

# A. Internet Appendix for “Securities Lending and Trading by Active and Passive Funds”

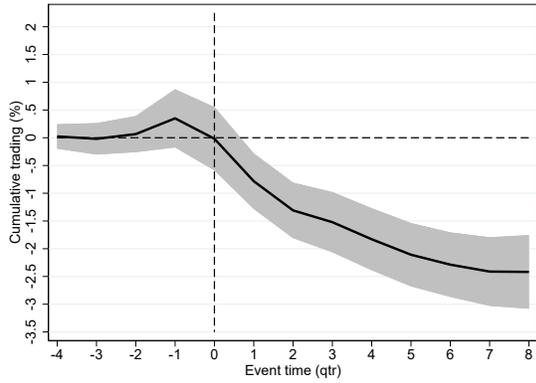
## Variable description

Variable	Description	Data source
$passive_{f,t}$	Passive fund dummy variable. Takes a value of 1 if any share class of a portfolio is identified as an index fund in SEC N-SAR filings	SEC (N-SAR)
$active_{f,t}$	Dummy variable defined as $1 - passive_{f,t}$	
$TNA_{f,t}$	Total net assets at quarter end	SEC (N-Q, N-CSR) and CRSP
$lending_{f,t}$	Dummy variable indicating that $collateral_{f,t}$ or $loanvalue_{f,t}$ is greater than zero	SEC (N-Q, N-CSR)
$loanvalue_{f,t}$	Value on loan: dollar value of outstanding securities loans at the quarter end	SEC (N-Q, N-CSR)
$collateral_{f,t}$	Collateral: dollar value of collateral held at quarter end	SEC (N-Q, N-CSR)
$overcollateral_{f,t}$	Overcollateralization at quarter end. $overcollateral_{f,t} = collateral_{f,t}/loanvalue_{f,t} - 1$	SEC (N-Q, N-CSR)
$lendingincome_{f,t}$	Dollar value of securities lending income earned in the quarter of half-year period	SEC (N-CSR)
$collateralshare_{f,t}$	Share of collateral of total net assets. $collateralshare_{f,t} = collateral_{f,t}/TNA_{f,t}$	SEC (N-Q, N-CSR)
$lendshare_{f,t}$	Share of net assets on loan. $lendshare_{f,t} = loanvalue_{f,t}/TNA_{f,t}$	SEC (N-Q, N-CSR)
$\widehat{lendingfee}_{f,t}$	Proxy for average lending fee earned by lender funds. $\frac{lending\ income_{f,t} - col_{f,t} * r_{MMF,t}}{loanvalue_{f,t}} \times \frac{2}{q_{f,t}} \times 2$	SEC (N-Q, N-CSR)
$Mkt\ Lending\ fee_{f,t}$	Fund-level lending fee based on Markit stock lending fees. $markitfee_{f,t} = \sum_{s \in S} fee_{s,t} * \frac{value_{f,s,t}}{\sum_{s \in S} value_{f,s,t}}$	Markit and CRSP
$\widehat{weight}_{g,s,t}$	Fund-category, total net asset tercile, and IOC level average holding for each stock.	CRSP
$\Delta Trading_{i,j,t}$	Fund-level over/underweighting in a stock. $\Delta Trading_{i,j,t} = (w_{i,j,t} - w_{i,j,t-1}) - (\widehat{weight}_{i,j,t} - \widehat{weight}_{i,j,t-1})$	CRSP

