CGR Panel Regressions Final Models

```
### Panel Estimation Including Country Level Internet Usage (per 100 persons)
## Equity
# Full
Panel_Equity_Int_Use
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 86, T = 3-21, N = 1373
Residuals:
    Min.
          1st Qu.
                             3rd Qu.
                    Median
                                         Max.
-41.50516 -6.46239 -0.34854
                            7.23825 37.43934
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              -7.415126 2.201287 -3.3685 0.0007781 ***
VIX
              -0.084201 0.086628 -0.9720 0.3312449
SENT
              -2.585608 0.588319 -4.3949
                                           1.2e-05 ***
               0.601144 0.276347
FEDFUNDS
                                   2.1753 0.0297886 *
             -10.055242 2.825021 -3.5594 0.0003854 ***
ERM
Euro
              -3.109601 2.205659 -1.4098 0.1588333
Internet_Usage -0.626032 0.055137 -11.3542 < 2.2e-16 ***</pre>
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      473600
Residual Sum of Squares: 184950
R-Squared:
              0.60949
Adj. R-Squared: 0.58142
F-statistic: 285.391 on 7 and 1280 DF, p-value: < 2.22e-16
# Pre 2000
Panel_Equity_Int_Use_Pre
Oneway (individual) effect Within Model
Call:
```

plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)

```
Unbalanced Panel: n = 69, T = 1-10, N = 505
Residuals:
   Min. 1st Qu.
                  Median 3rd Qu.
                                     Max.
                           5.8722 21.0899
-41.1647 -4.1431
                  1.1642
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
TED
              -21.48991
                          8.15151 -2.6363 0.008685 **
VIX
              -0.58421
                          0.20515 -2.8477  0.004615 **
SENT
              -4.15068
                          1.14743 -3.6174 0.000333 ***
                          0.52471 5.2010 3.073e-07 ***
FEDFUNDS
               2.72904
                          2.25536 -5.0784 5.682e-07 ***
ERM
              -11.45361
Internet_Usage -0.29285
                          0.10795 -2.7127 0.006941 **
Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' 1
Total Sum of Squares:
                       62663
Residual Sum of Squares: 39764
R-Squared:
               0.36544
Adj. R-Squared: 0.25623
F-statistic: 41.2722 on 6 and 430 DF, p-value: < 2.22e-16
# Post 2000
Panel_Equity_Int_Use_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 86, T = 3-11, N = 868
Residuals:
           1st Qu.
    Min.
                     Median
                              3rd Qu.
-30.66246 -6.48514 -0.57088
                              6.53349 46.35972
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              -11.436351 2.396861 -4.7714 2.186e-06 ***
               VIX
SENT
               1.220266
                         1.083814 1.1259 0.2605558
FEDFUNDS
              Euro
              -10.884821
                          2.912642 -3.7371 0.0001998 ***
                          0.094570 -4.4294 1.080e-05 ***
Internet_Usage -0.418891
```

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
Total Sum of Squares:
                        160410
Residual Sum of Squares: 83775
R-Squared:
               0.47776
Adj. R-Squared: 0.41652
F-statistic: 118.317 on 6 and 776 DF, p-value: < 2.22e-16
# Developed Countries
Panel_Equity_Int_Use_Dev
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 32, T = 12-21, N = 635
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
-42.30891 -8.77001 -0.33386
                               8.85421 39.69367
Coefficients:
                Estimate Std. Error t value Pr(>|t|)
TED
               -6.822747 3.011689 -2.2654
                                               0.02384 *
VIX
               -0.232294 0.143106 -1.6232
                                               0.10507
SENT
               -2.478265 1.023854 -2.4205
                                               0.01580 *
FEDFUNDS
                0.820702 0.388037
                                     2.1150
                                               0.03484 *
ERM
              -14.176820 3.232686 -4.3855 1.368e-05 ***
Euro
               -3.790325 3.214637 -1.1791
                                               0.23884
Internet_Usage -0.654436 0.058922 -11.1069 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        368290
Residual Sum of Squares: 114210
R-Squared:
               0.6899
Adj. R-Squared: 0.67013
F-statistic: 189.421 on 7 and 596 DF, p-value: < 2.22e-16
# Emerging Countries
Panel_Equity_Int_Use_Emerg
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
```

Residuals:

Unbalanced Panel: n = 20, T = 4-21, N = 329

