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 '**' 0.01 '*' 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
```

56817

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 '**' 0.01 '*' 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
```

36201

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

##