Internet Appendix: "Replicating Anomalies" (for Online Publication Only)

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October 2018

Abstract

This Internet Appendix furnishes supplementary results for "Replicating Anomalies."

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Table A1 : Portfolio Weights on Microcaps and Investment Capacity, January 1967 to December 2016, 600 Months

The 6 categories, momentum, value-versus-growth, investment, profitability, intangibles, and trading frictions, are denoted by "Mom," "VvG," "Inv," "Prof," "Intan," and "Fric," respectively. In sorts, "Low" denotes the low deciles, and "High" the high deciles. "ABM-VW" is all-but-micro breakpoints and value-weighted returns, "ABM-EW" all-but-micro breakpoints and equal-weighted returns, "NYSE-VW-EM" NYSE breakpoints and value-weighted returns, in which the decile returns are calculated after microcaps are purged from the deciles, "FM-WLS-EM" Fama-MacBeth regressions with weighted least squares, excluding microcaps, "Micro-VW" microcap breakpoints and value-weighted returns, and "Micro-EW" microcap breakpoints and equal-weighted returns. For FM-WLS-EM, we winsorize the regressors at the 1–99% level each month, and standardize them before performing cross-sectional regressions. Standardizing a variable means subtracting its cross-sectional mean and then dividing by its cross-sectional standard deviation. We separate each zero-investment slope portfolio into two: "Low" is the short portfolio with negative weights on individual stocks, and "High" the long portfolio with positive weights on individual stocks. To ease comparison with the results from sorts, we scale the long and short portfolios to make their total weights sum up to 1 and -1, respectively. In Panel A, we calculate the time series average of weights on microcaps for the low and high portfolios of each anomaly, and report the average across all the anomalies in a given category. In Panel B, the investment capacity of a portfolio is $\min_i\{\text{Me}_i/w_i\}$, in which Me_i is stock i's market equity, and w_i its weight. For the low and high portfolios of each anomaly, we calculate the investment capacity as a fraction of aggregate market cap at each month, take its time series average, and report the average across all the anomalies in a given category. In Panel C, we calculate the investment capacity for the low and high portfolios of each anomaly in terms of billions of dollars at the end of December 2016, and report the average across all the anomalies in a given category.

	Low							High						
	All	Mom	VvG	Inv	Prof	Intan	Fric	All	Mom	VvG	Inv	Prof	Intan	Fric
	Panel A: Portfolio weights allocated to microcaps (in %)													
ABM-VW	0.43	0.41	0.28	0.45	0.56	0.24	0.61	0.62	0.22	0.32	0.62	0.34	0.83	1.05
ABM-EW	3.52	3.43	3.55	5.08	4.69	2.87	2.74	4.08	2.34	3.49	6.28	3.43	4.56	4.64
NYSE-VW-EM	0.39	0.45	0.25	0.49	0.55	0.24	0.44	0.65	0.21	0.37	0.53	0.36	0.94	1.06
FM-WLS-EM	0.21	0.27	0.16	0.24	0.28	0.15	0.20	0.40	0.16	0.24	0.46	0.20	0.46	0.69
Micro-VW	91.35	93.93	89.75	88.34	91.73	89.89	93.21	91.45	91.73	91.47	86.41	90.37	91.56	93.79
Micro-EW	97.37	98.38	96.77	97.29	97.90	96.53	97.68	97.52	97.24	97.80	96.23	97.15	97.57	98.18
	Panel B: Investment capacity as a fraction of the aggregate market capitalization (in %)													
ABM-VW	9.63	6.10	8.13	6.37	7.31	9.29	15.73	7.26	7.76	5.98	5.07	8.25	7.35	7.80
ABM-EW	0.63	0.58	0.47	0.38	0.48	0.63	0.98	0.56	0.62	0.46	0.35	0.50	0.43	0.85
NYSE-VW-EM	10.44	5.69	12.81	5.63	8.13	9.59	15.78	8.10	8.75	5.39	7.13	10.80	8.23	7.73
FM-WLS-EM	18.12	11.43	21.81	11.27	12.93	18.60	25.18	7.75	11.27	6.11	4.68	7.40	8.23	7.82
Micro-VW	0.21	0.19	0.19	0.17	0.18	0.22	0.29	0.19	0.20	0.14	0.22	0.22	0.15	0.24
Micro-EW	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.02
	Panel C: Investment capacity at the end of December 2016 (in billions of dollars)													
ABM-VW	1,927.44	1,204.63	1,406.59	1,407.48	1,609.09	2,058.72	2,995.28	1,447.83	1,210.50	1,050.97	1,160.69	1,816.68	1,340.78	1,775.15
ABM-EW	101.89	84.61	68.53	62.04	75.79	117.91	153.46	83.99	93.33	72.85	35.83	69.94	64.31	134.43
NYSE-VW-EM	1,939.97	1,170.02	2,024.92	1,302.55	1,699.15	1,833.76	2,846.65	1,527.63	1,301.53	876.74	1,666.25	2,374.34	1,506.36	1,405.90
FM-WLS-EM	3,214.73	2,103.09	3,944.83	2,012.51	2,469.03	3,798.09	3,795.57	1,397.18	1,812.06	958.67	883.65	1,430.27	1,606.56	1,422.40
Micro-VW	21.35	20.76	16.58	16.67	16.67	22.25	29.40	18.82	18.91	13.06	20.46	23.01	15.13	22.44
Micor-EW	1.16	0.53	0.84	0.25	0.54	1.46	2.23	0.66	0.64	0.45	0.45	0.77	0.58	0.89

Table A2 : The Numbers of Replicated Anomalies from Different Procedures and Absolute t-cutoffs, January 1967–December 2016, 600 Months

The 6 categories of anomalies, momentum, value-versus-growth, investment, profitability, intangibles, and trading frictions, are denoted by "Mom," "VvG," "Inv," "Prof," "Intan," and "Fric," respectively. For portfolio sorts, "NYSE-VW" and "NYSE-EW" denote NYSE breakpoints with value- and equal-weighted returns, "All-VW" and "All-EW" NYSE-Amex-NASDAQ breakpoints with value- and equal-weighted returns, respectively. "NYSE-VW-SS" denotes NYSE breakpoints and value-weighted returns in the shorter samples in the original studies, and "All-VW-SS" NYSE-Amex-NASDAQ breakpoints and value-weighted returns in the shorter, original samples. For univariate Fama-MacBeth regressions, "FM-WLS" denotes weighted least squares with the market equity as weights, "FM-OLS" ordinary least squares, and "FM-WLS-SS" weighted least squares in the shorter, original samples. We winsorize the regressors at the 1–99% level each month, and standardize them before performing cross-sectional regressions. Standardizing a variable means subtracting its cross-sectional mean and then dividing by its cross-sectional standard deviation. In Panels A, B, and C, we apply the absolute t-cutoffs of 1.96, 2.78, and 3.39, which correspond to single testing at the 5% significance level and multiple testing at the 5% and 1% levels, respectively.

	All	Mom	VvG	Inv	Prof	Intan	Fric
	Panel A: $\|t\| \geq 1.96$						
NYSE-VW	158	36	29	28	35	26	4
NYSE-EW	255	48	54	37	42	41	33
All-VW	184	39	27	26	47	28	17
All-EW	265	48	54	37	44	40	42
FM-WLS	152	32	21	28	38	20	13
FM-OLS	263	46	48	38	49	42	40
NYSE-VW-SS	157	33	24	27	42	22	9
All-VW-SS	166	34	23	22	46	18	23
FM-WLS-SS	141	32	12	25	42	19	11
	Panel B: $\|t\| \geq 2.78$						
NYSE-VW	81	28	7	19	14	11	2
NYSE-EW	211	44	44	36	34	31	22
All-VW	100	30	11	18	25	9	7
All-EW	217	42	45	36	33	33	28
FM-WLS	60	19	2	14	18	5	2
FM-OLS	219	42	42	37	34	35	29
NYSE-VW-SS	74	27	6	16	15	7	3
All-VW-SS	97	28	9	16	24	8	12
FM-WLS-SS	63	21	5	13	16	5	3
	Panel C: $\|t\| \geq 3.39$						
NYSE-VW	40	16	3	7	9	5	0
NYSE-EW	178	38	39	35	28	23	15
All-VW	49	20	4	12	8	5	0
All-EW	190	38	41	35	25	28	23
FM-WLS	30	12	1	7	8	2	0
FM-OLS	185	36	38	36	28	28	19
NYSE-VW-SS	35	16	1	7	5	5	1
All-VW-SS	57	21	3	12	11	5	5
FM-WLS-SS	29	12	0	6	6	4	1

Table A3 : Further Results on the Numbers of Replicated Anomalies based on Different Procedures and Absolute t-cutoffs, January 1967–December 2016, 600 Months

The 6 categories, momentum, value-versus-growth, investment, profitability, intangibles, and trading frictions, are denoted by "Mom," "VvG," "Inv," "Prof," "Intan," and "Fric," respectively. "ABM-VW" and "ABM-EW" denote all-but-micro breakpoints with value- and equal-weighted returns; "NYSE-VW-EM" NYSE breakpoints and value-weighted returns, excluding microcaps after forming deciles but before calculating decile returns; "Micro-VW" microcaps breakpoints and value-weighted returns; as well as "Micro-EW" microcaps breakpoints and equal-weighted returns. At the portfolio formation, we exclude microcaps for ABM-VW and ABM-EW, and include only microcaps for Micro-VW and Micro-EW. "NYSE-EW-SS" denotes NYSE breakpoints and "All-EW-SS" NYSE-Amex-NASDAQ breakpoints, both with equal-weighted returns in the shorter samples in the original studies, and "FM-OLS-SS" Fama-MacBeth regressions with ordinary least squares in the shorter, original samples. "FM-WLS-EM" denotes Fama-MacBeth regressions with weighted least squares, excluding microcaps. We winsorize the regressors at the 1–99% level each month, and standardize them before performing cross-sectional regressions. Standardizing a variable means subtracting its cross-sectional mean and then dividing by its cross-sectional standard deviation. In Panels A, B, and C, we apply the absolute t-cutoffs of 1.96, 2.78, and 3.39, which correspond to single testing at the 5% significance level and multiple testing at the 5% and 1% levels, respectively.

