Least Squares |  |
| Date: 02/23/19 Time: 14:03 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1105.862 | 300.0057 | -3.686136 | 0.0005 |
| EQTA | -0.342427 | 0.132331 | -2.587648 | 0.0118 |
| ETLR | 0.072455 | 0.044613 | 1.624083 | 0.1090 |
| OEIR | 0.010400 | 0.016157 | 0.643674 | 0.5220 |
| TLER | -0.000387 | 7.06E-05 | -5.487236 | 0.0000 |
| EM | 11.67734 | 4.125321 | 2.830650 | 0.0061 |
| SIZE | 73.66867 | 20.10723 | 3.663789 | 0.0005 |
| GDPG | -0.318562 | 10.70451 | -0.029760 | 0.9763 |
| INF | 4.559533 | 2.399999 | 1.899806 | 0.0617 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.889658 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.876676 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 121.2583 |     Akaike info criterion | 12.54319 |
| Sum squared resid | 999843.4 |     Schwarz criterion | 12.81714 |
| Log likelihood | -473.9129 |     Hannan-Quinn criter. | 12.65277 |
| F-statistic | 68.53316 |     Durbin-Watson stat | 1.815338 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Model 4

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel Least Squares |  |
| Date: 02/23/19 Time: 14:03 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1107.563 | 292.3667 | -3.788269 | 0.0003 |
| EQTA | -0.341926 | 0.130303 | -2.624075 | 0.0107 |
| ETLR | 0.072385 | 0.044228 | 1.636632 | 0.1063 |
| OEIR | 0.010344 | 0.015933 | 0.649242 | 0.5183 |
| TLER | -0.000387 | 7.00E-05 | -5.530623 | 0.0000 |
| EM | 11.66998 | 4.087973 | 2.854709 | 0.0057 |
| SIZE | 73.68693 | 19.95183 | 3.693241 | 0.0004 |
| INF | 4.580844 | 2.274027 | 2.014420 | 0.0479 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.889656 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.878462 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 120.3772 |     Akaike info criterion | 12.51723 |
| Sum squared resid | 999856.4 |     Schwarz criterion | 12.76074 |
| Log likelihood | -473.9134 |     Hannan-Quinn criter. | 12.61463 |
| F-statistic | 79.47427 |     Durbin-Watson stat | 1.815209 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Model 5

|  |  |  |
| --- | --- | --- |
| Dependent Variable: ROE |  |  |
| Method: Panel Least Squares |  |  |
| Date: 03/03/19 Time: 12:26 |  |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |  |
| Total panel (balanced) observations: 77 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -880.3007 | 260.3527 | -3.381185 | 0.0012 |
| EQTA | -0.231157 | 0.112674 | -2.051544 | 0.0440 |
| OEIR | 0.014845 | 0.015881 | 0.934768 | 0.3531 |
| TLER | -0.000359 | 6.87E-05 | -5.228496 | 0.0000 |
| EM | 10.02275 | 4.009362 | 2.499837 | 0.0148 |
| SIZE | 59.04389 | 18.04583 | 3.271886 | 0.0017 |
| INF | 4.175969 | 2.287473 | 1.825582 | 0.0722 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.885373 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.875548 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 121.8120 |     Akaike info criterion | 12.52934 |
| Sum squared resid | 1038671. |     Schwarz criterion | 12.74242 |
| Log likelihood | -475.3797 |     Hannan-Quinn criter. | 12.61457 |
| F-statistic | 90.11269 |     Durbin-Watson stat | 1.776494 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Fixed Effect Model or LSDV MODEL

(Model 5)

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel Least Squares |  |
| Date: 02/23/19 Time: 14:41 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -1043.109 | 382.8780 | -2.724391 | 0.0083 |
| EQTA | -0.251921 | 0.155528 | -1.619773 | 0.1102 |
| OEIR | 0.005882 | 0.017000 | 0.346003 | 0.7305 |
| TLER | -0.000368 | 7.92E-05 | -4.648040 | 0.0000 |
| EM | 10.63027 | 4.624556 | 2.298658 | 0.0248 |
| SIZE | 70.76976 | 26.79533 | 2.641123 | 0.0104 |
| INF | 3.493945 | 2.469422 | 1.414884 | 0.1619 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section fixed (dummy variables) |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.892085 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.871851 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 123.6079 |     Akaike info criterion | 12.62485 |
| Sum squared resid | 977851.1 |     Schwarz criterion | 13.02055 |
| Log likelihood | -473.0566 |     Hannan-Quinn criter. | 12.78313 |
| F-statistic | 44.08826 |     Durbin-Watson stat | 1.831522 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