```
Min.
            1st Qu.
                       Median
                                3rd Qu.
                                             Max.
-35.34671 -5.35612
                      0.22176
                                6.84026 27.43725
Coefficients:
                Estimate Std. Error t value Pr(>|t|)
TED
               -21.41114
                            3.46743 -6.1749 2.132e-09 ***
VIX
                 0.40786
                            0.11795 3.4580 0.0006223 ***
SENT
                -3.48007
                            1.08609 -3.2042 0.0014990 **
                            0.51533 3.1372 0.0018742 **
FEDFUNDS
                 1.61667
ERM
                -0.47868
                            3.41377 -0.1402 0.8885801
                            3.21403 -4.9581 1.189e-06 ***
Euro
               -15.93547
Internet_Usage -0.36252
                            0.10688 -3.3918 0.0007869 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                         75656
Residual Sum of Squares: 37039
R-Squared:
                0.51042
Adj. R-Squared: 0.46827
F-statistic: 44.9796 on 7 and 302 DF, p-value: < 2.22e-16
# Frontier Countries
Panel_Equity_Int_Use_Front
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 34, T = 3-20, N = 409
Residuals:
     Min.
            1st Qu.
                       Median
                                3rd Qu.
                                             Max.
-27.88429 -2.65173 -0.33257
                                4.30222 20.87950
Coefficients:
                Estimate Std. Error t value Pr(>|t|)
TED
               -6.222564
                           2.168669 -2.8693 0.0043512 **
VIX
                0.068583
                           0.090128 0.7609 0.4471755
SENT
               -0.574959
                           0.450329 -1.2768 0.2024944
FEDFUNDS
                0.296720
                           0.256199 1.1582 0.2475497
ERM
               10.251980
                           1.236525 8.2910 2.134e-15 ***
               -3.506823
                           2.162569 -1.6216 0.1057453
Euro
                           0.083660 -3.7318 0.0002202 ***
Internet_Usage -0.312201
```

Total Sum of Squares: 29657 Residual Sum of Squares: 18852

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```
R-Squared:
               0.36432
Adj. R-Squared: 0.29522
F-statistic: 30.1295 on 7 and 368 DF, p-value: < 2.22e-16
## Bond
# Fu.1.1.
Panel_Bond_Int_Use
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 25, T = 1-21, N = 448
Residuals:
           1st Qu.
    Min.
                               3rd Qu.
                      Median
                                           Max.
                               5.06427 32.01822
-31.18740 -4.45189
                     0.23594
Coefficients:
                Estimate Std. Error t value Pr(>|t|)
TED
              -16.862790 2.916729 -5.7814 1.456e-08 ***
VIX
                SENT
                0.596040 0.411064
                                    1.4500
                                               0.1478
FEDFUNDS
                1.579521
                          0.223516
                                    7.0667 6.729e-12 ***
ERM
              -24.329899 2.353955 -10.3358 < 2.2e-16 ***
Euro
              -27.927145 2.901104 -9.6264 < 2.2e-16 ***
Internet_Usage -0.200576  0.018448 -10.8723 < 2.2e-16 ***</pre>
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        116410
Residual Sum of Squares: 41975
R-Squared:
               0.63942
Adj. R-Squared: 0.61255
F-statistic: 105.385 on 7 and 416 DF, p-value: < 2.22e-16
# Pre 2000
Panel_Bond_Int_Use_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
```

Unbalanced Panel: n = 20, T = 7-10, N = 194

```
Residuals:
```

Min. 1st Qu. Median 3rd Qu. Max. -16.50064 -2.28659 0.27593 2.24026 22.15586

Coefficients:

Estimate Std. Error t value Pr(>|t|)
TED 26.837373 6.230039 4.3077 2.799e-05 ***
VIX -0.405692 0.118000 -3.4381 0.0007387 ***
SENT 4.213119 0.898897 4.6870 5.704e-06 ***
FEDFUNDS 0.540981 0.464328 1.1651 0.2456364
ERM -22.351765 2.327342 -9.6040 < 2.2e-16 ***
Internet_Usage -0.159075 0.077679 -2.0478 0.0421320 *

Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1

Total Sum of Squares: 16728 Residual Sum of Squares: 3645.9

R-Squared: 0.78204 Adj. R-Squared: 0.74961

F-statistic: 100.466 on 6 and 168 DF, p-value: < 2.22e-16

Post 2000

Panel_Bond_Int_Use_Post

Oneway (individual) effect Within Model

Call:

plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)

Unbalanced Panel: n = 25, T = 1-11, N = 254

Residuals:

Min. 1st Qu. Median 3rd Qu. Max. -30.68068 -5.57247 -0.25026 5.24601 30.37961

Coefficients:

Estimate Std. Error t value Pr(>|t|)TED -28.28012 6.32782 -4.4692 1.249e-05 *** 0.29477 6.9347 4.345e-11 *** VIX 2.04412 SENT 0.59919 2.60771 0.2298 0.8185 **FEDFUNDS** 3.69900 0.52981 6.9818 3.303e-11 *** -34.81974 6.81791 -5.1071 7.012e-07 *** Euro Internet_Usage 0.13407 0.18341 0.7310 0.4656

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Total Sum of Squares: 79438 Residual Sum of Squares: 30042

R-Squared: 0.62182

```
Adj. R-Squared: 0.57095
F-statistic: 61.1115 on 6 and 223 DF, p-value: < 2.22e-16
## REIT
# Full
Panel_REIT_Int_Use
Oneway (individual) effect Within Model
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 17, T = 1-21, N = 227
Residuals:
          1st Qu.
    Min.
                    Median
                             3rd Qu.
                                        Max.
-40.58810 -7.53105
                    0.69581
                             6.66967 30.15091
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
             -23.033801 4.522040 -5.0937 8.004e-07 ***
VIX
               SENT
FEDFUNDS
               0.2929
ERM
             -16.232355 3.409690 -4.7607 3.664e-06 ***
             -23.577441 4.603074 -5.1221 7.005e-07 ***
Euro
Internet_Usage -0.378671 0.071379 -5.3051 2.935e-07 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      70344
Residual Sum of Squares: 23817
R-Squared:
              0.66142
Adj. R-Squared: 0.62306
F-statistic: 56.6525 on 7 and 203 DF, p-value: < 2.22e-16
# Pre 2000
Panel_REIT_Int_Use_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 9, T = 5-10, N = 81
```