	All	Mom	VvG	Inv	Prof	Intan	Fric
	Panel A: $\|t\| \geq 1.96$						
ABM-VW	142	37	14	28	28	23	12
ABM-EW	217	47	37	36	46	29	22
NYSE-VW-EM	138	32	19	26	27	26	8
FM-WLS-EM	123	27	18	26	27	18	7
Micro-VW	288	55	45	30	66	55	37
Micro-EW	283	50	52	36	55	46	44
NYSE-EW-SS	247	48	49	37	44	36	33
All-EW-SS	257	48	50	36	42	42	39
FM-OLS-SS	258	47	44	36	48	42	41
	Panel B: $\|t\| \geq 2.78$						
ABM-VW	63	22	3	15	13	6	4
ABM-EW	140	37	18	34	32	16	3
NYSE-VW-EM	62	22	5	13	12	8	2
FM-WLS-EM	42	13	2	11	10	4	2
Micro-VW	224	50	34	28	54	38	20
Micro-EW	230	43	43	34	41	33	36
NYSE-EW-SS	189	44	33	33	34	28	17
All-EW-SS	198	43	35	35	31	30	24
FM-OLS-SS	210	40	36	35	39	32	28
	Panel C: $\|t\| \geq 3.39$						
ABM-VW	24	9	1	5	5	3	1
ABM-EW	99	28	7	28	21	13	2
NYSE-VW-EM	23	11	1	4	3	4	0
FM-WLS-EM	19	7	1	6	3	2	0
Micro-VW	176	50	24	25	43	23	11
Micro-EW	193	42	37	30	29	28	27
NYSE-EW-SS	153	36	28	32	25	20	12
All-EW-SS	157	36	29	33	23	20	16
FM-OLS-SS	165	36	28	32	26	24	19

Table A4 : Average Returns of the High-minus-low Deciles, the Fama-MacBeth Slopes, and their Absolute t-values, 452 Anomalies, January 1967–December 2016, 600 Months

"ABM-VW" denotes all-but-micro breakpoints and value-weighted returns; "ABM-EW" all-but-micro breakpoints and equal-weighted returns; "NYSE-VW-EM" NYSE breakpoints and value-weighted returns, excluding microcaps after forming deciles but before calculating decile returns; "FM-WLS-EM" Fama-MacBeth regressions with weighted least squares, excluding microcaps; "Micro-VW" microcaps breakpoints and value-weighted returns; as well as "Micro-EW" microcaps breakpoints and equal-weighted returns. For FM-WLS-EM, we winsorize the regressors at the 1–99% level each month, and standardize them before performing cross-sectional regressions. Standardizing a variable means subtracting its cross-sectional mean and then dividing by its cross-sectional standard deviation. The superscripts, ^{a}, ^{b}, and ^{c}, indicate absolute t-values exceeding the thresholds of 1.96, 2.78, and 3.39, respectively. Table 3 in the main text describes the symbols of anomalies, and Appendix A details variable definitions and portfolio construction.

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Panel A: Momentum												
Sue1	0.42	3.23^b	0.80	6.21^c	0.43	3.25^b	0.11	3.45^c	1.77	11.95^c	1.98	14.55^c
Sue6	0.15	1.33	0.37	3.38^b	0.15	1.29	0.06	1.78	1.02	8.26^c	1.06	8.68^c
Sue12	0.07	0.66	0.16	1.66	0.07	0.67	0.02	0.71	0.45	4.38^c	0.44	4.04^c
Abr1	0.70	4.40^c	0.84	7.88^c	0.64	4.76^c	0.19	4.60^c	1.87	12.87^c	1.83	13.85^c
Abr6	0.29	2.56^a	0.44	6.04^c	0.27	2.76^a	0.07	2.40^a	1.10	11.94^c	1.05	10.93^c
Abr12	0.23	2.40^a	0.30	5.28^c	0.20	2.50^a	0.06	2.32^a	0.73	9.75^c	0.65	7.85^c
Re1	0.53	2.57^a	0.72	3.93^c	0.66	2.71^a	0.17	2.43^a	1.98	7.94^c	1.92	9.07^c
Re6	0.39	2.16^a	0.42	2.67^a	0.42	1.94	0.11	1.80	1.27	5.95^c	1.22	6.95^c
Re12	0.21	1.30	0.24	1.92	0.22	1.20	0.06	1.11	0.64	3.46^c	0.70	3.98^c
$R^6 1$	0.76	2.67^a	1.03	3.87^c	0.52	1.78	0.14	1.58	1.90	6.01^c	0.60	1.89
$R^6 6$	0.87	3.61^c	0.88	3.83^c	0.75	3.18^b	0.22	2.70^a	1.73	6.45^c	0.64	2.28^a
$R^6 12$	0.60	2.92^b	0.54	2.83^b	0.51	2.67^a	0.15	2.04^a	1.02	4.80^c	0.19	0.79
$R^{11} 1$	1.08	3.57^c	1.19	4.24^c	1.07	3.62^c	0.29	2.94^b	2.05	5.75^c	0.73	2.07^a
$R^{11} 6$	0.76	2.80^b	0.73	2.85^b	0.74	2.84^b	0.21	2.26^a	1.49	4.94^c	0.36	1.14
$R^{11} 12$	0.40	1.71	0.29	1.34	0.40	1.76	0.11	1.39	0.67	2.77^a	−0.17	0.62
Im1	0.64	2.61^a	0.98	4.33^c	0.64	2.61^a	0.11	1.57	1.66	5.81^c	1.78	6.41^c
Im6	0.55	2.70^a	0.61	3.19^b	0.55	2.73^a	0.09	1.51	1.16	5.21^c	1.19	5.57^c
Im12	0.61	3.38^b	0.63	3.70^c	0.61	3.38^b	0.08	1.54	0.84	4.52^c	0.86	4.79^c
Rs1	0.29	2.00^a	0.56	4.51^c	0.30	2.13^a	0.07	1.82	1.37	8.45^c	1.57	9.33^c
Rs6	0.16	1.12	0.27	2.40^a	0.14	1.03	0.04	1.17	0.85	6.21^c	0.88	5.94^c
Rs12	0.09	0.65	0.10	0.95	0.06	0.49	0.02	0.66	0.48	3.82^c	0.38	2.68^a
Tes1	0.27	1.64	0.28	2.34^a	0.20	1.23	0.08	1.78	0.98	7.10^c	1.19	9.28^c
Tes6	0.28	1.83	0.21	1.88	0.24	1.64	0.08	1.72	0.53	4.85^c	0.61	6.32^c
Tes12	0.16	1.16	0.10	0.97	0.16	1.18	0.05	1.06	0.26	2.74^a	0.27	3.10^b
dEf1	1.02	4.70^c	1.12	5.95^c	0.86	3.83^c	0.23	3.66^c	2.18	8.08^c	2.00	8.37^c
dEf6	0.55	3.28^b	0.56	3.90^c	0.51	2.85^b	0.13	2.65^a	1.20	8.08^c	1.18	8.26^c
dEf12	0.30	2.21^a	0.35	3.09^b	0.31	2.15^a	0.08	1.99^a	0.71	6.29^c	0.68	6.04^c
Nei1	0.31	2.80^b	0.45	4.21^c	0.31	2.80^b	0.08	2.14^a	1.23	8.49^c	1.27	8.24^c
Nei6	0.18	1.63	0.23	2.28^a	0.18	1.63	0.04	1.12	0.68	4.86^c	0.66	4.48^c
Nei12	0.11	1.03	0.12	1.24	0.11	1.03	0.02	0.55	0.33	2.44^a	0.29	2.07^a
52w1	0.12	0.36	0.32	1.04	0.10	0.32	0.04	0.44	0.72	1.65	−0.92	2.01^a
52w6	0.57	2.17^a	0.72	2.63^a	0.49	1.77	0.14	1.77	1.88	5.24^c	0.41	1.05
52w12	0.45	1.99^a	0.58	2.41^a	0.41	1.73	0.12	1.81	1.32	4.37^c	0.20	0.55
$\epsilon^6 1$	0.20	1.16	0.42	2.89^b	0.16	0.98	0.03	0.62	1.28	8.57^c	1.09	7.31^c
$\epsilon^6 6$	0.45	3.68^c	0.55	4.50^c	0.43	3.58^c	0.11	3.35^b	1.05	8.96^c	0.83	7.28^c
$\epsilon^6 12$	0.37	3.78^c	0.38	3.79^c	0.36	3.75^c	0.09	3.31^b	0.64	6.86^c	0.53	5.58^c

