

## **Internet Appendix to “When are analyst recommendation changes influential?”**

This appendix presents additional tables to accompany the paper “When are analyst recommendation changes influential?”.

Loh, Roger K., and René M. Stulz, 2010, When are analyst recommendation changes influential? *Review of Financial Studies*, forthcoming.

### **1. Alternative recommendation change measures**

Table A1 of this appendix replicates Table 2 of the paper using alternative recommendation change (*recchg*) measures. Essentially, we apply various filters that remove corporate event days from the sample of recommendation changes from I/B/E/S 1994 to 2006. The event CAR is the cumulative abnormal return (DGTW-adjusted) from day 0 to day 1 of the recommendation. Our original definition of recommendation change is the analyst’s recommendation minus the prior rating from the same analyst (*recchg\_own*). Two alternatives are considered: *recchg\_last* (the analyst’s rating minus the last rating by any analyst) and *recchg\_con* (the analyst’s rating minus the consensus rating). Three-point ratings are used. Our results are similar to our baseline Table 2 in that the event CAR falls when contaminating corporate events are removed from the sample. However, the mean reaction is still statistically significant.

Next, Table A2 examines a probit model predicting when a recommendation will be influential in returns using a battery of variables. This is similar to Table 4 of the paper except that the *recchg\_last* and *recchg\_con* definitions are used instead of *recchg\_own*. We show results using the influential in abnormal return definition. The coefficients from the probits are very similar to those reported in Table 4 of the paper and reinforce our findings.

### **2. Average event CAR of earnings forecast revisions**

To show that our results for the fraction of influential recommendation changes may not necessarily generalize to a sample of earnings forecasts revisions, we obtain quarterly, annual, and long-term growth (LTG) earnings forecast revisions from I/B/E/S. We then compute the event CARs of these events using an event window of [0,1] with hand-matched dates from First Call when available. Revisions are coded as upward or downward either against the analyst’s own prior forecast, the last forecast by any analyst, or the most recent consensus forecast.

Table A3 reports the results from the analysis. Upward and downward revisions elicit a statistically significant reaction in the stock price. However, the magnitude seems lower than those elicited by recommendation changes in Table 2—even one-point recommendation changes. Also, we see that the corporate event filters remove a large proportion of the earnings forecasts revisions. They also shave off a large fraction of the mean CAR reactions. This shows that earnings forecast revisions are more likely than recommendation changes to be issued in response to corporate events.

### 3. Predicting influential return probability using alternative influential definitions

Alternative definitions of influential are also examined in the text. These are discussed in Table 6 of the paper and the accompanying Section 4.1. Here, we present in Table A4 the probit estimations based on three alternative ways of defining influential. The first is to define influential based on raw returns rather than on abnormal returns. We see from the first set of estimations that the coefficients are similar to those reported in Table 4 of the paper. Second, we report results by changing the manner according to which the prior idiosyncratic volatility is computed. Recall that idiosyncratic volatility is used to benchmark the event return of the recommendation change and to determine whether the recommendations are influential. We remove non-corporate event recommendation days from the computation of idiosyncratic volatility. We see that the coefficients in the probit are similar with this new definition of influential. Finally, we impose a new screen on the sample in Table 4 by removing observations in the estimation that are associated with a large return (beyond  $\pm 1.96$  standard deviations than expected based on prior idiosyncratic return volatility) in days  $[-2,-1]$  of the recommendation date. This approach should remove corporate-event motivated recommendations not captured by our prior screens. We see that the coefficients in the third definition are again similar to those in our baseline results in Table 4.

Another robustness test is to include additional First Call observations. This addresses the concern that I/B/E/S provides only an incomplete record of the universe of stock recommendations (see, for e.g., Ljungqvist, Malloy, and Marston (2009)). For broker names on First Call that we can assign I/B/E/S broker identifiers to, we include their First Call recommendations that are not found on I/B/E/S. We let these observations inherit an I/B/E/S analyst identifier if the closest prior and future (two year window centered around the First Call observation) I/B/E/S recommendations have the same analyst identifier. We find in this combined sample that recommendation changes with influential returns remains similar—at 11.5%. Table A5 reports that the coefficients of the explanatory variables from the probits remain qualitatively similar to our earlier results. Note that only First Call observations that have inserted I/B/E/S analyst identifiers would enter for the first specification which includes analyst characteristics. The second specification that focuses on only firm characteristics includes all I/B/E/S and First Call observations.