Residuals:

```
Min.
           1st Qu.
                      Median
                               3rd Qu.
                                            Max.
-36.61368 -1.52781
                     0.46969
                               2.58089 15.01914
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
               18.09149
                           9.90607 1.8263
                                            0.07233 .
VIX
               -0.41140
                           0.25098 -1.6392
                                            0.10593
SENT
                1.84696
                           1.25177 1.4755
                                            0.14484
FEDFUNDS
                           0.60933 -0.2303
               -0.14030
                                            0.81860
ERM
              -11.95166
                           2.58873 -4.6168 1.853e-05 ***
Internet_Usage -0.26051
                           Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        4026.9
Residual Sum of Squares: 2674.6
R-Squared:
               0.33581
Adj. R-Squared: 0.19493
F-statistic: 5.56163 on 6 and 66 DF, p-value: 0.00010295
# Post 2000
Panel_REIT_Int_Use_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 17, T = 1-11, N = 146
Residuals:
     Min.
             1st Qu.
                         Median
                                   3rd Qu.
-20.689235 -7.194956
                       0.063341
                                  8.481791 24.883060
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              -13.94977
                           8.30894 -1.6789 0.09571 .
VIX
                0.16289
                           0.40178 0.4054 0.68587
SENT
                2.51245
                           3.64754 0.6888 0.49224
FEDFUNDS
               -1.13202
                           0.88810 -1.2746 0.20484
              -17.48853
                           8.04943 -2.1726 0.03172 *
Euro
Internet_Usage -0.73698
                           0.35069 -2.1015 0.03764 *
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        45461
Residual Sum of Squares: 15359
R-Squared:
               0.66215
```

Adj. R-Squared: 0.60172

```
F-statistic: 40.1783 on 6 and 123 DF, p-value: < 2.22e-16
##
### Panel estimation with country level Developmental PC1 as explanatory variable
## Equity
# Full
Panel_Equity_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 35, T = 3-21, N = 626
Residuals:
    Min.
          1st Qu.
                    Median
                             3rd Qu.
-49.99868 -9.52522 -0.27178
                             8.28447 41.78811
Coefficients:
        Estimate Std. Error t value Pr(>|t|)
TED
         -5.62946 4.32677 -1.3011
                                     0.1937
VIX
         -0.11979
                   0.15917 -0.7526
                                     0.4520
SENT
         -1.61541 1.06634 -1.5149
                                     0.1303
FEDFUNDS 0.79688
                    0.64711 1.2314
                                     0.2187
ERM
        -14.53974
                    3.45683 -4.2061 3.007e-05 ***
Euro
         -1.01590
                   4.10755 -0.2473
                                     0.8047
Dev_PC1
         -8.83364
                 1.40695 -6.2786 6.671e-10 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      263010
Residual Sum of Squares: 120300
R-Squared:
              0.54259
Adj. R-Squared: 0.51048
F-statistic: 98.9665 on 7 and 584 DF, p-value: < 2.22e-16
# Pre 2000
Panel_Equity_devpc_Pre
Oneway (individual) effect Within Model
Call:
```

plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)

```
Unbalanced Panel: n = 30, T = 2-10, N = 261
Residuals:
     Min.
            1st Qu.
                      Median
                                3rd Qu.
                                            Max.
-40.74891 -4.66662
                      0.69123
                                6.07835 19.54774
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -15.63181
                   10.06274 -1.5534 0.121725
         -1.14898
VIX
                      0.22369 -5.1365 6.061e-07 ***
SENT
         -4.83924
                     1.79595 -2.6945 0.007581 **
FEDFUNDS
           3.43476
                      0.81209 4.2295 3.408e-05 ***
         -14.98310
                      2.59555 -5.7726 2.572e-08 ***
ERM
Dev PC1
         -2.05034
                   1.89007 -1.0848 0.279173
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                         41047
Residual Sum of Squares: 22990
R-Squared:
                0.43992
Adj. R-Squared: 0.35279
F-statistic: 29.4542 on 6 and 225 DF, p-value: < 2.22e-16
# Post 2000
Panel_Equity_devpc_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 35, T = 3-11, N = 365
Residuals:
    Min. 1st Qu.
                   Median 3rd Qu.
-31.3575 -6.9384 -1.0651
                             6.8689 46.6556
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -17.62512
                     3.67117 -4.8010 2.416e-06 ***
                      0.14515 4.6315 5.264e-06 ***
VIX
           0.67224
SENT
           4.88518
                     1.84031 2.6545 0.008334 **
                      0.48431 0.2559 0.798191
FEDFUNDS
         0.12394
Euro
         -19.47932
                      4.31958 -4.5095 9.093e-06 ***
                      1.66360 -0.7833 0.434014
Dev_PC1
         -1.30313
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Total Sum of Squares:
                        75005
Residual Sum of Squares: 43357
R-Squared:
               0.42194
Adj. R-Squared: 0.35057
F-statistic: 39.4157 on 6 and 324 DF, p-value: < 2.22e-16
# Developed Countries
Panel_Equity_devpc_Dev
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 20, T = 13-21, N = 405
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
                               8.70121 37.11032
-54.22261 -9.72857 -0.12195
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -5.42571 4.09992 -1.3234
                                      0.18651
                   0.18862 -1.0551
VIX
         -0.19901
                                      0.29207
SENT
         -0.93537 1.47132 -0.6357
                                      0.52534
FEDFUNDS 0.68671 0.35301 1.9453 0.05248 .
        -19.47423
                     3.76513 -5.1723 3.759e-07 ***
ERM
         -0.07682
                     4.22384 -0.0182 0.98550
Euro
Dev_PC1 -10.78966 1.23283 -8.7520 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        237010
Residual Sum of Squares: 78497
R-Squared:
               0.6688
Adj. R-Squared: 0.64601
F-statistic: 109.042 on 7 and 378 DF, p-value: < 2.22e-16
# Emerging Countries
Panel_Equity_devpc_Emerg
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 5, T = 6-21, N = 90
```

