

Additional tables.

This Appendix contains three additional tables that were obtained by using the version of Reaction-Based Classification 1 based on positive γ 's only. The table captions are the same as in main text.

Table 3, Panel D.

Panel D: Linear regression of volatility												
Dependent Variable												
Variable	σ_{10}				σ_{20}							
	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>
Reaction-based classification 1												
INTERCEPT	3.67	(39.00)	2.65	(45.39)	2.63	(38.91)	3.35	(62.79)	2.49	(47.69)	2.40	(47.99)
α_h	111.00	(22.43)	71.66	(16.39)	75.05	(17.35)	103.00	(22.94)	72.07	(17.04)	70.48	(16.82)
σ_{-10M}	0.24	(15.33)			0.11	(6.72)	0.22	(34.98)			0.09	(12.67)
σ_{-1H}			0.13	(47.03)	0.10	(34.29)			0.11	(54.33)	0.09	(43.26)
Adjusted R ²	0.074		0.0876		0.1022		0.0533		0.0781		0.084	

Table 4, Panel A: Market Depth and type of market makers

	Glosten-Harris Specification		Madhavan-Smidt Specification	
Panel A: Reaction-based Classification 1				
Variable	Value	<i>t-stat.</i>	Value	<i>t-stat.</i>
$\lambda_{\text{CONFIDENT}}$	0.379	(53.72)	0.858	(150.21)
$\lambda_{\text{CONFIDENT}} \times \text{DUMMY}_{\text{OMM}}$	0.111	(11.21)	0.113	(15.20)
λ_{AVERAGE}	0.506	(62.08)	0.995	(157.38)
$\lambda_{\text{AVERAGE}} \times \text{DUMMY}_{\text{OMM}}$	0.014	(1.24)	0.010	(1.23)
λ_{SCARED}	0.610	(82.05)	1.065	(180.22)
$\lambda_{\text{SCARED}} \times \text{DUMMY}_{\text{OMM}}$	-0.020	(-1.74)	0.017	(2.08)
ψ	-5.390	(-236.60)	-2.490	(-112.55)
α			-1201.43	(-130.85)
γ			-0.533	(-8.81)
Adjusted R ²	0.088		0.067	
Hypothesis	χ^2	p-value	χ^2	p-value
$\lambda_{\text{CONFIDENT}} = \lambda_{\text{AVERAGE}} = \lambda_{\text{SCARED}}$	629.2	<.0001	1043.3	<.0001
$\lambda_{\text{CONFIDENT}} = \lambda_{\text{AVERAGE}}$	151.2	<.0001	327.1	<.0001
$\lambda_{\text{CONFIDENT}} = \lambda_{\text{SCARED}}$	601.3	<.0001	957.8	<.0001
$\lambda_{\text{AVERAGE}} = \lambda_{\text{SCARED}}$	124.6	<.0001	164.8	<.0001

Table 5, Panel A. Differential impact of active and passive trade on volume and volatility

