SUPPLEMENT TO "UNDERSTANDING MECHANISMS UNDERLYING PEER EFFECTS: EVIDENCE FROM A FIELD EXPERIMENT ON FINANCIAL DECISIONS"

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APPENDIX A: APPENDIX FIGURES AND TABLES

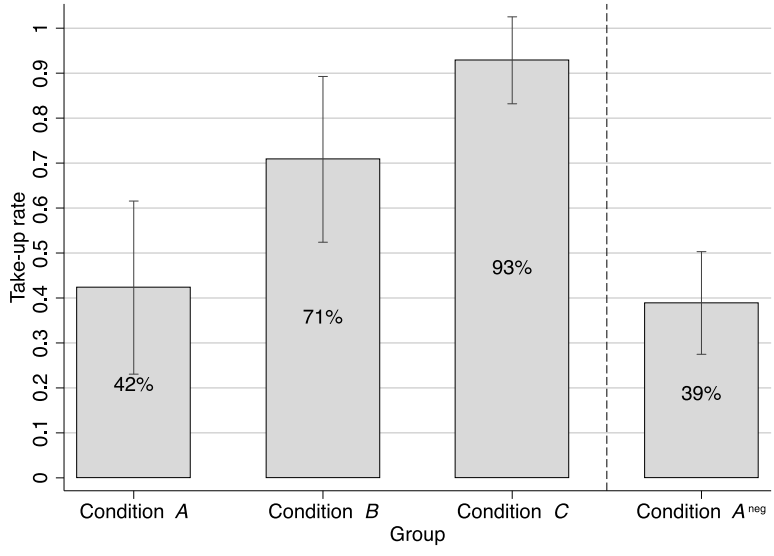

FIGURE A.1.—Investor 2's take-up rates. *Note*: This figure presents the mean (and 95% confidence interval) of the take-up rate for each group of investor 2's. Investors in conditions *A* to *C* have peers who wanted the asset. These investors were randomly allocated to one of these three groups. Those in condition *A* had no information about their peers. Those in condition *B* had information that their peers wanted to purchase the asset but had that choice rejected by the lottery. Those in condition *C* had information that their peers wanted and received the asset. Investors in condition A^{neg} have peers who did not want to purchase the asset (and received no information about their peer).

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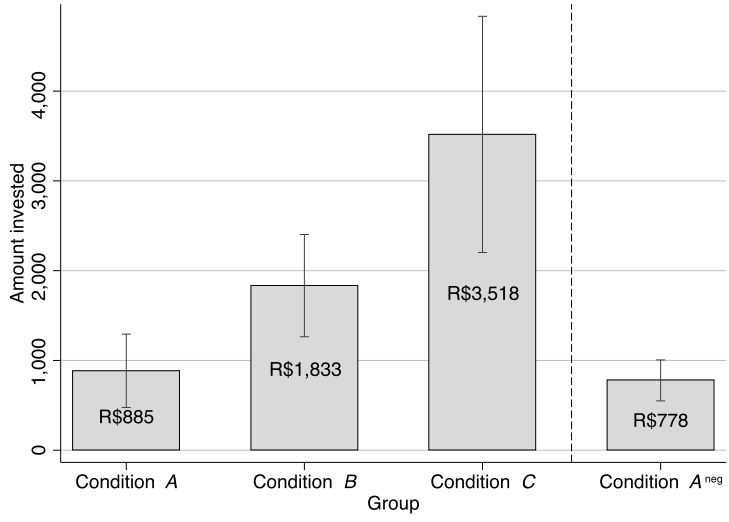
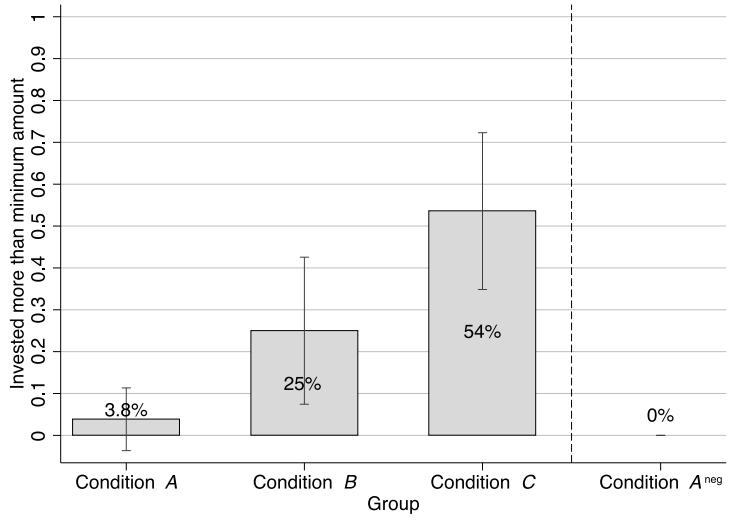
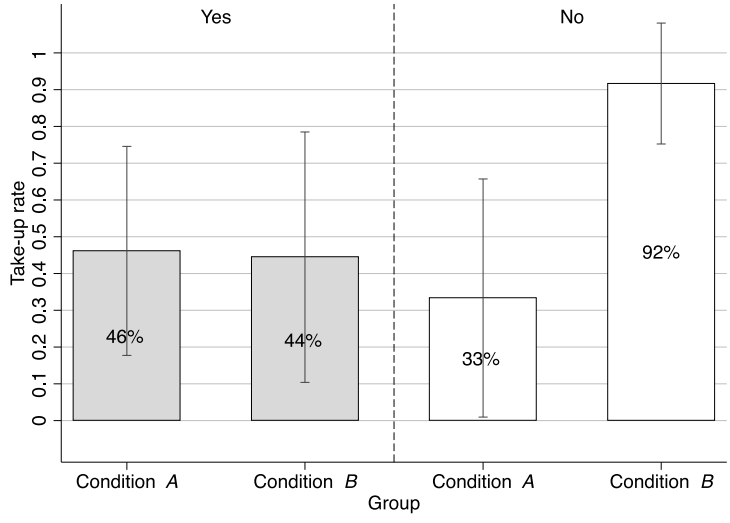


