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1 *****
2 ***** Main Tables/Analyses *****
3 ***** Last Updated: 31 August 2018 *****
4 *****
5
6 * Preamble *
7 clear all
8 cd "YOUR_DIR"
9
10 * Bring in primary dataset with most variables already defined/created *
11 sysuse Regression_data_final, clear
12
13
14 *****
15 *** DESCRIPTIVE STATISTICS ***
16 *****
17
18 * Table 1, Panel A *
19 unique firmid, by(cyearqtr adopt)
20
21 gen analysts = exp(ln_analysts) - 1
22 gen dowflash_count = exp(log_dowflash_count) - 1
23 gen rl_raw = exp(reporting_lag) - 1
24 foreach var in mkt_cap analysts dowflash_count rl_raw num_eas {
25     winsor2 `var', cuts(1 99) replace
26 }
27 tabstat mkt_cap, by(cyearqtr_adopt) stats(n mean median)
28
29 * Winsorize absolute trailing returns for descriptives (others already done) *
30 winsor2 absreta, cuts(1 99) replace
31
32 * Table 1, Panel B *
33 tabstat abn_turn_event_02 lnmv abs_ue absreta loss btm analysts ///
34     inst_hold volat_pre crsp_price any_dow_full dow_flash_count, ///
35     stats(n mean sd p25 p50 p75) col(stats)
36
37 * Correlation between absolute UE and absolute return ranks *
38 pwcorr absue10 absreta10
39
40
41 *****
42 *** FIGURES ***
43 *****
44
45 sysuse Regression_data_final, clear
46
47 gen control = 0
48 replace control = 1 if AI_cov == 0
49 gen treatpost = 0
50 replace treatpost = 1 if AI_cov == 1
51
52 foreach x in ue reta {
53     gen groups_`x' = .
54     replace groups_`x' = 0 if control == 1 & abs`x'2ext == 0
55     replace groups_`x' = 1 if treatpost == 1 & abs`x'2ext == 0
56     replace groups_`x' = 2 if control == 1 & abs`x'2ext == 1
57     replace groups_`x' = 3 if treatpost == 1 & abs`x'2ext == 1
58 }
59
60 egen avol_uegroup = mean(abn_turn_event_02), by(groups_ue)
61 egen avol_retagroup = mean(abn_turn_event_02), by(groups_reta)
62 egen avol_uecount = count(abn_turn_event_02), by(groups_ue)
63 egen avol_retacount = count(abn_turn_event_02), by(groups_reta)
64
65 * Move to Excel for graphs (copy and paste from data editor) *
66 collapse (mean) avol_treat avol_treat_count, by(AI_cov)
67 * Same as above but for UE groups *
68 * Reload file and run here *
69 collapse (mean) avol_uegroup avol_uecount, by(groups_ue)
70 * Same as above but for RETA groups *

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71 * Reload file and rerun here *
72 collapse (mean) avol_retagroup avol_retacount, by(groups_reta)
73
74
75
76 *****
77 ***                               MAIN REGRESSION ANALYSIS                               ***
78 *****
79
80 *** ANALYSES OF AWARENESS COSTS - BASE MODELS ***
81 sysuse Regression_data_final, clear
82
83 * Base Model without UE or Ret *
84 * Table 2, Column (i) *
85 reghdfe abn_turn_event_02 AI_cov, absorb(i.cyearqtr_adopt i.cyearqtr) cluster(firmid
yearmonth)
86 outreg2 using Table2.xls, tstat bdec(3) tdec(2) adj replace ctitle("Model 1") ///
87 addtext("Group & YearQtr fixed effects included?", "Yes", "UE and Ret measures
interacted with Group and YearQtr?", "No")
88
89 * Add in UE and Ret *
90 * Table 2, Column (ii) *
91 local ret "reta"
92 local ue "ue"
93 local cond ""
94 reghdfe abn_turn_event_02 AI_cov AI_abs`ue'10 AI_abs`ret'10 `cond', ///
