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. Median 3rd Qu. 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 \*\*\*  
FEDFUNDS 0.601144 0.276347 2.1753 0.0297886 \*   
ERM -10.055242 2.825021 -3.5594 0.0003854 \*\*\*  
Euro -3.109601 2.205659 -1.4098 0.1588333   
Internet\_Usage -0.626032 0.055137 -11.3542 < 2.2e-16 \*\*\*  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 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.   
-41.1647 -4.1431 1.1642 5.8722 21.0899   
  
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 \*\*\*  
FEDFUNDS 2.72904 0.52471 5.2010 3.073e-07 \*\*\*  
ERM -11.45361 2.25536 -5.0784 5.682e-07 \*\*\*  
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:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-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 0.212317 0.096507 2.2000 0.0280996 \*   
SENT 1.220266 1.083814 1.1259 0.2605558   
FEDFUNDS -0.162175 0.328197 -0.4941 0.6213467   
Euro -10.884821 2.912642 -3.7371 0.0001998 \*\*\*  
Internet\_Usage -0.418891 0.094570 -4.4294 1.080e-05 \*\*\*  
---  
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. Max.   
-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)  
  
Unbalanced Panel: n = 20, T = 4-21, N = 329  
  
Residuals:  
 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 \*\*   
FEDFUNDS 1.61667 0.51533 3.1372 0.0018742 \*\*   
ERM -0.47868 3.41377 -0.1402 0.8885801   
Euro -15.93547 3.21403 -4.9581 1.189e-06 \*\*\*  
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 \*\*\*  
Euro -3.506823 2.162569 -1.6216 0.1057453   
Internet\_Usage -0.312201 0.083660 -3.7318 0.0002202 \*\*\*  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 29657  
Residual Sum of Squares: 18852  
R-Squared: 0.36432  
Adj. R-Squared: 0.29522  
F-statistic: 30.1295 on 7 and 368 DF, p-value: < 2.22e-16

##  
  
## Bond  
  
# Full   
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:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-31.18740 -4.45189 0.23594 5.06427 32.01822   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -16.862790 2.916729 -5.7814 1.456e-08 \*\*\*  
VIX 1.214791 0.101437 11.9758 < 2.2e-16 \*\*\*  
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 \*\*\*  
---  
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 '\*\*' 0.01 '\*' 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 \*\*\*  
VIX 2.04412 0.29477 6.9347 4.345e-11 \*\*\*  
SENT 0.59919 2.60771 0.2298 0.8185   
FEDFUNDS 3.69900 0.52981 6.9818 3.303e-11 \*\*\*  
Euro -34.81974 6.81791 -5.1071 7.012e-07 \*\*\*  
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  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Unbalanced Panel: n = 17, T = 1-21, N = 227  
  
Residuals:  
 Min. 1st Qu. 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 0.702285 0.159313 4.4082 1.688e-05 \*\*\*  
SENT 3.301033 0.750296 4.3996 1.750e-05 \*\*\*  
FEDFUNDS 0.598713 0.567793 1.0545 0.2929   
ERM -16.232355 3.409690 -4.7607 3.664e-06 \*\*\*  
Euro -23.577441 4.603074 -5.1221 7.005e-07 \*\*\*  
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 -0.14030 0.60933 -0.2303 0.81860   
ERM -11.95166 2.58873 -4.6168 1.853e-05 \*\*\*  
Internet\_Usage -0.26051 0.12710 -2.0496 0.04438 \*   
---  
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. Max.   
-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   
Euro -17.48853 8.04943 -2.1726 0.03172 \*  
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. Max.   
-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   
VIX -1.14898 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 \*\*\*  
ERM -14.98310 2.59555 -5.7726 2.572e-08 \*\*\*  
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. Max.   
-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 \*\*\*  
VIX 0.67224 0.14515 4.6315 5.264e-06 \*\*\*  
SENT 4.88518 1.84031 2.6545 0.008334 \*\*   
FEDFUNDS 0.12394 0.48431 0.2559 0.798191   
Euro -19.47932 4.31958 -4.5095 9.093e-06 \*\*\*  
Dev\_PC1 -1.30313 1.66360 -0.7833 0.434014   
---  
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. Max.   
-54.22261 -9.72857 -0.12195 8.70121 37.11032   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -5.42571 4.09992 -1.3234 0.18651   
VIX -0.19901 0.18862 -1.0551 0.29207   
SENT -0.93537 1.47132 -0.6357 0.52534   
FEDFUNDS 0.68671 0.35301 1.9453 0.05248 .   
ERM -19.47423 3.76513 -5.1723 3.759e-07 \*\*\*  
Euro -0.07682 4.22384 -0.0182 0.98550   
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 0.283771 0.084232 3.3689 0.001175 \*\*   
SENT -4.434147 2.536676 -1.7480 0.084396 .   
FEDFUNDS 1.013933 0.845139 1.1997 0.233879   
ERM -7.700123 4.983996 -1.5450 0.126401   
Euro -12.499586 1.739528 -7.1856 3.486e-10 \*\*\*  
Dev\_PC1 -4.287020 3.601533 -1.1903 0.237526   
---  
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 -11.91383 3.26078 -3.6537 0.0003922 \*\*\*  
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   
Euro -9.56963 3.50188 -2.7327 0.0072829 \*\*   
Dev\_PC1 3.54259 1.06948 3.3124 0.0012396 \*\*   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 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  
  
# Full  
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. Max.   
-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 1.11783 0.12031 9.2912 < 2.2e-16 \*\*\*  
SENT 0.30394 0.52798 0.5757 0.5653   
FEDFUNDS 1.94920 0.38012 5.1278 5.156e-07 \*\*\*  
ERM -22.01344 3.00835 -7.3174 2.154e-12 \*\*\*  
Euro -23.96488 3.23885 -7.3992 1.279e-12 \*\*\*  
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 -0.27998 0.16285 -1.7192 0.087987 .   
SENT -0.66599 1.39669 -0.4768 0.634291   
FEDFUNDS 2.26414 0.40552 5.5832 1.351e-07 \*\*\*  
ERM -19.75918 2.67318 -7.3916 1.667e-11 \*\*\*  
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. Median 3rd Qu. 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 0.5174   
FEDFUNDS 3.57118 0.59736 5.9782 1.366e-08 \*\*\*  
Euro -28.26804 6.85557 -4.1234 5.919e-05 \*\*\*  
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: 56817  
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. Max.   
-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 0.56894 0.17071 3.3327 0.0010578 \*\*   
SENT 2.46232 0.90076 2.7336 0.0069360 \*\*   
FEDFUNDS 1.51425 0.44438 3.4076 0.0008203 \*\*\*  
ERM -12.47272 3.20361 -3.8933 0.0001424 \*\*\*  
Euro -20.92312 5.67000 -3.6901 0.0003025 \*\*\*  
Dev\_PC1 -4.20988 1.26868 -3.3183 0.0011103 \*\*   
---  
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   
VIX 0.02179 0.19599 0.1112 0.91187   
SENT -6.56960 5.39050 -1.2187 0.22796   
FEDFUNDS 3.16345 1.32241 2.3922 0.02007 \*  
ERM -8.58698 3.25223 -2.6403 0.01067 \*  
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   
Euro -33.07348 11.33739 -2.9172 0.0043793 \*\*   
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: 36201  
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

##