

Internet Appendix to

**“The People in Your Neighborhood: Social Interactions
and Mutual Fund Portfolios”**

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This appendix provides additional results that were not included in the published article. The tables include:

- Regressions with indirect neighbors and additional controls
- Additional robustness tests of performance
- Trades in hard-to-research stocks—by characteristic
- Performance analysis using regressions
- Results using alternative measures of overlap
- Social interactions and round-trip trades
- Subsample analysis

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Table IA.I
Social Interactions vs. Preferences:
Indirect Neighbors with Additional Controls

The table reports the coefficient estimates and standard errors from the OLS estimation of holdings, purchase, and sale overlap on *Neighbors*, *DistantIndirectNeighbors*, and additional manager pair-level control variables. *DistantIndirectNeighbors* is defined as in Table VIII in the main text. Definitions for the additional controls are found in Table VII of the main text. The analysis in the table uses quarterly manager-pair observations outlined in Table VI of the main text. The sample is limited to fund pairs that have no managers in common during quarter *t*. Significance levels for tests of difference in means are denoted by *a*, *b*, *c*, which correspond to the 1%, 5%, and 10% levels, respectively.

Dependent variable:	% of overlapping					
	Holdings		Buys		Sales	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>DistantIndirectNeighbors</i>	1.26 ^a (0.45)	1.31 ^a (0.44)	1.15 ^a (0.43)	1.18 ^a (0.42)	1.01 ^b (0.48)	1.07 ^b (0.46)
<i>Neighbors</i>	1.08 ^a (0.33)	0.94 ^a (0.34)	1.27 ^a (0.43)	1.11 ^a (0.43)	0.58 ^c (0.32)	0.49 (0.32)
<i>SameMFCity</i>	0.36 ^b (0.15)	0.31 ^b (0.15)	-0.01 (0.14)	-0.06 (0.14)	0.24 ^c (0.14)	0.20 (0.14)
<i>SameMediaMkt</i>	0.69 ^a (0.16)	0.19 (0.12)	0.93 ^a (0.14)	0.43 ^a (0.11)	0.68 ^a (0.15)	0.35 ^a (0.12)
<i>Similar Age</i>		0.53 ^a (0.09)		0.43 ^a (0.08)		0.47 ^a (0.08)
<i>HomePriceRatio</i>		0.37 (0.23)		0.25 (0.20)		0.25 (0.18)
<i>BothReligiousAreas</i>		0.88 ^a (0.27)		0.66 ^a (0.21)		0.81 ^a (0.21)
<i>BothJewishAreas</i>		0.04 (0.26)		0.42 ^c (0.22)		-0.06 (0.22)
<i>BothCatholicAreas</i>		0.22 (0.32)		0.29 (0.26)		-0.09 (0.23)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
<i>AdjR</i> ²	0.39	0.39	0.13	0.14	0.09	0.09
<i>N</i> (thousands)	4,954	4,954	4,125	4,125	4,125	4,125

Table IA.II
The Performance Effect of Social Interactions: Additional Robustness

Panel A of this table reports the performance of portfolios based on trades made by neighboring and nonneighboring mutual fund managers analogous to that in Table X of the main text. In row 1, the stocks in the trade-based portfolios are equal-weighted instead of using the new money the stock receives during the previous quarter as weights. In row 2, stocks included in the DGTW benchmark portfolio must have nominal prices greater than \$5. In row 3, risk-adjusted returns are calculated using the Fama-French-Carhart four-factor model. In row 4, the analysis excludes common trades made by funds in the same fund family. Finally, in row 5, the analysis excludes local stocks, where local stocks are defined as those headquartered within 50 miles of the fund’s management company. Columns 1 and 2 report the risk-adjusted average returns of the neighbor buy and sell portfolios, respectively. Where not otherwise noted, risk adjustment is based on DGTW benchmark returns. Columns 4 and 5 report the corresponding results for the nonneighbor portfolios. Finally, columns 3 and 6 describe the difference of the returns of the buy and sell portfolios for the neighbor and nonneighbor stocks, respectively, and column 7 provides the difference-in-difference estimate. Panel B of the table reports the performance of portfolios based on trades made by neighboring mutual fund managers with abnormal trade overlap during the previous quarter and those without. Abnormal trade overlap is computed as the residual from the regression models estimated in columns 1 and 4 of Table III in the main text, but with the *Neighbors* dummy variable excluded from the model. Trades from neighbor pairs with positive residuals from these regressions are allocated to the “Neighbors with abnormal overlap portfolio” and trades from neighbor pairs with non-positive residuals are allocated to the “Neighbors without abnormal overlap portfolio.” Neighbor portfolios are constructed following the methodology outlined in Table X in the main text for both subgroups. Columns 1 and 2 report the risk-adjusted average returns of the neighbors with abnormal overlap buy and sell portfolios, respectively. Columns 4 and 5 report the corresponding results for neighbor trades without abnormal overlap. Finally, columns 3 and 6 describe the difference of the returns of the buy and sell portfolios for neighbors with and without abnormal trade overlap, respectively, and column 7 provides the difference-in-difference estimate. Standard errors are reported in parentheses. Portfolio returns are reported for the entire sample period. The samples are limited to fund pairs that have no managers in common during quarter t . Significance levels for tests of difference in means are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

