**1. HR Granger-Causes Ind Mispricing**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 5

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2512.4 2532.1 -1249.2 2498.4

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24751 753.38 32.854 118 3.2581e-61 23259 26243

{'Granger\_0:Treatment\_1' } 886.9 299.2 2.9643 118 0.0036714 294.41 1479.4

{'Granger\_5:Treatment\_1' } 229.32 327.95 0.69928 118 0.48576 -420.1 878.74

{'Granger\_10:Treatment\_1'} 621.07 368.78 1.6841 118 0.094799 -109.21 1351.4

{'Granger\_15:Treatment\_1'} -1244.1 411.97 -3.0198 118 0.0031013 -2059.9 -428.24

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 1329.7

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 6106

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 7 2512.4 2532.1 -1249.2 15.144 4 0.0044115

**2. Ind Mispricing Granger-Causes HR**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 8

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + Granger\_20:Treatment + Granger\_25:Treatment + Granger\_30:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2526.1 2554.2 -1253 2506.1

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24151 639.97 37.738 115 1.2855e-66 22883 25419

{'Granger\_0:Treatment\_1' } -499.86 409.78 -1.2198 115 0.22503 -1311.6 311.83

{'Granger\_5:Treatment\_1' } 25.454 332.77 0.076492 115 0.93916 -633.69 684.6

{'Granger\_10:Treatment\_1'} 247.76 351.11 0.70565 115 0.48183 -447.72 943.24

{'Granger\_15:Treatment\_1'} 850.5 490.61 1.7335 115 0.085679 -121.31 1822.3

{'Granger\_20:Treatment\_1'} -142.78 439.11 -0.32515 115 0.74565 -1012.6 727.02

{'Granger\_25:Treatment\_1'} -379.38 419.17 -0.90507 115 0.36732 -1209.7 450.92

{'Granger\_30:Treatment\_1'} -677.59 348.62 -1.9436 115 0.054384 -1368.1 12.964

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 679.7

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 6393.1

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 10 2526.1 2554.2 -1253 7.4777 7 0.38089

**3. HR Granger-Causes Holdings**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 5

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2522.2 2541.9 -1254.1 2508.2

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24411 752.91 32.422 118 1.329e-60 22920 25902

{'Granger\_0:Treatment\_1' } 26.283 362.87 0.07243 118 0.94238 -692.31 744.87

{'Granger\_5:Treatment\_1' } 577.8 351.21 1.6451 118 0.1026 -117.7 1273.3

{'Granger\_10:Treatment\_1'} -414.88 322.7 -1.2856 118 0.20109 -1053.9 224.16

{'Granger\_15:Treatment\_1'} 433.23 312.67 1.3856 118 0.16849 -185.95 1052.4

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 1381.3

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 6353.6

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 7 2522.2 2541.9 -1254.1 5.3794 4 0.25054

**4. Holdings Granger-Cause HR**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 8

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + Granger\_20:Treatment + Granger\_25:Treatment + Granger\_30:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2512.4 2540.5 -1246.2 2492.4

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24565 666.29 36.869 115 1.5272e-65 23246 25885

{'Granger\_0:Treatment\_1' } -421.02 358.24 -1.1753 115 0.24232 -1130.6 288.58

{'Granger\_5:Treatment\_1' } 884.5 407.47 2.1707 115 0.032006 77.392 1691.6

{'Granger\_10:Treatment\_1'} -1948.4 522.82 -3.7267 115 0.00030242 -2984 -912.79

{'Granger\_15:Treatment\_1'} 644.17 391.12 1.647 115 0.10229 -130.57 1418.9

{'Granger\_20:Treatment\_1'} -379.74 411.78 -0.92218 115 0.35837 -1195.4 435.93

{'Granger\_25:Treatment\_1'} 150.79 335.95 0.44883 115 0.6544 -514.67 816.24

{'Granger\_30:Treatment\_1'} 36.288 353.68 0.1026 115 0.91846 -664.29 736.86

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 1272.3

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 5963.3

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 10 2512.4 2540.5 -1246.2 21.134 7 0.0035765

**5. HR Granger-Causes B/A Spread**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 5

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2521 2540.7 -1253.5 2507

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24535 633.13 38.751 118 5.8343e-69 23281 25789

{'Granger\_0:Treatment\_1' } 578.56 361.56 1.6002 118 0.11223 -137.43 1294.5

{'Granger\_5:Treatment\_1' } -37.248 415.26 -0.089697 118 0.92868 -859.58 785.08

{'Granger\_10:Treatment\_1'} 732.75 412.42 1.7767 118 0.078193 -83.954 1549.5

{'Granger\_15:Treatment\_1'} -430.38 358.2 -1.2015 118 0.23196 -1139.7 278.96

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 522.49

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 6431.2

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 7 2521 2540.7 -1253.5 6.5582 4 0.16116

**6. B/A Spread Granger-Causes HR**

mdl =

**Generalized linear mixed-effects model fit by PL**

**Model information:**

Number of observations 123

Fixed effects coefficients 8

Random effects coefficients 16

Covariance parameters 2

Distribution Normal

Link Identity

FitMethod MPL

**Formula:**

Earnings ~ 1 + Granger\_0:Treatment + Granger\_5:Treatment + Granger\_10:Treatment + Granger\_15:Treatment + Granger\_20:Treatment + Granger\_25:Treatment + Granger\_30:Treatment + (1 | Session)

**Model fit statistics:**

AIC BIC LogLikelihood Deviance

2527.5 2555.6 -1253.7 2507.5

**Fixed effects coefficients (95% CIs):**

Name Estimate SE tStat DF pValue Lower Upper

{'(Intercept)' } 24558 736.68 33.336 115 6.1272e-61 23099 26017

{'Granger\_0:Treatment\_1' } -383.21 429.62 -0.89197 115 0.37427 -1234.2 467.79

{'Granger\_5:Treatment\_1' } -200.83 349.42 -0.57474 115 0.56659 -892.96 491.31

{'Granger\_10:Treatment\_1'} -24.739 442.46 -0.055912 115 0.95551 -901.16 851.68

{'Granger\_15:Treatment\_1'} -101.55 538.95 -0.18842 115 0.85088 -1169.1 966

{'Granger\_20:Treatment\_1'} 509.28 326.28 1.5608 115 0.12131 -137.03 1155.6

{'Granger\_25:Treatment\_1'} -146.55 453.95 -0.32283 115 0.74741 -1045.7 752.64

{'Granger\_30:Treatment\_1'} 458.57 402.89 1.1382 115 0.2574 -339.48 1256.6

**Random effects covariance parameters:**

Group: Session (16 Levels)

Name1 Name2 Type Estimate

{'(Intercept)'} {'(Intercept)'} {'std'} 1653.6

Group: Error

Name Estimate

{'sqrt(Dispersion)'} 6287.6

LRstat =

**Theoretical Likelihood Ratio Test**

Model DF AIC BIC LogLik LRStat deltaDF pValue

mdlR 3 2519.6 2528 -1256.8

mdl 10 2527.5 2555.6 -1253.7 6.0892 7 0.52938