(a) Amount invested

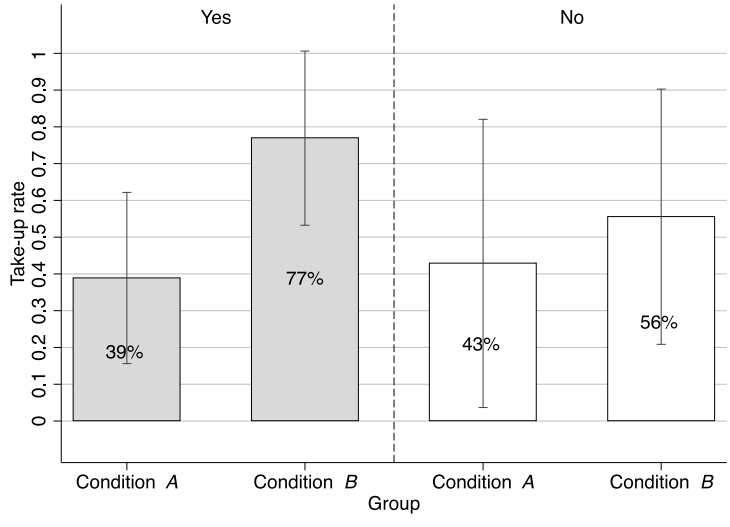


(b) Invested more than the minimum

FIGURE A.2.—Investor 2's alternative outcomes. *Note*: Panel (a) presents the mean (and 95% confidence interval) of amount invested for each group of investor 2's. Panel (b) presents the mean (and 95% confidence interval) of a dummy variable equal to 1 if the investor invested more than the minimum amount for each group of investor 2's. Investors in conditions A to C have peers who wanted the asset. These investors were randomly allocated to one of these three groups. Those in condition A had no information about their peers. Those in condition B had information that their peers wanted to purchase the asset but had that choice rejected by the lottery. Those in condition C had information that their peers wanted and received the asset. Investors in condition A^{neg} have peers who did not want to purchase the asset (and received no information about their peer).



(a) Investor 2 is financially sophisticated



(b) Associated investor 1 is financially sophisticated

FIGURE A.3.—Heterogeneity of social learning effects—self-assessed measure of financial literacy. *Note*: Panel (a) presents the mean (and 95% confidence intervals) of take-up rates for investor 2's in conditions *A* and *B*, separately for those who are and who are not financially sophisticated. Panel (b) presents the take-up rates separately for those whose associated investor 1's are and who are not financially sophisticated. Investors in conditions *A* and *B* have peers who wanted the asset. Those in condition *A* had no information about their peers. Those in condition *B* had information that their peers wanted to purchase the asset but had that choice rejected by the lottery. The financial sophistication variable is based on a self-assessment question conducted in a follow-up survey, where investors were asked to rank their level of financial sophistication from 1 (very low) to 7 (very high). Investors who reported 4 or higher were classified as financially sophisticated.