95 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10 c.zzabs`ret'10) i.cyearqtr##(c.zzabs`ue'10 c
.zzabs`ret'10)) cluster(firmid yearmonth)
96 outreg2 using Table2.xls, tstat bdec(3) tdec(2) adj append ctitle("Model 2") ///
97 addtext("Group & YearQtr fixed effects included?", "Yes", "UE and Ret measures
interacted with Group and YearQtr?", "Yes")
98
99 * Extreme and non-extreme partition *
100 * Table 2, Column (iii) *
101 local ret "reta"
102 local ue "ue"
103 local cond ""
104 reghdfe abn_turn_event_02 AI_cov AI_abs`ue'10nonext AI_abs`ue'10ext AI_abs`ret'10nonext
AI_abs`ret'10ext `cond', ///
105 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10nonext c.zzabs`ue'10ext c.zzabs`ret'10nonext
c.zzabs`ret'10ext) ///
106 i.cyearqtr##(c.zzabs`ue'10nonext c.zzabs`ue'10ext c.zzabs`ret'10nonext c.zzabs`ret'
10ext)) cluster(firmid yearmonth)
107 outreg2 using Table2.xls, tstat bdec(3) tdec(2) adj append ctitle("Model 3") ///
108 addtext("Group & YearQtr fixed effects included?", "Yes", "UE and Ret measures
interacted with Group and YearQtr?", "Yes")
109
110
111
112 *****
113
114 *** ANALYSES OF AWARENESS COSTS - EXTENSIONS ***
115
116 * Split UE and Ret into Positive/Negative extreme and non-extreme *
117 * Look at abnormal buying volume as outcome variable *
118 * Table 3, Column (i)
119 local ret "reta"
120 local ue "ue"
121 local cond ""
122 reghdfe abn_buy_event AI_cov AI_abs`ue'10nonext_pos AI_abs`ue'10nonext_neg AI_abs`ue'
10ext_pos AI_abs`ue'10ext_neg ///
123 AI_abs`ret'10nonext_pos AI_abs`ret'10nonext_neg AI_abs`ret'10ext_pos AI_abs`ret'
10ext_neg `cond', ///
124 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10nonext_pos c.zzabs`ue'10nonext_neg c.zzabs
`ue'10ext_pos c.zzabs`ue'10ext_neg ///
125 c.zzabs`ret'10nonext_pos c.zzabs`ret'10nonext_neg c.zzabs`ret'10ext_pos c.zzabs`ret'
10ext_neg) ///
126 i.cyearqtr##(c.zzabs`ue'10nonext_pos c.zzabs`ue'10nonext_neg c.zzabs`ue'10ext_pos c.
zzabs`ue'10ext_neg ///
127 c.zzabs`ret'10nonext_pos c.zzabs`ret'10nonext_neg c.zzabs`ret'10ext_pos c.zzabs`ret'

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10ext_neg)) cluster(firmid yearmonth)
128 outreg2 using Table3.xls, tstat bdec(3) tdec(2) adj replace ctitle("Abn_BuyVol") ///
129 addtext("Group & YearQtr fixed effects included?","Yes","(Ret measures * Group) &
(UE measures * Group) included?","Yes","(Ret measures * YearQtr) & (UE measures * YearQtr)
included?","Yes")
130 * Look at abnormal selling volume as outcome variable *
131 * Table 3, Column (ii)
132 local ret "reta"
133 local ue "ue"
134 local cond ""
135 reghdfe abn_sell_event AI_cov AI_abs`ue'10nonext_pos AI_abs`ue'10nonext_neg AI_abs`ue'
10ext_pos AI_abs`ue'10ext_neg ///
136 AI_abs`ret'10nonext_pos AI_abs`ret'10nonext_neg AI_abs`ret'10ext_pos AI_abs`ret'
10ext_neg `cond', ///
137 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10nonext_pos c.zzabs`ue'10nonext_neg c.zzabs
`ue'10ext_pos c.zzabs`ue'10ext_neg ///
138 c.zzabs`ret'10nonext_pos c.zzabs`ret'10nonext_neg c.zzabs`ret'10ext_pos c.zzabs`ret'
10ext_neg) ///
139 i.cyearqtr##(c.zzabs`ue'10nonext_pos c.zzabs`ue'10nonext_neg c.zzabs`ue'10ext_pos c.