**Table A1**

**The impact of various filters on recommendation event percentage CAR: Alternative recchg measures**

This table replicates key columns of Table 2 using alternative measures of *recchg*. The first is *recchg\_last* (Panel A) which is the analyst's current rating minus the most recent prior rating from any analyst. The second measure is *recchg\_con* which is the analyst's current rating minus the most recent consensus recommendation. Three-point ratings are used so that *recchg* ranges from -2 to +2. Please also see descriptive text in Table 2 for understanding the below numbers.

Filtered Samples	Panel A: Recchg=Rec minus last rec from any analyst					Panel B: Recchg=Rec minus most recent consensus				
	Mean	Mode (50bps intervals)	% CAR +	Median	# Obs	Mean	Mode (50bps intervals)	% CAR +	Median	# Obs
Recommendation Change = -2										
1) Full sample	-3.368***	-1	0.307	-1.448***	4,008	-3.333***	-1	0.302	-1.552***	8,348
2) No earnings annc days	-2.802***	-1	0.318	-1.263***	3,370	-2.750***	-1	0.314	-1.334***	6,918
3) No earnings annc or mgt forecasts days	-1.957***	-1	0.330	-1.113***	3,161	-2.073***	-1	0.325	-1.167***	6,452
4) No earnings annc or mgt forecasts or multiple rec days	-1.605***	-1	0.331	-1.062***	2,816	-1.609***	-1	0.326	-1.097***	5,646
5) Remove 5% from both tails of (4).	-1.346***	-1	0.316	-1.039***	2,520	-1.342***	-1	0.312	-1.072***	5,059
6) Remove LTS-identified outliers from (4)	-1.229***	-1	0.332	-0.991***	2,618	-1.242***	-1	0.326	-1.031***	5,249
Recommendation Change = -1										
1) Full sample	-3.206***	-0.5	0.343	-1.314***	34,798	-2.952***	-0.5	0.350	-1.214***	58,426
2) No earnings annc days	-2.740***	-0.5	0.351	-1.119***	28,293	-2.496***	-0.5	0.360	-1.033***	47,453
3) No earnings annc or mgt forecasts days	-1.633***	-0.5	0.370	-0.919***	25,731	-1.412***	-0.5	0.379	-0.826***	42,863
4) No earnings annc or mgt forecasts or multiple rec days	-1.234***	-0.5	0.375	-0.845***	22,724	-1.082***	-0.5	0.383	-0.764***	37,496
5) Remove 5% from both tails of (4).	-1.013***	-0.5	0.366	-0.815***	20,261	-0.907***	-0.5	0.374	-0.736***	33,381
6) Remove LTS-identified outliers from (4)	-0.893***	-0.5	0.380	-0.767***	21,199	-0.812***	-0.5	0.386	-0.703***	34,958
Recommendation Change = 0										
1) Full sample	-0.356***	0	0.497	-0.027*	80,045	-0.421***	-0.5	0.490	-0.106**	11,294
2) No earnings annc days	-0.307***	0	0.496	-0.030*	65,019	-0.309***	-0.5	0.490	-0.100*	9,179
3) No earnings annc or mgt forecasts days	0.225***	0	0.509	0.065***	60,810	0.374***	-0.5	0.504	0.032	8,627
4) No earnings annc or mgt forecasts or multiple rec days	0.321***	0	0.512	0.079***	54,261	0.460***	0.5	0.507	0.071	8,003
5) Remove 5% from both tails of (4).	0.224***	0	0.513	0.077***	48,238	0.305***	0.5	0.508	0.066	7,108
6) Remove LTS-identified outliers from (4)	0.139***	0	0.506	0.038***	51,063	0.159***	0.5	0.500	0.001	7,510