Residuals:

```
Min.
           1st Qu.
                      Median
                               3rd Qu.
                                           Max.
-31.00527 -6.05155 -0.26704
                               5.57994 25.70568
Coefficients:
          Estimate Std. Error t value Pr(>|t|)
TED
        -15.695325 2.716049 -5.7787 1.473e-07 ***
VIX
          SENT
         -4.434147 2.536676 -1.7480 0.084396 .
          1.013933 0.845139 1.1997 0.233879
FEDFUNDS
ERM
         -7.700123 4.983996 -1.5450 0.126401
        -12.499586 1.739528 -7.1856 3.486e-10 ***
Euro
         -4.287020
                     3.601533 -1.1903 0.237526
Dev_PC1
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        20186
Residual Sum of Squares: 12019
R-Squared:
               0.40457
Adj. R-Squared: 0.3206
F-statistic: 7.57124 on 7 and 78 DF, p-value: 6.0199e-07
# Frontier Countries
Panel_Equity_devpc_Front
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 10, T = 3-21, N = 131
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
                                           Max.
-24.82083 -2.36955
                     0.61985
                               3.03707 14.91075
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
                     3.26078 -3.6537 0.0003922 ***
        -11.91383
VIX
          0.36528
                     0.11418 3.1991 0.0017857 **
SENT
         -0.94983
                     0.69874 -1.3593 0.1767223
FEDFUNDS
          1.76740
                     0.45056 3.9226 0.0001501 ***
ERM
         -0.84677
                     4.79385 -0.1766 0.8601065
         -9.56963
                     3.50188 -2.7327 0.0072829 **
Euro
Dev_PC1
          3.54259
                     1.06948 3.3124 0.0012396 **
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        5819.7
Residual Sum of Squares: 3530.1
```

```
R-Squared:
               0.39343
Adj. R-Squared: 0.30829
F-statistic: 10.563 on 7 and 114 DF, p-value: 3.4785e-10
## Bond
# Fu.1.1.
Panel_Bond_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 17, T = 11-21, N = 336
Residuals:
    Min.
           1st Qu.
                     Median
                              3rd Qu.
-30.59257 -4.67253 0.27248
                              5.56496 30.04442
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
        -17.42108 3.47741 -5.0098 9.140e-07 ***
VIX
          SENT
          0.30394
                     0.52798 0.5757
                                       0.5653
FEDFUNDS
         1.94920
                     0.38012 5.1278 5.156e-07 ***
                     3.00835 -7.3174 2.154e-12 ***
ERM
        -22.01344
        -23.96488
                     3.23885 -7.3992 1.279e-12 ***
Euro
Dev_PC1
         -2.79457
                     0.43286 -6.4561 4.108e-10 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        83546
Residual Sum of Squares: 34560
R-Squared:
               0.58633
Adj. R-Squared: 0.55584
F-statistic: 63.1754 on 7 and 312 DF, p-value: < 2.22e-16
# Pre 2000
Panel_Bond_devpc_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 15, T = 9-10, N = 149
```

```
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
                                            Max.
-14.36498 -2.28647
                     0.27632
                               1.83989 21.43544
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
          2.39219
                     8.84473 0.2705 0.787238
VIX
                     0.16285 -1.7192 0.087987 .
         -0.27998
SENT
         -0.66599
                     1.39669 -0.4768 0.634291
FEDFUNDS
          2.26414
                     0.40552 5.5832 1.351e-07 ***
         -19.75918
                     2.67318 -7.3916 1.667e-11 ***
ERM
Dev_PC1
          2.72441
                     0.82691 3.2947 0.001275 **
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        12080
Residual Sum of Squares: 2865.5
R-Squared:
               0.7628
Adj. R-Squared: 0.72573
F-statistic: 68.6033 on 6 and 128 DF, p-value: < 2.22e-16
# Post 2000
Panel_Bond_devpc_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 17, T = 11, N = 187
Residuals:
    Min.
           1st Qu.
                               3rd Qu.
                      Median
                                            Max.
-29.25824 -6.31681 -0.46081
                               6.69541 28.04700
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -24.97078 4.98000 -5.0142 1.371e-06 ***
VIX
          1.79359
                     0.26477 6.7741 2.134e-10 ***
SENT
         -1.19118
                     1.83614 -0.6487
                     0.59736 5.9782 1.366e-08 ***
FEDFUNDS
          3.57118
         -28.26804
                     6.85557 -4.1234 5.919e-05 ***
Euro
Dev_PC1
         -0.24409
                   1.90177 -0.1284
                                        0.8980
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Total Sum of Squares:

Residual Sum of Squares: 23811

```
R-Squared:
              0.58092
Adj. R-Squared: 0.52471
F-statistic: 37.8893 on 6 and 164 DF, p-value: < 2.22e-16
## REIT
# Full
Panel_REIT_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 13, T = 1-21, N = 188
Residuals:
    Min.
           1st Qu.
                     Median
                             3rd Qu.
-42.24477 -7.20919 0.62046
                             7.72949 32.82432
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
        -24.15631 5.42721 -4.4510 1.552e-05 ***
VIX
          SENT
          FEDFUNDS
        1.51425
                    0.44438 3.4076 0.0008203 ***
                    3.20361 -3.8933 0.0001424 ***
ERM
        -12.47272
        -20.92312
                    5.67000 -3.6901 0.0003025 ***
Euro
                   1.26868 -3.3183 0.0011103 **
Dev_PC1
        -4.20988
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                       55129
Residual Sum of Squares: 23160
R-Squared:
              0.5799
Adj. R-Squared: 0.53239
F-statistic: 33.1296 on 7 and 168 DF, p-value: < 2.22e-16
# Pre 2000
Panel_REIT_devpc_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 8, T = 5-10, N = 71
```