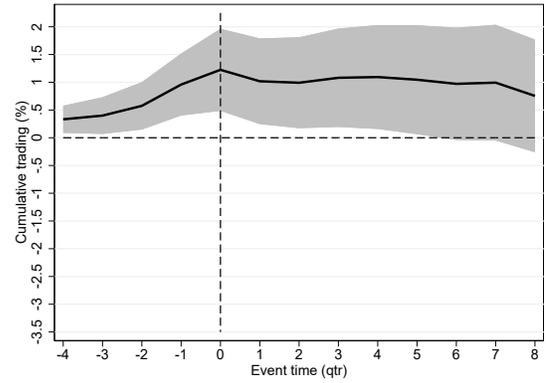
Variable	Description	Data source
$collateralyield_{f,t}$	Yield on collateral. $collateralyield_{f,t} = income_{f,t}/collateral_{f,t} - 1$	SEC (N-Q, N-CSR)
$lendyield_{f,t}$	Yield on lending. $lendyield_{f,t} = income_{f,t}/TNA_{f,t} - 1$	SEC (N-Q, N-CSR)
$r_{MMF,t}$	Average money market fund return in the quarter	CRSP
$numonloan_{f,t}$	Number of individual stocks on loan at quarter end.	SEC (N-Q, N-CSR)
$numintensity_{f,t}$	$numintensity_{f,t}$	SEC (N-Q, N-CSR)
$loanintensity_{f,t}$	$loanintensity_{f,t} = numonloan_{f,t}/(Number\ of\ securities\ in\ portfolio)_{f,t}$	SEC (N-Q, N-CSR)
$IOC_f$	CRSP Investment Objective Code	CRSP
$bidask_{s,t}$	Average daily bid-ask spread over the calendar quarter.	CRSP
$hilo_{s,t}$	Average daily high-low ratio over the calendar quarter.	CRSP
$volatility_{s,t}$	Average daily absolute value of returns over the calendar quarter	CRSP
$cooperation_{f,t}$	Cooperation index	Evans et al. (2017)
$competition_{f,t}$	Competition index	
$fundflow_{f,t}$	Quarterly fund flow . $fundflow_{f,t} = (TNA_{f,t} - (1 + r_{f,t}) \times TNA_{f,t-1})/TNA_{f,t-1}$	CRSP

Figure A1: Trading – rebalancing

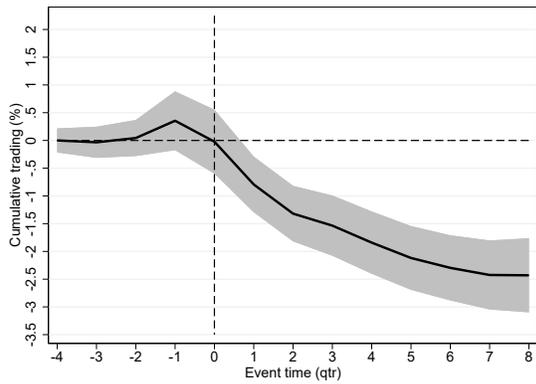
This figure presents the cumulative deviation in trading when comparing Active and Passive lender funds to non-lender funds of the same type. The graphs plot the estimates for cumulative trading for all specifications from Table 3. The numerical coefficients are tabulated in Table A2 in the Internet Appendix. The graphs display the period from four quarters before an observed loan to eight quarters after a loan. The grey bands show the 95% confidence interval.