TABLE A.I

CHARACTERISTICS OF THE EXPERIMENTAL SAMPLE[a]

	Experimental Sample							
		Investor 1			Investor 2			
			Wanted the Asset?			Peer Wanted the Asset?		
	Full Sample (1)	All (2)	Yes (3)	No (4)	All (5)	Yes (6)	No (7)	Universe (8)
Age	38.15	39.12	39.60	38.60	37.18	36.45	37.97	34.14
	(0.80)	(1.14)	(1.60)	(1.62)	(1.12)	(1.50)	(1.68)	(0.16)
Gender (= 1 if male)	0.680	0.747	0.769	0.722	0.613	0.641	0.583	0.729
	(0.027)	(0.036)	(0.048)	(0.053)	(0.040)	(0.055)	(0.059)	(0.006)
Married	0.413	0.440	0.436	0.444	0.387	0.333	0.444	0.340
	(0.028)	(0.041)	(0.057)	(0.059)	(0.040)	(0.054)	(0.059)	(0.006)
Single	0.557	0.527	0.513	0.542	0.587	0.628	0.542	0.647
	(0.029)	(0.041)	(0.057)	(0.059)	(0.040)	(0.055)	(0.059)	(0.006)
Earnings	4,500	5,000	5,000	5,000	4,000	4,000	3,500	3,200
	(256)	(499)	(501)	(775)	(507)	(504)	(650)	(126)
Relationship with associated investor (= 1 if family)	0.48	0.48	0.53	0.43	0.48	0.53	0.43	–
	(0.03)	(0.04)	(0.06)	(0.06)	(0.04)	(0.06)	(0.06)	
N	300	150	78	72	150	78	72	5,506

[a]Column 1 presents the characteristics of the experimental sample, combining investor 1's and investor 2's. Column 2 presents the sample characteristics of investor 1's in the experimental sample, while columns 3 and 4 present the information for investor 1's who wanted and who did not want the asset, respectively. Column 5 presents the characteristics of investors 2's in the experimental sample, while columns 6 and 7 present the information for investor 2's whose peers wanted and did not want the asset, respectively. Column 8 presents the characteristics of the universe of investors in the main office of the brokerage. Each line presents averages of the corresponding variable. For earnings, we present the median value instead of the mean due to large outliers. The sample size for the earnings variable is smaller due to missing values. The omitted value for "Relationship with associated investor" is "friends." This variable is not defined for investors outside the experiment's sample.

TABLE A.II

COVARIATES BALANCE—OTHER RANDOMIZATIONS[a]

	Assignment to Investor 1 or Investor 2				Lottery for Investor 1's Who Wanted the Asset			
	Investor 1 (1)	Investor 2 (2)	p-Value of Test (1) = (2) (3)	N (4)	Won (5)	Lost (6)	p-Value of Test (5) = (6) (7)	N (8)
Age	39.12 (1.14)	37.18 (1.12)	0.22	300	39.47 (2.34)	39.71 (2.23)	0.94	78
Gender (= 1 if male)	0.747 (0.036)	0.613 (0.040)	0.01	300	0.861 (0.058)	0.690 (0.072)	0.07	78
Married	0.440 (0.041)	0.387 (0.040)	0.35	300	0.472 (0.084)	0.405 (0.077)	0.56	78
Single	0.527 (0.041)	0.587 (0.040)	0.30	300	0.528 (0.084)	0.500 (0.078)	0.81	78
Earnings	5,000 (499)	4,000 (507)	0.22	270	5,000 (925)	5,000 (754)	0.59	74
Relationship with peer (= 1 if family)	–	–	–	–	0.44 (0.08)	0.60 (0.08)	0.19	78

[a]Columns 1 and 2 present the averages of the corresponding variable, respectively, for investors assigned to be in the role of investor 1 and for those assigned to be in the role of investor 2. Robust standard errors in parentheses. Relationship with peer is not considered in this comparison since this variable is equal for both groups by construction. Column 3 presents the p-value of an F-test that the mean of the corresponding variable is the same for these two groups. Column 5 presents the averages for investor 1's who wanted the asset and won the lottery, while column 6 presents the averages for investor 1's who wanted the asset but did not win the lottery. Column 7 presents the p-value of an F-test that the mean of the corresponding variable is the same for these two groups. For earnings, we present the median and the p-value of a test that the median of this variable is the same for the corresponding groups. The sample size for the earnings variable is smaller due to missing values.