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
$\epsilon^{11}1$	0.58	3.42^c	0.87	5.54^c	0.58	3.51^c	0.18	3.89^c	1.64	10.26^c	1.54	10.07^c
$\epsilon^{11}6$	0.48	3.54^c	0.57	4.22^c	0.49	3.69^c	0.14	3.38^b	0.98	7.55^c	0.86	6.80^c
$\epsilon^{11}12$	0.32	2.69^a	0.31	2.87^b	0.33	2.83^b	0.08	2.41^a	0.50	4.76^c	0.40	3.72^c
Sm1	0.52	2.31^a	0.84	4.34^c	0.52	2.28^a	0.15	2.27^a	1.25	5.69^c	1.72	6.36^c
Sm6	0.08	0.79	0.29	2.86^b	0.08	0.83	0.01	0.34	0.58	5.24^c	0.67	5.07^c
Sm12	0.12	1.56	0.25	3.59^c	0.14	1.83	0.04	1.80	0.48	5.46^c	0.61	6.55^c
Ilr1	0.60	2.83^b	0.85	4.25^c	0.61	2.90^b	0.19	3.24^b	1.53	6.32^c	1.52	6.72^c
Ilr6	0.30	2.89^b	0.45	4.52^c	0.30	2.88^b	0.03	1.06	0.70	5.31^c	0.71	5.86^c
Ilr12	0.33	3.99^c	0.36	4.54^c	0.33	3.93^c	0.06	2.61^a	0.55	5.65^c	0.58	6.28^c
Ile1	0.58	3.37^b	0.74	4.56^c	0.60	3.49^c	0.06	1.33	0.54	2.16^a	0.55	2.07^a
Ile6	0.21	1.38	0.28	2.01^a	0.20	1.35	0.03	0.63	0.41	2.08^a	0.41	1.97^a
Ile12	0.07	0.54	0.10	0.77	0.07	0.51	0.00	0.02	0.20	1.19	0.18	0.99
Cm1	0.71	3.34^b	0.52	2.87^b	0.76	3.64^c	0.23	2.92^b	0.93	4.73^c	1.05	5.75^c
Cm6	0.20	1.78	0.19	2.42^a	0.14	1.43	0.07	1.66	0.48	5.16^c	0.55	7.32^c
Cm12	0.16	2.13^a	0.17	2.74^a	0.13	1.93	0.06	2.21^a	0.38	5.11^c	0.44	7.14^c
Sim1	0.68	3.17^b	0.98	4.73^c	0.76	3.45^c	0.22	3.95^c	1.48	5.95^c	1.43	5.63^c
Sim6	0.08	0.76	0.22	1.94	0.08	0.80	0.02	0.86	0.59	4.02^c	0.68	4.88^c
Sim12	0.11	1.45	0.18	2.23^a	0.10	1.32	0.04	1.83	0.39	3.94^c	0.45	4.86^c
Cim1	0.66	2.95^b	0.99	4.24^c	0.72	3.14^b	0.19	3.47^c	1.45	6.18^c	1.52	7.04^c
Cim6	0.24	2.25^a	0.37	3.56^c	0.28	2.58^a	0.07	2.77^a	0.72	6.11^c	0.75	6.27^c
Cim12	0.25	3.20^b	0.31	4.09^c	0.26	3.28^b	0.07	3.83^c	0.55	6.64^c	0.59	7.31^c
Panel B: Value-versus-growth												
Bm	0.39	1.81	0.70	3.15^b	0.45	2.17^a	0.12	1.73	1.23	4.51^c	1.49	6.18^c
Bmj	0.31	1.34	0.52	2.15^a	0.40	1.80	0.10	1.37	0.95	3.39^b	1.45	6.01^c
Bm^q1	0.23	1.01	0.38	1.45	0.35	1.39	0.11	1.54	1.16	3.43^c	2.39	7.83^c
Bm^q6	0.22	0.95	0.35	1.38	0.37	1.56	0.09	1.26	0.72	2.38^a	1.51	5.74^c
Bm^q12	0.29	1.32	0.51	2.16^a	0.42	1.97^a	0.10	1.45	0.84	3.00^b	1.44	5.79^c
Dm	0.36	1.65	0.37	1.79	0.27	1.44	0.07	1.23	0.48	1.92	0.27	1.03
Dm^q1	0.32	1.22	0.35	1.35	0.30	1.28	0.09	1.17	−0.11	0.31	0.38	1.20
Dm^q6	0.36	1.42	0.36	1.49	0.27	1.23	0.09	1.19	−0.04	0.12	0.03	0.12
Dm^q12	0.37	1.51	0.38	1.61	0.31	1.49	0.10	1.39	0.21	0.76	0.13	0.46
Am	0.39	1.77	0.61	2.48^a	0.25	1.24	0.10	1.53	1.03	3.79^c	1.03	3.85^c
Am^q1	0.22	0.86	0.36	1.16	0.31	1.16	0.12	1.58	0.64	1.63	1.73	4.62^c
Am^q6	0.24	0.96	0.33	1.10	0.37	1.46	0.11	1.43	0.47	1.32	1.01	3.12^b
Am^q12	0.29	1.21	0.41	1.48	0.35	1.49	0.10	1.41	0.63	1.98^a	0.98	3.29^b
Rev1	−0.32	1.47	−0.61	3.50^c	−0.43	1.94	−0.05	0.75	−0.80	2.90^b	−1.33	4.39^c
Rev6	−0.34	1.62	−0.52	3.11^b	−0.42	2.00^a	−0.04	0.67	−0.66	2.68^a	−1.09	4.04^c
Rev12	−0.31	1.58	−0.49	3.06^b	−0.38	1.98^a	−0.05	0.81	−0.50	2.30^a	−1.00	3.98^c
Ep	0.45	2.07^a	0.59	3.13^b	0.36	1.84	0.14	2.07^a	0.71	3.75^c	0.59	3.57^c
Ep^q1	0.82	3.84^c	1.10	5.49^c	0.86	4.54^c	0.26	3.45^c	1.76	9.40^c	2.09	11.69^c
Ep^q6	0.54	2.75^a	0.76	4.38^c	0.54	3.09^b	0.19	2.72^a	1.10	6.94^c	1.17	8.04^c
Ep^q12	0.41	2.15^a	0.50	3.11^b	0.39	2.31^a	0.15	2.18^a	0.69	4.93^c	0.71	5.78^c
Efp1	0.38	1.34	0.50	1.66	0.39	1.67	0.10	1.03	0.62	2.32^a	0.52	2.05^a
Efp6	0.32	1.15	0.34	1.19	0.37	1.57	0.08	0.88	0.19	0.77	0.01	0.04
Efp12	0.28	1.02	0.35	1.31	0.33	1.45	0.08	0.91	0.13	0.57	−0.08	0.37
Cp	0.43	1.92	0.71	3.21^b	0.36	1.79	0.13	1.96	1.01	4.48^c	0.95	4.76^c
Cp^q1	0.54	2.37^a	0.79	3.41^c	0.57	2.75^a	0.21	2.85^b	1.02	4.07^c	1.63	7.04^c
Cp^q6	0.37	1.72	0.49	2.25^a	0.45	2.27^a	0.17	2.42^a	0.75	3.26^b	1.06	5.35^c
Cp^q12	0.35	1.68	0.51	2.49^a	0.36	1.90	0.15	2.21^a	0.68	3.30^b	0.84	4.60^c

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Dp	0.16	0.65	0.17	0.87	0.25	1.03	0.08	1.13	−0.10	0.40	0.05	0.22
Dp^{q}1	0.26	1.04	0.21	1.00	0.27	1.09	0.13	1.80	0.07	0.34	0.29	1.58
Dp^{q}6	0.17	0.68	0.12	0.57	0.19	0.79	0.09	1.31	−0.05	0.26	0.11	0.59
Dp^{q}12	0.16	0.66	0.14	0.74	0.20	0.88	0.09	1.31	−0.02	0.08	0.22	1.24
Op	0.39	1.78	0.38	2.02^{a}	0.36	1.72	0.14	2.06^{a}	0.84	4.23^{c}	0.77	4.10^{c}
Op^{q}1	0.19	0.83	0.36	2.15^{a}	0.10	0.44	0.13	1.94	0.38	1.73	0.48	2.16^{a}
Op^{q}6	0.12	0.60	0.33	2.28^{a}	0.10	0.55	0.08	1.20	0.26	1.44	0.43	2.39^{a}
Op^{q}12	0.17	0.84	0.27	2.02^{a}	0.16	0.83	0.08	1.22	0.25	1.57	0.39	2.49^{a}
Nop	0.65	3.26^{b}	0.64	3.65^{c}	0.61	3.26^{b}	0.16	2.06^{a}	0.92	4.30^{c}	0.92	4.37^{c}
Nop^{q}1	0.19	0.81	0.41	1.71	0.15	0.67	0.08	0.97	1.03	3.66^{c}	0.80	2.79^{b}
Nop^{q}6	0.22	0.98	0.43	1.97^{a}	0.20	0.95	0.08	1.04	1.10	4.22^{c}	1.08	4.17^{c}
Nop^{q}12	0.31	1.45	0.43	2.05^{a}	0.27	1.37	0.09	1.18	0.99	4.20^{c}	1.04	4.39^{c}
Sr	−0.10	0.50	−0.27	1.84	−0.19	1.03	−0.02	0.28	−0.06	0.34	−0.51	3.40^{c}
Sg	−0.22	1.21	−0.42	3.09^{b}	−0.02	0.11	−0.09	1.35	−0.53	3.59^{c}	−1.07	6.79^{c}
Em	−0.59	2.66^{a}	−0.77	3.69^{c}	−0.48	2.48^{a}	−0.14	1.93	−1.00	5.12^{c}	−0.94	5.68^{c}
Em^{q}1	−0.74	2.55^{a}	−0.93	3.57^{c}	−0.63	2.82^{b}	−0.17	2.09^{a}	−1.87	8.42^{c}	−2.26	11.55^{c}
Em^{q}6	−0.47	1.78	−0.52	2.21^{a}	−0.38	1.77	−0.10	1.36	−1.04	5.52^{c}	−1.35	9.13^{c}
Em^{q}12	−0.47	1.89	−0.53	2.42^{a}	−0.39	1.89	−0.10	1.30	−0.87	5.19^{c}	−1.05	7.86^{c}
Sp	0.56	2.27^{a}	0.76	2.82^{b}	0.40	1.89	0.16	2.17^{a}	1.11	3.73^{c}	0.89	3.25^{b}
Sp^{q}1	0.57	2.21^{a}	0.78	2.62^{a}	0.53	2.14^{a}	0.20	2.33^{a}	1.22	3.70^{c}	1.77	5.88^{c}
Sp^{q}6	0.49	1.95	0.68	2.44^{a}	0.52	2.24^{a}	0.18	2.12^{a}	1.02	3.27^{b}	1.19	4.31^{c}
Sp^{q}12	0.48	1.96	0.64	2.42^{a}	0.47	2.20^{a}	0.17	2.07^{a}	0.88	3.02^{b}	0.97	3.71^{c}
Ocp	0.62	2.74^{a}	0.62	2.87^{b}	0.65	2.91^{b}	0.18	2.57^{a}	0.80	3.51^{c}	0.84	4.06^{c}
Ocp^{q}1	0.58	2.12^{a}	0.60	2.09^{a}	0.62	2.23^{a}	0.19	2.07^{a}	0.34	0.97	0.93	2.97^{b}
Ocp^{q}6	0.48	1.89	0.37	1.43	0.44	1.72	0.12	1.44	0.33	1.00	0.62	2.12^{a}
Ocp^{q}12	0.45	1.87	0.42	1.74	0.33	1.41	0.11	1.34	0.32	1.13	0.56	2.18^{a}
Ir	−0.41	1.93	−0.60	3.13^{b}	−0.43	2.02^{a}	−0.12	1.79	−0.79	3.44^{c}	−1.17	5.37^{c}
Vhp	0.48	2.31^{a}	0.50	2.76^{a}	0.31	1.68	0.14	2.22	0.53	2.75^{a}	0.30	1.89
Vfp	0.39	1.45	0.29	1.15	0.47	2.14^{a}	0.11	1.27	0.07	0.25	−0.18	0.67
Ebp	0.34	1.53	0.57	2.35^{a}	0.32	1.54	0.10	1.34	0.98	4.01^{c}	1.25	5.49^{c}
Ebp^{q}1	0.18	0.60	0.31	0.95	0.12	0.43	0.08	0.85	0.99	3.24^{b}	2.09	7.36^{c}
Ebp^{q}6	0.18	0.61	0.33	1.05	0.15	0.60	0.06	0.72	0.61	2.17^{a}	1.40	5.50^{c}
Ebp^{q}12	0.29	1.06	0.43	1.46	0.24	0.99	0.08	0.95	0.69	2.58^{a}	1.30	5.28^{c}
Ndp	0.25	1.49	0.29	1.87	0.24	1.33	0.08	1.57	0.53	2.12^{a}	0.40	1.61
Ndp^{q}1	0.15	0.70	0.20	0.89	0.17	0.72	0.07	1.01	−0.38	1.00	0.27	0.71
Ndp^{q}6	0.18	0.92	0.22	1.07	0.16	0.72	0.07	1.01	−0.23	0.63	−0.05	0.13
Ndp^{q}12	0.21	1.12	0.22	1.15	0.24	1.15	0.08	1.22	0.14	0.46	0.13	0.39
Dur	−0.65	2.80^{b}	−0.65	3.00^{b}	−0.32	1.64	−0.17	2.22^{a}	−0.93	3.25^{b}	−0.79	3.09^{b}
Ltg	−0.07	0.17	−0.41	1.02	−0.56	1.78	−0.04	0.30	0.15	0.43	−0.04	0.30
Ltg1	−0.14	0.31	−0.50	1.16	0.04	0.11	−0.04	0.29	−0.69	2.16^{a}	−0.66	2.21^{a}
Ltg6	−0.19	0.41	−0.51	1.21	0.03	0.09	−0.06	0.40	−0.86	2.89^{b}	−0.74	2.57^{a}
Ltg12	−0.18	0.40	−0.50	1.21	0.04	0.13	−0.06	0.42	−0.71	2.51^{a}	−0.66	2.28^{a}
Panel C: Investment												
Aci	−0.31	2.17^{a}	−0.30	3.68^{c}	−0.29	1.99^{a}	−0.08	2.11^{a}	−0.34	2.83^{b}	−0.41	3.61^{c}
I/A	−0.43	2.57^{a}	−0.68	4.74^{c}	−0.42	2.60^{a}	−0.16	2.65^{a}	−0.72	4.03^{c}	−1.44	7.13^{c}
Ia^{q}1	−0.44	2.11^{a}	−0.81	4.61^{c}	−0.27	1.44	−0.12	1.83	−0.81	3.47^{c}	−1.51	5.81^{c}
Ia^{q}6	−0.56	2.88^{b}	−0.83	5.27^{c}	−0.44	2.56^{a}	−0.17	2.61^{a}	−0.94	4.28^{c}	−1.62	6.49^{c}
Ia^{q}12	−0.55	3.06^{b}	−0.77	5.57^{c}	−0.44	2.71^{a}	−0.17	2.86^{b}	−0.79	3.97^{c}	−1.53	6.68^{c}
dPia	−0.41	3.05^{b}	−0.62	5.10^{c}	−0.45	3.34^{b}	−0.11	2.52^{a}	−0.85	5.87^{c}	−1.17	7.98^{c}
Noa	−0.45	2.83^{b}	−0.56	3.50^{c}	−0.43	3.15^{b}	−0.17	4.74^{c}	−0.82	3.67^{c}	−1.24	5.66^{c}