RANDOM EFFECT MODEL (MODEL 5)

|  |  |
| --- | --- |
| Dependent Variable: ROE |  |
| Method: Panel EGLS (Cross-section random effects) |
| Date: 02/23/19 Time: 14:44 |  |
| Sample: 2006 2016 |  |  |
| Periods included: 11 |  |  |
| Cross-sections included: 7 |  |
| Total panel (balanced) observations: 77 |
| Swamy and Arora estimator of component variances |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.   |
|  |  |  |  |  |
|  |  |  |  |  |
| C | -880.3007 | 264.1913 | -3.332058 | 0.0014 |
| EQTA | -0.231157 | 0.114336 | -2.021735 | 0.0470 |
| OEIR | 0.014845 | 0.016115 | 0.921186 | 0.3601 |
| TLER | -0.000359 | 6.97E-05 | -5.152527 | 0.0000 |
| EM | 10.02275 | 4.068476 | 2.463515 | 0.0162 |
| SIZE | 59.04389 | 18.31189 | 3.224346 | 0.0019 |
| INF | 4.175969 | 2.321200 | 1.799056 | 0.0763 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Effects Specification |  |  |
|  |  |  | S.D.   | Rho   |
|  |  |  |  |  |
|  |  |  |  |  |
| Cross-section random | 0.000000 | 0.0000 |
| Idiosyncratic random | 123.6079 | 1.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Weighted Statistics |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.885373 |     Mean dependent var | 34.91141 |
| Adjusted R-squared | 0.875548 |     S.D. dependent var | 345.2936 |
| S.E. of regression | 121.8120 |     Sum squared resid | 1038671. |
| F-statistic | 90.11269 |     Durbin-Watson stat | 1.776494 |
| Prob(F-statistic) | 0.000000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Unweighted Statistics |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.885373 |     Mean dependent var | 34.91141 |
| Sum squared resid | 1038671. |     Durbin-Watson stat | 1.776494 |
|  |  |  |  |  |
|  |  |  |  |  |

Stationary

|  |
| --- |
| Panel unit root test: Summary  |
| Series: ROA |  |  |
| Date: 02/23/19 Time: 00:21 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -10.4831 |  0.0000 |  7 |  63 |
| Breitung t-stat |  0.72577 |  0.7660 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.96748 |  0.1667 |  7 |  63 |
| ADF - Fisher Chi-square |  24.9897 |  0.0347 |  7 |  63 |
| PP - Fisher Chi-square |  26.7390 |  0.0208 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(ROA) |  |  |
| Date: 02/23/19 Time: 00:22 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -7.22947 |  0.0000 |  7 |  56 |
| Breitung t-stat | -1.86263 |  0.0313 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.12179 |  0.1310 |  7 |  56 |
| ADF - Fisher Chi-square |  29.6739 |  0.0085 |  7 |  56 |
| PP - Fisher Chi-square |  76.8582 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

|  |
| --- |
| Panel unit root test: Summary  |
| Series: D(ROA,2) |  |  |
| Date: 02/23/19 Time: 00:23 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -7.17384 |  0.0000 |  7 |  49 |
| Breitung t-stat | -1.94921 |  0.0256 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.47165 |  0.0706 |  7 |  49 |
| ADF - Fisher Chi-square |  35.5095 |  0.0012 |  7 |  49 |
| PP - Fisher Chi-square |  97.3558 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

|  |
| --- |
| Panel unit root test: Summary  |
| Series: ROE |  |  |
| Date: 02/23/19 Time: 00:24 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -0.37282 |  0.3546 |  7 |  63 |
| Breitung t-stat |  0.99345 |  0.8398 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  |  0.69757 |  0.7573 |  7 |  63 |
| ADF - Fisher Chi-square |  7.37941 |  0.9191 |  7 |  63 |
| PP - Fisher Chi-square |  19.7263 |  0.1390 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