```
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
                                            Max.
-31.29544 -2.46242
                     0.98038
                               3.12932 15.34594
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -30.23676 18.41438 -1.6420 0.10609
                     0.19599 0.1112 0.91187
VIX
          0.02179
SENT
         -6.56960
                     5.39050 -1.2187 0.22796
FEDFUNDS
          3.16345
                     1.32241 2.3922 0.02007 *
         -8.58698
                     3.25223 -2.6403 0.01067 *
ERM
Dev_PC1
          6.13605
                     4.41521 1.3898 0.17001
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        3518.1
Residual Sum of Squares: 2308.2
R-Squared:
               0.3439
Adj. R-Squared: 0.19426
F-statistic: 4.97951 on 6 and 57 DF, p-value: 0.00036772
# Post 2000
Panel_REIT_devpc_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Unbalanced Panel: n = 13, T = 1-11, N = 117
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
                                            Max.
-30.79050 -6.73305 -0.57926
                               8.03711 25.34668
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -29.33920 8.12534 -3.6108 0.0004833 ***
VIX
          0.80940
                     0.28365 2.8535 0.0052766 **
SENT
          8.89908
                     3.63003 2.4515 0.0159960 *
FEDFUNDS -0.31280
                    1.06154 -0.2947 0.7688728
         -33.07348
                   11.33739 -2.9172 0.0043793 **
Euro
Dev_PC1
         -0.45871
                     2.80206 -0.1637 0.8703011
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Total Sum of Squares:

Residual Sum of Squares: 14176

```
R-Squared:
              0.6084
Adj. R-Squared: 0.53647
F-statistic: 25.3755 on 6 and 98 DF, p-value: < 2.22e-16
### Balanced Panel estimation with country level Developmental PC1 among explanatory variables
## Equities
# Full
Bal_Equity_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 26, T = 15, N = 390
Residuals:
   Min. 1st Qu.
                 Median 3rd Qu.
                                   Max.
-44.5768 -8.8802 -1.6857
                         7.4612 48.4578
Coefficients:
        Estimate Std. Error t value Pr(>|t|)
TED
        -8.46715 3.66289 -2.3116
                                  0.02137 *
VIX
        0.31213
SENT
        2.92599 1.14041 2.5657
                                  0.01070 *
FEDFUNDS -0.27210
                  0.65628 -0.4146
                                  0.67868
       -7.76919
                  3.86252 -2.0114
                                  0.04503 *
Euro
Dev_PC1 -8.19922
                  1.34826 -6.0813 3.059e-09 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      141220
Residual Sum of Squares: 72208
R-Squared:
              0.48869
Adj. R-Squared: 0.44441
F-statistic: 57.0263 on 6 and 358 DF, p-value: < 2.22e-16
# Pre 2000
Bal_Equity_devpc_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
```

```
Balanced Panel: n = 26, T = 8, N = 208
Residuals:
                               3rd Qu.
    Min.
           1st Qu.
                      Median
                                            Max.
-40.66618 -6.88522
                     0.61198
                               7.61107 35.97022
Coefficients:
        Estimate Std. Error t value Pr(>|t|)
TED
        10.73492
                    7.47423 1.4363
                                      0.15269
VIX
        -1.66754
                    0.29674 -5.6195 7.324e-08 ***
SENT
         4.05686
                    2.56005 1.5847
                                      0.11482
FEDFUNDS -3.17461
                    2.06250 -1.5392
                                      0.12554
                    2.67161 -1.9739
                                    0.04995 *
Dev_PC1 -5.27346
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        41233
Residual Sum of Squares: 31442
               0.23746
R-Squared:
Adj. R-Squared: 0.10822
F-statistic: 11.0239 on 5 and 177 DF, p-value: 2.9691e-09
# Post 2000
Bal_Equity_devpc_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 26, T = 7, N = 182
Residuals:
    Min.
           1st Qu.
                      Median
                               3rd Qu.
-27.07366 -5.53427 -0.36018
                               5.22057 28.56100
Coefficients:
        Estimate Std. Error t value Pr(>|t|)
TED
         -53.5516 26.7889 -1.9990 0.04741 *
VIX
          2.6477
                    1.4094 1.8786 0.06224 .
SENT
         -49.3518
                    39.7366 -1.2420 0.21619
FEDFUNDS
         5.8348
                     3.9990 1.4591 0.14664
        -32.6304
                    12.5390 -2.6023 0.01019 *
Euro
Dev_PC1 -3.1059
                    1.6338 -1.9010 0.05922 .
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Total Sum of Squares:

Residual Sum of Squares: 12938 R-Squared: 0.36608 Adj. R-Squared: 0.23507 F-statistic: 14.4373 on 6 and 150 DF, p-value: 5.8299e-13 # Developed Countries Bal_Equity_devpc_Dev Oneway (individual) effect Within Model Call: plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 19, T = 15, N = 285Residuals: Min. 1st Qu. Median 3rd Qu. Max. -48.1792 -9.3332 -1.2364 8.1500 45.5828 Coefficients: Estimate Std. Error t value Pr(>|t|) TED -8.93375 4.31528 -2.0703 0.039415 * VIX 0.19449 0.7286 0.466929 0.14170 SENT 3.94338 1.41991 2.7772 0.005882 ** FEDFUNDS -0.24634 0.71261 -0.3457 0.729859 Euro -7.12065 4.21115 -1.6909 0.092053 . Dev_PC1 -9.46243 1.34982 -7.0102 2.046e-11 *** Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 Total Sum of Squares: 126200 Residual Sum of Squares: 54811 R-Squared: 0.5657 Adj. R-Squared: 0.52561 F-statistic: 56.4437 on 6 and 260 DF, p-value: < 2.22e-16# Emerging Countries Bal_Equity_devpc_Emerg Oneway (individual) effect Within Model plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 4, T = 15, N = 60Residuals: Min. 1st Qu. Median 3rd Qu.

5.34830 34.47905

-21.74570 -7.44826 -0.79063

Max.