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
dNoa	−0.54	3.86^{c}	−0.73	5.89^{c}	−0.52	3.79^{c}	−0.19	4.13^{c}	−0.86	5.41^{c}	−1.34	8.05^{c}
dLno	−0.42	3.12^{b}	−0.57	5.19^{c}	−0.36	2.75^{a}	−0.10	2.91^{b}	−0.70	5.25^{c}	−1.00	6.60^{c}
Ig	−0.33	2.36^{a}	−0.43	4.66^{c}	−0.45	3.44^{c}	−0.13	2.33^{a}	−0.56	4.49^{c}	−0.79	6.65^{c}
2Ig	−0.39	2.49^{a}	−0.46	4.14^{c}	−0.32	2.33^{a}	−0.12	2.17^{a}	−0.38	3.08^{b}	−0.65	5.27^{c}
3Ig	−0.19	1.15	−0.35	3.12^{b}	−0.12	0.83	−0.09	1.56	−0.22	1.50	−0.64	4.71^{c}
Nsi	−0.63	4.17^{c}	−0.82	5.69^{c}	−0.61	4.19^{c}	−0.14	3.90^{c}	−1.10	5.35^{c}	−1.21	6.16^{c}
dIi	−0.29	2.15^{a}	−0.46	4.85^{c}	−0.28	2.43^{a}	−0.11	2.22^{a}	−0.21	1.75	−0.54	5.41^{c}
Cei	−0.53	2.96^{b}	−0.67	4.14^{c}	−0.55	3.21^{b}	−0.17	3.01^{b}	−0.93	3.61^{c}	−0.83	3.32^{b}
Cdi	−0.01	0.10	−0.23	2.89^{b}	0.06	0.50	−0.03	0.70	0.02	0.08	−0.41	2.62^{a}
Ivg	−0.34	2.20^{a}	−0.48	4.31^{c}	−0.31	2.21^{a}	−0.11	2.41^{a}	−0.64	4.24^{c}	−0.91	5.81^{c}
Ivc	−0.39	2.83^{b}	−0.49	4.33^{c}	−0.43	3.12^{b}	−0.10	2.16^{a}	−0.63	3.66^{c}	−0.93	6.12^{c}
Oa	−0.21	1.41	−0.26	2.17^{a}	−0.28	2.20^{a}	−0.08	1.64	−0.37	2.29^{a}	−0.52	3.28^{b}
Ta	−0.20	1.29	−0.43	3.83^{c}	−0.21	1.50	−0.09	1.62	−0.24	1.22	−0.50	2.61^{a}
dWc	−0.53	3.62^{c}	−0.33	3.14^{b}	−0.42	3.17^{b}	−0.14	2.82^{b}	−0.38	2.83^{b}	−0.73	5.51^{c}
dCoa	−0.34	2.19^{a}	−0.53	4.29^{c}	−0.27	1.93	−0.12	2.01^{a}	−0.84	5.20^{c}	−1.31	8.72^{c}
dCol	−0.08	0.47	−0.42	3.45^{c}	−0.10	0.66	−0.02	0.42	−0.66	5.38^{c}	−1.03	8.46^{c}
dNco	−0.50	3.99^{c}	−0.67	5.70^{c}	−0.37	3.01^{b}	−0.15	3.73^{c}	−0.72	5.45^{c}	−1.10	7.52^{c}
dNca	−0.40	3.36^{b}	−0.65	5.43^{c}	−0.37	2.97^{b}	−0.14	3.51^{c}	−0.75	5.48^{c}	−1.10	7.10^{c}
dNcl	−0.03	0.23	−0.15	1.73	−0.07	0.61	−0.03	1.01	−0.05	0.47	−0.12	1.16
dFin	0.32	2.32^{a}	0.31	2.82^{b}	0.26	2.14^{a}	0.09	2.11^{a}	0.49	4.03^{c}	0.76	6.88^{c}
dSti	−0.17	0.82	0.01	0.12	0.19	1.26	0.01	0.17	0.10	0.60	−0.16	0.83
dLti	−0.15	0.87	−0.29	2.54^{a}	−0.22	1.50	−0.05	1.03	−0.22	1.38	−0.47	2.85^{b}
dFnl	−0.35	3.12^{b}	−0.46	5.33^{c}	−0.29	2.68^{a}	−0.13	3.71^{c}	−0.54	4.64^{c}	−1.05	9.41^{c}
dBe	−0.51	2.76^{a}	−0.62	4.40^{c}	−0.31	1.85	−0.16	2.33^{a}	−0.32	1.82	−0.76	4.07^{c}
Dac	−0.41	2.74^{a}	−0.31	3.17^{b}	−0.38	2.81^{b}	−0.11	2.33^{a}	−0.38	2.44^{a}	−0.41	2.85^{b}
Poa	−0.38	2.62^{a}	−0.41	3.79^{c}	−0.37	2.66^{a}	−0.05	1.39	−0.67	5.82^{c}	−0.75	6.94^{c}
Pta	−0.44	2.98^{b}	−0.47	4.75^{c}	−0.41	2.92^{b}	−0.12	3.37^{b}	−0.40	3.72^{c}	−0.39	4.29^{c}
Pda	−0.40	3.39^{c}	−0.33	4.50^{c}	−0.47	3.62^{c}	−0.07	2.40^{a}	−0.51	4.88^{c}	−0.38	3.53^{c}
Nxf	−0.40	1.91	−0.64	3.82^{c}	−0.24	1.35	−0.11	1.77	−0.92	4.80^{c}	−1.20	6.46^{c}
Nef	−0.28	1.31	−0.53	2.84^{b}	−0.14	0.75	−0.09	1.28	−0.88	4.03^{c}	−0.90	3.91^{c}
Ndf	−0.27	2.07^{a}	−0.40	4.20^{c}	−0.27	2.12^{a}	−0.07	1.96^{a}	−0.53	4.36^{c}	−0.98	8.33^{c}
					Panel D: Profitability							
Roe1	0.59	2.77^{a}	0.95	4.57^{c}	0.61	2.79^{b}	0.15	2.41^{a}	1.97	7.76^{c}	2.00	7.75^{c}
Roe6	0.35	1.64	0.65	3.41^{c}	0.36	1.69	0.10	1.78	1.47	6.17^{c}	1.33	5.12^{c}
Roe12	0.20	1.03	0.35	1.88	0.20	1.01	0.07	1.25	0.89	3.97^{c}	0.72	2.94^{b}
dRoe1	0.66	4.84^{c}	0.83	6.40^{c}	0.70	5.03^{c}	0.18	4.46^{c}	1.54	10.23^{c}	1.84	11.93^{c}
dRoe6	0.29	2.64^{a}	0.40	3.77^{c}	0.33	2.78^{a}	0.09	2.53^{a}	0.96	8.21^{c}	1.01	8.03^{c}
dRoe12	0.20	1.97^{a}	0.21	2.25^{a}	0.23	2.19^{a}	0.07	2.07^{a}	0.40	4.01^{c}	0.48	4.37^{c}
Roa1	0.63	2.69^{a}	0.88	4.05^{c}	0.49	2.27^{a}	0.16	2.35^{a}	1.78	6.14^{c}	1.61	5.22^{c}
Roa6	0.40	1.72	0.61	3.01^{b}	0.32	1.52	0.11	1.78	1.43	5.48^{c}	1.05	3.46^{c}
Roa12	0.24	1.15	0.36	1.85	0.21	1.10	0.07	1.19	0.89	3.58^{c}	0.48	1.66
dRoa1	0.50	3.11^{b}	0.80	5.43^{c}	0.49	3.17^{b}	0.19	$4.4^{c}3$	1.51	8.99^{c}	1.70	10.52^{c}
dRoa6	0.25	1.69	0.37	2.92^{b}	0.23	1.61	0.10	2.59^{a}	0.85	6.56^{c}	0.84	6.39^{c}
dRoa12	0.16	1.29	0.20	1.86	0.15	1.26	0.07	1.94	0.34	3.34^{b}	0.32	2.85^{b}
Rna	0.10	0.53	0.24	1.53	0.13	0.69	0.04	0.75	0.58	2.21^{a}	0.00	0.00
$\text{Rna}^{q}1$	0.58	2.15^{a}	0.86	4.05^{c}	0.55	2.38^{a}	0.18	3.28^{b}	1.35	4.37^{c}	1.07	3.17^{b}
$\text{Rna}^{q}6$	0.46	1.93	0.58	2.90^{b}	0.34	1.63	0.14	2.59^{a}	1.15	3.90^{c}	0.79	2.49^{a}
$\text{Rna}^{q}12$	0.37	1.68	0.47	2.49^{a}	0.28	1.41	0.12	2.24^{a}	0.89	3.22^{b}	0.45	1.47