|  |
| --- |
| Panel unit root test: Summary  |
| Series: D(ROE) |  |  |
| Date: 02/23/19 Time: 00:25 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -0.89694 |  0.1849 |  7 |  56 |
| Breitung t-stat |  0.45332 |  0.6748 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  |  0.35422 |  0.6384 |  7 |  56 |
| ADF - Fisher Chi-square |  11.9283 |  0.6121 |  7 |  56 |
| PP - Fisher Chi-square |  66.7855 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(ROE,2) |  |  |
| Date: 02/23/19 Time: 00:25 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -4.88289 |  0.0000 |  7 |  49 |
| Breitung t-stat |  0.69133 |  0.7553 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.72304 |  0.2348 |  7 |  49 |
| ADF - Fisher Chi-square |  25.5987 |  0.0291 |  7 |  49 |
| PP - Fisher Chi-square |  100.919 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

|  |
| --- |
| Panel unit root test: Summary  |
| Series: EQTA |  |  |
| Date: 02/23/19 Time: 00:27 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -92.0977 |  0.0000 |  7 |  63 |
| Breitung t-stat |  0.47895 |  0.6840 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -14.2761 |  0.0000 |  7 |  63 |
| ADF - Fisher Chi-square |  31.5107 |  0.0047 |  7 |  63 |
| PP - Fisher Chi-square |  16.2102 |  0.3007 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(EQTA) |  |  |
| Date: 02/23/19 Time: 00:27 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -45.0557 |  0.0000 |  7 |  56 |
| Breitung t-stat |  0.62653 |  0.7345 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -5.53851 |  0.0000 |  7 |  56 |
| ADF - Fisher Chi-square |  30.9343 |  0.0057 |  7 |  56 |
| PP - Fisher Chi-square |  50.5199 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(EQTA,2) |  |
| Date: 02/23/19 Time: 00:27 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -11.8864 |  0.0000 |  7 |  49 |
| Breitung t-stat | -1.42394 |  0.0772 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.09838 |  0.0179 |  7 |  49 |
| ADF - Fisher Chi-square |  32.6873 |  0.0032 |  7 |  49 |
| PP - Fisher Chi-square |  83.3893 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: ETLR |  |  |
| Date: 02/23/19 Time: 00:31 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -33.8137 |  0.0000 |  7 |  63 |
| Breitung t-stat |  1.27068 |  0.8981 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -4.04968 |  0.0000 |  7 |  63 |
| ADF - Fisher Chi-square |  24.8369 |  0.0362 |  7 |  63 |
| PP - Fisher Chi-square |  11.9606 |  0.6095 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(ETLR) |  |  |
| Date: 02/23/19 Time: 00:32 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -18.0023 |  0.0000 |  7 |  56 |
| Breitung t-stat |  1.83834 |  0.9670 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.07059 |  0.0192 |  7 |  56 |
| ADF - Fisher Chi-square |  31.8855 |  0.0042 |  7 |  56 |
| PP - Fisher Chi-square |  53.9065 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(ETLR,2) |  |
| Date: 02/23/19 Time: 00:32 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -2.01299 |  0.0221 |  7 |  49 |
| Breitung t-stat |  0.67894 |  0.7514 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.83663 | 0.2014 |  7 |  49 |
| ADF - Fisher Chi-square |  26.7784 | 0.0206 |  7 |  49 |
| PP - Fisher Chi-square |  91.0556 | 0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: LITA |  |  |
| Date: 02/23/19 Time: 00:33 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -6.77400 |  0.0000 |  7 |  63 |
| Breitung t-stat |  1.92748 |  0.9730 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.88671 |  0.1876 |  7 |  63 |
| ADF - Fisher Chi-square |  24.6637 |  0.0380 |  7 |  63 |
| PP - Fisher Chi-square |  11.8757 |  0.6163 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(LITA) |  |  |
| Date: 02/23/19 Time: 00:37 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -8.03912 |  0.0000 |  7 |  56 |
| Breitung t-stat | -0.58581 |  0.2790 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.81177 |  0.2085 |  7 |  56 |
| ADF - Fisher Chi-square |  24.8744 |  0.0358 |  7 |  56 |
