CGR REIT Panel Regressions Model Number 5

#############################################################################################  
### Unbalanced REIT Panel Estimation Augmented Model #5 #####################################  
#############################################################################################  
  
## Model Number 5  
  
# Full  
Panel\_REIT\_model\_5

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 = 229  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-37.0069 -7.7471 1.2900 7.5237 27.9634   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -33.906044 5.703804 -5.9445 1.193e-08 \*\*\*  
VIX 1.206680 0.224384 5.3777 2.065e-07 \*\*\*  
SENT 1.838687 1.109533 1.6572 0.0990294 .   
FEDFUNDS 3.169634 0.706767 4.4847 1.221e-05 \*\*\*  
ERM -9.240676 2.629284 -3.5145 0.0005432 \*\*\*  
Euro -36.417137 6.065590 -6.0039 8.752e-09 \*\*\*  
Agg\_Econ\_Risk -1.116848 0.336674 -3.3173 0.0010770 \*\*   
Agg\_Fin\_Risk -1.661021 0.611673 -2.7155 0.0071871 \*\*   
Agg\_Pol\_Risk 0.030442 0.369184 0.0825 0.9343652   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 70836  
Residual Sum of Squares: 28350  
R-Squared: 0.59978  
Adj. R-Squared: 0.55049  
F-statistic: 33.8023 on 9 and 203 DF, p-value: < 2.22e-16

# Pre 2000  
Panel\_REIT\_model\_5\_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 = 80  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-35.22596 -2.44987 0.68719 2.26392 14.30218   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED 14.93689 9.17232 1.6285 0.10842   
VIX -0.27201 0.23675 -1.1489 0.25493   
SENT 3.10365 1.16935 2.6542 0.01005 \*   
FEDFUNDS 0.37631 0.48393 0.7776 0.43971   
ERM -12.15212 2.43435 -4.9919 5.004e-06 \*\*\*  
Agg\_Econ\_Risk -0.38438 0.23591 -1.6293 0.10823   
Agg\_Fin\_Risk 0.21486 0.39785 0.5401 0.59106   
Agg\_Pol\_Risk -0.26545 0.22171 -1.1973 0.23568   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 4014.6  
Residual Sum of Squares: 2632.6  
R-Squared: 0.34424  
Adj. R-Squared: 0.17769  
F-statistic: 4.13388 on 8 and 63 DF, p-value: 0.00051618

# Post 2000  
Panel\_REIT\_model\_5\_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 = 149  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-28.67004 -8.14016 0.23817 8.08106 25.72609   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -30.35527 5.40810 -5.6129 1.237e-07 \*\*\*  
VIX 0.81307 0.21395 3.8004 0.0002253 \*\*\*  
SENT 8.57617 1.99495 4.2989 3.439e-05 \*\*\*  
FEDFUNDS -1.41106 1.00403 -1.4054 0.1624073   
Euro -32.44452 6.12677 -5.2955 5.219e-07 \*\*\*  
Agg\_Econ\_Risk 1.33475 1.15538 1.1552 0.2502096   
Agg\_Fin\_Risk -2.17268 0.69051 -3.1465 0.0020695 \*\*   
Agg\_Pol\_Risk -0.13256 0.54857 -0.2416 0.8094581   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 46257  
Residual Sum of Squares: 16606  
R-Squared: 0.64101  
Adj. R-Squared: 0.57153  
F-statistic: 27.6765 on 8 and 124 DF, p-value: < 2.22e-16

##  
  
## Model Number 5 with Equity\_Liq and Int\_Use  
  
# Full  
Panel\_REIT\_model\_5\_aug\_int

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Unbalanced Panel: n = 16, T = 1-21, N = 210  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-37.86437 -6.48981 0.46343 5.92569 25.33192   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -21.488867 4.617635 -4.6537 6.242e-06 \*\*\*  
VIX 0.494141 0.202426 2.4411 0.0155944 \*   
SENT 0.584079 1.154975 0.5057 0.6136712   
FEDFUNDS 0.243868 0.691807 0.3525 0.7248623   
ERM -13.248199 4.010491 -3.3034 0.0011490 \*\*   
Euro -20.216391 5.578576 -3.6239 0.0003758 \*\*\*  
Agg\_Econ\_Risk 0.606483 0.567567 1.0686 0.2866725   
Agg\_Fin\_Risk -2.097978 0.610871 -3.4344 0.0007346 \*\*\*  
Agg\_Pol\_Risk -0.201568 0.351951 -0.5727 0.5675395   
REIT\_Liq 3.065418 11.715331 0.2617 0.7938789   
Internet\_Usage -0.451336 0.098255 -4.5935 8.091e-06 \*\*\*  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 67340  
Residual Sum of Squares: 19661  
R-Squared: 0.70803  
Adj. R-Squared: 0.66655  
F-statistic: 40.3437 on 11 and 183 DF, p-value: < 2.22e-16