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Pm	−0.05	0.19	0.22	0.96	−0.01	0.05	0.07	1.04	0.61	2.13^{a}	0.18	0.64
Pm^{q}1	0.38	1.49	0.64	2.72^{a}	0.27	1.26	0.12	1.68	1.20	4.12^{c}	0.95	3.20^{b}
Pm^{q}6	0.22	0.98	0.31	1.45	0.09	0.44	0.07	1.02	1.11	4.24^{c}	0.72	2.55^{a}
Pm^{q}12	0.20	0.94	0.23	1.08	0.11	0.61	0.07	1.08	0.81	3.13^{b}	0.42	1.54
Ato	0.31	1.70	0.21	1.25	0.31	1.76	0.05	0.93	0.38	2.01^{a}	0.08	0.39
Ato^{q}1	0.76	3.94^{c}	0.74	4.34^{c}	0.59	3.24^{b}	0.16	3.49^{c}	1.20	5.91^{c}	1.18	6.45^{c}
Ato^{q}6	0.61	3.35^{b}	0.56	3.29^{b}	0.51	2.93^{b}	0.15	3.05^{b}	1.01	5.36^{c}	0.93	5.14^{c}
Ato^{q}12	0.50	2.83^{b}	0.46	2.64^{a}	0.41	2.45^{a}	0.13	2.68^{a}	0.78	4.20^{c}	0.65	3.56^{c}
Cto	0.29	1.77	0.37	2.10^{a}	0.25	1.49	0.05	1.13	0.40	1.64	−0.05	0.20
Cto^{q}1	0.54	2.59^{a}	0.79	3.67^{c}	0.40	2.21^{a}	0.12	2.60^{a}	1.02	4.10^{c}	0.92	3.89^{c}
Cto^{q}6	0.51	2.58^{a}	0.67	3.32^{b}	0.37	2.14^{a}	0.11	2.36^{a}	0.97	3.93^{c}	0.74	3.24^{b}
Cto^{q}12	0.44	2.35^{a}	0.54	2.78^{b}	0.34	2.00^{a}	0.09	2.02^{a}	0.69	2.79^{b}	0.47	2.07^{a}
Gpa	0.49	2.77^{a}	0.62	3.59^{c}	0.33	2.29^{a}	0.09	1.75	0.83	3.65^{c}	0.47	2.20^{a}
Gla	0.19	1.15	0.29	1.90	0.14	0.94	0.05	0.81	0.48	2.09^{a}	0.06	0.27
Gla^{q}1	0.53	2.98^{b}	0.79	4.42^{c}	0.45	3.03^{b}	0.14	2.63^{a}	1.23	4.96^{c}	0.97	3.93^{c}
Gla^{q}6	0.41	2.58^{a}	0.54	3.26^{b}	0.28	2.04^{a}	0.11	2.07^{a}	1.06	4.17^{c}	0.74	2.99^{b}
Gla^{q}12	0.37	2.47^{a}	0.48	3.00^{b}	0.25	1.85	0.10	1.84	0.78	3.00^{b}	0.43	1.70
Ope	0.19	0.80	0.49	2.29^{a}	0.21	1.01	0.08	1.53	0.96	3.56^{c}	0.46	1.63
Ole	0.16	0.76	0.21	1.17	0.05	0.29	0.04	0.81	0.85	3.26^{b}	0.37	1.33
Ole^{q}1	0.64	2.81^{b}	0.96	4.27^{c}	0.61	2.89^{b}	0.16	2.96^{b}	1.73	6.45^{c}	1.56	5.39^{c}
Ole^{q}6	0.43	1.97^{a}	0.53	2.54^{a}	0.40	2.05^{a}	0.12	2.54^{a}	1.36	5.39^{c}	1.14	4.18^{c}
Ole^{q}12	0.34	1.64	0.42	2.09^{a}	0.31	1.67	0.10	2.18^{a}	0.93	3.83^{c}	0.66	2.45^{a}
Opa	0.37	1.79	0.65	3.45^{c}	0.33	1.72	0.06	1.28	1.44	6.48^{c}	0.74	3.06^{b}
Ola	0.22	1.16	0.30	1.82	0.15	0.80	0.00	0.08	1.13	5.46^{c}	0.46	1.95
Ola^{q}1	0.64	2.81^{b}	1.02	4.93^{c}	0.61	2.89^{b}	0.17	2.88^{b}	2.26	9.17^{c}	1.73	6.18^{c}
Ola^{q}6	0.46	2.19^{a}	0.66	3.51^{c}	0.42	2.11^{a}	0.10	1.86	1.87	8.91^{c}	1.30	5.08^{c}
Ola^{q}12	0.44	2.21^{a}	0.57	3.12^{b}	0.39	2.14^{a}	0.09	1.74	1.44	7.44^{c}	0.88	3.65^{c}
Cop	0.70	3.75^{c}	0.77	5.11^{c}	0.62	3.58^{c}	0.11	2.14^{a}	1.52	8.17^{c}	1.14	5.94^{c}
Cla	0.56	3.09^{b}	0.64	4.38^{c}	0.54	3.25^{b}	0.07	1.25	1.47	8.12^{c}	1.06	5.27^{c}
Cla^{q}1	0.47	2.97^{b}	0.89	6.26^{c}	0.44	2.78^{a}	0.15	3.30^{b}	1.53	8.42^{c}	1.36	6.80^{c}
Cla^{q}6	0.49	3.63^{c}	0.71	5.67^{c}	0.44	3.33^{b}	0.12	2.93^{b}	1.30	8.72^{c}	1.20	7.06^{c}
Cla^{q}12	0.46	3.59^{c}	0.67	5.67^{c}	0.42	3.43^{c}	0.13	3.20^{b}	1.08	8.62^{c}	1.00	6.81^{c}
F	0.21	0.77	0.57	2.69^{a}	0.21	0.77	0.06	1.44	0.64	2.75^{a}	0.47	2.04^{a}
F^{q}1	0.44	1.94	0.91	3.90^{c}	0.44	1.94	0.10	2.19^{a}	1.64	5.83^{c}	1.78	6.61^{c}
F^{q}6	0.42	2.15^{a}	0.65	3.20^{b}	0.42	2.15^{a}	0.08	1.87	1.10	4.20^{c}	1.25	4.98^{c}
F^{q}12	0.33	1.90	0.50	2.65^{a}	0.33	1.90	0.05	1.44	0.75	2.96^{b}	0.82	3.33^{b}
Fp	−0.36	1.36	−0.39	1.51	−0.38	1.26	−0.11	1.39	−0.87	2.60^{a}	−0.57	1.59
Fp^{q}1	−0.45	1.39	−0.47	1.67	−0.33	0.98	−0.09	0.93	−1.45	3.82^{c}	−1.11	3.26^{b}
Fp^{q}6	−0.52	1.78	−0.56	2.07^{a}	−0.57	1.78	−0.12	1.46	−1.48	4.37^{c}	−1.02	3.02^{b}
Fp^{q}12	−0.27	1.05	−0.44	1.76	−0.33	1.13	−0.08	1.11	−0.94	2.91^{b}	−0.53	1.56
O	−0.09	0.48	−0.31	2.35^{a}	−0.05	0.27	−0.01	0.26	−0.84	3.29^{b}	−0.20	0.72
O^{q}1	−0.34	1.52	−0.34	1.98^{a}	−0.29	1.31	−0.09	1.32	−1.04	3.22^{b}	−0.38	1.03
O^{q}6	−0.19	0.89	−0.23	1.49	−0.16	0.75	−0.07	1.13	−0.86	2.73^{a}	−0.20	0.57
O^{q}12	−0.13	0.68	−0.23	1.56	−0.12	0.60	−0.07	1.05	−0.80	2.62^{a}	−0.18	0.53
Z	−0.01	0.03	−0.12	0.58	0.02	0.11	−0.05	0.65	−0.41	2.10^{a}	−0.60	3.03^{b}
Z^{q}1	−0.18	0.69	−0.12	0.49	−0.01	0.04	−0.03	0.32	0.12	0.43	−0.52	1.81
Z^{q}6	−0.18	0.70	−0.20	0.85	−0.03	0.15	−0.04	0.56	−0.14	0.58	−0.66	2.45^{a}
Z^{q}12	−0.14	0.57	−0.19	0.89	−0.08	0.41	−0.04	0.56	−0.20	0.87	−0.63	2.46^{a}
G	0.21	1.10	0.52	2.82^{b}	0.21	1.10	0.05	1.15	0.74	3.73^{c}	0.46	2.10^{a}