zzabs`ue'10ext_neg ///
140 c.zzabs`ret'10nonext_pos c.zzabs`ret'10nonext_neg c.zzabs`ret'10ext_pos c.zzabs`ret'
10ext_neg)) cluster(firmid yearmonth)
141 outreg2 using Table3.xls, tstat bdec(3) tdec(2) adj append ctitle("Abn_SellVol") ///
142 addtext("Group & YearQtr fixed effects included?","Yes","(Ret measures * Group) &
(UE measures * Group) included?","Yes","(Ret measures * YearQtr) & (UE measures * YearQtr)
included?","Yes")
143
144
145 *****
146
147 *** ANALYSES OF AWARENESS COSTS - INDIVIDUAL TRADER DATA ***
148
149 * Outcome variable is abnormal retail volume based on Boehmer et al. approach *
150 * Table 4, Column (i) *
151 local ret "reta"
152 local ue "ue"
153 local cond ""
154 reghdfe abn_turn_retail_02 AI_cov AI_abs`ue'10nonext AI_abs`ue'10ext AI_abs`ret'10nonext
AI_abs`ret'10ext `cond', ///
155 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10nonext c.zzabs`ue'10ext c.zzabs`ret'10nonext
c.zzabs`ret'10ext) ///
156 i.cyearqtr##(c.zzabs`ue'10nonext c.zzabs`ue'10ext c.zzabs`ret'10nonext c.zzabs`ret'
10ext)) cluster(firmid yearmonth)
157 outreg2 using Table4.xls, tstat bdec(3) tdec(2) adj replace ctitle("Model 3") ///
158 addtext("Group & YearQtr fixed effects included?","Yes","(Ret measures * Group) &
(UE measures * Group) included?","Yes","(Ret measures * YearQtr) & (UE measures * YearQtr)
included?","Yes")
159
160
161 *****
162
163 *** ANALYSES OF ACQUISITION COSTS ***
164
165 * Split on high/low acquisition costs based on the presence/absence of the consensus analyst
forecast *
166 * First use standard abnormal volume *
167 * Table 5, Column (i) *
168 local ret "reta"
169 local ue "ue"
170 local cond ""
171 local xvar "anpro"
172 reghdfe abn_turn_event_02 AI_cov AI_abs`ue'10nonext `xvar' AI_abs`ue'10nonext_non`xvar'
AI_abs`ue'10ext `xvar' AI_abs`ue'10ext_non`xvar' ///
173 AI_abs`ret'10nonext `xvar' AI_abs`ret'10nonext_non`xvar' AI_abs`ret'10ext `xvar' AI_abs
`ret'10ext_non`xvar' `cond', ///
174 absorb(i.cyearqtr_adopt##(c.zzabs`ue'10nonext `xvar' c.zzabs`ue'10nonext_non`xvar' c.
zzabs`ue'10ext `xvar' c.zzabs`ue'10ext_non`xvar' ///
175 c.zzabs`ret'10nonext `xvar' c.zzabs`ret'10nonext_non`xvar' c.zzabs`ret'10ext `xvar' c.
zzabs`ret'10ext_non`xvar') ///
176 i.cyearqtr##(c.zzabs`ue'10nonext `xvar' c.zzabs`ue'10nonext_non`xvar' c.zzabs`ue'10ext_

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177 `xvar' c.zzabs`ue'10ext_non`xvar' ///
    c.zzabs`ret'10nonext_`xvar' c.zzabs`ret'10nonext_non`xvar' c.zzabs`ret'10ext_`xvar' c.