# Pre 2000  
Panel\_REIT\_model\_5\_aug\_int\_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 = 75  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-34.51299 -1.68642 0.69404 2.74543 12.96125   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED 30.32567 13.61644 2.2271 0.0299756 \*   
VIX -0.27119 0.24993 -1.0850 0.2825572   
SENT 5.45947 1.46664 3.7224 0.0004595 \*\*\*  
FEDFUNDS -0.50682 0.78424 -0.6463 0.5207534   
ERM -11.33478 3.51881 -3.2212 0.0021279 \*\*   
Agg\_Econ\_Risk -0.36399 0.22169 -1.6418 0.1062263   
Agg\_Fin\_Risk -0.42246 0.67010 -0.6304 0.5309712   
Agg\_Pol\_Risk -0.36503 0.26594 -1.3726 0.1753405   
REIT\_Liq -8.02440 13.63268 -0.5886 0.5584864   
Internet\_Usage -0.25531 0.13126 -1.9451 0.0567928 .   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 3901.6  
Residual Sum of Squares: 2506.7  
R-Squared: 0.35752  
Adj. R-Squared: 0.15101  
F-statistic: 3.11623 on 10 and 56 DF, p-value: 0.0031792

# Post 2000  
Panel\_REIT\_model\_5\_aug\_int\_Post

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Unbalanced Panel: n = 16, T = 1-11, N = 135  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-21.16786 -7.15284 -0.22447 7.03074 24.43285   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -19.69316 11.11367 -1.7720 0.0791928 .   
VIX 0.22091 0.48025 0.4600 0.6464345   
SENT 3.30933 4.74607 0.6973 0.4871139   
FEDFUNDS -1.76127 0.80417 -2.1902 0.0306422 \*   
Euro -19.73534 9.89729 -1.9940 0.0486477 \*   
Agg\_Econ\_Risk 1.10791 1.07017 1.0353 0.3028368   
Agg\_Fin\_Risk -2.58707 0.72973 -3.5453 0.0005792 \*\*\*  
Agg\_Pol\_Risk -0.78875 0.63804 -1.2362 0.2190413   
REIT\_Liq -26.10440 25.95044 -1.0059 0.3166757   
Internet\_Usage -0.70904 0.35593 -1.9921 0.0488611 \*   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 42834  
Residual Sum of Squares: 12535  
R-Squared: 0.70737  
Adj. R-Squared: 0.64025  
F-statistic: 26.3479 on 10 and 109 DF, p-value: < 2.22e-16

##  
  
## Model Number 5 with Equity\_Liq and Dev\_PC1  
  
# Full  
Panel\_REIT\_model\_5\_aug\_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 = 182  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-38.40566 -6.85936 0.98333 7.25343 26.79378   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -24.71129 5.84835 -4.2253 4.02e-05 \*\*\*  
VIX 0.55967 0.19455 2.8767 0.0045738 \*\*   
SENT 1.46287 0.96965 1.5087 0.1333850   
FEDFUNDS 1.29597 0.66905 1.9370 0.0545263 .   
ERM -10.31004 3.64072 -2.8319 0.0052305 \*\*   
Euro -22.35617 6.09148 -3.6701 0.0003312 \*\*\*  
Agg\_Econ\_Risk 0.03946 0.55439 0.0712 0.9433469   
Agg\_Fin\_Risk -1.88997 0.72079 -2.6221 0.0095945 \*\*   
Agg\_Pol\_Risk -0.30542 0.38463 -0.7941 0.4283441   
REIT\_Liq 3.88029 17.82181 0.2177 0.8279228   
Dev\_PC1 -4.04601 2.28809 -1.7683 0.0789428 .   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 54752  
Residual Sum of Squares: 20880  
R-Squared: 0.61863  
Adj. R-Squared: 0.56312  
F-statistic: 23.3 on 11 and 158 DF, p-value: < 2.22e-16