Panel A: Performance robustness

	Risk-adjusted monthly returns						
	Neighbor portfolio			Nonneighbor portfolio			
	Buys	Sells	Diff.	Buys	Sells	Diff.	Diff.-Diff.
Equal-weighted stock portfolios	0.20 (0.14)	-0.28 (0.21)	0.48 ^b (0.23)	0.11 (0.09)	0.05 (0.09)	0.06 (0.09)	0.41 (0.25)
DGTW (CRSP with price >\$5)	0.18 (0.20)	-0.32 (0.21)	0.51 (0.31)	-0.01 (0.13)	0.00 (0.10)	-0.02 (0.12)	0.52 ^c (0.31)

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	Risk-adjusted monthly returns						
	Neighbor portfolio			Nonneighbor portfolio			Diff.-Diff.
	Buys	Sells	Diff.	Buys	Sells	Diff.	
Four-factor α	0.20 (0.15)	-0.35 (0.22)	0.56 ^b (0.28)	0.12 (0.10)	0.03 (0.10)	0.09 (0.11)	0.46 ^c (0.28)
Excluding same fund family pairs	0.29 (0.18)	-0.29 (0.22)	0.58 ^c (0.29)	0.06 (0.12)	0.07 (0.09)	-0.03 (0.12)	0.61 ^b (0.30)
Excluding local stocks	0.23 (0.17)	-0.29 (0.27)	0.53 ^c (0.31)	0.10 (0.13)	0.14 (0.10)	-0.04 (0.13)	0.56 ^c (0.33)

Panel B: Performance conditional on abnormal overlap

	DGTW-adjusted monthly returns						
	Neighbor portfolio with abnormal trade overlap			Neighbor portfolio without abnormal trade overlap			Diff.-Diff.
	Buys	Sells	Diff.	Buys	Sells	Diff.	
Full sample	0.47 (0.30)	-0.49 ^c (0.28)	0.96 ^b (0.41)	0.13 (0.17)	-0.07 (0.20)	0.20 (0.27)	0.76 ^c (0.40)

Table IA.III
The Performance Effect of Social Interactions:
Trades in Hard-to-Research Stocks—By Characteristic

This table reports the performance of portfolios based on trades made in hard-to-research and easy-to-research stocks by neighboring and nonneighboring mutual fund managers broken down by the individual characteristics that make up the definition of hard-to-research securities in Table XII of the main text. In particular, stocks are categorized as “hard-to-research” if they have low sales, low advertising expense, or low analyst coverage, where these variables follow the definitions described in Table XI of the main text. Finally, in the last few rows, we split stocks based on whether they are included in the S&P 500 index. Portfolios are created following the methodology outlined in Table XII in the main text. The table also follows the format of Table XII of the main text but subheadings are added to indicate the criteria used for classifying stocks by visibility. Standard errors are reported in parentheses. Portfolio returns are reported for the entire sample period. The sample is limited to fund pairs that have no managers in common during quarter t . Significance levels for tests of difference in means are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