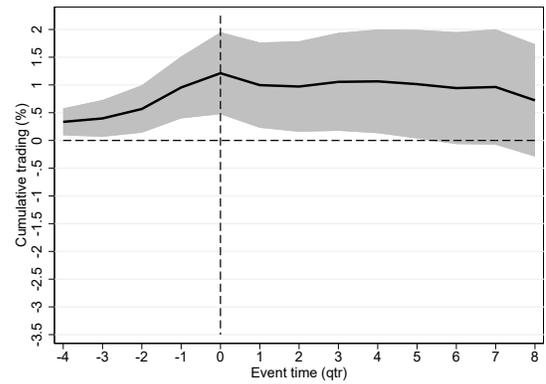
Specification (1): Active funds



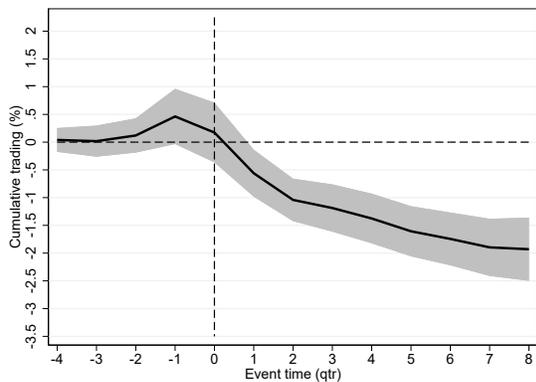
Specification (1): Passive funds



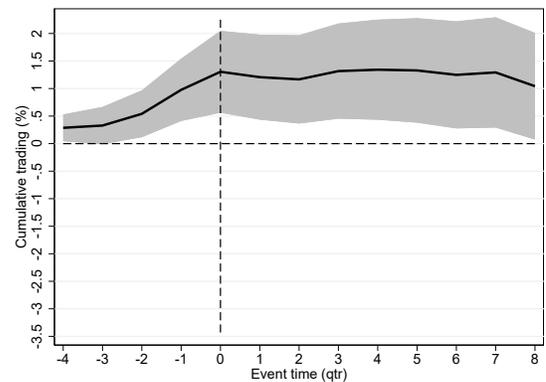
Specification (2): Active funds



Specification (2): Passive funds

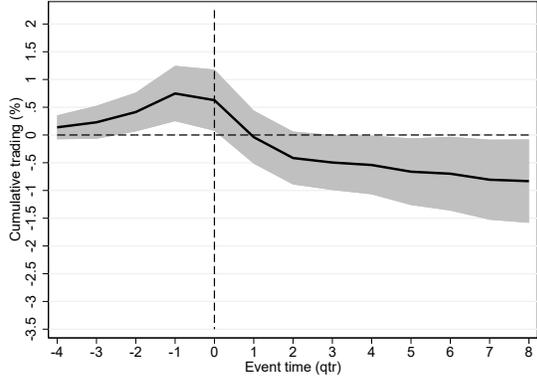


Specification (3): Active funds

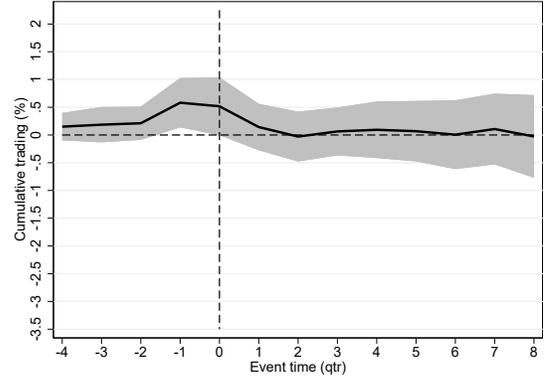


Specification (3): Passive funds

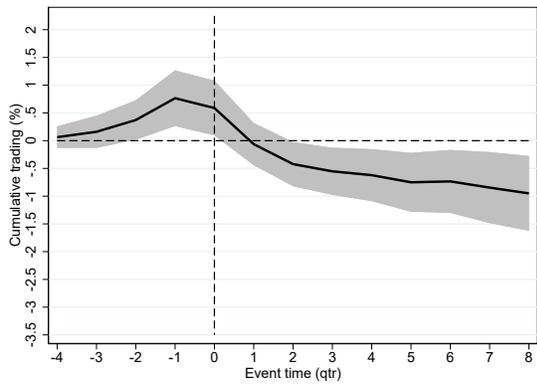
Figure A1: continued



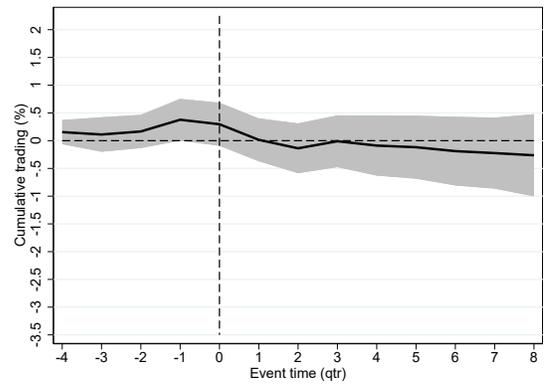
Specification (4): Active funds



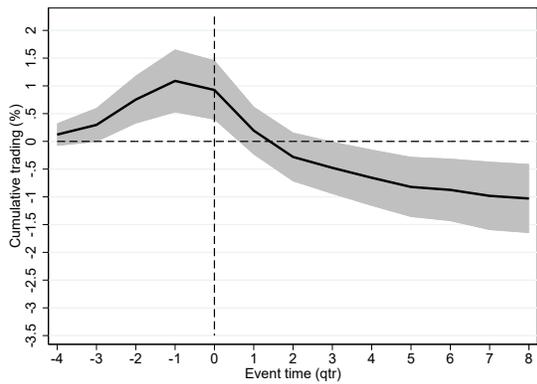
Specification (4): Passive funds



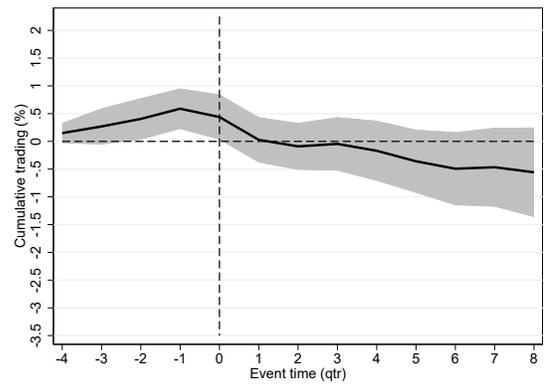
Specification (5): Active funds



Specification (5): Passive funds



Specification (6): Active funds



Specification (6): Passive funds

Table A1: Portfolio rebalancing around stock lending

This table analyzes mutual funds' trading around stock lending events. The dependent variable  $\Delta Trading_{f,s,t}$  measures the difference in trading in stock  $s$  between a fund and the fund's comparison group. This table presents the results from estimating Model (8) separately for active and passive funds, and is analogous to Table 3 in the paper. The comparison groups are defined according to Active/Passive status, CRSP Investment Objective Code and Total Net Asset tercile. The leads and lags of the indicator variables for lending measure the deviation from the comparison group average portfolio weight change for the stock in event-time, where an event is the observation of a stock loan. The baseline coefficients are the event-time dummies for