# Pre 2000  
Panel\_REIT\_model\_5\_aug\_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 = 65  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-28.68238 -2.09394 0.21017 3.21610 12.44469   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -25.08805 12.13673 -2.0671 0.044255 \*   
VIX 0.16291 0.27689 0.5884 0.559109   
SENT -3.28696 4.51658 -0.7278 0.470373   
FEDFUNDS 2.95051 0.89931 3.2809 0.001955 \*\*  
ERM -9.90674 4.08374 -2.4259 0.019163 \*   
Agg\_Econ\_Risk -0.33408 0.19438 -1.7187 0.092254 .   
Agg\_Fin\_Risk 0.99515 0.30215 3.2936 0.001885 \*\*  
Agg\_Pol\_Risk -0.31187 0.24856 -1.2547 0.215797   
REIT\_Liq -5.08266 17.33181 -0.2933 0.770617   
Dev\_PC1 7.50944 3.93157 1.9100 0.062242 .   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 3392.8  
Residual Sum of Squares: 1991.9  
R-Squared: 0.4129  
Adj. R-Squared: 0.20054  
F-statistic: 3.30544 on 10 and 47 DF, p-value: 0.0025812

# Post 2000  
Panel\_REIT\_model\_5\_aug\_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.   
-27.68193 -6.77635 0.61738 6.28175 25.84584   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -27.10782 11.18188 -2.4243 0.01725 \*  
VIX 0.65899 0.46127 1.4287 0.15642   
SENT 6.15293 4.43490 1.3874 0.16860   
FEDFUNDS -1.08886 1.12470 -0.9681 0.33546   
Euro -17.32980 9.81536 -1.7656 0.08071 .  
Agg\_Econ\_Risk 2.75969 1.10362 2.5006 0.01413 \*  
Agg\_Fin\_Risk -1.83243 0.79336 -2.3097 0.02309 \*  
Agg\_Pol\_Risk -0.49480 0.74262 -0.6663 0.50686   
REIT\_Liq -4.81260 30.42388 -0.1582 0.87465   
Dev\_PC1 -2.73272 2.21530 -1.2336 0.22044   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 36201  
Residual Sum of Squares: 11925  
R-Squared: 0.67059  
Adj. R-Squared: 0.5935  
F-statistic: 19.1361 on 10 and 94 DF, p-value: < 2.22e-16

##

#########################################################################################  
### Balanced REIT Panel Estimation Augmented Model #5 #################################  
#########################################################################################  
  
## Model Number 5  
  
# Full  
Bal\_REIT\_model\_5

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 9, T = 15, N = 135  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-31.0918 -7.6801 0.1912 8.2937 26.2376   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -33.11765 7.37679 -4.4894 1.672e-05 \*\*\*  
VIX 1.12234 0.26276 4.2714 3.953e-05 \*\*\*  
SENT 1.24169 1.01558 1.2226 0.223901   
FEDFUNDS 3.04231 0.92794 3.2786 0.001371 \*\*   
Euro -37.90182 5.57081 -6.8036 4.481e-10 \*\*\*  
Agg\_Econ\_Risk -0.52987 0.51376 -1.0314 0.304483   
Agg\_Fin\_Risk -2.08733 0.77077 -2.7081 0.007773 \*\*   
Agg\_Pol\_Risk 0.43010 0.49482 0.8692 0.386497   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 52839  
Residual Sum of Squares: 18453  
R-Squared: 0.65078  
Adj. R-Squared: 0.60342  
F-statistic: 27.4865 on 8 and 118 DF, p-value: < 2.22e-16

# Pre 2000  
Bal\_REIT\_model\_5\_Pre

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 9, T = 8, N = 72  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-31.19165 -2.55266 0.48067 2.48839 11.30140   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED 14.679877 4.923506 2.9816 0.004239 \*\*  
VIX -0.837031 0.270649 -3.0927 0.003091 \*\*  
SENT 2.452738 1.662588 1.4753 0.145745   
FEDFUNDS -2.375562 1.339038 -1.7741 0.081486 .   
Agg\_Econ\_Risk 0.144180 0.162010 0.8899 0.377304   
Agg\_Fin\_Risk -0.565657 0.807274 -0.7007 0.486392   
Agg\_Pol\_Risk -0.033252 0.199100 -0.1670 0.867961   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 2724.7  
Residual Sum of Squares: 2322.1  
R-Squared: 0.14775  
Adj. R-Squared: -0.080532  
F-statistic: 1.38691 on 7 and 56 DF, p-value: 0.22901