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**Table A1 (Continued)**

Filtered Samples	Panel A: Recchg=Rec minus last rec from any analyst					Panel B: Recchg=Rec minus most recent consensus				
	Mean	Mode (50bps intervals)	% CAR +	Median	# Obs	Mean	Mode (50bps intervals)	% CAR +	Median	# Obs
Recommendation Change = +1										
1) Full sample	0.826***	-0.5	0.566	0.537***	31,911	1.052***	0	0.583	0.689***	74,301
2) No earnings annc days	0.705***	-0.5	0.561	0.471***	26,031	0.853***	0	0.576	0.583***	60,437
3) No earnings annc or mgt forecasts days	0.958***	-0.5	0.569	0.518***	24,642	1.037***	0	0.581	0.605***	57,626
4) No earnings annc or mgt forecasts or multiple rec days	0.993***	0	0.573	0.525***	22,121	1.022***	0	0.582	0.599***	51,911
5) Remove 5% from both tails of (4).	0.770***	0	0.580	0.516***	19,693	0.817***	0	0.590	0.585***	46,254
6) Remove LTS-identified outliers from (4)	0.599***	0	0.565	0.436***	20,709	0.668***	0	0.574	0.510***	48,995
Recommendation Change = +2										
1) Full sample	1.551***	0.5	0.609	0.841***	3,372	2.759***	0.5	0.679	1.477***	1,765
2) No earnings annc days	1.222***	0	0.599	0.744***	2,711	2.429***	0.5	0.674	1.345***	1,437
3) No earnings annc or mgt forecasts days	1.322***	0	0.602	0.747***	2,608	2.466***	0.5	0.676	1.340***	1,384
4) No earnings annc or mgt forecasts or multiple rec days	1.285***	0	0.596	0.698***	2,363	2.246***	0.5	0.673	1.225***	1,229
5) Remove 5% from both tails of (4).	0.957***	0	0.607	0.697***	2,106	1.746***	0.5	0.692	1.190***	1,098
6) Remove LTS-identified outliers from (4)	0.711***	0	0.584	0.589***	2,229	1.429***	0.5	0.662	1.028***	1,161

**Table A2**

**Probit predicting when a recommendation change will be influential: Using alternative recommendation change measures**

This table replicates the probit model in Table 4 using alternative measures of *recchg*: *recchg\_last* is the analyst's current rating minus the most recent prior rating from any analyst and *recchg\_con* is the analyst's current rating minus the most recent consensus rating. Three-point rating changes are used. The definition of influential is based on event date abnormal stock returns. Standard errors are clustered by analyst and firm.

Explanatory Variable	recchg definition:			
	recchg_last		recchg_con	
	Coefficient	Marg. Eff	Coefficient	Marg. Eff
Influential before (any stock)	0.126*** (5.05)	2.23%	0.142*** (7.56)	2.48%
Influential before (same stock)	0.082*** (2.77)	1.45%	0.051** (2.24)	0.89%
Rec level	0.067*** (4.54)	1.19%	0.052*** (4.65)	0.86%
Absolute value of rec change	0.007 (0.30)	0.06%	0.007 (0.39)	0.06%
Upgrade Dummy	0.084*** (2.99)	1.49%	0.113*** (5.33)	1.96%
Reg FD Dummy	0.203*** (6.06)	3.58%	0.208*** (8.68)	3.62%
Settlement Dummy	0.088** (2.53)	1.55%	0.071*** (2.87)	1.24%
Past forecast accuracy quintile	-0.014 (-1.62)	-0.29%	-0.009 (-1.53)	-0.19%
Rec away from consensus Dummy	0.322*** (15.19)	5.69%	0.249*** (15.76)	4.33%
Star analyst Dummy	0.204*** (7.09)	3.60%	0.203*** (9.06)	3.53%
# Qtrs analyst in I/B/E/S	-0.001* (-1.89)	-0.51%	-0.001*** (-2.58)	-0.49%
Analyst's relative experience	0.001 (1.12)	0.26%	0.001 (1.13)	0.19%
Concurrent earnings forecast Dummy	0.130*** (6.11)	2.30%	0.127*** (8.00)	2.21%
Past Leader-Follower Ratio	0.006** (2.30)	0.36%	0.006*** (2.67)	0.33%
Log(B/M)	-0.114*** (-8.08)	-1.63%	-0.094*** (-8.79)	-1.32%
Log(Size)	-0.079*** (-7.43)	-2.25%	-0.083*** (-10.47)	-2.33%
Price momentum	0.014 (0.72)	0.13%	0.021 (1.41)	0.20%
Log(Institutional ownership)	0.071** (2.29)	0.53%	0.018 (0.76)	0.13%
Log(Turnover)	0.043** (2.08)	0.60%	0.042*** (2.64)	0.57%
Log(Idiosyncratic volatility)	-0.365*** (-11.27)	-3.41%	-0.352*** (-14.31)	-3.22%
Dispersion	0.037*** (2.94)	0.47%	0.034*** (3.04)	0.38%
Log(# of forecasts)	-0.144*** (-8.47)	-2.14%	-0.121*** (-9.55)	-1.76%
Pseudo R-sq	0.05983		0.05025	
# Observations	28777		55121	
Chi-Sq test	1034.19***		1502.71***	