Panel A: Reaction-based classification 1

	Value	t-stat.	Value	t-stat.	Value	t-stat.	Value	t-stat.	Value	t-stat.	Value	t-stat.
Volume												
PAS	0.340	(4.81)	0.411	(4.84)	0.231	(4.55)	-0.122	(-5.12)	-0.132	(-6.01)	0.042	(2.45)
ACT	0.771	(14.83)	0.781	(13.36)	0.448	(13.21)	-0.226	(-13.00)	-0.202	(-12.85)	0.164	(10.67)
PAS	0.502	(13.74)	0.569	(12.28)	0.330	(12.14)	-0.214	(-12.11)	-0.195	(-11.74)	0.065	(4.13)
ACT	1.026	(12.77)	1.173	(12.35)	0.667	(12.56)	-0.281	(-10.21)	-0.268	(-10.81)	0.232	(9.89)
PAS	0.561	(15.13)	0.640	(12.91)	0.372	(12.75)	-0.172	(-10.25)	-0.146	(-8.61)	0.128	(7.72)
ACT	1.186	(41.25)	1.393	(37.53)	0.810	(36.89)	-0.411	(-30.91)	-0.405	(-28.48)	0.257	(19.20)
MORNING	70.909	(150.76)	61.529	(116.55)	46.201	(125.49)	39.682	(106.79)	45.848	(118.40)	62.886	(162.28)
EVENING	-2.796	(-13.79)	1.973	(8.90)	-2.413	(-14.09)	-20.831	(-128.26)	-36.739	(-192.00)	-50.470	(-248.21)
VOLUM_1H	0.123	(136.07)	0.116	(114.41)	0.121	(173.49)	0.052	(89.59)	-0.006	(-9.82)	0.011	(19.62)
VOLUM_10M	0.201	(89.47)	-0.103	(-43.56)	-0.290	(-162.82)	0.130	(67.70)	0.499	(220.36)	0.518	(242.06)
INVENTORY	-0.007	(-29.33)	-0.008	(-27.93)	-0.005	(-24.35)	-0.001	(-5.31)	-0.002	(-9.86)	-0.004	(-18.24)
Adjusted R ²	0.498		0.277		0.229		0.192		0.376		0.463	
HYPOTHESIS	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value
PAS = PAS	4.19	0.0407	2.73	0.0983	3.05	0.0807	9.88	0.0017	5.33	0.021	0.98	0.322
PAS = PAS	7.83	0.0051	5.61	0.0179	5.97	0.0145	3.04	0.0814	0.25	0.6168	13.32	0.0003
PAS = PAS	1.27	0.2596	1.10	0.295	1.09	0.2974	2.99	0.084	4.27	0.0388	7.64	0.0057
ACT = ACT	8.10	0.0044	14.02	0.0002	13.72	0.0002	3.23	0.0723	5.77	0.0163	6.49	0.0109
ACT = ACT	60.08	<.0001	94.26	<.0001	96.62	<.0001	85.30	<.0001	107.44	<.0001	23.71	<.0001
ACT = ACT	4.35	0.037	5.71	0.0168	7.65	0.0057	21.78	<.0001	26.73	<.0001	0.95	0.3291
Volatility												
PAS	-1.76	(-2.21)	3.052	(2.55)	1.987	(2.62)	-3.94	(-5.02)	-5.03	(-4.98)	-4.03	(-5.60)
ACT	4.962	(7.25)	11.41	(12.14)	7.036	(12.00)	-4.99	(-10.98)	-6.59	(-11.25)	-1.58	(-3.95)
PAS	-2.13	(-1.68)	6.314	(4.95)	6.439	(5.24)	-6.51	(-10.90)	-8.89	(-11.86)	-6.27	(-8.28)
ACT	11.76	(8.45)	21.8	(10.30)	11.65	(9.05)	-7.61	(-9.44)	-9.7	(-9.43)	-0.352	(-0.55)
PAS	-5.52	(-2.95)	-3.6	(-2.14)	-2.18	(-1.95)	-6.63	(-9.19)	-8.87	(-10.23)	-10.4	(-9.97)
ACT	27.05	(15.21)	41.04	(23.91)	25.15	(21.39)	-9.66	(-15.25)	-11.8	(-15.93)	5.599	(5.67)
MORNING	3170	(10.95)	840	(7.36)	-200	(-5.45)	760	(10.47)	1310	(10.80)	840	(5.53)
EVENING	1740	(20.41)	2040	(41.25)	1370	(37.39)	-85.3	(-2.93)	-400	(-9.81)	-200	(-4.45)
VOLAT_1H	0.0840	(4.47)	0.0520	(4.50)	0.0399	(4.53)	0.0325	(4.49)	0.0384	(4.44)	0.0510	(4.45)
VOLAT_10M	0.0142	(0.29)	-0.0144	(-0.67)	-0.0288	(-2.50)	-0.0086	(-0.63)	0.0023	(0.11)	0.0013	(0.05)
INVENTORY	-0.779	(-9.24)	-0.695	(-13.47)	-0.355	(-9.35)	-0.298	(-9.41)	-0.528	(-13.30)	-0.826	(-15.94)
Adjusted R ²	0.065		0.041		0.031		0.036		0.040		0.039	
HYPOTHESIS	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value	Wald	n-value
PAS = PAS	0.09	0.7607	3.69	0.0549	9.85	0.0017	7.40	0.0065	10.52	0.0012	5.93	0.0149
PAS = PAS	4.87	0.0273	11.23	0.0008	10.34	0.0013	7.25	0.0071	9.77	0.0018	33.98	<.0001
PAS = PAS	3.4	0.0652	24.20	<.0001	28.71	<.0001	0.02	0.8939	0.00	0.9822	15.40	<.0001
ACT = ACT	20.92	<.0001	21.94	<.0001	11.38	0.0007	8.67	0.0032	7.52	0.0061	2.77	0.0958
ACT = ACT	135.44	<.0001	245.17	<.0001	201.21	<.0001	37.72	<.0001	32.41	<.0001	45.52	<.0001
ACT = ACT	54.72	<.0001	58.19	<.0001	69.37	<.0001	4.90	0.0268	3.45	0.0631	30.81	<.0001