# Post 2000  
Bal\_REIT\_model\_5\_Post

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 9, T = 7, N = 63  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-20.74701 -5.75019 0.24967 4.76082 28.08881   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -92.08389 28.37935 -3.2448 0.002194 \*\*   
VIX 4.52375 1.54415 2.9296 0.005267 \*\*   
SENT -43.84792 28.12164 -1.5592 0.125798   
FEDFUNDS 7.98490 3.71455 2.1496 0.036878 \*   
Euro -57.23515 11.05779 -5.1760 4.858e-06 \*\*\*  
Agg\_Econ\_Risk 2.35758 1.53244 1.5385 0.130789   
Agg\_Fin\_Risk 0.46877 1.54507 0.3034 0.762955   
Agg\_Pol\_Risk -0.86306 0.97810 -0.8824 0.382156   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 15062  
Residual Sum of Squares: 5113.8  
R-Squared: 0.66049  
Adj. R-Squared: 0.54239  
F-statistic: 11.1859 on 8 and 46 DF, p-value: 1.2956e-08

##  
  
## Model Number 5 with Equity\_Liq and Int\_Use  
  
# Full  
Bal\_REIT\_model\_5\_aug\_int

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 15, N = 105  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-21.81782 -6.68091 -0.31512 6.31707 25.97910   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -11.66524 8.70342 -1.3403 0.1835964   
VIX -0.17207 0.40670 -0.4231 0.6732634   
SENT 2.86160 1.75423 1.6313 0.1064095   
FEDFUNDS -3.14314 1.63244 -1.9254 0.0574049 .   
Euro -22.68262 6.35998 -3.5665 0.0005879 \*\*\*  
Agg\_Econ\_Risk 1.35041 0.73314 1.8419 0.0688510 .   
Agg\_Fin\_Risk -1.97046 1.17240 -1.6807 0.0963663 .   
Agg\_Pol\_Risk 0.14120 0.51132 0.2761 0.7830882   
REIT\_Liq 9.99149 37.73388 0.2648 0.7917917   
Internet\_Usage -0.59031 0.14389 -4.1024 9.103e-05 \*\*\*  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 46800  
Residual Sum of Squares: 10133  
R-Squared: 0.78348  
Adj. R-Squared: 0.74411  
F-statistic: 31.843 on 10 and 88 DF, p-value: < 2.22e-16

# Pre 2000  
Bal\_REIT\_model\_5\_aug\_int\_Pre

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 8, N = 56  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-7.0641 -2.3167 0.1733 1.9925 7.7838   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED 25.847386 4.822687 5.3595 3.742e-06 \*\*\*  
VIX -0.657312 0.254409 -2.5837 0.0135347 \*   
SENT 5.565025 1.915749 2.9049 0.0059582 \*\*   
FEDFUNDS -5.976190 1.416886 -4.2178 0.0001372 \*\*\*  
Agg\_Econ\_Risk 0.153797 0.213420 0.7206 0.4753286   
Agg\_Fin\_Risk -0.190727 0.482977 -0.3949 0.6950157   
Agg\_Pol\_Risk 0.339717 0.161306 2.1060 0.0415240 \*   
REIT\_Liq 18.131628 13.245162 1.3689 0.1786615   
Internet\_Usage -0.224178 0.097743 -2.2935 0.0271491 \*   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 1244.6  
Residual Sum of Squares: 742.58  
R-Squared: 0.40338  
Adj. R-Squared: 0.17965  
F-statistic: 3.00493 on 9 and 40 DF, p-value: 0.0078308

# Post 2000  
Bal\_REIT\_model\_5\_aug\_int\_Post

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 7, N = 49  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-12.77840 -4.88671 -0.28771 3.82465 16.23156   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -52.39492 41.21510 -1.2713 0.21280   
VIX 2.71569 2.21878 1.2240 0.22991   
SENT -50.90009 42.38405 -1.2009 0.23859   
FEDFUNDS 6.53309 6.26681 1.0425 0.30500   
Euro -25.42952 14.88592 -1.7083 0.09727 .   
Agg\_Econ\_Risk 1.03655 0.92497 1.1206 0.27078   
Agg\_Fin\_Risk 1.00390 1.26216 0.7954 0.43225   
Agg\_Pol\_Risk -1.22520 0.44613 -2.7463 0.00981 \*\*   
REIT\_Liq -57.72015 66.40903 -0.8692 0.39123   
Internet\_Usage -1.67048 0.25221 -6.6234 1.809e-07 \*\*\*  
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 13700  
Residual Sum of Squares: 2025.3  
R-Squared: 0.85217  
Adj. R-Squared: 0.77825  
F-statistic: 18.4464 on 10 and 32 DF, p-value: 1.3851e-10