Passive funds. The Active fund event-time dummies measure trading relative to their benchmark groups and passive funds. For brevity, the table only reports leads up to two quarters and lags up to six quarters; the regression specification has leads and lags up to eight quarters. Standard errors are clustered at the stock, fund and quarter levels. \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

Panel (a): Lending by passive funds

	1	2	3	4	5	6
Passive						
-2	0.002 (1.66)	0.002 (1.63)	0.001 (0.68)	0.001 (0.45)	-0.000 (-0.09)	-0.000 (-0.19)
-1	0.004** (2.64)	0.004** (2.61)	0.004*** (2.74)	0.003** (2.17)	0.002* (1.89)	0.003** (2.66)
0	0.003* (1.83)	0.003* (1.79)	0.001 (0.76)	-0.000 (-0.36)	-0.002 (-1.31)	-0.003* (-1.84)
1	-0.002 (-1.16)	-0.002 (-1.20)	-0.004*** (-2.86)	-0.006*** (-3.70)	-0.002** (-2.08)	-0.003*** (-2.71)
2	-0.000 (-0.19)	-0.000 (-0.22)	-0.002 (-1.57)	-0.002 (-1.62)	-0.002 (-1.46)	-0.003** (-2.10)
3	0.001 (0.90)	0.001 (0.86)	-0.001 (-0.62)	-0.001 (-0.80)	0.000 (0.19)	0.001 (1.01)
4	0.000 (0.12)	0.000 (0.11)	-0.000 (-0.37)	0.000 (0.11)	-0.001 (-0.73)	-0.002** (-2.03)
5	-0.000 (-0.66)	-0.000 (-0.68)	-0.001 (-0.89)	-0.002 (-1.41)	-0.001 (-0.77)	-0.002 (-1.39)
6	-0.001 (-0.76)	-0.001 (-0.79)	-0.001 (-0.64)	-0.000 (-0.32)	-0.001 (-0.76)	-0.001 (-0.65)
Fund flow control	No	Yes	No	No	No	No
Stock $\times$ Quarter FE	No	No	Yes	Yes	Yes	Yes
Stock $\times$ Fund FE	No	No	No	Yes	Yes	Yes
IOC $\times$ Quarter FE	No	No	No	No	Yes	Yes
F.Family $\times$ Stock $\times$ Quarter FE	No	No	No	No	No	Yes
Observations	3804177	3743481	3773908	3651211	3453259	2310000
Adjusted $R^2$	0.000	0.000	0.062	0.196	0.218	0.037

