

Internet Appendix for
Rest in Peace Post-Earnings Announcement Drift

This Internet Appendix includes additional results that are discussed but not reported in the main manuscript.

Figure IA.1. Unbiasedness Regressions: Compustat Sample

Description: This figure shows the estimated coefficient (β) in Panel A and the explanatory power (R^2) in Panel B of the following 2-year rolling regression:

$$BHAR[0, 60]_{i,j} = \alpha + \beta BHAR[0, 1]_{i,j} + \varepsilon_{i,j},$$

where $BHAR[0, 1]$ and $BHAR[2, 60]$ are the stock i 's announcement j buy-and-hold abnormal returns on earnings announcement date and post-announcement, respectively. See Figure 5 for the definition of BHAR. The results are reported for the full sample, all-but-microcap, and microcap stocks from the Compustat sample. Microcap stocks are those smaller than the NYSE 20th market capitalization percentile. Above each plot is a linear time trend τ (red dotted line) with p-value based on Newey-West standard errors with five lags. The sample period is from January 1, 1977 to December 31, 2019. Including the years 1973 to 1976 provides noisy results with wide confidence intervals due to the low number of observations.

Interpretation: The β for all-but-microcap stocks converges towards one over time, indicative that stock prices on announcement dates are close to martingale. The increase in R^2 over time suggests that announcement date prices are more information about one-quarter ahead prices.

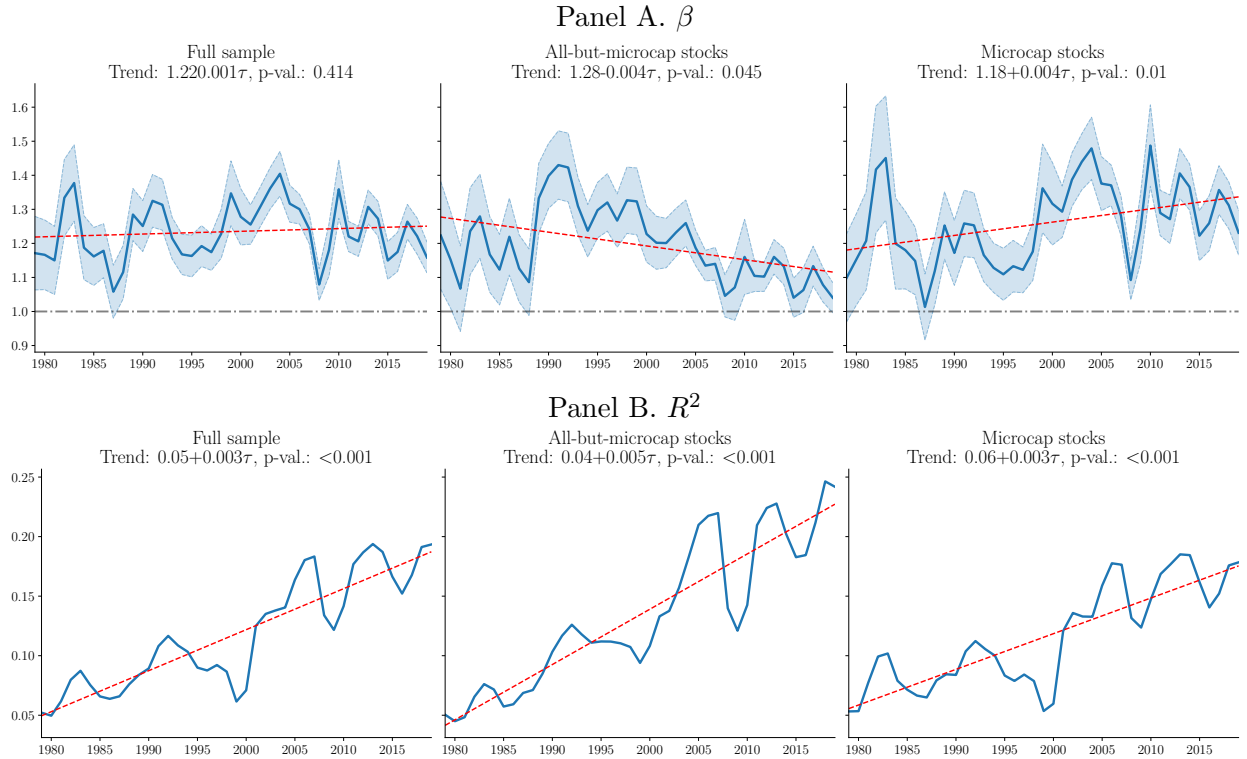


Table IA.1
Price Formation to Analyst Earnings Surprises (BHAR[2,15])