```
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -20.74933 4.10510 -5.0545 6.156e-06 ***
                     0.19462 3.3796 0.001415 **
VIX
          0.65775
SENT
          0.47356
                   1.56593 0.3024 0.763593
FEDFUNDS
        0.12393
                   1.84807 0.0671 0.946801
        -19.74619
                     3.61199 -5.4668 1.456e-06 ***
Euro
Dev PC1
         -2.46538
                     3.59169 -0.6864 0.495624
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        13452
Residual Sum of Squares: 7924.2
R-Squared:
               0.41091
Adj. R-Squared: 0.30488
F-statistic: 5.81287 on 6 and 50 DF, p-value: 0.00011885
# Frontier Countries
# Not Available
## Bonds
# Full
Bal_Bond_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 15, T = 15, N = 225
Residuals:
     Min.
             1st Qu.
                         Median
                                   3rd Qu.
                                                 Max.
-26.640386 -5.114729 -0.075842
                                  5.554727 27.345595
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
         -20.27828
                   3.64490 -5.5635 8.245e-08 ***
VIX
          1.49061
                     0.17934 8.3115 1.317e-14 ***
                     0.80370 -1.8711 0.062766 .
SENT
         -1.50379
FEDFUNDS
         3.37187
                     0.59797 5.6388 5.657e-08 ***
        -22.48255
                     3.32832 -6.7549 1.462e-10 ***
Euro
         -1.77663
                     0.53379 -3.3283 0.001037 **
Dev_PC1
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Total Sum of Squares: 57391 Residual Sum of Squares: 22536 0.60733 R-Squared: Adj. R-Squared: 0.56883 F-statistic: 52.5857 on 6 and 204 DF, p-value: < 2.22e-16# Pre 2000 Bal_Bond_devpc_Pre Oneway (individual) effect Within Model Call: plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 15, T = 8, N = 120Residuals: Median Min. 1st Qu. 3rd Qu. Max. -11.34577 -0.99962 0.52292 1.50844 5.52505 Coefficients: Estimate Std. Error t value Pr(>|t|) TED 3.53870 2.10527 1.6809 0.09591 . VIX -0.14081 0.10213 -1.3788 0.17103 SENT 0.92908 0.96281 0.9650 0.33689 FEDFUNDS -0.69041 0.53166 -1.2986 0.19707 Dev_PC1 0.67313 0.53069 1.2684 0.20760 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 Total Sum of Squares: 905.89 Residual Sum of Squares: 839.06 0.073777 R-Squared: Adj. R-Squared: -0.10221 F-statistic: 1.59308 on 5 and 100 DF, p-value: 0.16893 # Post 2000 Bal_Bond_devpc_Post Oneway (individual) effect Within Model Call: plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 15, T = 7, N = 105

3rd Qu.

Max.

Median

Residuals:

Min.

1st Qu.

```
-32.8007351 -5.1844321 -0.0086139 6.7730818 30.2909554
Coefficients:
        Estimate Std. Error t value Pr(>|t|)
                   44.2156 3.3074 0.0013872 **
TED
        146.2393
                    2.2259 -3.2224 0.0018100 **
VIX
         -7.1728
SENT
        273.2745
                   68.8470 3.9693 0.0001513 ***
FEDFUNDS -23.1712
                   6.8151 -3.4000 0.0010333 **
         37.6390
                   15.3432 2.4531 0.0162297 *
Euro
Dev_PC1
          4.7839
                    2.7415 1.7450 0.0846417 .
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                       18332
Residual Sum of Squares: 10681
R-Squared:
               0.41737
Adj. R-Squared: 0.27865
F-statistic: 10.0291 on 6 and 84 DF, p-value: 2.4633e-08
## REITS
# Full
Bal_REIT_devpc
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 8, T = 15, N = 120
Residuals:
    Min.
           1st Qu.
                     Median
                              3rd Qu.
-36.36763 -7.41107
                    0.41637
                              7.96314 29.19068
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
        -28.17630 6.97151 -4.0416 0.0001008 ***
VIX
          0.84979
                    0.25335 3.3543 0.0011048 **
          SENT
FEDFUNDS
         1.93984
                    0.86328 2.2471 0.0267086 *
                    4.96038 -5.8729 4.983e-08 ***
Euro
        -29.13183
Dev_PC1 -2.54583
                  1.17704 -2.1629 0.0327956 *
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Total Sum of Squares:

Residual Sum of Squares: 16455 R-Squared: 0.61507 Adj. R-Squared: 0.56786 F-statistic: 28.2289 on 6 and 106 DF, p-value: < 2.22e-16 # Pre 2000 Bal_REIT_devpc_Pre Oneway (individual) effect Within Model Call: plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 8, T = 8, N = 64Residuals: Min. 1st Qu. Median 3rd Qu. Max. -28.07055 -3.40876 0.46723 3.44018 10.38878 Coefficients: Estimate Std. Error t value Pr(>|t|) TED 7.59033 5.13189 1.4791 0.14528 VIX 0.46476 -2.3218 0.02427 * -1.07909 SENT -1.70791 1.73674 -0.9834 0.33006 FEDFUNDS 1.88376 1.43281 1.3147 0.19448 Dev PC1 6.16421 3.95594 1.5582 0.12537 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1 Total Sum of Squares: 2601.4 Residual Sum of Squares: 2016.8 R-Squared: 0.22474 Adj. R-Squared: 0.042322 F-statistic: 2.95682 on 5 and 51 DF, p-value: 0.020297 # Post 2000 Bal_REIT_devpc_Post Oneway (individual) effect Within Model Call: plm::plm(formula = form, data = data_matrix, model = mdl, index = ind) Balanced Panel: n = 8, T = 7, N = 56

5.02803 29.93909

3rd Qu.

Max.

Residuals: Min.

1st Qu.

-19.45440 -6.44082

Median

0.30975