	DGTW-adjusted monthly returns						
	Hard-to-research stocks			Easy-to-research stocks			Diff.-Diff.
	Buys	Sells	Diff.	Buys	Sells	Diff.	
<hr/>							
Sales							
Neighbor	0.14 (0.79)	-1.45 (1.02)	1.59 (1.14)	0.27 (0.19)	-0.23 (0.18)	0.50 ^c (0.27)	1.08 (1.06)
Nonneighbor	-0.17 (0.56)	0.19 (0.57)	-0.36 (0.59)	0.08 (0.13)	0.05 (0.09)	0.03 (0.12)	-0.39 (0.59)
Diff.-Diff.			1.94 ^c (1.11)			0.47 ^c (0.27)	1.47 (1.09)
Analyst coverage							
Neighbor	0.55 (0.89)	-1.88 (1.78)	2.43 (2.25)	0.28 (0.27)	-0.16 (0.35)	0.43 (0.42)	2.00 (2.44)
Nonneighbor	-0.27 (0.77)	-1.93 (0.90)	1.66 (1.17)	0.14 (0.12)	0.13 (0.17)	0.02 (0.16)	1.65 (1.19)
Diff.-Diff.			0.77 (2.68)			0.42 (0.46)	0.35 (3.00)
Advertising expense							
Neighbor	0.54 (0.56)	-0.57 (0.78)	1.12 (0.92)	0.40 ^c (0.23)	-0.09 (0.35)	0.49 (0.39)	0.63 (0.94)
Nonneighbor	-0.60 (0.41)	-0.31 (0.44)	-0.20 (0.45)	0.02 (0.15)	0.06 (0.12)	-0.04 (0.17)	-0.20 (0.44)
Diff.-Diff.			1.41 ^c (0.87)			0.53 (0.43)	0.88 (0.91)

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	DGTW-adjusted monthly returns						
	Hard-to-research stocks			Easy-to-research stocks			Diff.-Diff.
	Buys	Sells	Diff.	Buys	Sells	Diff.	
S&P 500 index membership							
Neighbor	0.34 (0.42)	-0.72 (0.57)	1.06 ^c (0.61)	0.22 (0.16)	-0.19 (0.22)	0.42 (0.29)	0.64 (0.69)
Nonneighbor	-0.03 (0.26)	0.11 (0.20)	-0.14 (0.28)	0.10 (0.11)	0.11 (0.10)	-0.01 (0.11)	-0.13 (0.27)
Diff.-Diff.			1.20 ^c (0.65)			0.43 (0.31)	0.77 (0.69)

Table IA.IV
Performance Effect of Social Interactions: Regression Analysis

The table reports the coefficient estimates and standard errors from quarterly Fama-MacBeth least squares regressions, where the dependent variable in the “Buys” (“Sells”) column is the average monthly DGTW-adjusted performance during quarter $t + 1$ of the overlapping purchases (sales) of funds i and j during quarter t . In each of the quarterly regressions, fund-pair observations are weighted using the average dollar assets (TNA) of the fund pair during the previous quarter. In total 56 quarters are included in the estimates from the first quarter of 1997 through the last quarter of 2010. The last column, “Diff”, reports the Fama-MacBeth estimates and standard errors of the difference between the estimates in the first two columns. Included in the regressions are the control variables from Table II in the main text, but coefficient estimates are only reported for variables of interest. The sample is limited to fund pairs with no managers in common during quarter t and fund pairs whose managers do not manage another fund together. Heteroskedasticity-consistent standard errors are reported in parentheses. Significance levels are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

	Buys	Sells	Diff
<i>Neighbors</i>	0.16 (0.12)	-0.27 (0.17)	0.43 ^b (0.20)
<i>SameMFCity</i>	-0.06 (0.07)	-0.05 (0.07)	-0.01 (0.11)
<i>SameMediaMkt</i>	0.02 (0.05)	-0.02 (0.05)	0.03 (0.07)
<i>SameFundFam</i>	0.01 (0.10)	-0.11 (0.10)	0.11 (0.15)
Controls	Yes	Yes	Yes

Table IA.V
Alternative Overlap Measures

The table reports the coefficient estimates and standard errors from OLS estimation of various measures of overlap on *Neighbors*, *SameMediaMkt*, and *SameMFCity*. Each row reports results for a separate regression. Included in the regressions are the control variables from column 5 of Table II in the main text, but coefficient estimates are only reported for variables of interest. Also, reported is the average overlap in the sample for the dependent variable. The analysis in the table uses quarterly fund-pair observations outlined in Tables II and III of the main text. The samples are limited to fund pairs that have no managers in common during quarter t . Standard errors two-way clustered by each fund in the pair, are in parentheses. Significance levels are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