Description: This table reports coefficient estimates of the following regression models:

$$BHAR[2, 15]_{i,j} = \beta Surprise\ rank_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j},$$

where $BHAR[2, 15]$ is the stock i 's announcement j buy-and-hold abnormal returns (BHAR) two to 15 days following the earnings announcement. See the caption of Figure 5 for the definition of BHAR. *Surprise rank* is the decile rank of analyst earnings surprises defined in Equation (1) in Panel A and the decile rank of random-walk earnings surprises defined in Equation (3) in Panel B. The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. α_i and α_q correspond to firm and year-quarter fixed effects. The results are reported for all-but-microcap and microcap stocks. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and announcement year-quarter. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1984 to December 31, 2019.

Interpretation: In recent years, analyst earnings surprise and random-walk surprise fail to BHAR[2,15] returns for all-but-microcap stocks but can predict BHAR[2,15] for microcap stocks.

Panel A. Analyst earnings surprise

All-but-microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.000 (0.000)	-0.000 (0.000)
<i>N</i>	206,272	21,868	25,787	36,414	34,214	31,095	31,422	25,472
<i>R</i> ²	0.001	0.002	0.002	0.001	0.002	0.001	0.000	0.000

Microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.002*** (0.000)	0.001** (0.001)	0.000 (0.001)	0.001** (0.000)	0.002*** (0.000)	0.004*** (0.000)	0.002*** (0.000)	0.002*** (0.001)
<i>N</i>	106,183	6,211	10,711	19,257	17,902	22,762	16,814	12,526
<i>R</i> ²	0.002	0.002	0.000	0.000	0.003	0.008	0.004	0.002

Panel B. Random-walk earnings surprise

All-but-microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.000*** (0.000)	0.001*** (0.000)	0.000 (0.000)	0.000 (0.000)	-0.000 (0.001)	0.000 (0.001)	0.000 (0.000)	-0.001 (0.001)
<i>N</i>	296,467	87,061	33,371	43,662	38,821	32,982	33,405	27,165
<i>R</i> ²	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000

Microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.001*** (0.000)	0.000** (0.000)	-0.000 (0.000)	0.001* (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
<i>N</i>	297,278	64,230	33,808	53,828	48,355	42,604	31,884	22,569
<i>R</i> ²	0.001	0.000	0.000	0.000	0.001	0.002	0.004	0.002

Table IA.2
Price Formation to Analyst Earnings Surprises Prior to Announcements

Description: This table reports coefficient estimates of the following regression model:

$$BHAR[\tau, -1]_{i,j} = \beta Surprise\ rank_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j},$$

where $BHAR[\tau, -1]$ corresponds to stock i 's announcement j buy-and-hold abnormal returns (BHAR) prior to earnings announcements. See the caption of Figure 5 for the definition of BHAR. Panels A to C reports the results for dependent variable $BHAR[-60, -1]$, $BHAR[-30, -1]$, and $BHAR[-15, -1]$, respectively. *Surprise rank* is the decile rank of analyst earnings surprises defined in Equation (1). α_i and α_q correspond to firm and year-quarter fixed effects. The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. The results are reported for all-but-microcap and microcap stocks. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and year-quarter. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1984 to December 31, 2019.

Interpretation: The persistence in pre-earnings announcement returns, conditioned on analyst earnings surprises, has weakened over time.

Panel A. Dependent variable: $BHAR[-60, -1]$

All-but-microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.007*** (0.000)	0.009*** (0.001)	0.013*** (0.001)	0.012*** (0.001)	0.006*** (0.001)	0.005*** (0.001)	0.002*** (0.001)	0.002*** (0.000)
<i>N</i>	206,281	21,867	25,787	36,417	34,214	31,095	31,426	25,475
<i>R</i> ²	0.009	0.033	0.038	0.012	0.005	0.004	0.001	0.001

Microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.009*** (0.001)	0.014*** (0.001)	0.018*** (0.002)	0.015*** (0.001)	0.009*** (0.001)	0.006*** (0.001)	0.003*** (0.001)	0.001** (0.001)
<i>N</i>	106,182	6,209	10,711	19,256	17,901	22,761	16,816	12,528
<i>R</i> ²	0.010	0.056	0.056	0.013	0.009	0.005	0.001	0.000