Table A1: Continued

Panel (b): Lending by active funds

	1	2	3	4	5	6
Active						
-2	0.001 (1.15)	0.001 (1.04)	0.001 (0.94)	0.002 (1.62)	0.002** (2.02)	0.004*** (3.63)
-1	0.003* (1.94)	0.003** (2.14)	0.004** (2.63)	0.004*** (2.89)	0.004*** (3.24)	0.004*** (2.97)
0	-0.004*** (-2.90)	-0.004*** (-2.99)	-0.003* (-1.98)	-0.000 (-0.29)	-0.001 (-1.20)	-0.001 (-1.55)
1	-0.008*** (-5.63)	-0.008*** (-5.63)	-0.007*** (-5.30)	-0.007*** (-4.59)	-0.007*** (-4.90)	-0.007*** (-4.91)
2	-0.005*** (-4.94)	-0.005*** (-4.94)	-0.004*** (-4.25)	-0.004*** (-3.37)	-0.003*** (-3.51)	-0.004*** (-4.21)
3	-0.002* (-2.00)	-0.002** (-2.07)	-0.001 (-1.47)	-0.000 (-0.61)	-0.001* (-1.82)	-0.002*** (-2.87)
4	-0.003*** (-4.60)	-0.003*** (-4.53)	-0.002** (-2.58)	-0.000 (-0.46)	-0.001 (-0.93)	-0.002*** (-2.69)
5	-0.003*** (-3.78)	-0.003*** (-3.69)	-0.002*** (-2.92)	-0.001 (-1.11)	-0.001 (-1.50)	-0.002** (-2.53)
6	-0.002** (-2.48)	-0.002** (-2.48)	-0.001* (-1.91)	-0.000 (-0.23)	0.000 (0.46)	-0.000 (-0.72)
Fund flow control	No	Yes	No	No	No	No
Stock $\times$ Quarter FE	No	No	Yes	Yes	Yes	Yes
Stock $\times$ Fund FE	No	No	No	Yes	Yes	Yes
IOC $\times$ Quarter FE	No	No	No	No	Yes	Yes
F.Family $\times$ Stock $\times$ Quarter FE	No	No	No	No	No	Yes
Observations	27552073	27093917	27520644	26910657	24604742	13408658
Adjusted $R^2$	0.000	0.000	-0.005	0.058	0.085	0.269

Table A2: Cumulative rebalancing trading stock lending

This table presents the cumulative trading by Active and Passive funds around stock loans relative to similar non-lender funds. The table is constructed by cumulating the coefficients from Table 3 for passive funds (Panel (a)) and for active funds (Panel (b)). The cumulative trading for active funds is the cumulative sum of active fund and passive fund (the reference category) event-time coefficients. Each column represents the corresponding specification from Table 3.  $***p < 0.01, **p < 0.05, *p < 0.1$ .

Panel (a): Cumulative trading by Passive funds

Event time	(1)	(2)	(3)	(4)	(5)	(6)
-4	0.33***	0.34***	0.29***	0.15	0.15	0.15
-1	0.40***	0.40***	0.33*	0.19	0.11	0.27
-2	0.58***	0.57***	0.54*	0.21	0.17	0.41**
-1	0.96***	0.95***	0.98***	0.58*	0.38***	0.59***
0	1.22***	1.21***	1.30***	0.52	0.3	0.44**
1	1.02***	1.00***	1.21***	0.14	0.02	0.03
2	0.99***	0.97***	1.17***	-0.03	-0.14	-0.09
3	1.08***	1.06***	1.32***	0.06	-0.01	-0.05
4	1.09**	1.07**	1.34***	0.09	-0.09	-0.17
5	1.05**	1.01**	1.33***	0.07	-0.12	-0.36
6	0.97*	0.94*	1.25**	0.01	-0.19	-0.49
7	0.99*	0.96*	1.29**	0.11	-0.22	-0.47
8	0.75	0.72	1.04**	-0.03	-0.26	-0.56

Panel (b): Cumulative trading by Active funds

Event time	(1)	(2)	(3)	(4)	(5)	(6)
-4	0.02	0.00	0.04	0.14	0.06	0.12
-1	-0.02	-0.03	0.02	0.23	0.16	0.3*
-2	0.07	0.04	0.12	0.41**	0.37***	0.75***
-1	0.35	0.36	0.46	0.75***	0.77***	1.09***
0	-0.02	-0.02	0.17	0.63**	0.59**	0.93***
1	-0.78***	-0.79***	-0.56***	-0.04*	-0.06	0.19
2	-1.31***	-1.32***	-1.04***	-0.42**	-0.42**	-0.28
3	-1.52***	-1.53***	-1.19***	-0.50**	-0.55***	-0.48**
4	-1.83***	-1.84***	-1.38***	-0.54**	-0.62***	-0.66**
5	-2.11***	-2.12***	-1.61***	-0.66**	-0.75***	-0.82***
6	-2.29***	-2.30***	-1.74***	-0.70**	-0.73**	-0.87***
7	-2.41***	-2.42***	-1.90***	-0.81**	-0.85***	-0.98***
8	-2.42***	-2.43***	-1.93***	-0.83***	-0.95***	-1.03***