**Table A3**  
**Average event CAR of earnings forecast revisions**

This replicates Table 2 of the paper using earnings forecast revisions. Annual (FY1), quarterly (Q1), and LTG forecasts from I/B/E/S are considered and handmatched revision dates from FC are used when available. CAR is from [0,1] days from the revision date. Three definitions of revision are used, revision from own prior forecast, from last forecast from any analyst, and revision from the most recent consensus.

Filtered Samples	Panel A: Forecast minus analyst's own prior forecast					Panel B: Forecast minus last forecast from any analyst					Panel C: Forecast minus most recent consensus				
	Mean	Mode	% CAR +	Median	# Obs	Mean	Mode	% CAR +	Median	# Obs	Mean	Mode	% CAR +	Median	# Obs
Downward revision of annual earnings															
1) Full sample	-0.839***	0	0.442	-0.386***	287,587	-1.190***	-0.5	0.414	-0.608***	376,189	-0.893***	0	0.449	-0.360***	331,096
2) No earnings annnc days	-0.319***	0	0.458	-0.259***	253,770	-1.015***	0	0.422	-0.518***	287,363	-0.840***	0	0.450	-0.323***	240,587
3) No earnings annnc or mgt forecasts days	-0.146***	0	0.467	-0.194***	162,922	-0.468***	0	0.439	-0.380***	253,690	-0.279***	0	0.468	-0.189***	212,855
4) No earnings annnc or mgt forecasts or multiple forecast days	-0.182***	0	0.463	-0.193***	146,627	-0.277***	0	0.448	-0.307***	163,115	-0.118***	0	0.474	-0.146***	136,417
5) Remove 5% from both tails of (4).	-0.203***	0	0.463	-0.203***	154,965	-0.309***	0	0.442	-0.307***	146,805	-0.138***	0	0.471	-0.145***	122,792
6) Remove LTS-identified outliers from (4)	-0.155***	0	0.466	-0.194***	147,832	-0.323***	0	0.444	-0.315***	155,016	-0.155***	0	0.471	-0.153***	129,747
Upward revision of annual earnings															
1) Full sample	0.816***	0	0.563	0.430***	355,604	0.423***	0	0.523	0.162***	325,843	0.574***	0	0.540	0.274***	342,098
2) No earnings annnc days	0.542***	0	0.550	0.292***	224,944	0.157***	0	0.505	0.033***	219,315	0.317***	0	0.524	0.144***	224,335
3) No earnings annnc or mgt forecasts days	0.418***	0	0.540	0.233***	208,630	0.130***	0	0.500	0.000	201,997	0.237***	0	0.517	0.094***	208,269
4) No earnings annnc or mgt forecasts or multiple forecast days	0.351***	0	0.533	0.181***	137,092	0.131***	0	0.499	-0.009	131,947	0.195***	0	0.510	0.058***	137,208
5) Remove 5% from both tails of (4).	0.268***	0	0.537	0.181***	123,384	0.054***	0	0.499	-0.008	118,758	0.127***	0	0.512	0.058***	123,513
6) Remove LTS-identified outliers from (4)	0.204***	0	0.529	0.149***	131,052	-0.001	0	0.494	-0.035***	125,913	0.069***	0	0.506	0.031***	131,073
Downward revision of quarterly earnings															
1) Full sample	-1.223***	0	0.411	-0.601***	125,216	-1.180***	0	0.432	-0.449***	92,312	-1.140***	0	0.426	-0.503***	117,485
2) No earnings annnc days	-1.243***	0	0.410	-0.606***	121,932	-1.203***	0	0.430	-0.455***	89,880	-1.160***	0	0.424	-0.510***	114,367
3) No earnings annnc or mgt forecasts days	-0.553***	0	0.432	-0.414***	101,541	-0.426***	0	0.458	-0.244***	74,771	-0.447***	0	0.449	-0.315***	94,555
4) No earnings annnc or mgt forecasts or multiple forecast days	-0.334***	-0.5	0.446	-0.319***	65,172	-0.210***	0	0.469	-0.184***	47,823	-0.232***	-0.5	0.462	-0.227***	60,190
5) Remove 5% from both tails of (4).	-0.341***	-0.5	0.440	-0.319***	58,656	-0.191***	0	0.466	-0.180***	43,055	-0.229***	-0.5	0.458	-0.224***	54,207
6) Remove LTS-identified outliers from (4)	-0.335***	-0.5	0.444	-0.317***	61,994	-0.184***	0	0.469	-0.177***	45,589	-0.231***	-0.5	0.460	-0.225***	57,270