Panel B. Dependent variable: $BHAR[-30, -1]$

All-but-microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.005*** (0.000)	0.007*** (0.001)	0.009*** (0.001)	0.007*** (0.001)	0.004*** (0.001)	0.004*** (0.001)	0.002*** (0.000)	0.001*** (0.000)
<i>N</i>	206,281	21,867	25,787	36,417	34,214	31,095	31,426	25,475
<i>R</i> ²	0.009	0.032	0.037	0.010	0.005	0.005	0.002	0.001

Microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.006*** (0.000)	0.010*** (0.001)	0.012*** (0.001)	0.009*** (0.001)	0.006*** (0.001)	0.003*** (0.001)	0.002*** (0.000)	0.001 (0.001)
<i>N</i>	106,182	6,209	10,711	19,256	17,901	22,761	16,816	12,528
<i>R</i> ²	0.010	0.052	0.054	0.017	0.010	0.003	0.001	0.000

Table IA.2
Pre-Price Formation to Analyst Earnings Surprises (cont.)

Panel C. Dependent variable: $BHAR[-15, -1]$								
All-but-microcap stocks								
	Full sample	1984-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2016-2019
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Surprise rank</i>	0.003*** (0.000)	0.004*** (0.000)	0.005*** (0.000)	0.004*** (0.000)	0.003*** (0.000)	0.003*** (0.000)	0.002*** (0.000)	0.001*** (0.000)
<i>N</i>	206,281	21,867	25,787	36,417	34,214	31,095	31,426	25,475
<i>R</i> ²	0.007	0.019	0.026	0.006	0.003	0.004	0.004	0.001
Microcap stocks								
	Full sample	1984-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2016-2019
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Surprise rank</i>	0.004*** (0.000)	0.005*** (0.001)	0.008*** (0.001)	0.006*** (0.001)	0.004*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.002*** (0.000)
<i>N</i>	106,182	6,209	10,711	19,256	17,901	22,761	16,816	12,528
<i>R</i> ²	0.008	0.027	0.045	0.012	0.007	0.002	0.002	0.002

Table IA.3
Price Formation to Random-Walk Earnings Surprises Prior to Announcements

Description: This table reports coefficient estimates of the following regression model:

$$BHAR[\tau, -1]_{i,j} = \beta Surprise\ rank_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j},$$

where $BHAR[\tau, -1]$ corresponds to stock i 's announcement j buy-and-hold abnormal returns (BHAR) prior to earnings announcements. See the caption of Figure 5 for the definition of BHAR. Panels A to C reports the results for dependent variable $BHAR[-60, -1]$, $BHAR[-30, -1]$, and $BHAR[-15, -1]$, respectively. *Surprise rank* is the decile rank of random-walk earnings surprises defined in Equation (3). The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. α_i and α_q correspond to firm and year-quarter fixed effects. The results are reported for all-but-microcap and microcap stocks. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and year-quarter. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1973 to December 31, 2019.

Interpretation: The persistence in pre-earnings announcement returns, conditioned on random-walk earnings surprises, has weakened over time.

Panel A. Dependent variable: $BHAR[-60, -1]$

All-but-microcap stocks								
	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.009*** (0.000)	0.012*** (0.001)	0.011*** (0.001)	0.010*** (0.001)	0.007*** (0.001)	0.006*** (0.001)	0.005*** (0.001)	0.003*** (0.001)
<i>N</i>	295,228	86,113	33,319	43,588	38,758	32,951	33,363	27,136
<i>R</i> ²	0.015	0.038	0.022	0.009	0.007	0.005	0.006	0.003

Microcap stocks								
	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.014*** (0.000)	0.016*** (0.001)	0.020*** (0.001)	0.016*** (0.001)	0.013*** (0.001)	0.011*** (0.001)	0.008*** (0.001)	0.006*** (0.001)
<i>N</i>	294,294	62,056	33,617	53,723	48,140	42,380	31,866	22,512
<i>R</i> ²	0.025	0.067	0.059	0.017	0.020	0.014	0.011	0.005

Panel B. Dependent variable: $BHAR[-30, -1]$

All-but-microcap stocks								
	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.006*** (0.000)	0.008*** (0.000)	0.008*** (0.001)	0.006*** (0.001)	0.005*** (0.000)	0.003* (0.002)	0.004*** (0.001)	0.002*** (0.000)
<i>N</i>	295,743	86,486	33,343	43,618	38,786	32,966	33,393	27,151
<i>R</i> ²	0.012	0.033	0.022	0.006	0.005	0.003	0.007	0.003

Microcap stocks								
	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.010*** (0.000)	0.011*** (0.000)	0.013*** (0.001)	0.012*** (0.001)	0.008*** (0.001)	0.007*** (0.001)	0.005*** (0.000)	0.003*** (0.001)
<i>N</i>	295,686	63,012	33,705	53,782	48,263	42,497	31,884	22,543
<i>R</i> ²	0.025	0.060	0.056	0.023	0.016	0.010	0.011	0.004

Table IA.3
Pre-Price Formation to Random-Walk Earnings Surprises (cont.)