zzabs`ret'10ext_non`xvar')) cluster(firmid yearmonth)
178 outreg2 using Table5.xls, tstat bdec(3) tdec(2) adj replace ctitle("Model 4") ///
179 addtext("Group & YearQtr fixed effects included?","Yes","(Ret measures * Group) & (UE
measures * Group) included?","Yes","(Ret measures * YearQtr) & (UE measures * YearQtr)
included?","Yes")
180
181 * Individual abnormal volume *
182 * Table 5, Column (ii) *
183 local ret "reta"
184 local ue "ue"
185 local cond ""
186 local xvar "anpro"
187 reghdfe abn_turn_retail_02 AI_cov AI_abs`ue'10nonext_`xvar' AI_abs`ue'10nonext_non`xvar'
AI_abs`ue'10ext_`xvar' AI_abs`ue'10ext_non`xvar' ///
188 AI_abs`ret'10nonext_`xvar' AI_abs`ret'10nonext_non`xvar' AI_abs`ret'10ext_`xvar' AI_abs
`ret'10ext_non`xvar' `cond', ///
189 absorb(i.cyearqtr adopt##(c.zzabs`ue'10nonext_`xvar' c.zzabs`ue'10nonext_non`xvar' c.
zzabs`ue'10ext_`xvar' c.zzabs`ue'10ext_non`xvar' ///
190 c.zzabs`ret'10nonext_`xvar' c.zzabs`ret'10nonext_non`xvar' c.zzabs`ret'10ext_`xvar' c.
zzabs`ret'10ext_non`xvar') ///
191 i.cyearqtr##(c.zzabs`ue'10nonext_`xvar' c.zzabs`ue'10nonext_non`xvar' c.zzabs`ue'10ext_
`xvar' c.zzabs`ue'10ext_non`xvar' ///
192 c.zzabs`ret'10nonext_`xvar' c.zzabs`ret'10nonext_non`xvar' c.zzabs`ret'10ext_`xvar' c.
zzabs`ret'10ext_non`xvar')) cluster(firmid yearmonth)
193 outreg2 using Table5.xls, tstat bdec(3) tdec(2) adj append ctitle("Model 4") ///
194 addtext("Group & YearQtr fixed effects included?","Yes","(Ret measures * Group) & (UE
measures * Group) included?","Yes","(Ret measures * YearQtr) & (UE measures * YearQtr)
included?","Yes")
195
196
197
198 *****
199
200 *** TRADING STRATEGY TESTS ***
201
202 * Table 6, Panel A *
203 * First look at unconditional returns for size-BTM match *
204 cgmreg ar_203_sb, cluster(yearweek firmid)
205 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
206
207 foreach x in 204 205 210 220 240 260 {
208     cgmreg ar_`x'_sb, cluster(yearweek firmid)
209     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
210 }
211
212 * Same with size-BTM-momentum match *
213 cgmreg ar_203_sbm, cluster(yearweek firmid)
214 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
215
216 foreach x in 204 205 210 220 240 260 {
217     cgmreg ar_`x'_sbm, cluster(yearweek firmid)
218     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
219 }
220
221 * Table 6, Panel B *
222 * Now let's look at momentum strategy using size-BTM factor model *
223 cgmreg ar_203_sb, cluster(yearweek firmid)
224 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
225
226 foreach x in 203 204 205 210 220 240 260 {
227     cgmreg ar_`x'_sb posREText posRETnonext negRETnonext negREText, cluster(yearweek firmid)
nocons
228
229     lincom posREText - negREText
230     local estdiff1 = r(estimate)
231     local stat1 = r(estimate)/r(se)
232     lincom posRETnonext - negRETnonext
233     local estdiff2 = r(estimate)

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234     local stat2 = r(estimate)/r(se)
235
236     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append ///
237     addstat("Extreme (Positive - Negative)", `estdiff1', "Test Statistic", `stat1', ///
238     "Non-Extreme (Positive - Negative)", `estdiff2', "Test Statistic", `stat2')
239 }
240
241 * Easier presentation of extreme positive - extreme negative *
242 cgmreg ar_203_sb, cluster(yearweek firmid)
243 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
244
245 foreach x in 203 204 205 210 220 240 260 {
246     cgmreg ar_`x'_sb posREText posREText negREText, cluster(yearweek firmid)
247     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
248 }
249
250 * Easier presentation of nonextreme positive - nonextreme negative *
251 cgmreg ar_203_sb, cluster(yearweek firmid)
252 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