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**Table A3 (Cont'd)**

Filtered Samples	Panel A: Forecast minus analyst's own prior forecast					Panel B: Forecast minus last forecast from any analyst					Panel C: Forecast minus most recent consensus				
	Mean	Mode	% CAR +	Median	# Obs	Mean	Mode	% CAR +	Median	# Obs	Mean	Mode	% CAR +	Median	# Obs
Upward revision of quarterly earnings															
1) Full sample	0.770***	0	0.577	0.451***	83,166	0.324***	0	0.524	0.155***	81,250	0.512***	0	0.546	0.275***	89,462
2) No earnings annnc days	0.771***	0	0.578	0.449***	79,855	0.316***	0	0.523	0.152***	78,340	0.507***	0	0.545	0.270***	86,002
3) No earnings annnc or mgt forecasts days	0.536***	0	0.563	0.351***	68,294	0.177***	0	0.511	0.067***	68,178	0.311***	0	0.531	0.182***	74,169
4) No earnings annnc or mgt forecasts or multiple forecast days	0.475***	0	0.554	0.285***	45,703	0.180***	0	0.510	0.059***	45,166	0.281***	0	0.525	0.140***	49,868
5) Remove 5% from both tails of (4).	0.392***	0	0.560	0.285***	41,133	0.122***	0	0.511	0.061***	40,672	0.212***	0	0.528	0.141***	44,926
6) Remove LTS-identified outliers from (4)	0.326***	0	0.550	0.252***	43,672	0.070***	0	0.506	0.033**	43,080	0.152***	0	0.521	0.113***	47,681
Downward revision of LTG forecasts															
1) Full sample	-0.511***	-0.5	0.472	-0.188***	37,529	-0.398***	0	0.479	-0.127***	30,353	-0.409***	-0.5	0.478	-0.140***	37,583
2) No earnings annnc days	-0.475***	0	0.471	-0.179***	28,612	-0.431***	0	0.474	-0.145***	23,188	-0.413***	0	0.476	-0.145***	28,593
3) No earnings annnc or mgt forecasts days	-0.124***	0	0.481	-0.113***	26,419	-0.109***	0	0.482	-0.097***	21,487	-0.083***	0	0.484	-0.094***	26,442
4) No earnings annnc or mgt forecasts or multiple forecast days	-0.103***	0	0.480	-0.116***	23,988	-0.075**	0	0.482	-0.097***	19,501	-0.069**	0	0.482	-0.103***	24,003
5) Remove 5% from both tails of (4).	-0.116***	0	0.477	-0.116***	21,590	-0.063***	0	0.482	-0.085***	17,425	-0.067***	0	0.481	-0.094***	21,416
6) Remove LTS-identified outliers from (4)	-0.127***	0	0.478	-0.120***	22,795	-0.104***	0	0.479	-0.104***	18,475	-0.112***	0	0.479	-0.112***	22,693
Upward revision of LTG forecasts															
1) Full sample	0.312***	0	0.519	0.119***	29,593	0.103***	0	0.507	0.042**	30,030	0.175***	0	0.511	0.062***	29,640
2) No earnings annnc days	0.162***	0	0.509	0.044***	23,004	0.035	0	0.500	0.002	23,277	0.080***	0	0.503	0.015	23,196
3) No earnings annnc or mgt forecasts days	0.201***	0	0.508	0.042**	21,846	0.143***	0	0.502	0.013	21,973	0.144***	0	0.504	0.018	22,001
4) No earnings annnc or mgt forecasts or multiple forecast days	0.174***	0	0.506	0.027	20,020	0.117***	0	0.500	-0.000	20,064	0.122***	0	0.503	0.012	20,157
5) Remove 5% from both tails of (4).	0.116***	0	0.506	0.027*	18,018	0.066***	0	0.501	0.005	17,990	0.084***	0	0.504	0.016	18,085
6) Remove LTS-identified outliers from (4)	0.056***	0	0.501	0.003	19,120	0.009	0	0.496	-0.021	19,064	0.022	0	0.498	-0.011	19,217