| PP - Fisher Chi-square |  46.0640 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(LITA,2) |  |
| Date: 02/23/19 Time: 00:39 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -16.0694 |  0.0000 |  7 |  49 |
| Breitung t-stat | -2.22685 |  0.0130 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.02111 |  0.0216 |  7 |  49 |
| ADF - Fisher Chi-square |  41.7853 |  0.0001 |  7 |  49 |
| PP - Fisher Chi-square |  73.5027 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: OEIR |  |  |
| Date: 02/23/19 Time: 00:44 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -4.33844 |  0.0000 |  7 |  63 |
| Breitung t-stat |  1.10946 |  0.8664 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.27550 |  0.3915 |  7 |  63 |
| ADF - Fisher Chi-square |  17.9991 |  0.2068 |  7 |  63 |
| PP - Fisher Chi-square |  56.5409 |  0.0000 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(OEIR) |  |  |
| Date: 02/23/19 Time: 00:46 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -9.00685 |  0.0000 |  7 |  56 |
| Breitung t-stat |  0.11950 |  0.5476 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.25431 |  0.0121 |  7 |  56 |
| ADF - Fisher Chi-square |  41.7626 |  0.0001 |  7 |  56 |
| PP - Fisher Chi-square |  96.9553 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(OEIR,2) |  |
| Date: 02/23/19 Time: 00:46 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -9.27171 |  0.0000 |  7 |  49 |
| Breitung t-stat |  0.76414 |  0.7776 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -4.59743 |  0.0000 |  7 |  49 |
| ADF - Fisher Chi-square |  64.1052 |  0.0000 |  7 |  49 |
| PP - Fisher Chi-square |  106.926 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: OIAR |  |  |
| Date: 02/23/19 Time: 00:47 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -46.2004 |  0.0000 |  7 |  63 |
| Breitung t-stat | -1.38087 |  0.0837 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -6.70299 |  0.0000 |  7 |  63 |
| ADF - Fisher Chi-square |  29.7292 |  0.0083 |  7 |  63 |
| PP - Fisher Chi-square |  34.4891 |  0.0017 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(OIAR) |  |  |
| Date: 02/23/19 Time: 00:47 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -14.5024 |  0.0000 |  7 |  56 |
| Breitung t-stat | -2.85452 |  0.0022 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -3.02283 |  0.0013 |  7 |  56 |
| ADF - Fisher Chi-square |  46.4508 |  0.0000 |  7 |  56 |
| PP - Fisher Chi-square |  83.4200 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(OIAR,2) |  |
| Date: 02/23/19 Time: 00:48 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -7.53230 |  0.0000 |  7 |  49 |
| Breitung t-stat | -3.08282 |  0.0010 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.32003 |  0.0102 |  7 |  49 |
| ADF - Fisher Chi-square |  46.6792 |  0.0000 |  7 |  49 |
| PP - Fisher Chi-square |  110.636 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: OETA |  |  |
| Date: 02/23/19 Time: 00:50 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -9.71440 |  0.0000 |  7 |  63 |
| Breitung t-stat |  1.88597 |  0.9704 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.53824 |  0.2952 |  7 |  63 |
| ADF - Fisher Chi-square |  21.9016 |  0.0807 |  7 |  63 |
| PP - Fisher Chi-square |  12.4465 |  0.5705 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(OETA) |  |  |
| Date: 02/23/19 Time: 00:51 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -2.91797 |  0.0018 |  7 |  56 |
| Breitung t-stat |  0.14762 |  0.5587 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.14432 |  0.4426 |  7 |  56 |
| ADF - Fisher Chi-square |  16.9699 |  0.2578 |  7 |  56 |
| PP - Fisher Chi-square |  62.0120 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: D(OETA,2) |  |
| Date: 02/23/19 Time: 00:53 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -7.14375 |  0.0000 |  7 |  49 |
| Breitung t-stat | -3.00066 |  0.0013 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.66897 |  0.2518 |  7 |  49 |
| ADF - Fisher Chi-square |  22.5992 |  0.0671 |  7 |  49 |
| PP - Fisher Chi-square |  112.660 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| Panel unit root test: Summary  |