Table A3: Stock returns after borrowing from mutual funds

Table A3 reports the results from event studies on stocks borrowed from Active and Passive mutual funds, respectively. The dependent variable is quarterly Carhart four-factor alpha. Event time is measured relative to the end of the quarter when a stock loan is observed ( $t = 0$ ). The table presents cumulative returns in percentage points and t-statistics for stocks borrowed from Active and Passive funds.

Event time	Active	t-stat (Act)	Passive	t-stat (Pass)
0	-1.13	-11.56	-1.27	-11.84
1	-2.42	-10.57	-2.56	-10.07
2	-3.58	-9.75	-3.64	-9.33
3	-4.81	-9.43	-4.71	-8.99
4	-5.77	-9.02	-5.19	-7.91
5	-6.75	-8.65	-5.89	-7.50
6	-7.2	-7.99	-6.46	-6.95
7	-8.00	-7.62	-7.04	-6.52
8	-8.08	-6.83	-7.53	-6.24
9	-8.8	-6.61	-7.51	-5.61
10	-8.82	-6.01	-7.82	-5.33
11	-9.35	-5.76	-7.37	-4.64
12	-8.84	-5.06	-7.86	-4.49

Table A4: Stock returns and rebalancing by active funds

This table reports the results from event studies on stocks borrowed from Active mutual funds. I separate stock loans into two groups based on the relative amount of rebalancing performed by the funds between quarters  $t = 0$  and  $t = 3$ . The dependent variable is quarterly Carhart four-factor alpha. Event time is measured relative to the end of the quarter when a stock loan is observed ( $t = 0$ ). The table presents cumulative returns and t-statistics.

Event time	Holdings change low	t-stat (Low)	Holdings change high	t-stat (High)
0	-1.96	-12.1	-.55	-5.58
1	-3.55	-10.52	-.98	-4.00
2	-5.05	-9.68	-1.87	-4.57
3	-5.96	-8.96	-2.35	-4.24
4	-6.96	-8.37	-2.85	-3.93
5	-7.09	-7.22	-2.99	-3.39
6	-7.78	-6.81	-3.93	-3.67
7	-7.71	-5.93	-3.98	-3.24
8	-8.31	-5.61	-4.77	-3.37
9	-8.00	-4.92	-4.11	-2.67
10	-8.54	-4.68	-5.02	-2.87
11	-8.66	-4.36	-4.37	-2.31
12	-9.48	-4.38	-5.16	-2.43

Table A5: Cross-sectional spillover effects on trading

This table examines cross-sectional information spillover events when the lender is an Active fund. The dependent variable  $\Delta Trading_{f,s,t}$  measures the difference in trading in stock  $s$  between a fund and the fund's comparison group. The comparison groups are defined according to Active/Passive fund status, CRSP Investment Objective Code and Total Net Asset tercile. The leads and lags of the indicator variables for lending measure the deviation from the comparison group average portfolio weight change for the stock in event-time, where an event is the observation of a stock loan. The baseline coefficients are the event-time dummies for Passive funds. The Active fund event-time dummies measure trading relative to their benchmark groups *and* passive funds. For brevity, the table only reports leads up to two quarters and lags up to six quarters; the regression specification has leads and lags up to eight quarters. Standard errors are clustered at the stock, fund and quarter levels. shows sample splits based on fund family competition, cooperation, and net cooperation following Evans et al. (2020). Panel (b) shows sample splits based on past fund returns, imputed fund flow, total net assets, the combination of past returns and fund flow, and past returns within the investment objective code group. \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