**Table A4**

**Predicting influential return probability using alternative methods to define influential**

This table replicates the probit model in Table 4 using alternative to define whether a recommendation change is influential in returns. The first definition uses raw returns instead of abnormal returns. The second definition excludes non-corporate event recommendation days from the computation of past three-month idiosyncratic return volatility. The third definition excludes recommendation changes with large pre-event [-2,-1] absolute returns.

Explanatory Variable	Alternative influential return definition is based on:					
	rec raw returns		no rec-days idio vol.		no pre-event large return obs.	
	Coefficient	Marg. Eff	Coefficient	Marg. Eff	Coefficient	Marg. Eff
Influential before (any stock)	0.151*** (8.14)	3.07%	0.161*** (8.68)	2.67%	0.160*** (8.07)	2.86%
Influential before (same stock)	0.023 (1.06)	1.57%	0.082*** (3.83)	0.40%	0.065*** (2.69)	1.16%
Rec level	0.038*** (3.29)	0.75%	0.041*** (3.72)	0.65%	0.049*** (4.04)	0.84%
Absolute value of rec change	-0.006 (-0.33)	-0.21%	-0.021 (-1.28)	-0.05%	-0.014 (-0.77)	-0.13%
Upgrade Dummy	0.161*** (7.87)	1.66%	0.087*** (4.33)	2.84%	0.084*** (3.82)	1.50%
Reg FD Dummy	0.179*** (7.24)	3.86%	0.202*** (8.61)	3.17%	0.205*** (8.04)	3.67%
Settlement Dummy	0.030 (1.19)	2.10%	0.110*** (4.52)	0.53%	0.132*** (5.08)	2.37%
Past forecast accuracy quintile	-0.009 (-1.46)	-0.24%	-0.010* (-1.87)	-0.19%	-0.013** (-2.12)	-0.28%
Rec away from consensus Dummy	0.119*** (8.02)	2.85%	0.149*** (10.19)	2.11%	0.154*** (9.56)	2.75%
Star analyst Dummy	0.206*** (9.31)	3.80%	0.199*** (9.02)	3.64%	0.233*** (9.76)	4.17%
# Qtrs analyst in I/B/E/S	-0.001* (-1.91)	-0.51%	-0.001** (-2.37)	-0.36%	-0.001* (-1.82)	-0.39%
Analyst's relative experience	0.000 (0.44)	0.22%	0.001 (1.26)	0.07%	0.001 (0.79)	0.14%
Concurrent earnings forecast Dummy	0.095*** (6.04)	2.31%	0.121*** (8.10)	1.68%	0.143*** (8.64)	2.55%
Past Leader-Follower Ratio	0.005** (2.43)	0.39%	0.006*** (2.88)	0.31%	0.005** (2.24)	0.30%
Log(B/M)	-0.083*** (-7.47)	-1.49%	-0.096*** (-9.31)	-1.18%	-0.111*** (-10.01)	-1.61%
Log(Size)	-0.085*** (-10.52)	-2.46%	-0.080*** (-10.29)	-2.44%	-0.083*** (-9.84)	-2.40%
Price momentum	0.025* (1.81)	0.32%	0.029** (2.19)	0.26%	0.024 (1.62)	0.25%
Log(Institutional ownership)	0.064*** (2.69)	0.39%	0.049** (2.19)	0.47%	0.049** (1.96)	0.36%
Log(Turnover)	0.027* (1.74)	0.71%	0.048*** (3.20)	0.37%	0.050*** (3.11)	0.71%
Log(Idiosyncratic volatility)	-0.310*** (-13.25)	-3.43%	-0.342*** (-14.88)	-2.88%	-0.339*** (-13.77)	-3.20%
Dispersion	0.026*** (2.75)	0.38%	0.031*** (3.10)	0.29%	0.036*** (3.31)	0.42%
Log(# of forecasts)	-0.102*** (-8.18)	-2.21%	-0.138*** (-11.37)	-0.0152	-0.142*** (-10.86)	-0.0214
Pseudo R-sq	0.03767		0.04830		0.05220	
# Observations	58384		58384		51209	
Chi-Sq test	1172.82***		1570.04***		1364.35***	