Panel C. Dependent variable: $BHAR[-15, -1]$								
All-but-microcap stocks								
	Full sample	1973-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2016-2019
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Surprise rank</i>	0.004*** (0.000)	0.006*** (0.000)	0.005*** (0.000)	0.004*** (0.000)	0.003*** (0.001)	0.003*** (0.001)	0.003*** (0.000)	0.002*** (0.000)
<i>N</i>	296,128	86,745	33,362	43,656	38,809	32,983	33,406	27,167
<i>R</i> ²	0.012	0.035	0.018	0.005	0.003	0.004	0.010	0.004
Microcap stocks								
	Full sample	1973-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2015	2016-2019
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Surprise rank</i>	0.007*** (0.000)	0.009*** (0.000)	0.009*** (0.000)	0.008*** (0.000)	0.005*** (0.000)	0.005*** (0.000)	0.004*** (0.000)	0.003*** (0.000)
<i>N</i>	296,487	63,608	33,742	53,800	48,317	42,560	31,898	22,562
<i>R</i> ²	0.025	0.062	0.049	0.022	0.012	0.011	0.015	0.005

Table IA.4
Price Formation to Analyst Earnings Surprises -
Controlling for Pre-Announcement Returns (BHAR[-60,-1])

Description: This table reports coefficient estimates of the following regression models:

$$BHAR[0, 1]_{i,j} = \beta_1 Surprise\ rank_{i,j} + \beta_2 BHAR[-60, -1]_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel A and}$$

$$BHAR[2, 60]_{i,j} = \beta_1 Surprise\ rank_{i,j} + \beta_2 BHAR[-60, -1]_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel B,}$$

where $BHAR[0, 1]$, $BHAR[2, 60]$, and $BHAR[-60, -1]$ are the stock i 's earnings announcement j buy-and-hold abnormal returns (BHAR) on announcement dates, post-announcement, and pre-announcement, respectively. See the caption of Figure 5 for the definition of BHAR. *Surprise rank* is the decile rank of analyst earnings surprises defined in Equation (1). The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. α_i and α_q correspond to firm and year-quarter fixed effects. The results are reported for all-but-microcap and microcap stocks. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and earnings announcement date in Panel A and by firm and announcement year-quarter in Panel B. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1984 to December 31, 2019.

Interpretation: Pre-earnings announcement returns (BHAR[-60,-1]) are negatively associated with announcement returns and post-announcement returns.

Panel A. Dependent variable: $BHAR[0, 1]$

All-but-microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.008*** (0.000)	0.002*** (0.000)	0.004*** (0.000)	0.006*** (0.000)	0.008*** (0.000)	0.012*** (0.001)	0.011*** (0.000)	0.012*** (0.000)
$BHAR[-60, -1]$	-0.016*** (0.002)	-0.011*** (0.003)	-0.023*** (0.003)	-0.014*** (0.004)	-0.028*** (0.007)	-0.016*** (0.005)	-0.012*** (0.005)	-0.012** (0.005)
<i>N</i>	206,278	21,867	25,786	36,416	34,214	31,095	31,426	25,474
<i>R</i> ²	0.066	0.019	0.034	0.035	0.065	0.117	0.118	0.118

Microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.008*** (0.000)	0.003*** (0.000)	0.005*** (0.000)	0.006*** (0.000)	0.007*** (0.000)	0.010*** (0.000)	0.009*** (0.000)	0.010*** (0.000)
$BHAR[-60, -1]$	-0.015*** (0.003)	-0.025*** (0.006)	-0.030*** (0.005)	-0.014* (0.008)	-0.015*** (0.005)	-0.022*** (0.003)	-0.012** (0.006)	-0.008 (0.006)
<i>N</i>	106,177	6,207	10,711	19,256	17,900	22,761	16,814	12,528
<i>R</i> ²	0.074	0.030	0.051	0.049	0.064	0.106	0.099	0.093