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Cr1	−0.15	0.42	−0.28	0.89	0.06	0.17	−0.01	0.18	−1.95	3.13^{b}	−2.72	4.06^{c}
Cr6	−0.17	0.49	−0.34	1.10	0.00	0.01	−0.02	0.19	−1.33	2.25^{a}	−2.41	3.72^{c}
Cr12	−0.18	0.55	−0.38	1.21	−0.01	0.03	−0.01	0.13	−0.77	1.45	−1.85	3.09^{b}
Tbi	0.14	1.05	0.13	1.31	0.13	0.98	0.04	1.28	0.26	2.03^{a}	0.14	1.20
Tbi^{q}1	0.17	1.30	0.11	1.08	0.18	1.36	0.01	0.45	0.20	1.51	−0.01	0.11
Tbi^{q}6	0.20	1.76	0.12	1.37	0.21	1.86	0.03	1.18	0.15	1.28	0.05	0.42
Tbi^{q}12	0.18	1.68	0.12	1.45	0.20	1.84	0.03	1.25	0.18	1.65	0.09	0.89
Bl	0.10	0.53	0.05	0.33	−0.02	0.15	0.01	0.21	0.07	0.44	−0.36	2.26^{a}
Bl^{q}1	0.28	1.25	0.30	1.49	0.09	0.51	0.06	1.34	−0.13	0.65	−0.47	2.37^{a}
Bl^{q}6	0.26	1.16	0.21	1.14	0.11	0.64	0.05	1.18	0.08	0.44	−0.42	2.32^{a}
Bl^{q}12	0.20	0.98	0.15	0.81	0.08	0.45	0.04	0.94	0.08	0.44	−0.37	2.09^{a}
Sg^{q}1	0.26	1.35	0.26	1.52	0.28	1.58	0.07	1.09	0.72	4.55^{c}	0.69	4.44^{c}
Sg^{q}6	−0.03	0.18	−0.11	0.71	0.12	0.68	−0.02	0.23	0.27	2.10^{a}	0.08	0.52
Sg^{q}12	−0.17	1.01	−0.31	2.28^{a}	−0.09	0.56	−0.06	1.07	−0.04	0.33	−0.35	2.57^{a}
Panel E: Intangibles												
Oca	0.53	2.42^{a}	0.46	2.35^{a}	0.53	2.51^{a}	0.10	1.56	0.55	2.58^{a}	0.88	3.77^{c}
Ioca	0.48	3.71^{c}	0.38	4.10^{c}	0.53	4.09^{c}	0.11	2.41^{a}	0.50	3.15^{b}	0.86	5.15^{c}
Adm	0.70	2.34^{a}	0.62	2.25^{a}	0.63	2.48^{a}	0.16	1.91	0.82	2.74^{a}	0.83	2.94^{b}
gAd	−0.08	0.34	−0.40	2.46^{a}	−0.05	0.28	−0.04	0.55	−0.78	3.76^{c}	−0.89	5.07^{c}
Rdm	0.48	1.98^{a}	0.98	4.06^{c}	0.64	2.55^{a}	0.15	2.06^{a}	1.45	4.06^{c}	1.86	5.82^{c}
Rdm^{q}1	0.83	2.29^{a}	1.30	3.90^{c}	1.08	2.83^{b}	0.31	2.48^{a}	2.74	5.38^{c}	4.14	7.65^{c}
Rdm^{q}6	0.62	1.78	1.11	3.43^{c}	0.76	2.10^{a}	0.24	2.14^{a}	1.85	4.07^{c}	3.07	6.31^{c}
Rdm^{q}12	0.64	1.95	1.23	4.11^{c}	0.75	2.27^{a}	0.23	2.26^{a}	1.89	4.52^{c}	2.89	6.68^{c}
Rds	−0.06	0.16	−0.01	0.03	0.11	0.44	0.02	0.12	−0.31	0.76	0.00	0.00
Rds^{q}1	−0.15	0.30	−0.20	0.41	0.38	1.29	0.09	0.63	−0.15	0.30	0.01	0.02
Rds^{q}6	−0.16	0.35	0.05	0.11	0.49	1.81	0.06	0.44	−0.39	0.76	−0.06	0.11
Rds^{q}12	−0.12	0.26	−0.01	0.01	0.48	1.78	0.06	0.42	−0.27	0.53	0.00	0.00
Ol	0.47	2.54^{a}	0.42	2.26^{a}	0.40	2.36^{a}	0.10	2.06^{a}	0.67	3.54^{c}	0.45	2.36^{a}
Ol^{q}1	0.42	2.09^{a}	0.54	2.64^{a}	0.46	2.40^{a}	0.11	2.32^{a}	0.73	3.16^{b}	0.44	2.04^{a}
Ol^{q}6	0.40	2.00^{a}	0.52	2.61^{a}	0.46	2.44^{a}	0.10	2.19^{a}	0.69	3.21^{b}	0.44	2.23^{a}
Ol^{q}12	0.38	1.97^{a}	0.49	2.53^{a}	0.46	2.60^{a}	0.10	2.23^{a}	0.57	2.75^{a}	0.37	1.91
Hn	−0.21	1.16	−0.50	3.67^{c}	−0.23	1.47	−0.06	1.01	−0.57	4.07^{c}	−0.88	5.65^{c}
Rca	0.32	1.06	0.39	1.26	0.37	1.54	0.11	0.99	0.29	0.68	0.87	2.08^{a}
Bca	0.19	0.78	0.28	1.35	0.13	0.57	0.06	0.84	0.59	2.85^{b}	0.33	1.67
Aop	−0.09	0.55	−0.13	0.95	−0.16	0.90	−0.03	0.59	−0.01	0.02	0.00	0.01
Pafe	0.15	0.44	−0.02	0.05	0.25	0.75	0.06	0.56	−0.46	1.48	−0.32	0.95
Parc	0.22	0.88	0.29	2.31^{a}	0.10	0.43	0.07	1.09	−0.14	0.58	−0.35	1.57
Crd	0.16	0.57	0.15	1.04	0.16	0.60	0.03	0.31	−0.03	0.12	−0.01	0.02
Hs	−0.29	1.87	−0.16	1.11	−0.31	2.12^{a}	−0.04	1.19	−0.13	0.89	−0.21	1.52
Ha	−0.28	1.77	−0.10	0.64	−0.25	1.75	−0.05	1.32	−0.07	0.39	−0.17	0.95
He	−0.21	1.28	−0.04	0.23	−0.24	1.66	−0.05	1.32	−0.03	0.17	−0.14	0.77
Age1	0.00	0.01	0.25	1.18	0.01	0.06	−0.01	0.19	0.53	2.92^{b}	0.54	2.94^{b}
Age6	0.04	0.20	0.32	1.58	0.02	0.11	−0.01	0.18	0.58	3.22^{b}	0.58	3.24^{b}
Age12	0.04	0.23	0.33	1.73	0.02	0.10	−0.01	0.19	0.52	2.97^{b}	0.55	3.11^{b}
D1	0.13	0.80	0.09	0.66	0.35	1.22	0.09	1.41	0.01	0.04	0.96	4.40^{c}
D2	0.25	1.65	0.14	1.07	0.50	1.59	0.12	1.71	0.18	0.92	1.07	5.09^{c}
D3	0.23	1.54	0.13	0.98	0.64	1.93	0.12	1.63	0.23	1.23	1.08	5.12^{c}
dSi	0.13	0.91	0.17	2.13^{a}	0.08	0.62	0.06	1.66	0.26	2.09^{a}	0.13	1.10
dSa	0.04	0.31	0.10	1.35	0.18	1.40	0.08	2.48^{a}	0.12	0.96	0.09	0.82
dGs	−0.06	0.47	0.07	0.73	0.06	0.48	−0.01	0.41	0.24	2.17^{a}	0.19	1.72

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
dSs	0.00	0.01	−0.12	1.21	−0.01	0.07	−0.01	0.16	−0.07	0.48	−0.30	2.37^{a}
Etr	0.23	2.21^{a}	0.01	0.14	0.24	2.24^{a}	0.05	1.98^{a}	−0.10	0.74	−0.17	1.27
Lfe	0.18	1.38	0.03	0.35	0.18	1.44	−0.01	0.28	0.09	0.74	−0.10	0.86
Ana1	−0.16	1.06	−0.17	1.17	−0.15	1.00	−0.04	0.97	0.05	0.31	−0.01	0.06
Ana6	−0.12	0.82	−0.13	0.98	−0.12	0.79	−0.04	0.88	−0.04	0.27	−0.05	0.34
Ana12	−0.09	0.62	−0.07	0.54	−0.08	0.55	−0.04	0.83	0.06	0.50	0.01	0.05
Tan	−0.10	0.70	0.12	0.78	0.02	0.16	0.01	0.32	0.26	1.23	0.59	3.24^{b}
$\text{Tan}^{q}1$	0.15	0.82	0.31	1.77	0.21	1.06	0.07	1.35	0.56	2.64^{a}	0.99	5.06^{c}
$\text{Tan}^{q}6$	0.15	0.87	0.28	1.72	0.19	1.09	0.06	1.21	0.49	2.34^{a}	0.90	4.61^{c}
$\text{Tan}^{q}12$	0.06	0.38	0.20	1.28	0.12	0.76	0.04	0.88	0.34	1.67	0.74	4.02^{c}
Rer	0.31	2.00^{a}	0.35	3.70^{c}	0.35	2.38^{a}	0.06	1.61	0.41	2.87^{b}	0.33	2.39^{a}
Kz	0.03	0.17	0.02	0.10	−0.09	0.49	0.02	0.44	−0.58	3.49^{c}	−0.40	2.23^{a}
$\text{Kz}^{q}1$	−0.08	0.40	0.12	0.66	−0.05	0.27	−0.01	0.19	−1.10	4.71^{c}	−0.99	3.84^{c}
$\text{Kz}^{q}6$	−0.03	0.14	0.10	0.52	−0.09	0.48	−0.01	0.24	−0.64	2.84^{b}	−0.65	2.71^{a}
$\text{Kz}^{q}12$	−0.03	0.15	0.05	0.24	−0.09	0.47	−0.03	0.55	−0.58	2.77^{a}	−0.60	2.65^{a}
Ww	0.07	0.27	−0.07	0.30	0.12	0.49	0.05	0.85	−0.98	3.31^{b}	0.33	1.17
$\text{Ww}^{q}1$	−0.02	0.05	−0.10	0.34	0.06	0.20	0.06	0.76	−1.24	3.64^{c}	0.07	0.22
$\text{Ww}^{q}6$	0.02	0.07	−0.07	0.26	0.10	0.34	0.06	0.81	−1.14	3.56^{c}	0.21	0.66
$\text{Ww}^{q}12$	0.00	0.01	−0.10	0.35	0.07	0.25	0.05	0.71	−1.06	3.41^{c}	0.25	0.82
Sdd	0.16	0.58	−0.18	1.29	0.12	0.46	0.03	0.32	−0.44	1.58	−0.34	1.14
Cdd	0.08	0.29	−0.03	0.11	0.12	0.48	−0.01	0.09	−0.15	0.52	0.15	0.54
Vcf1	−0.23	0.85	−0.48	1.74	−0.30	1.43	−0.11	1.51	−1.04	3.19^{b}	−0.67	1.94
Vcf6	−0.19	0.69	−0.47	1.83	−0.28	1.40	−0.08	1.23	−1.08	3.27^{b}	−0.74	2.16^{a}
Vcf12	−0.15	0.56	−0.46	1.81	−0.24	1.21	−0.07	1.11	−0.92	2.81^{b}	−0.65	1.93
Cta1	0.29	1.13	−0.02	0.07	0.29	1.44	0.10	1.13	0.04	0.14	0.45	1.77
Cta6	0.18	0.70	−0.04	0.16	0.16	0.80	0.06	0.73	−0.05	0.18	0.29	1.17
Cta12	0.15	0.61	−0.09	0.35	0.13	0.68	0.05	0.59	−0.02	0.08	0.27	1.08
Gind	0.02	0.06	−0.02	0.10	0.02	0.06	−0.04	0.52	−0.16	0.27	−0.68	0.98
Acq	−0.14	0.71	−0.07	0.38	−0.14	0.68	−0.01	0.22	−0.70	2.25^{a}	−0.50	1.79
Acq1	−0.15	0.79	−0.12	0.59	−0.07	0.34	−0.02	0.43	−0.50	1.96^{a}	−0.25	0.95
Acq6	−0.14	0.73	−0.09	0.48	−0.05	0.23	−0.01	0.18	−0.49	1.87	−0.23	0.89
Acq12	−0.11	0.57	−0.08	0.44	−0.02	0.07	0.00	0.02	−0.57	2.22^{a}	−0.27	1.05
Ob	0.19	0.78	0.13	0.79	0.16	0.68	0.01	0.17	−0.10	0.48	−0.05	0.25
Eper	−0.01	0.04	−0.07	0.71	−0.01	0.09	0.00	0.03	−0.15	0.91	−0.27	1.79
Eprd	−0.46	2.69^{a}	−0.64	3.76^{c}	−0.53	2.95^{b}	−0.16	2.94^{b}	−1.16	5.21^{c}	−1.08	4.83^{c}
Esm	−0.02	0.16	−0.02	0.13	−0.04	0.31	0.05	1.31	0.08	0.37	0.12	0.59
Evr	0.18	1.33	0.13	1.48	0.18	1.30	0.05	1.47	0.03	0.19	0.01	0.06
Etl	0.33	2.69^{a}	0.15	1.77	0.34	2.75^{a}	0.06	2.02^{a}	0.17	1.06	0.14	0.94
Ecs	0.03	0.28	0.10	1.64	0.03	0.23	−0.01	0.44	0.01	0.06	−0.15	1.11
Frm	0.09	0.54	0.12	0.85	0.06	0.33	0.02	0.36	0.03	0.12	0.04	0.14
Fra	−0.14	1.05	0.04	0.36	−0.15	1.03	−0.02	0.60	0.00	0.01	−0.04	0.22
Ala	−0.10	0.43	−0.47	2.41^{a}	−0.07	0.37	−0.10	1.32	−0.47	3.27^{b}	−0.78	5.38^{c}
$\text{Ala}^{q}1$	0.43	1.49	−0.01	0.03	0.43	1.74	0.08	1.00	0.43	2.21^{a}	0.42	2.29^{a}
$\text{Ala}^{q}6$	0.32	1.18	−0.06	0.23	0.29	1.18	0.05	0.61	0.08	0.42	0.06	0.35
$\text{Ala}^{q}12$	0.21	0.81	−0.19	0.76	0.21	0.89	0.01	0.15	−0.08	0.41	−0.15	0.93
Alm	0.11	0.59	0.11	0.78	0.11	0.57	0.04	0.66	0.48	2.65^{a}	0.29	1.39
$\text{Alm}^{q}1$	0.43	1.98^{a}	0.58	2.39^{a}	0.48	2.28^{a}	0.12	1.60	1.30	5.56^{c}	1.66	6.83^{c}
$\text{Alm}^{q}6$	0.54	2.64^{a}	0.60	2.78^{b}	0.51	2.71^{a}	0.14	1.91	1.31	5.95^{c}	1.54	6.81^{c}
$\text{Alm}^{q}12$	0.47	2.38^{a}	0.55	2.65^{a}	0.46	2.52^{a}	0.12	1.79	1.04	4.99^{c}	1.25	5.72^{c}