Panel (a): Lending by active funds

	1		2		3		4		5		6	
	Competition		Cooperation				Net Cooperation					
	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Passive												
-2	0.002	-0.008	0.002	0.002	0.004	0.002*	(1.61)	(-0.93)	(0.41)	(1.61)	(0.27)	(1.77)
-1	0.001	0.004	0.007	0.001	0.015	0.001	(1.09)	(0.64)	(1.18)	(0.90)	(0.78)	(0.92)
0	0.007***	0.008	0.013**	0.006***	0.028	0.006***	(2.96)	(1.48)	(2.02)	(2.75)	(1.14)	(2.99)
1	0.000	0.002	-0.001	0.000	-0.017	0.000	(0.12)	(0.28)	(-0.17)	(0.01)	(-0.63)	(0.25)
2	0.001	-0.009	-0.008	0.002	-0.055	0.001	(0.66)	(-1.53)	(-1.27)	(0.93)	(-1.54)	(0.78)
3	0.002	-0.006	-0.004	0.001	-0.005	0.001	(1.07)	(-1.51)	(-1.10)	(0.58)	(-0.27)	(0.64)
4	0.002	0.003	0.003	0.000	0.010	0.000	(0.63)	(1.03)	(0.57)	(0.18)	(0.71)	(0.13)
5	0.002	-0.004	0.008**	-0.000	0.030	0.001	(0.59)	(-0.87)	(2.09)	(-0.15)	(0.95)	(0.37)
6	-0.002	0.002	-0.008	-0.002	-0.005	-0.002	(-0.87)	(0.56)	(-1.00)	(-1.01)	(-0.50)	(-1.23)
Active												
-2	-0.002	0.005	-0.001	-0.001	0.005	-0.001	(-0.86)	(0.57)	(-0.17)	(-0.29)	(0.31)	(-0.38)
-1	-0.003*	0.018**	0.002	0.001	-0.006	0.001	(-1.91)	(2.03)	(0.19)	(0.56)	(-0.18)	(0.60)
0	-0.013***	-0.010	-0.043***	-0.010***	-0.004	-0.010***	(-4.33)	(-1.20)	(-3.28)	(-3.24)	(-0.16)	(-3.42)
1	-0.004	-0.020	-0.012	-0.006*	-0.019	-0.006**	(-1.54)	(-1.66)	(-0.94)	(-1.90)	(-0.72)	(-2.26)
2	-0.004*	-0.003	0.009	-0.006**	0.043	-0.005**	(-1.76)	(-0.30)	(1.22)	(-2.37)	(1.31)	(-2.27)
3	-0.003	0.006	0.014*	-0.003	-0.003	-0.003	(-1.58)	(1.45)	(1.85)	(-1.53)	(-0.09)	(-1.36)
4	-0.004	-0.007	-0.003	-0.002	-0.038	-0.002	(-1.11)	(-1.50)	(-0.48)	(-0.90)	(-1.42)	(-0.79)
5	-0.003	0.005	-0.012	0.000	-0.014	-0.001	(-0.70)	(0.84)	(-1.16)	(0.17)	(-0.54)	(-0.51)
6	0.003	-0.005	0.008	0.003	-0.006	0.003	(1.28)	(-1.03)	(0.81)	(1.25)	(-0.31)	(1.59)
Stock $\times$ Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes						
Observations	11342979	3030342	2129836	12240191	1565060	12801537						
Adjusted $R^2$	-0.002	0.000	0.011	-0.003	-0.002	-0.003						