```
Coefficients:
         Estimate Std. Error t value Pr(>|t|)
TED
        -84.18014 20.39167 -4.1282 0.0001697 ***
          3.95358 1.09828 3.5998 0.0008342 ***
VIX
        -43.22238 21.99181 -1.9654 0.0560054 .
SENT
FEDFUNDS
         7.41410
                  3.07508 2.4110 0.0203607 *
Euro
        -64.08619 13.18577 -4.8603 1.674e-05 ***
Dev_PC1
          0.85629 2.34285 0.3655 0.7165803
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                       14023
Residual Sum of Squares: 5405.2
R-Squared:
              0.61455
Adj. R-Squared: 0.49524
F-statistic: 11.1604 on 6 and 42 DF, p-value: 2.0435e-07
### Balanced Panel estimation with country level internet usage among explanatory variables
## Equities
# Fu.1.1.
Bal_Equity_int_use
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 55, T = 15, N = 825
Residuals:
    Min.
         1st Qu.
                     Median
                             3rd Qu.
                                         Max.
-34.41327 -7.26085 -0.66362
                             6.98698 43.74056
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
                       2.625526 -3.2772 0.0010957 **
TED
             -8.604424
VIX
             -0.024699
                        0.124177 -0.1989 0.8423905
SENT
              2.007638
                       0.765402 2.6230 0.0088901 **
FEDFUNDS
             -0.969510
                        0.426151 -2.2750 0.0231798 *
                        2.597302 -3.6764 0.0002531 ***
             -9.548610
Euro
                        0.061436 -10.0697 < 2.2e-16 ***
Internet_Usage -0.618643
```

Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1

```
Total Sum of Squares:
                         251540
Residual Sum of Squares: 109920
               0.563
R-Squared:
Adj. R-Squared: 0.52868
F-statistic: 164.046 on 6 and 764 DF, p-value: < 2.22e-16
# Pre 2000
Bal_Equity_int_use_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 55, T = 8, N = 440
Residuals:
    Min. 1st Qu.
                   Median 3rd Qu.
                                        Max.
                             5.7248 37.8431
-35.5254 -6.1552
                    1.0777
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
               9.114821 5.141633 1.7727 0.0770715 .
VIX
               -1.309740
                         0.182646 -7.1709 3.917e-12 ***
SENT
               3.365154
                         1.299948 2.5887 0.0100042 *
FEDFUNDS
               -3.739092
                           1.067312 -3.5033 0.0005143 ***
Internet_Usage -0.486082
                         0.095461 -5.0920 5.589e-07 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                         64121
Residual Sum of Squares: 45596
                0.2889
R-Squared:
Adj. R-Squared: 0.1785
F-statistic: 30.8773 on 5 and 380 DF, p-value: < 2.22e-16
# Post 2000
Bal_Equity_int_use_Post
Oneway (individual) effect Within Model
Call:
```

Max.

plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)

Balanced Panel: n = 55, T = 7, N = 385

Median 3rd Qu.

Residuals:

Min. 1st Qu.

```
-27.3635 -5.8636 -0.0735 5.4030 30.5467
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
                         15.29358 -3.0566 0.0024247 **
              -46.74654
VIX
                2.14214
                           0.80091 2.6746 0.0078607 **
SENT
              -37.10551
                          21.02569 -1.7648 0.0785445 .
FEDFUNDS
                4.39156
                           2.23851 1.9618 0.0506386 .
                           7.88306 -3.6819 0.0002711 ***
Euro
              -29.02443
Internet_Usage -0.36881
                           0.14279 -2.5828 0.0102372 *
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        50965
Residual Sum of Squares: 29567
               0.41985
R-Squared:
Adj. R-Squared: 0.31242
F-statistic: 39.0794 on 6 and 324 DF, p-value: < 2.22e-16
# Developed Countries
Bal_Equity_int_use_Dev
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 29, T = 15, N = 435
Residuals:
    Min. 1st Qu.
                   Median 3rd Qu.
                                       Max.
-35.8905 -8.6337 -1.1043
                            7.7742 41.2894
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              -4.693773
                          3.361487 -1.3963 0.1633871
VIX
              -0.265105
                          0.175309 -1.5122 0.1312690
SENT
                          1.187135
                                    3.3962 0.0007516 ***
               4.031781
FEDFUNDS
              -1.956077
                          0.627662 -3.1164 0.0019625 **
                          3.326570 -2.9462 0.0034047 **
Euro
              -9.800883
Internet_Usage -0.695120
                          0.065297 -10.6455 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        189510
Residual Sum of Squares: 71233
R-Squared:
               0.62412
```

F-statistic: 110.694 on 6 and 400 DF, p-value: < 2.22e-16

Adj. R-Squared: 0.59217

```
# Emerging Countries
Bal_Equity_int_use_Emerg
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 16, T = 15, N = 240
Residuals:
    Min.
           1st Qu.
                     Median
                              3rd Qu.
-28.80365 -6.58184 -0.27018
                              5.71303 35.23829
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              -21.52662 3.98029 -5.4083 1.667e-07 ***
                VIX
SENT
                0.15747
                        1.02542 0.1536 0.878093
FEDFUNDS
                0.38281 0.74217 0.5158 0.606516
Euro
              -19.44862
                          3.97354 -4.8945 1.916e-06 ***
Internet_Usage -0.36429
                          0.11666 -3.1226  0.002036 **
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                       55391
Residual Sum of Squares: 25842
R-Squared:
               0.53346
Adj. R-Squared: 0.48852
F-statistic: 41.545 on 6 and 218 DF, p-value: < 2.22e-16
# Frontier Countries
# Not Available
##
## Bonds
# Full
Bal_Bond_int_use
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 19, T = 15, N = 285
Residuals:
```