Overlap measure:	<i>Neighbors</i>	<i>Same MFCity</i>	<i>Same MediaMkt</i>	Avg. overlap
Percentage of overlapping holdings	1.56 ^a (0.53)	-0.15 (0.24)	0.99 ^a (0.23)	14.59
Overlapping buys (weight-based)	0.17 ^a (0.05)	0.04 ^a (0.02)	0.13 ^a (0.02)	0.72
Overlapping sales (weight-based)	0.09 ^a (0.03)	0.03 ^b (0.01)	0.08 ^a (0.01)	0.50
Overlapping buys (share-based)	0.14 ^a (0.05)	0.02 (0.02)	0.14 ^a (0.02)	0.75
Overlapping sales (share-based)	0.08 ^b (0.03)	0.04 ^a (0.01)	0.06 ^a (0.01)	0.42

Table IA.VI
Social Interactions and Round-Trip Trades

The table describes correlated round-trip trades among neighboring and nonneighboring mutual fund managers. Column 1 shows the mean probability that, if neighbor funds i and j both buy stock k in quarter t , they will liquidate their positions in stock k simultaneously in the future. Column 2 provides the corresponding mean probability for nonneighboring fund pairs. The difference in probabilities between columns 1 and 2 is reported in column 3. Finally, while the first row of the table reports round-trip probabilities for all common buys, the second row shows the corresponding mean probabilities for common extensive margin buys only. The average probabilities reported in the table represent time-series averages of the corresponding quarterly frequencies. The sample is limited to fund pairs that have no managers in common during quarter t . Significance levels for tests of difference in means are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

	Prob. of liquidating a common position together with		
	Neighbor fund	Non- neighbor fund	Diff.
Bought together (all buys)	17.90 ^a (0.66)	15.28 ^a (0.52)	2.67 ^a (0.84)
Bought together (only new buys)	22.00 ^a (1.21)	18.38 ^a (0.75)	3.62 ^b (1.42)

Table IA.VII
Subsample Analysis

The table reports the coefficient estimates and standard errors from OLS estimation of various subsamples on *Neighbors*, *SameMediaMkt*, and *SameMFCity*. Each row reports results for a separate regression. Included in the regressions are the control variables from column 5 of Table II of the main text, but coefficient estimates are only reported for variables of interest. Also, reported is the average overlap in the sample for the dependent variable and the percentage of the original sample included in the subsample. The analysis in the table uses quarterly fund-pair observations outlined in Tables II and III of the main text. The samples are limited to fund pairs that have no managers in common during quarter t . Standard errors, two-way clustered by each fund in the pair, are in parentheses. Significance levels are denoted by a , b , c , which correspond to the 1%, 5%, and 10% levels, respectively.

Overlap in:	Subsample	<i>Neighbors</i>	<i>Same MFCity</i>	<i>Same MediaMkt</i>	Avg. overlap	% of orig. sample
Holdings	Excluding New York- and Boston-based funds	1.53 ^a (0.39)	-0.15 (0.15)	0.35 ^a (0.14)	7.78	50
	Funds within the same city	1.59 ^a (0.38)		0.05 (0.20)	8.91	7
	Funds within the same media market	0.92 ^a (0.25)	-0.24 (0.19)		8.93	10
	Funds within the same city and media market	1.46 ^a (0.37)			9.23	3
Buys	Excluding New York- and Boston-based funds	1.10 ^b (0.52)	-0.36 ^b (0.17)	1.07 ^a (0.14)	8.36	50
	Funds within the same city	1.85 ^a (0.52)		0.21 (0.17)	9.22	7
	Funds within the same media market	1.08 ^a (0.33)	-0.83 ^a (0.19)		9.59	11
	Funds within the same city and media market	1.67 ^a (0.49)			9.63	3
Sells	Excluding New York- and Boston-based funds	0.61 (0.41)	0.00 (0.15)	0.62 ^a (0.13)	6.42	50
	Funds within the same city	1.20 ^a (0.42)		-0.13 (0.20)	7.65	7
	Funds within the same media market	0.53 ^b (0.26)	-0.45 ^a (0.17)		7.56	11
	Funds within the same city and media market	1.06 ^a (0.41)			7.82	3