TABLE A.III

FOLLOW-UP SURVEY[a]

Question	Universe	Sample Size	Results
	Panel A: Financial Literacy Survey		
1. Self-assessed financial literacy (range: 1–7)	Investor 2's in conditions *A* and *B*, and their associated investor 1's	90 (out of 100)	Mean: 3.8 Standard deviation: 1.7 Proportion ≥ 4: 58.89%
2. Interest rate compounding question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	90 (out of 100)	Correct: 85.56%
3. Inflation question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	90 (out of 100)	Correct: 85.56%
4. Diversification question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	90 (out of 100)	Correct: 67.78%
5. Bond prices question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	90 (out of 100)	Correct: 14.44%
Questions (2)–(5)			0 correct answers: 5.56% 1 correct answer: 5.56% 2 correct answers: 32.22% 3 correct answers: 43.33% 4 correct answers: 13.33%

(*Continues*)

TABLE A.III—*Continued*

Question	Universe	Sample Size	Results
	Panel B: Questions Regarding the Sales Call		
1. Effect of lottery on purchase decision	Investor 2's in conditions *A*, *B*, and *C*	69 (out of 78)	No: 95.65%
2. Believed purchase decision could have been changed after lottery	Investor 2's in conditions *A*, *B*, and *C*	69 (out of 78)	No: 94.20%
3. Peer's lottery result affected beliefs about own lottery	Investor 2's in conditions *B* and *C*	47 (out of 52)	No: 100%
4. Peer's lottery result affected beliefs about quality of the asset	Investor 2's in conditions *B* and *C*	47 (out of 52)	No: 97.87%
5. Was (not) wanting something your peer could not have a significant factor in decision?	Investor 2's in condition *B*	20 (out of 24)	No: 100%
6. Effect of peer decision on beliefs about quality of the asset	Investor 2's in conditions *B* and *C*	48 (out of 52)	Positive update: 66.67% Negative update: 2.08% No update: 31.24%

(*Continues*)

TABLE A.III—*Continued*

Question	Universe	Sample Size	Results
7. Was wanting to have the same financial return as your peer a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	25 (out of 26)	Yes: 60%
8. Was wanting to have the same asset as your peer to talk about the asset a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	25 (out of 26)	Yes: 44%
9. Did you think about what your peer could do with the return?	Investor 2's in condition *C* who wanted the asset	25 (out of 26)	Yes: 80%
10. Was the fear of not having a return your peer could have a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	25 (out of 26)	Yes: 32%
11. Did you believe the information provided by the broker?	Investor 2's in conditions *B* and *C*	47 (out of 52)	Yes: 97.87%
12. Were you concerned about your decision being revealed to other clients?	Investor 2's in conditions *B* and *C*	47 (out of 52)	No: 89.36%

[a]The follow-up survey was conducted between November 26 and December 7, 2012. From the universe of investor 2's in conditions *A*–*C* and investor 1's associated with investor 2's in conditions *B* or *C* (128 investors in total), we collected information on 117 investors. Not all of those investors were asked all of the questions. This table reports, for each question, which investors answered it, the number of responses, and the results.

TABLE A.IV

FOLLOW-UP SURVEY—EXCLUDING INVESTORS INTERVIEWED BY SAME BROKER[a]

Question	Universe	Sample Size	Results
	Panel A: Financial Literacy Survey		
1. Self-assessed financial literacy (range: 1–7)	Investor 2's in conditions *A* and *B*, and their associated investor 1's	80 (out of 100)	Mean: 3.9 Standard deviation: 1.7 Proportion ≥ 4: 61.25%
2. Interest rate compounding question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	80 (out of 100)	Correct: 83.75%
3. Inflation question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	80 (out of 100)	Correct: 85.00%
4. Diversification question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	80 (out of 100)	Correct: 67.50%
5. Bond prices question	Investor 2's in conditions *A* and *B*, and their associated investor 1's	80 (out of 100)	Correct: 16.25%
Questions (2)–(5)			0 correct answers: 6.25% 1 correct answer: 6.25% 2 correct answers: 31.25% 3 correct answers: 41.25% 4 correct answers: 15.00%