253
254 foreach x in 203 204 205 210 220 240 260 {
255     cgmreg ar_`x'_sb posREText negREText posREText, cluster(yearweek firmid)
256     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
257 }
258
259 * Table 6, Panel C *
260 * Now look at UE strategy using size-BTM factor model *
261 cgmreg ar_203_sb, cluster(yearweek firmid)
262 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
263
264 foreach x in 203 204 205 210 220 240 260 {
265     cgmreg ar_`x'_sb posUEext posUEnonext negUEnonext negUEext, cluster(yearweek firmid)
266     nocons
267     lincom posUEext - negUEext
268     local estdiff1 = r(estimate)
269     local stat1 = r(estimate)/r(se)
270     lincom posUEnonext - negUEnonext
271     local estdiff2 = r(estimate)
272     local stat2 = r(estimate)/r(se)
273
274     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append ///
275     addstat("Extreme (Positive - Negative)", `estdiff1', "Test Statistic", `stat1', ///
276     "Non-Extreme (Positive - Negative)", `estdiff2', "Test Statistic", `stat2')
277 }
278
279 * Easier presentation of extreme positive - extreme negative *
280 cgmreg ar_203_sb, cluster(yearweek firmid)
281 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
282
283 foreach x in 203 204 205 210 220 240 260 {
284     cgmreg ar_`x'_sb posUEext posUEnonext negUEnonext, cluster(yearweek firmid)
285     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
286 }
287
288 * Easier presentation of nonextreme positive - nonextreme negative *
289 cgmreg ar_203_sb, cluster(yearweek firmid)
290 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
291
292 foreach x in 203 204 205 210 220 240 260 {
293     cgmreg ar_`x'_sb posUEext negUEext posUEnonext, cluster(yearweek firmid)
294     outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
295 }
296
297 * Table 6, Panel D *
298 * Finally look at UE using size-BTM-momentum factor model *
299 cgmreg ar_203_sbm, cluster(yearweek firmid)
300 outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
301
302 foreach x in 203 204 205 210 220 240 260 {

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303      cgmreg ar_`x'_sbm posUEext posUEnonext negUEnonext negUEext, cluster(yearweek firmid)
      nocons
304
305      lincom posUEext - negUEext
306      local estdiff1 = r(estimate)
307      local stat1 = r(estimate)/r(se)
308      lincom posUEnonext - negUEnonext
309      local estdiff2 = r(estimate)
310      local stat2 = r(estimate)/r(se)
311
312      outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append ///
313      addstat("Extreme (Positive - Negative)", `estdiff1', "Test Statistic", `stat1', ///
314      "Non-Extreme (Positive - Negative)", `estdiff2', "Test Statistic", `stat2')
315  }
316
317  * Easier presentation of extreme positive - extreme negative *
318  cgmreg ar_203_sbm, cluster(yearweek firmid)
319  outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
320
321  foreach x in 203 204 205 210 220 240 260 {
322      cgmreg ar_`x'_sbm posUEext posUEnonext negUEnonext, cluster(yearweek firmid)
323      outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
324  }
325
326  * Easier presentation of nonextreme positive - nonextreme negative *
327  cgmreg ar_203_sbm, cluster(yearweek firmid)
328  outreg2 using trading.xls, tstat bdec(3) tdec(2) adj replace
329
330  foreach x in 203 204 205 210 220 240 260 {
331      cgmreg ar_`x'_sbm posUEext negUEext posUEnonext, cluster(yearweek firmid)
332      outreg2 using trading.xls, tstat bdec(3) tdec(2) adj append
333  }
334
335
336
337  *****
338  **                                END OF FILE                                **
339  **      SEE SEPARATE FILES FOR TESTS USED IN SUPPLEMENTARY MATERIALS      **
340  *****
341

```