| Series: TLER |  |  |
| Date: 02/23/19 Time: 00:54 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -26.7568 |  0.0000 |  7 |  63 |
| Breitung t-stat | -1.74036 |  0.0409 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -3.80124 |  0.0001 |  7 |  63 |
| ADF - Fisher Chi-square |  31.0186 |  0.0055 |  7 |  63 |
| PP - Fisher Chi-square |  21.0825 |  0.0995 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(TLER) |  |  |
| Date: 02/23/19 Time: 00:54 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -8.68207 |  0.0000 |  7 |  56 |
| Breitung t-stat | -2.52874 |  0.0057 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.16790 |  0.0151 |  7 |  56 |
| ADF - Fisher Chi-square |  40.9485 |  0.0002 |  7 |  56 |
| PP - Fisher Chi-square |  84.3941 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(TLER,2) |  |
| Date: 02/23/19 Time: 00:55 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -2.88783 |  0.0019 |  7 |  49 |
| Breitung t-stat | -2.71942 |  0.0033 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.71341 |  0.0433 |  7 |  49 |
| ADF - Fisher Chi-square |  37.7167 |  0.0006 |  7 |  49 |
| PP - Fisher Chi-square |  93.1449 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: TLTA |  |  |
| Date: 02/23/19 Time: 00:56 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -16.7708 |  0.0000 |  7 |  63 |
| Breitung t-stat | -0.30450 |  0.3804 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -2.80135 |  0.0025 |  7 |  63 |
| ADF - Fisher Chi-square |  36.6642 |  0.0008 |  7 |  63 |
| PP - Fisher Chi-square |  17.3715 |  0.2369 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(TLTA) |  |  |
| Date: 02/23/19 Time: 00:57 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -9.14003 |  0.0000 |  7 |  56 |
| Breitung t-stat |  0.11502 |  0.5458 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.14308 |  0.1265 |  7 |  56 |
| ADF - Fisher Chi-square |  28.7928 |  0.0111 |  7 |  56 |
| PP - Fisher Chi-square |  42.6569 |  0.0001 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(TLTA,2) |  |
| Date: 02/23/19 Time: 00:57 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* |  0.95669 |  0.8306 |  7 |  49 |
| Breitung t-stat | -1.66781 |  0.0477 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.35889 |  0.3598 |  7 |  49 |
| ADF - Fisher Chi-square |  19.5697 |  0.1443 |  7 |  49 |
| PP - Fisher Chi-square |  75.5775 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: EM |  |  |
| Date: 02/23/19 Time: 12:36 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -10.5632 |  0.0000 |  7 |  63 |
| Breitung t-stat |  0.56434 |  0.7137 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.33799 |  0.0904 |  7 |  63 |
| ADF - Fisher Chi-square |  28.2181 |  0.0133 |  7 |  63 |
| PP - Fisher Chi-square |  27.7193 |  0.0155 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(EM) |  |  |
| Date: 02/23/19 Time: 12:36 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -4.45485 |  0.0000 |  7 |  56 |
| Breitung t-stat | -1.21409 |  0.1124 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.79881 |  0.2122 |  7 |  56 |
| ADF - Fisher Chi-square |  24.0514 |  0.0452 |  7 |  56 |
| PP - Fisher Chi-square |  68.5899 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |
| Panel unit root test: Summary  |
| Series: D(EM,2) |  |  |
| Date: 02/23/19 Time: 12:37 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* |  1.68099 |  0.9536 |  7 |  49 |
| Breitung t-stat | -2.94343 |  0.0016 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.59809 |  0.2749 |  7 |  49 |
| ADF - Fisher Chi-square |  22.4919 |  0.0691 |  7 |  49 |
| PP - Fisher Chi-square |  89.3563 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: SIZE |  |  |
| Date: 02/23/19 Time: 12:37 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -30.2163 |  0.0000 |  7 |  63 |
| Breitung t-stat |  1.11831 |  0.8683 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -4.46389 |  0.0000 |  7 |  63 |
| ADF - Fisher Chi-square |  31.9900 |  0.0040 |  7 |  63 |