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Dls1	−0.23	1.10	−0.37	1.96	−0.27	1.32	−0.07	1.27	−1.15	4.53^{c}	−1.17	4.68^{c}
Dls6	0.02	0.13	−0.12	0.72	−0.01	0.04	−0.02	0.31	−0.51	2.55^{a}	−0.42	1.83
Dls12	0.09	0.65	−0.09	0.60	0.07	0.46	0.00	0.05	−0.25	1.49	−0.17	0.88
Dis1	−0.17	0.68	−0.41	1.83	−0.14	0.53	−0.03	0.46	−1.10	4.97^{c}	−1.20	5.70^{c}
Dis6	−0.13	0.52	−0.38	1.85	−0.14	0.58	−0.01	0.18	−0.55	2.66^{a}	−0.56	2.77^{a}
Dis12	−0.05	0.20	−0.27	1.37	−0.05	0.23	0.01	0.09	−0.39	2.07^{a}	−0.35	1.85
Dlg1	−0.05	0.17	−0.22	0.94	−0.11	0.42	−0.01	0.14	−0.34	1.11	−0.19	0.65
Dlg6	−0.02	0.07	−0.17	0.74	−0.07	0.30	0.00	0.01	−0.37	1.68	−0.24	1.02
Dlg12	0.01	0.03	−0.14	0.64	−0.06	0.25	0.01	0.12	−0.21	1.10	−0.19	0.88
R_{a}^{1}	0.59	2.79^{b}	0.58	3.38^{b}	0.61	3.08^{b}	0.19	2.58^{a}	0.82	4.73^{c}	0.69	4.36^{c}
R_{n}^{1}	0.67	2.24^{a}	0.67	2.29^{a}	0.49	1.55	0.18	1.71	0.49	1.33	−0.92	2.52^{a}
$R_{\mathrm{a}}^{[2,5]}$	0.58	3.18^{b}	0.51	3.88^{c}	0.66	3.80^{c}	0.15	2.83^{b}	0.63	4.78^{c}	0.68	4.95^{c}
$R_{\mathrm{n}}^{[2,5]}$	−0.49	1.89	−0.82	4.06^{c}	−0.49	2.12^{a}	−0.14	1.66	−1.25	4.87^{c}	−1.41	5.86^{c}
$R_{\mathrm{a}}^{[6,10]}$	0.80	4.39^{c}	0.63	5.75^{c}	0.81	4.84^{c}	0.24	4.78^{c}	0.69	4.22^{c}	0.74	4.25^{c}
$R_{\mathrm{n}}^{[6,10]}$	−0.45	2.23^{a}	−0.42	2.80^{b}	−0.45	2.26^{a}	−0.12	1.91	−0.51	2.98^{b}	−0.57	3.65^{c}
$R_{\mathrm{a}}^{[11,15]}$	0.58	4.09^{c}	0.42	3.98^{c}	0.60	4.27^{c}	0.16	3.80^{c}	0.81	4.65^{c}	0.67	3.77^{c}
$R_{\mathrm{n}}^{[11,15]}$	−0.24	1.57	−0.21	1.71	−0.29	1.79	−0.07	1.58	−0.20	1.04	−0.16	0.79
$R_{\mathrm{a}}^{[16,20]}$	0.56	3.37^{b}	0.49	4.57^{c}	0.53	3.17^{b}	0.12	2.51^{a}	0.47	2.05^{a}	0.32	1.69
$R_{\mathrm{n}}^{[16,20]}$	−0.21	1.35	−0.15	1.35	−0.25	1.54	−0.04	0.99	−0.16	0.73	−0.36	1.77
Panel F: Trading frictions												
Me	−0.27	1.51	−0.20	1.18			−0.07	1.39	−0.27	1.20	−1.47	5.98^{c}
Iv	−0.41	1.19	−0.55	1.55	−0.33	1.01	−0.02	0.19	−1.09	3.03^{b}	0.30	0.78
Ivff1	−0.61	1.99^{a}	−0.64	2.05^{a}	−0.56	1.85	−0.09	0.86	−2.01	6.10^{c}	−0.51	1.48
Ivff6	−0.37	1.32	−0.53	1.80	−0.33	1.18	−0.06	0.58	−1.30	4.10^{c}	−0.10	0.30
Ivff12	−0.21	0.78	−0.46	1.58	−0.19	0.73	−0.03	0.29	−0.91	2.99^{b}	0.15	0.44
Ivc1	−0.63	2.03^{a}	−0.69	2.18^{a}	−0.51	1.65	−0.09	0.86	−2.02	6.00^{c}	−0.59	1.68
Ivc6	−0.39	1.37	−0.55	1.83	−0.32	1.13	−0.06	0.60	−1.34	4.22^{c}	−0.13	0.37
Ivc12	−0.24	0.86	−0.46	1.59	−0.22	0.80	−0.04	0.36	−0.92	3.02^{b}	0.12	0.38
Ivq1	−0.54	1.85	−0.63	2.03^{a}	−0.52	1.69	−0.09	0.85	−2.07	6.26^{c}	−0.59	1.72
Ivq6	−0.39	1.39	−0.54	1.85	−0.30	1.13	−0.06	0.59	−1.30	4.10^{c}	−0.15	0.44
Ivq12	−0.22	0.81	−0.47	1.64	−0.21	0.81	−0.03	0.34	−0.92	3.04^{b}	0.10	0.30
Tv1	−0.59	1.66	−0.68	1.98^{a}	−0.38	1.14	−0.08	0.66	−1.99	5.66^{c}	−0.60	1.69
Tv6	−0.36	1.08	−0.52	1.63	−0.22	0.72	−0.05	0.48	−1.32	4.05^{c}	−0.14	0.42
Tv12	−0.28	0.90	−0.46	1.49	−0.20	0.65	−0.04	0.39	−0.91	2.94^{b}	0.10	0.31
Sv1	−0.58	2.33^{a}	−0.42	2.14^{a}	−0.52	2.27^{a}	−0.17	2.20^{a}	−0.18	0.98	−0.36	1.97^{a}
Sv6	−0.24	1.49	−0.13	1.04	−0.18	1.27	−0.07	1.44	0.04	0.51	−0.08	1.12
Sv12	−0.18	1.39	−0.11	1.11	−0.14	1.24	−0.05	1.26	0.03	0.45	−0.04	0.74
$\beta 1$	−0.06	0.16	−0.12	0.36	0.01	0.03	−0.03	0.23	0.01	0.01	−0.07	0.24
$\beta 6$	−0.04	0.12	−0.07	0.22	0.00	0.01	−0.02	0.15	−0.04	0.12	−0.05	0.16
$\beta 12$	−0.09	0.24	−0.14	0.42	−0.04	0.13	−0.02	0.14	−0.02	0.07	−0.07	0.26
$\beta^{\mathrm{FP}}1$	−0.29	0.83	−0.29	0.83	−0.20	0.60	−0.09	0.82	−0.24	0.63	−0.41	1.07
$\beta^{\mathrm{FP}}6$	−0.26	0.74	−0.22	0.64	−0.21	0.65	−0.08	0.77	−0.20	0.55	−0.34	0.92
$\beta^{\mathrm{FP}}12$	−0.20	0.59	−0.21	0.62	−0.16	0.52	−0.07	0.64	−0.12	0.34	−0.27	0.77
$\beta^{\mathrm{D}}1$	0.05	0.21	−0.05	0.26	0.18	0.81	0.01	0.13	0.10	0.61	−0.28	1.91
$\beta^{\mathrm{D}}6$	0.02	0.07	0.04	0.19	0.08	0.43	0.03	0.38	0.09	0.76	−0.22	2.33^{a}
$\beta^{\mathrm{D}}12$	−0.04	0.21	−0.05	0.32	0.02	0.12	0.00	0.00	0.04	0.46	−0.23	2.90^{b}