(*Continues*)

TABLE A.IV—*Continued*

Question	Universe	Sample Size	Results
	Panel B: Questions Regarding the Sales Call		
1. Effect of lottery on purchase decision	Investor 2's in conditions *A*, *B*, and *C*	64 (out of 78)	No: 95.31%
2. Believed purchase decision could have been changed after lottery	Investor 2's in conditions *A*, *B*, and *C*	64 (out of 78)	No: 93.75%
3. Peer's lottery result affected beliefs about own lottery	Investor 2's in conditions *B* and *C*	45 (out of 52)	No: 100%
4. Peer's lottery result affected beliefs about quality of the asset	Investor 2's in conditions *B* and *C*	45 (out of 52)	No: 97.78%
5. Was (not) wanting something your peer could not have a significant factor in decision?	Investor 2's in condition *B*	20 (out of 24)	No: 100%
6. Effect of peer decision on beliefs about quality of the asset	Investor 2's in conditions *B* and *C*	46 (out of 52)	Positive update: 67.39% No update: 32.61%

(*Continues*)

TABLE A.IV—*Continued*

Question	Universe	Sample Size	Results
7. Was wanting to have the same financial return as your peer a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	24 (out of 26)	Yes: 62.50%
8. Was wanting to have the same asset as your peer to talk about the asset a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	24 (out of 26)	Yes: 41.67%
9. Did you think about what your peer could do with the return?	Investor 2's in condition *C* who wanted the asset	24 (out of 26)	Yes: 79.17%
10. Was the fear of not having a return your peer could have a significant factor in decision?	Investor 2's in condition *C* who wanted the asset	24 (out of 26)	Yes: 33.33%
11. Did you believe the information provided by the broker?	Investor 2's in conditions *B* and *C*	45 (out of 52)	Yes: 97.78%
12. Were you concerned about your decision being revealed to other clients?	Investor 2's in conditions *B* and *C*	45 (out of 52)	No: 88.89%

[a]This table replicates Table A.III excluding 11 investors who were interviewed by the same broker who made the sales call.

TABLE A.V

PROBIT AVERAGE MARGINAL EFFECTS—PEER EFFECTS, SOCIAL LEARNING, SOCIAL UTILITY, AND SELECTION: TAKE-UP RATES[a]

Dependent Variable: Wanted to Purchase the Asset				
	(1)	(2)	(3)	(4)
Learning alone (condition B − condition A)	0.285** (0.138)	0.301** (0.142)	0.357*** (0.125)	0.282** (0.128)
Learning and possession (condition C − condition A)	0.505*** (0.104)	0.536*** (0.109)	0.545*** (0.104)	0.525*** (0.103)
Negative selection (condition A^{neg} − condition A)	−0.034 (0.106)	0.018 (0.129)	0.002 (0.108)	0.055 (0.115)
Investor 1				0.133 (0.096)
Possession alone (condition C − condition B)	0.220** (0.108)	0.234** (0.103)	0.188* (0.103)	0.243** (0.117)
Mean (no information; peer chose the asset) (condition A)		0.423 (0.099)		
Broker fixed effects	No	Yes	Yes	Yes
Controls	No	No	Yes	Yes
N	150	150	150	300

[a]This table replicates the results from Table II using Probit models instead of ordinary least squares regressions. The coefficients presented are average marginal effects. Standard errors are bootstrapped and clustered at the pair level in column 4. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.VI

LOGIT AVERAGE MARGINAL EFFECTS—PEER EFFECTS, SOCIAL LEARNING, SOCIAL UTILITY, AND SELECTION: TAKE-UP RATES[a]

Dependent Variable: Wanted to Purchase the Asset				
	(1)	(2)	(3)	(4)
Learning alone (condition B − condition A)	0.285** (0.138)	0.295** (0.143)	0.355*** (0.124)	0.275** (0.127)
Learning and possession (condition C − condition A)	0.505*** (0.104)	0.542*** (0.112)	0.556*** (0.103)	0.527*** (0.106)
Negative selection (condition A^{neg} − condition A)	−0.034 (0.106)	0.018 (0.131)	−0.006 (0.107)	0.052 (0.116)
Investor 1				0.132 (0.096)
Possession alone (condition C − condition B)	0.220** (0.108)	0.247** (0.105)	0.202* (0.104)	0.252** (0.120)
Mean (no information; peer chose the asset) (condition A)		0.423 (0.099)		
Broker fixed effects	No	Yes	Yes	Yes
Controls	No	No	Yes	Yes
N	150	150	150	300
Broker fixed effects	No	Yes	Yes	Yes
Controls	No	No	Yes	Yes
N	150	150	150	300