Table A5 Continued

Panel (b): Lending by active funds

	1	2	3	4	5	6	7	8	9	10
	Past returns		Fund flow		TNA		Past returns & Flow		Past Obj.Cd. Returns	
	Low	High	Low	High	Low	High	Low-Low	High-High	Low	High
Passive										
-2	-0.001 (-0.41)	0.003** (2.43)	0.004*** (2.66)	0.001 (0.82)	0.005** (2.49)	0.001 (1.00)	-0.001 (-0.18)	0.002 (1.10)	0.002 (1.19)	0.001 (1.14)
-1	0.002 (0.80)	0.002** (2.05)	0.001 (0.77)	0.001 (0.62)	0.002 (1.05)	0.001 (0.51)	0.004 (1.26)	0.001 (1.29)	0.003* (1.89)	0.001 (1.10)
0	0.003 (1.15)	0.004*** (2.92)	0.006*** (3.06)	0.004** (2.22)	0.007** (2.61)	0.003** (2.14)	0.005 (1.31)	0.003** (2.13)	0.005** (2.37)	0.003** (2.45)
1	-0.003 (-1.41)	-0.002* (-1.86)	-0.003* (-1.78)	-0.001 (-0.31)	-0.002 (-0.56)	-0.002* (-1.84)	-0.003 (-1.16)	-0.002 (-1.60)	-0.005** (-2.31)	-0.002 (-1.49)
2	-0.002 (-1.07)	-0.001 (-1.59)	-0.002 (-1.06)	0.000 (0.29)	0.003 (1.26)	-0.002 (-1.21)	-0.001 (-0.74)	0.000 (0.18)	-0.001 (-0.40)	-0.001* (-1.68)
3	0.000 (0.20)	0.002** (2.58)	0.002*** (2.71)	0.000 (0.17)	-0.002 (-0.76)	0.003*** (3.83)	-0.001 (-0.48)	0.001 (1.15)	0.000 (0.37)	0.002** (2.50)
4	-0.002 (-0.68)	0.000 (0.04)	-0.000 (-0.19)	-0.002 (-1.43)	-0.001 (-0.97)	-0.000 (-0.16)	0.000 (0.16)	-0.001 (-0.74)	-0.000 (-0.07)	-0.001 (-0.62)
5	-0.000 (-0.10)	-0.000 (-0.57)	-0.000 (-0.33)	0.000 (0.05)	0.001 (0.49)	-0.001 (-1.16)	0.001 (0.37)	0.000 (0.01)	0.000 (0.25)	-0.001 (-1.05)
6	-0.002 (-1.03)	-0.000 (-0.17)	-0.002 (-1.29)	-0.000 (-0.40)	-0.001 (-0.95)	-0.000 (-0.44)	-0.004 (-1.54)	-0.001 (-0.56)	-0.001 (-0.57)	-0.000 (-0.52)
Active										
-2	0.002 (0.51)	-0.001 (-0.60)	0.000 (0.02)	-0.002 (-1.22)	-0.003 (-0.78)	0.000 (0.11)	0.004 (0.65)	-0.002 (-1.16)	0.001 (0.18)	-0.000 (-0.09)
-1	-0.001 (-0.41)	0.002 (0.89)	0.002 (0.93)	0.000 (0.01)	-0.000 (-0.16)	0.002 (1.03)	-0.001 (-0.33)	0.002 (0.76)	-0.000 (-0.00)	0.002 (0.83)
0	-0.007** (-2.04)	-0.007*** (-3.66)	-0.010*** (-3.37)	-0.008*** (-3.73)	-0.011*** (-2.98)	-0.007*** (-3.29)	-0.010** (-2.01)	-0.008*** (-3.59)	-0.009*** (-2.71)	-0.006*** (-3.12)
1	0.000 (0.02)	-0.002 (-1.02)	-0.003 (-1.41)	-0.003 (-1.13)	-0.002 (-0.65)	-0.003* (-1.69)	-0.002 (-0.61)	-0.001 (-0.63)	0.000 (0.11)	-0.001 (-0.81)
2	-0.001 (-0.37)	-0.002** (-2.11)	-0.002 (-0.84)	-0.003* (-1.71)	-0.006* (-1.79)	-0.002 (-1.06)	-0.001 (-0.40)	-0.003* (-1.93)	-0.003 (-1.17)	-0.002 (-1.63)
3	-0.002 (-1.00)	-0.003** (-2.27)	-0.003** (-2.11)	-0.002 (-0.86)	0.001 (0.29)	-0.004*** (-2.90)	0.000 (0.01)	-0.002 (-1.49)	-0.002 (-1.30)	-0.003** (-2.03)
4	-0.002 (-0.83)	-0.000 (-0.17)	-0.002 (-1.06)	0.001 (0.78)	0.001 (0.59)	-0.001 (-0.82)	-0.005* (-1.98)	0.001 (0.44)	-0.002 (-0.98)	-0.000 (-0.08)
5	0.000 (0.01)	-0.001 (-1.20)	-0.001 (-0.62)	-0.000 (-0.34)	-0.002 (-0.78)	-0.000 (-0.04)	-0.002 (-0.61)	-0.001 (-1.08)	-0.002 (-0.81)	-0.001 (-0.79)
6	0.002 (0.93)	0.000 (0.41)	0.001 (0.56)	0.001 (0.94)	0.002 (1.19)	0.000 (0.23)	0.003 (1.30)	0.001 (1.30)	0.002 (0.78)	0.000 (0.48)
Stock × Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	9723889	15121487	14873599	12619003	12174804	15971120	5742114	7405957	10256298	14591018
Adjusted $R^2$	-0.002	0.012	0.003	0.003	-0.004	0.002	0.003	0.021	0.003	0.009