Panel B. Dependent variable: $BHAR[2, 60]$

All-but-microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.002*** (0.000)	0.004*** (0.001)	0.004*** (0.001)	0.002 (0.002)	0.002*** (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.001** (0.001)
$BHAR[-60, -1]$	-0.030** (0.014)	-0.064*** (0.024)	-0.074*** (0.018)	-0.087*** (0.026)	-0.093** (0.039)	-0.053 (0.035)	-0.060*** (0.022)	-0.114*** (0.043)
<i>N</i>	206,270	21,867	25,786	36,414	34,214	31,095	31,422	25,472
<i>R</i> ²	0.001	0.008	0.007	0.008	0.010	0.003	0.004	0.013

Microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.004*** (0.000)	0.004*** (0.001)	0.005*** (0.001)	0.006*** (0.001)	0.004*** (0.001)	0.003*** (0.001)	0.003*** (0.001)	0.002* (0.001)
$BHAR[-60, -1]$	-0.029*** (0.011)	-0.081*** (0.019)	-0.070*** (0.019)	-0.087*** (0.031)	-0.057*** (0.022)	-0.075*** (0.028)	-0.078*** (0.014)	-0.075*** (0.022)
<i>N</i>	106,178	6,209	10,711	19,256	17,901	22,760	16,814	12,527
<i>R</i> ²	0.003	0.008	0.007	0.011	0.005	0.007	0.009	0.006

Table IA.5
Price Formation to Random-Walk Earnings Surprises -
Controlling for Pre-Announcement Returns (BHAR[-60,-1])

Description: This table reports coefficient estimates of the following regression models:

$$BHAR[0, 1]_{i,j} = \beta_1 Surprise\ rank_{i,j} + \beta_2 BHAR[-60, -1]_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel A and}$$

$$BHAR[2, 60]_{i,j} = \beta_1 Surprise\ rank_{i,j} + \beta_2 BHAR[-60, -1]_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel B,}$$

where $BHAR[0, 1]$, $BHAR[2, 60]$, and $BHAR[-60, -1]$ are the stock i 's earnings announcement j buy-and-hold abnormal returns (BHAR) on announcement dates, post-announcement, and pre-announcement, respectively. See the caption of Figure 5 for the definition of BHAR. *Surprise rank* is the decile rank of random-walk earnings surprises defined in Equation (3). The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. α_i and α_q correspond to firm and year-quarter fixed effects. The results are reported for all-but-microcap and microcap stocks. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and earnings announcement date in Panel A and by firm and announcement year-quarter in Panel B. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1973 to December 31, 2019.

Interpretation: Pre-earnings announcement returns (BHAR[-60,-1]) are negatively associated with announcement returns and post-announcement returns.

Panel A. Dependent variable: $BHAR[0, 1]$

All-but-microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.002*** (0.000)	0.002*** (0.000)	0.001*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.003*** (0.000)	0.004*** (0.000)	0.004*** (0.000)
$BHAR[-60, -1]$	0.045*** (0.003)	0.030*** (0.002)	0.035*** (0.003)	0.031*** (0.003)	0.034*** (0.006)	0.064*** (0.009)	0.079*** (0.009)	0.098*** (0.012)
N	295,197	86,102	33,316	43,584	38,758	32,947	33,359	27,131
R^2	0.026	0.031	0.022	0.014	0.012	0.033	0.045	0.050

Microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.004*** (0.000)	0.003*** (0.000)	0.004*** (0.000)	0.005*** (0.000)	0.005*** (0.000)	0.005*** (0.000)	0.005*** (0.000)	0.005*** (0.000)
$BHAR[-60, -1]$	0.027*** (0.004)	0.022*** (0.002)	0.029*** (0.003)	0.011*** (0.003)	0.027*** (0.004)	0.043*** (0.006)	0.040*** (0.006)	0.047*** (0.008)
N	294,199	62,032	33,615	53,715	48,112	42,369	31,851	22,505
R^2	0.037	0.036	0.039	0.028	0.037	0.044	0.046	0.043

Panel B. Dependent variable: $BHAR[2, 60]$

All-but-microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.001*** (0.000)	0.004*** (0.000)	0.002** (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.002 (0.003)	0.000 (0.001)	-0.003* (0.001)
$BHAR[-60, -1]$	-0.027** (0.012)	-0.038*** (0.014)	-0.062*** (0.015)	-0.078*** (0.026)	-0.098*** (0.036)	-0.051 (0.041)	-0.055*** (0.019)	-0.111*** (0.040)
N	295,188	86,110	33,315	43,582	38,757	32,946	33,351	27,127
R^2	0.001	0.004	0.005	0.007	0.010	0.003	0.003	0.015