[a]This table replicates the results from Table II using Logit models instead of ordinary least squares regressions. The coefficients presented are average marginal effects. Standard errors are bootstrapped and clustered at the pair level in column 4. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.VII
GMM RESULTS[a]

Panel A: Treatment Effects			
Learning and possession ($c - a$)	0.384^{***}		
	(0.085)		
Learning alone ($b - a$)	0.164		
	(0.116)		
Possession alone ($c - b$)	0.220^{**}		
	(0.105)		
Negative selection ($n - a$)	-0.116		
	(0.106)		
Panel B: GMM Coefficients			
c	0.929^{***}	b	0.708^{***}
	(0.049)		(0.093)
a	0.545^{***}	n	0.429^{***}
	(0.052)		(0.069)
p	0.485^{***}		
	(0.035)		
Hansen's J chi2(1) $= 2.60863$ ($p = 0.1063$)			

[a]This table presents results using a GMM model, where the overidentifying restriction is that investor 1's take-up rate is a weighted average of investor 2's in conditions A and A^{neg}. More specifically, the moment conditions are: $E[Y|\text{condition } C] = c$, $E[Y|\text{condition } B] = b$, $E[Y|\text{condition } A] = a$, $E[Y|\text{condition } A^{\text{neg}}] = n$, $E[Y|\text{investor 1}] = p$, and $p = p \cdot a + (1 - p) \cdot n$. Panel A presents the treatment effects, while Panel B presents the GMM coefficients. We also present the p-value of Hansen's J overidentifying test. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.VIII

PERMUTATION TESTS (p-VALUES)[a]

Dependent Variable:	Take-Up Rates (1)	Amount Invested (2)	Invested More Than Minimum (3)
	Panel A: Main Results		
Learning alone (condition B − condition A)	[0.052]*	[0.012]**	[0.047]**
Learning and possession (condition C − condition A)	[0.000]***	[0.000]***	[0.000]***
Possession alone (condition C − condition B)	[0.063]*	[0.011]**	[0.047]**
Negative selection (condition A^{neg} − condition A)	[0.812]	[0.646]	[0.270]
	Panel B: Heterogeneity		
Learning *by*			
Sophisticated	[0.922]	[0.675]	[0.324]
Non-sophisticated	[0.008]***	[0.004]***	[0.083]*
Difference	[0.053]*	[0.071]*	[0.428]
Learning *from*			
Sophisticated	[0.038]**	[0.009]***	[0.028]**
Non-sophisticated	[0.801]	[0.816]	[1.000]
Difference	[0.434]	[0.155]	[0.028]**

[a]This table presents the results of two-sided permutation tests with 10,000 replications for the main results in the paper. For each pairwise comparison, we randomly reassign the experimental treatment conditions, drawing treatment assignments (without replacement) in the same ratios as the actual experimental treatment assignments. Based on these "placebo" treatment assignments, we calculate "placebo treatment effects" using 10,000 independent reassignments. The distribution of "placebo treatment effects" from the 10,000 reassignments approximates the distribution of our estimator under the null hypothesis that the treatment effects are zero. We calculate p-values from the permutation tests as the proportion of "placebo treatment effects" that are greater (in absolute value) than the estimated treatment effects using the actual experimental treatment assignments. Panel A reports p-values from permutation tests for pairwise comparisons of the conditions of interest using three different outcome variables: take-up rates, amount invested, and a dummy variable indicating whether the investor invested more than the minimum amount. Panel B reports p-values from permutation tests for the heterogeneity results using the self-assessed measure of financial literacy. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.IX

PEER EFFECTS, SOCIAL LEARNING, SOCIAL UTILITY, AND SELECTION: ALTERNATIVE OUTCOMES[a]