##  
  
## Model Number 5 with Equity\_Liq and Dev\_PC1  
  
# Full  
Bal\_REIT\_model\_5\_aug\_devpc

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 15, N = 105  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-27.2526 -5.9948 -1.2546 7.8840 28.5523   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -18.252010 7.902537 -2.3096 0.0232490 \*   
VIX 0.258149 0.302090 0.8545 0.3951237   
SENT 0.285638 1.587256 0.1800 0.8576001   
FEDFUNDS 0.224545 1.063678 0.2111 0.8332953   
Euro -20.734128 5.964712 -3.4761 0.0007922 \*\*\*  
Agg\_Econ\_Risk 1.178867 0.802645 1.4687 0.1454724   
Agg\_Fin\_Risk -2.417791 0.772911 -3.1282 0.0023854 \*\*   
Agg\_Pol\_Risk -0.056825 0.505430 -0.1124 0.9107401   
REIT\_Liq 89.457520 44.091963 2.0289 0.0454923 \*   
Dev\_PC1 -1.822123 1.083906 -1.6811 0.0962954 .   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 39894  
Residual Sum of Squares: 13577  
R-Squared: 0.65967  
Adj. R-Squared: 0.5978  
F-statistic: 17.0575 on 10 and 88 DF, p-value: < 2.22e-16

# Pre 2000  
Bal\_REIT\_model\_5\_aug\_devpc\_Pre

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 8, N = 56  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-27.53255 -2.97003 0.75476 3.55162 9.90223   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED 10.38439 7.34011 1.4147 0.164881   
VIX -1.38284 0.45000 -3.0730 0.003806 \*\*  
SENT -2.51338 1.52438 -1.6488 0.107025   
FEDFUNDS 2.04974 1.18840 1.7248 0.092287 .   
Agg\_Econ\_Risk 0.15302 0.25477 0.6006 0.551469   
Agg\_Fin\_Risk -0.13540 0.86058 -0.1573 0.875775   
Agg\_Pol\_Risk 0.15215 0.23904 0.6365 0.528073   
REIT\_Liq 12.39849 15.68682 0.7904 0.433969   
Dev\_PC1 7.05448 3.21288 2.1957 0.033975 \*   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 2596.4  
Residual Sum of Squares: 1852  
R-Squared: 0.2867  
Adj. R-Squared: 0.019215  
F-statistic: 1.78639 on 9 and 40 DF, p-value: 0.10136

# Post 2000  
Bal\_REIT\_model\_5\_aug\_devpc\_Post

Oneway (individual) effect Within Model  
  
Call:  
plm::plm(formula = form, data = data\_matrix, model = mdl, index = ind)  
  
Balanced Panel: n = 7, T = 7, N = 49  
  
Residuals:  
 Min. 1st Qu. Median 3rd Qu. Max.   
-19.32953 -6.94201 -0.57735 5.17183 27.01564   
  
Coefficients:  
 Estimate Std. Error t value Pr(>|t|)   
TED -139.28837 27.22414 -5.1164 1.417e-05 \*\*\*  
VIX 7.36057 1.49219 4.9327 2.416e-05 \*\*\*  
SENT -108.61440 41.42397 -2.6220 0.013270 \*   
FEDFUNDS 16.09396 4.51506 3.5645 0.001169 \*\*   
Euro -68.16688 8.90681 -7.6533 1.010e-08 \*\*\*  
Agg\_Econ\_Risk 3.71969 1.75306 2.1218 0.041689 \*   
Agg\_Fin\_Risk 0.28417 1.67677 0.1695 0.866491   
Agg\_Pol\_Risk -1.14000 1.04733 -1.0885 0.284511   
REIT\_Liq 51.20108 52.45361 0.9761 0.336326   
Dev\_PC1 -0.67779 3.40928 -0.1988 0.843671   
---  
Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
  
Total Sum of Squares: 13062  
Residual Sum of Squares: 4519.4  
R-Squared: 0.65402  
Adj. R-Squared: 0.48103  
F-statistic: 6.04903 on 10 and 32 DF, p-value: 4.2454e-05

##