| PP - Fisher Chi-square |  9.00933 |  0.8305 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(SIZE) |  |  |
| Date: 02/23/19 Time: 12:38 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -10.4225 |  0.0000 |  7 |  56 |
| Breitung t-stat |  0.89394 |  0.8143 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.55750 |  0.0597 |  7 |  56 |
| ADF - Fisher Chi-square |  36.3781 |  0.0009 |  7 |  56 |
| PP - Fisher Chi-square |  35.8966 |  0.0011 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(SIZE,2) |  |
| Date: 02/23/19 Time: 12:38 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -1.85774 |  0.0316 |  7 |  49 |
| Breitung t-stat | -1.72096 |  0.0426 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.41965 |  0.3374 |  7 |  49 |
| ADF - Fisher Chi-square |  21.6074 |  0.0870 |  7 |  49 |
| PP - Fisher Chi-square |  72.7057 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: GDPG |  |  |
| Date: 02/23/19 Time: 12:39 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -17.6151 |  0.0000 |  7 |  63 |
| Breitung t-stat |  0.99838 |  0.8410 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -5.39825 |  0.0000 |  7 |  63 |
| ADF - Fisher Chi-square |  74.6069 |  0.0000 |  7 |  63 |
| PP - Fisher Chi-square |  25.5023 |  0.0299 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(GDPG) |  |  |
| Date: 02/23/19 Time: 12:41 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -0.98831 |  0.1615 |  7 |  56 |
| Breitung t-stat |  2.97162 |  0.9985 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.26793 |  0.3944 |  7 |  56 |
| ADF - Fisher Chi-square |  16.3945 |  0.2899 |  7 |  56 |
| PP - Fisher Chi-square |  33.5440 |  0.0024 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(GDPG,2) |  |
| Date: 02/23/19 Time: 12:41 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* |  20.1286 |  1.0000 |  7 |  49 |
| Breitung t-stat | -2.28605 |  0.0111 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -0.09187 |  0.4634 |  7 |  49 |
| ADF - Fisher Chi-square |  15.2385 |  0.3620 |  7 |  49 |
| PP - Fisher Chi-square |  128.945 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: INF |  |  |
| Date: 02/23/19 Time: 12:41 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -3.06668 |  0.0011 |  7 |  63 |
| Breitung t-stat | -0.61333 |  0.2698 |  7 |  56 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  |  0.24122 |  0.5953 |  7 |  63 |
| ADF - Fisher Chi-square |  9.65282 |  0.7871 |  7 |  63 |
| PP - Fisher Chi-square |  29.4945 |  0.0090 |  7 |  70 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(INF) |  |  |
| Date: 02/23/19 Time: 12:42 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -3.48897 |  0.0002 |  7 |  56 |
| Breitung t-stat | -5.19408 |  0.0000 |  7 |  49 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -1.82230 |  0.0342 |  7 |  56 |
| ADF - Fisher Chi-square |  38.7293 |  0.0004 |  7 |  56 |
| PP - Fisher Chi-square |  92.5333 |  0.0000 |  7 |  63 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |

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| --- |
| Panel unit root test: Summary  |
| Series: D(INF,2) |  |  |
| Date: 02/23/19 Time: 12:43 |
| Sample: 2006 2016 |  |  |
| Exogenous variables: Individual effects, individual linear trends |
| User-specified lags: 1 |  |
| Newey-West automatic bandwidth selection and Bartlett kernel |
| Balanced observations for each test  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | Cross- |  |
| Method | Statistic | Prob.\*\* | sections | Obs |
| Null: Unit root (assumes common unit root process)  |
| Levin, Lin & Chu t\* | -15.3441 |  0.0000 |  7 |  49 |
| Breitung t-stat | -3.98799 |  0.0000 |  7 |  42 |
|  |  |  |  |  |
| Null: Unit root (assumes individual unit root process)  |
| Im, Pesaran and Shin W-stat  | -3.58669 |  0.0002 |  7 |  49 |
| ADF - Fisher Chi-square |  65.4260 |  0.0000 |  7 |  49 |
| PP - Fisher Chi-square |  105.414 |  0.0000 |  7 |  56 |
|  |  |  |  |  |
|  |  |  |  |  |
| \*\* Probabilities for Fisher tests are computed using an asymptotic Chi |
|         -square distribution. All other tests assume asymptotic normality. |