```
Min.
          1st Qu.
                    Median
                            3rd Qu.
                                        Max.
-30.25740 -4.81193
                   0.55997
                            4.51384 29.72088
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
             -18.186231
                        2.957837 -6.1485 2.931e-09 ***
VIX
               SENT
              -1.282382 0.679716 -1.8866
                                          0.06032 .
               FEDFUNDS
Euro
             -25.998809 2.888213 -9.0017 < 2.2e-16 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      72916
Residual Sum of Squares: 26303
R-Squared:
              0.63927
Adj. R-Squared: 0.60597
F-statistic: 76.7934 on 6 and 260 DF, p-value: < 2.22e-16
# Pre 2000
Bal_Bond_int_use_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 19, T = 8, N = 152
Residuals:
    Min.
          1st Qu.
                    Median
                            3rd Qu.
                                        Max.
-11.67507 -0.91334
                   0.24801
                            1.16407
                                     5.50034
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
TED
              5.711631
                       1.674495 3.4110 0.0008666 ***
VIX
             -0.013084
                        0.061735 -0.2119 0.8324890
SENT
              1.977220
                        0.799035 2.4745 0.0146505 *
FEDFUNDS
             -1.563735
                        0.510367 -3.0639 0.0026641 **
                        0.029118 -0.5803 0.5627417
Internet_Usage -0.016897
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                      882.71
Residual Sum of Squares: 798.19
R-Squared:
              0.095754
Adj. R-Squared: -0.066727
```

F-statistic: 2.7109 on 5 and 128 DF, p-value: 0.023073

```
# Post 2000
Bal_Bond_int_use_Post
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 19, T = 7, N = 133
Residuals:
    Min.
           1st Qu.
                     Median
                               3rd Qu.
-34.11421 -5.38009 0.79632
                               6.20284 31.57348
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
              170.77361
                        35.27356 4.8414 4.322e-06 ***
VIX
                         1.76905 -4.7063 7.522e-06 ***
               -8.32565
              309.09965 52.36937 5.9023 4.194e-08 ***
SENT
                         5.20554 -5.1191 1.347e-06 ***
FEDFUNDS
              -26.64774
Euro
               46.37603
                         13.73178 3.3773 0.001019 **
Internet_Usage 0.44797
                          0.20153 2.2228 0.028310 *
Signif. codes: 0 '***' 0.001 '**' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                        26023
Residual Sum of Squares: 12820
R-Squared:
               0.50737
Adj. R-Squared: 0.3979
F-statistic: 18.5386 on 6 and 108 DF, p-value: 1.0224e-14
## REITS
# Full
Bal_REIT_int_use
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 8, T = 15, N = 120
Residuals:
   Min. 1st Qu. Median 3rd Qu.
                                      Max.
-23.2122 -6.7142 -1.0440 6.8214 27.2904
```

```
-21.683649 7.032371 -3.0834 0.0026092 **
VIX
                0.500891 0.307051 1.6313 0.1057956
SENT
                4.143821 1.213512 3.4147 0.0009058 ***
               -0.595154 1.330962 -0.4472 0.6556712
FEDFUNDS
Euro
               -31.323962 4.234899 -7.3966 3.433e-11 ***
Internet_Usage -0.448850 0.095974 -4.6768 8.630e-06 ***
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                         49653
Residual Sum of Squares: 12166
R-Squared:
                0.75497
Adj. R-Squared: 0.72492
F-statistic: 54.4344 on 6 and 106 DF, p-value: < 2.22e-16
# Pre 2000
Bal_REIT_int_use_Pre
Oneway (individual) effect Within Model
Call:
plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)
Balanced Panel: n = 8, T = 8, N = 64
Residuals:
                               3rd Qu.
     Min.
                      Median
            1st Qu.
-7.415647 -2.478979 -0.013494 1.916517 7.689412
Coefficients:
               Estimate Std. Error t value Pr(>|t|)
TED
               18.918550
                          6.430168 2.9422 0.004893 **
VIX
                          0.181613 -2.6250 0.011406 *
               -0.476736
SENT
               3.917850
                          1.726968 2.2686 0.027554 *
FEDFUNDS
               -3.622515
                          1.218868 -2.9720 0.004506 **
Internet_Usage -0.139445
                          0.068788 -2.0272 0.047886 *
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares:
                         1249.7
Residual Sum of Squares: 830.78
R-Squared:
                0.33522
Adj. R-Squared: 0.1788
F-statistic: 5.14348 on 5 and 51 DF, p-value: 0.00067808
# Post 2000
Bal_REIT_int_use_Post
```

Estimate Std. Error t value Pr(>|t|)

Coefficients:

TED

```
Oneway (individual) effect Within Model
```

Call:

plm::plm(formula = form, data = data_matrix, model = mdl, index = ind)

Balanced Panel: n = 8, T = 7, N = 56

Residuals:

Min. 1st Qu. Median 3rd Qu. Max. -14.1595 -4.8376 -1.0869 4.5557 14.8542

Coefficients:

Estimate Std. Error t value Pr(>|t|)
TED -41.54476 20.44774 -2.0318 0.048536 *
VIX 1.80985 1.15667 1.5647 0.125156
SENT -45.57361 29.27733 -1.5566 0.127065
FEDFUNDS 4.81392 3.35392 1.4353 0.158603
Euro -25.78383 10.86228 -2.3737 0.022260 *
Internet_Usage -1.35715 0.41572 -3.2646 0.002185 **

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Total Sum of Squares: 14661 Residual Sum of Squares: 2932.2

R-Squared: 0.79999 Adj. R-Squared: 0.73808

F-statistic: 27.9984 on 6 and 42 DF, p-value: 3.4769e-13

##