**Table A5****Predicting influential return probability using I/B/E/S combined with FC sample**

This table replicates the probit model in Table 4 using a combined sample of I/B/E/S appended with First Call (FC) recommendation changes. FC broker names that can be hand-matched to I/B/E/S broker names are appended. Because FC observations have no analyst identifiers, we insert analyst identifiers to an FC observation if the prior and next I/B/E/S recommendation are both issued by the same analyst. Observations with analyst identifiers can be assigned analyst characteristics and are part of the first specification. All observations can enter the second specification that uses only firm characteristics on the RHS.

Explanatory Variable	Firm and analyst characteristics		Firm characteristics only	
	Coefficient	Marg. Eff	Coefficient	Marg. Eff
Influential before (any stock)	0.152*** (8.04)	2.83%		
Influential before (same stock)	0.054** (2.30)	1.00%		
Rec level	0.041*** (3.65)	0.73%	0.026*** (2.74)	0.55%
Absolute value of rec change	-0.014 (-0.80)	-0.13%	-0.016 (-1.09)	-0.22%
Upgrade Dummy	0.086*** (4.14)	1.60%	0.102*** (5.86)	1.93%
Reg FD Dummy	0.212*** (8.67)	3.94%	0.217*** (10.84)	4.28%
Settlement Dummy	0.103*** (4.11)	1.92%	0.087*** (4.03)	1.68%
Past forecast accuracy quintile	-0.010* (-1.66)	-0.22%		
Rec away from consensus Dummy	0.132*** (8.50)	2.46%	0.135*** (10.42)	2.45%
Star analyst Dummy	0.211*** (8.95)	3.92%		
# Qtrs analyst in I/B/E/S	-0.001 (-1.45)	-0.31%		
Analyst's relative experience	0.000 (0.37)	0.07%		
Concurrent earnings forecast Dummy	0.116*** (7.60)	2.17%		
Past Leader-Follower Ratio	0.005** (2.55)	0.33%		
Log(B/M)	-0.099*** (-9.16)	-1.49%	-0.083*** (-9.07)	-1.25%
Log(Size)	-0.084*** (-10.62)	-2.56%	-0.079*** (-11.56)	-2.55%
Price momentum	0.029** (2.02)	0.31%	0.020** (2.09)	0.25%
Log(Institutional ownership)	0.041* (1.74)	0.32%	0.063*** (3.46)	0.65%
Log(Turnover)	0.039** (2.57)	0.57%	0.043*** (3.49)	0.61%
Log(Idiosyncratic volatility)	-0.335*** (-14.38)	-3.28%	-0.342*** (-17.52)	-3.41%
Dispersion	0.028** (2.36)	0.32%	0.022*** (2.61)	0.30%
Log(# of forecasts)	-0.136*** (-11.30)	-2.18%	-0.127*** (-12.73)	-2.20%
Pseudo R-sq	0.04626		0.03619	
# Observations	54427		91010	
Chi-Sq test	1369.07***		1464.84***	