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Tur1	−0.14	0.49	−0.46	1.84	−0.12	0.48	−0.03	0.28	−0.34	1.22	−0.93	3.14^{b}
Tur6	−0.08	0.29	−0.50	2.02^{a}	−0.10	0.40	−0.01	0.15	−0.61	2.34^{a}	−1.17	4.25^{c}
Tur12	−0.04	0.14	−0.50	2.07^{a}	−0.06	0.24	−0.01	0.13	−0.61	2.50^{a}	−1.18	4.51^{c}
Cvt1	0.12	0.88	0.07	0.50	0.12	0.87	0.04	0.82	0.03	0.19	0.49	2.82^{b}
Cvt6	0.08	0.65	0.08	0.63	0.07	0.57	0.05	1.05	0.14	1.00	0.52	3.25^{b}
Cvt12	0.15	1.20	0.10	0.86	0.13	1.08	0.06	1.27	0.17	1.36	0.51	3.42^{c}
Dtv1	−0.26	2.05^{a}	−0.37	2.70^{a}	−0.21	1.51	−0.03	1.54	−0.37	1.52	−1.53	5.89^{c}
Dtv6	−0.35	2.79^{b}	−0.46	3.43^{c}	−0.31	2.27^{a}	−0.03	1.60	−0.59	2.60^{a}	−1.67	6.70^{c}
Dtv12	−0.35	2.80^{b}	−0.46	3.53^{c}	−0.33	2.51^{a}	−0.04	1.80	−0.60	2.84^{b}	−1.63	6.99^{c}
Cvd1	0.12	0.88	0.09	0.61	0.07	0.47	0.06	1.01	−0.14	0.96	0.19	1.12
Cvd6	0.10	0.77	0.09	0.70	0.08	0.63	0.06	1.15	0.05	0.42	0.43	2.84^{b}
Cvd12	0.13	1.05	0.11	0.84	0.12	0.99	0.07	1.25	0.08	0.74	0.43	3.08^{b}
Pps1	−0.07	0.25	0.08	0.31	0.00	0.01	−0.01	0.29	−0.13	0.30	−1.63	3.81^{c}
Pps6	−0.03	0.11	0.15	0.63	0.11	0.36	−0.01	0.14	0.57	1.43	−1.02	2.55^{a}
Pps12	−0.10	0.46	0.07	0.32	0.03	0.11	−0.01	0.34	0.61	1.67	−0.99	2.64^{a}
Ami1	0.20	1.27	0.27	1.86	0.27	1.50	0.10	1.79	0.21	0.92	1.41	5.25^{c}
Ami6	0.31	2.05^{a}	0.37	2.65^{a}	0.34	2.06^{a}	0.13	2.30^{a}	0.50	2.36^{a}	1.63	6.48^{c}
Ami12	0.31	2.15^{a}	0.38	2.82^{b}	0.34	2.18^{a}	0.14	2.60^{a}	0.54	2.70^{a}	1.66	6.83^{c}
Lm^{1}1	−0.05	0.18	0.10	0.48	−0.07	0.29	−0.01	0.09	−0.22	0.76	0.37	1.30
Lm^{1}6	0.12	0.48	0.44	2.08^{a}	0.14	0.64	0.03	0.66	0.37	1.41	1.07	4.13^{c}
Lm^{1}12	0.06	0.23	0.44	2.10^{a}	0.12	0.56	0.04	0.77	0.44	1.80	1.16	4.80^{c}
Lm^{6}1	0.32	1.28	0.55	2.49^{a}	0.36	1.69	0.01	0.17	0.39	1.30	1.16	3.99^{c}
Lm^{6}6	0.24	0.98	0.54	2.49^{a}	0.31	1.42	0.01	0.16	0.66	2.39^{a}	1.38	4.98^{c}
Lm^{6}12	0.18	0.75	0.53	2.54^{a}	0.23	1.07	0.01	0.17	0.60	2.34^{a}	1.33	5.06^{c}
Lm^{12}1	0.21	0.85	0.52	2.52^{a}	0.34	1.61	0.00	0.09	0.60	2.04^{a}	1.31	4.43^{c}
Lm^{12}6	0.19	0.81	0.55	2.65^{a}	0.30	1.39	0.02	0.75	0.69	2.53^{a}	1.36	4.88^{c}
Lm^{12}12	0.11	0.48	0.49	2.46^{a}	0.19	0.87	0.02	0.62	0.57	2.23^{a}	1.27	4.79^{c}
Mdr1	−0.36	1.23	−0.66	2.27^{a}	−0.26	0.91	−0.06	0.60	−1.81	6.19^{c}	−1.21	4.13^{c}
Mdr6	−0.19	0.72	−0.40	1.48	−0.15	0.57	−0.05	0.48	−0.92	3.41^{c}	−0.35	1.23
Mdr12	−0.09	0.35	−0.33	1.23	−0.06	0.22	−0.02	0.22	−0.64	2.47^{a}	−0.07	0.25
Ts1	0.21	1.83	−0.12	1.32	0.23	2.09^{a}	0.07	2.31^{a}	−0.37	2.95^{b}	−0.74	5.32^{c}
Ts6	0.03	0.56	−0.02	0.38	0.02	0.28	−0.01	0.46	0.11	1.38	−0.15	1.86
Ts12	0.03	0.69	−0.01	0.13	0.02	0.35	0.00	0.11	0.09	1.32	−0.07	0.91
Isc1	0.22	2.18^{a}	−0.03	0.35	0.17	1.63	0.07	2.90^{b}	−0.28	2.19^{a}	−0.69	4.86^{c}
Isc6	−0.02	0.40	−0.01	0.10	−0.04	0.74	0.00	0.04	0.14	1.75	−0.14	1.71
Isc12	0.05	0.98	0.02	0.42	0.03	0.66	0.01	0.97	0.11	1.63	−0.06	0.78
Isff1	0.35	3.65^{c}	0.06	0.72	0.29	3.14^{b}	0.07	2.89^{b}	−0.20	1.58	−0.55	4.11^{c}
Isff6	0.04	0.81	0.00	0.07	0.03	0.63	0.00	0.29	0.15	1.73	−0.11	1.35
Isff12	0.07	1.58	0.02	0.45	0.07	1.53	0.02	1.23	0.09	1.38	−0.06	0.78
Isq1	0.27	2.88^{b}	0.11	1.46	0.26	2.82^{b}	0.06	2.36^{a}	−0.22	1.96	−0.59	4.59^{c}
Isq6	0.07	1.30	0.00	0.04	0.06	1.05	0.01	0.91	0.11	1.39	−0.11	1.36
Isq12	0.10	2.01^{a}	0.03	0.53	0.08	1.61	0.02	1.60	0.09	1.38	−0.05	0.70
Cs1	−0.09	0.70	−0.12	1.16	−0.11	0.88	−0.01	0.26	−0.07	0.74	0.03	0.38
Cs6	−0.02	0.31	−0.01	0.22	−0.02	0.31	0.00	0.22	0.01	0.21	0.04	1.10
Cs12	−0.02	0.33	−0.01	0.14	−0.01	0.32	−0.01	0.45	0.01	0.39	0.03	1.15
Srev	−0.11	0.54	−0.53	2.51^{a}	−0.17	0.88	−0.11	1.57	−1.88	6.13^{c}	−3.58	10.68^{c}
β^{-}1	−0.24	0.71	−0.54	1.57	−0.09	0.29	−0.08	0.71	−0.47	1.48	−0.75	2.59^{a}
β^{-}6	−0.23	0.68	−0.51	1.50	−0.14	0.48	−0.10	0.90	−0.61	2.05^{a}	−1.02	3.72^{c}
β^{-}12	−0.16	0.49	−0.42	1.30	−0.09	0.33	−0.08	0.79	−0.33	1.22	−0.80	3.10^{b}

	ABM-VW		ABM-EW		NYSE-VW-EM		FM-WLS-EM		Micro-VW		Micro-EW	
	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$	$\overline{R}$	$\lvert t\rvert$
Tail1	0.13	0.63	0.15	0.88	0.10	0.48	0.07	1.11	0.18	1.09	0.15	0.82
Tail6	0.09	0.43	0.17	1.07	0.12	0.65	0.05	0.89	0.17	1.16	0.19	1.27
Tail12	0.14	0.77	0.18	1.33	0.14	0.84	0.07	1.18	0.24	1.77	0.24	1.71
$\beta^{\text{ret}}1$	−0.08	0.23	−0.14	0.43	−0.01	0.04	−0.03	0.26	0.04	0.13	−0.08	0.26
$\beta^{\text{ret}}6$	−0.07	0.19	−0.11	0.32	−0.01	0.04	−0.02	0.18	−0.05	0.16	−0.08	0.28
$\beta^{\text{ret}}12$	−0.10	0.29	−0.16	0.50	−0.04	0.14	−0.02	0.18	−0.04	0.15	−0.09	0.35
$\beta^{\text{lcc}}1$	0.19	0.94	0.18	1.13	0.20	1.00	0.08	1.29	−0.02	0.14	0.04	0.29
$\beta^{\text{lcc}}6$	0.21	1.10	0.17	1.15	0.18	0.93	0.08	1.25	0.04	0.30	0.07	0.54
$\beta^{\text{lcc}}12$	0.21	1.16	0.10	0.76	0.16	0.83	0.07	1.13	−0.05	0.36	0.02	0.17
$\beta^{\text{lrc}}1$	0.15	0.51	0.12	0.47	0.06	0.20	0.01	0.15	0.21	0.87	0.12	0.55
$\beta^{\text{lrc}}6$	0.11	0.39	0.10	0.39	0.04	0.16	0.01	0.10	0.12	0.51	0.04	0.17
$\beta^{\text{lrc}}12$	0.12	0.45	0.16	0.68	0.08	0.30	0.01	0.15	0.10	0.48	0.07	0.34
$\beta^{\text{lcr}}1$	−0.07	0.54	0.02	0.25	0.05	0.37	−0.04	0.87	0.16	1.34	0.10	0.85
$\beta^{\text{lcr}}6$	−0.11	0.91	0.00	0.01	0.00	0.03	−0.04	0.89	0.12	1.01	0.02	0.20
$\beta^{\text{lcr}}12$	−0.10	0.88	0.04	0.56	−0.02	0.14	−0.03	0.62	0.12	1.12	0.02	0.20
$\beta^{\text{net}}1$	−0.05	0.13	−0.09	0.27	0.04	0.11	0.00	0.00	−0.19	0.66	−0.03	0.10
$\beta^{\text{net}}6$	−0.04	0.11	−0.06	0.19	0.07	0.23	0.01	0.05	−0.26	1.03	−0.02	0.09
$\beta^{\text{net}}12$	−0.09	0.26	−0.13	0.43	0.01	0.04	0.01	0.04	−0.27	1.20	−0.05	0.26
Shl1	−0.31	0.97	−0.46	1.62	−0.18	0.59	−0.02	0.20	−0.83	2.80^{b}	0.69	2.19^{a}
Shl6	−0.27	0.96	−0.42	1.61	−0.19	0.71	−0.05	0.51	−0.84	3.11^{b}	0.69	2.30^{a}
Shl12	−0.23	0.85	−0.36	1.45	−0.17	0.70	−0.04	0.39	−0.64	2.53^{a}	0.79	2.79^{b}
Sba1	−0.20	0.88	−0.17	0.86	−0.33	1.30	0.02	0.24	−0.86	2.48^{a}	0.75	1.88
Sba6	−0.12	0.57	−0.16	0.88	−0.23	1.06	0.03	0.30	−0.59	2.10^{a}	0.86	2.46^{a}
Sba12	−0.07	0.34	−0.10	0.55	−0.25	1.19	0.03	0.32	−0.44	1.68	0.96	2.88^{b}
$\beta^{\text{lev}}1$	0.36	1.60	0.28	1.52	0.37	1.77	0.08	1.25	0.16	0.84	0.23	1.26
$\beta^{\text{lev}}6$	0.25	1.20	0.24	1.38	0.23	1.16	0.06	0.89	0.06	0.35	0.12	0.70
$\beta^{\text{lev}}12$	0.23	1.14	0.21	1.28	0.22	1.13	0.05	0.80	0.03	0.17	0.08	0.48
$\beta^{\text{PS}}1$	0.12	0.67	0.13	1.00	0.09	0.51	0.04	0.72	−0.11	0.73	−0.04	0.28
$\beta^{\text{PS}}6$	0.13	0.77	0.05	0.47	0.12	0.73	0.03	0.69	0.00	0.03	−0.01	0.09
$\beta^{\text{PS}}12$	0.19	1.23	0.06	0.57	0.18	1.23	0.05	1.00	0.00	0.02	0.00	0.04
Pin	−0.33	1.28	−0.18	0.78	−0.31	1.21	0.00	0.03	0.68	2.60^{a}	1.50	6.04^{c}

Figure A1 : Replication Rates for Each Category of Anomalies, Different Procedures, Single and Multiple Tests, the Shorter Samples in the Original Studies

"NYSE-VW" and "NYSE-EW" denote NYSE breakpoints with value- and equal-weighted returns, "All-VW" and "All-EW" NYSE-Amex-NASDAQ breakpoints with value- and equal-weighted returns, respectively, in portfolio sorts. "FM-WLS" denotes weighted least squares with the market equity as the weights, and "FM-OLS" ordinary least squares in univariate cross-sectional regressions. We winsorize the regressors at the 1–99% level each month before standardizing them. Standardizing means subtracting a variable's cross-sectional mean and then dividing by its cross-sectional standard deviation. We apply the absolute t-cutoff of 1.96 for single testing and 2.78 for multiple testing, both at the 5% threshold level. The blue bars are for single testing, and white bars multiple testing. For each category, the bars report the fractions (in percent) of anomalies that are successfully replicated (significant at the 5% level). The multiple testing bar graphs are overlaid on the single testing bar graphs.