Microcap stocks

	Full sample (1)	1973-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.005*** (0.000)	0.005*** (0.000)	0.004*** (0.001)	0.005*** 9(0.001)	0.006*** (0.001)	0.004*** (0.001)	0.005*** (0.001)	0.004*** (0.001)
$BHAR[-60, -1]$	-0.025*** (0.009)	-0.057*** (0.009)	-0.039*** (0.011)	-0.077*** (0.029)	-0.058*** (0.020)	-0.061*** (0.024)	-0.064*** (0.011)	-0.078*** (0.021)
N	294,201	62,047	33,617	53,709	48,125	42,362	31,841	22,500
R^2	0.004	0.008	0.004	0.008	0.007	0.005	0.009	0.008

Table IA.6
Price Formation to Random-Walk
Earnings Surprises for Stocks with Analyst Coverage

Description: This table reports coefficient estimates of the following regression models:

$$BHAR[0, 1]_{i,j} = \beta Surprise\ rank_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel A and}$$

$$BHAR[2, 60]_{i,j} = \beta Surprise\ rank_{i,j} + \alpha_i + \alpha_q + \varepsilon_{i,j} \text{ in Panel B,}$$

where $BHAR[0, 1]$ and $BHAR[2, 60]$ are the stock i 's announcement j buy-and-hold abnormal returns (BHAR) on announcement date and post-announcement, respectively. *Surprise rank* is the decile rank of random-walk earnings surprises defined in Equation (3). α_i and α_q correspond to firm and year-quarter fixed effects. The decile ranks are formed on each year-quarter using the previous quarter observations to define the decile cutoffs. See the caption of Figure 5 for the definition of BHAR. The results are reported for all-but-microcap and microcap stocks with analyst coverage in I/B/E/S. Microcap stocks are those with market capitalization smaller than the NYSE 20th percentile. Standard errors are clustered by firm and earnings announcement date in Panel A and by firm and announcement year-quarter in Panel B. ***, ** and * indicate a two-tailed test significance level of less than 1, 5, and 10%, respectively. The sample period is from January 1, 1984 to December 31, 2019.

Interpretation: For stocks with analyst coverage, random-walk earnings surprises are weakly associated with post-announcement returns ($BHAR[2,60]$).

Panel A. Dependent variable: $BHAR[0, 1]$
All-but-microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.003*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)	0.004*** (0.000)	0.004*** (0.000)	0.004*** (0.000)
<i>N</i>	206,280	21,868	25,787	36,416	34,214	31,095	31,426	25,474
<i>R</i> ²	0.010	0.015	0.007	0.004	0.004	0.011	0.018	0.017

Microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.004*** (0.000)	0.002*** (0.000)	0.003*** (0.000)	0.004*** (0.000)	0.004*** (0.000)	0.005*** (0.000)	0.005*** (0.000)	0.005*** (0.000)
<i>N</i>	106,185	6,209	10,714	19,257	17,901	22,762	16,814	12,528
<i>R</i> ²	0.025	0.023	0.021	0.020	0.022	0.024	0.028	0.025

Panel B. Dependent variable: $BHAR[2, 60]$
All-but-microcap stocks

	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.001 (0.001)	0.003*** (0.001)	0.002** (0.001)	-0.001 (0.001)	0.000 (0.001)	-0.003 (0.003)	0.000 (0.001)	-0.003* (0.002)
<i>N</i>	206,321	21,870	25,793	36,430	34,217	31,108	31,424	25,479
<i>R</i> ²	0.000	0.002	0.001	0.000	0.000	0.001	0.000	0.003

Microcap stocks								
	Full sample (1)	1984-1990 (2)	1991-1995 (3)	1996-2000 (4)	2001-2005 (5)	2006-2010 (6)	2011-2015 (7)	2016-2019 (8)
<i>Surprise rank</i>	0.003*** (0.000)	0.001 (0.001)	0.003** (0.001)	0.002 (0.001)	0.003** (0.001)	0.001 (0.001)	0.002*** (0.001)	0.002 (0.001)
<i>N</i>	106,220	6,211	10,716	19,260	17,913	22,773	16,815	12,532
<i>R</i> ²	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000