Dependent Variable:	Amount Invested		Invested More Than Minimum	
	(1)	(2)	(3)	(4)
Learning alone (condition B − condition A)	948.7*** (357.7)	715.2* (394.5)	0.212** (0.097)	0.173* (0.095)
Learning and possession (condition C − condition A)	2,633.2*** (702.9)	2,521.4*** (611.9)	0.497*** (0.103)	0.485*** (0.101)
Negative selection (condition A^{neg} − condition A)	−106.8 (239.0)	123.9 (308.6)	−0.038 (0.038)	−0.016 (0.049)
Investor 1		503.8* (300.1)		0.097* (0.053)
Possession alone (condition C − condition B)	1,684.5** (731.4)	1,806.1** (727.0)	0.286** (0.131)	0.311** (0.128)
Mean (no information; peer chose the asset) (condition A)	884.6 (210.0)		0.038 (0.038)	
Broker fixed effects	No	Yes	No	Yes
Controls	No	Yes	No	Yes
N	150	300	150	300
R^2	0.251	0.264	0.338	0.295

[a]Columns 1 and 2 replicate the regressions in columns 1 and 4 of Table II using the amount invested in the asset instead of take-up rate as dependent variable. Columns 3 and 4 replicate the regressions in columns 1 and 4 of Table II using a dummy variable equal to 1 if the investor invested more than the minimum amount as dependent variable. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.X

HETEROGENEITY OF SOCIAL LEARNING EFFECTS—OBJECTIVE MEASURE OF FINANCIAL SOPHISTICATION[a]

	Investor 2 Is Financially Sophisticated			Associated Investor 1 Is Financially Sophisticated		
	Yes (1)	No (2)	*p*-Value of Test (1) = (2) (3)	Yes (4)	No (5)	*p*-Value of Test (4) = (5) (6)
Panel A: No Controls						
Learning alone (condition B − condition A)	0.196 (0.227)	0.394* (0.218)	0.533	0.386** (0.175)	0.100 (0.246)	0.349
Panel B: Full Specification						
Learning alone (condition B − condition A)	0.031 (0.367)	0.892** (0.450)	0.085	0.399* (0.210)	−0.111 (0.408)	0.291
Mean (no information; peer chose the asset) (condition A)	0.429 (0.139)	0.375 (0.180)	0.816	0.400 (0.132)	0.400 (0.162)	1.000

[a]This table replicates the results from Table III using an objective (instead of self-assessed) measure of financial literacy, based on four financial literacy questions conducted in a follow-up survey. Investors who answered three or more questions correctly were classified as financially sophisticated. See Appendix C for an English version of the financial literacy questions. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.XI

HETEROGENEITY OF SOCIAL LEARNING EFFECTS—AMOUNT INVESTED[a]

	Investor 2 Is Financially Sophisticated			Associated Investor 1 Is Financially Sophisticated		
	Yes (1)	No (2)	*p*-Value of Test (1) = (2) (3)	Yes (4)	No (5)	*p*-Value of Test (4) = (5) (6)
Panel A: No Controls						
Learning alone (condition B − condition A)	222.2 (608.7)	1,750.0*** (488.3)	0.057	1,320.5*** (498.3)	254.0 (522.4)	0.147
Panel B: Full Specification						
Learning alone (condition B − condition A)	201.4 (828.9)	1,791.0** (815.9)	0.069	1,152.1*** (417.1)	513.8 (912.1)	0.547
Mean (no information; peer chose the asset) (condition A)	1,000.0 (322.7)	666.7 (329.6)	0.478	833.3 (262.2)	857.1 (390.0)	0.960

[a]This table replicates the results from Table III using the amount invested in the asset instead of take-up rate as dependent variable. The financial sophistication variable is based on the self-assessment question conducted in the follow-up survey described in the text. Investors rated their financial knowledge from 1 (very low) to 7 (very high). Investors who reported 4 or higher were classified as financially sophisticated. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.XII

HETEROGENEITY OF SOCIAL LEARNING EFFECTS—INVESTED MORE THAN MINIMUM[a]

	Investor 2 Is Financially Sophisticated			Associated Investor 1 Is Financially Sophisticated		
	Yes (1)	No (2)	*p*-Value of Test (1) = (2) (3)	Yes (4)	No (5)	*p*-Value of Test (4) = (5) (6)
Panel A: No Controls						
Learning alone (condition B − condition A)	0.145 (0.165)	0.333** (0.143)	0.394	0.329** (0.152)	0.000 (0.000)	0.036
Panel B: Full Specification						
Learning alone (condition B − condition A)	0.135 (0.148)	0.233 (0.161)	0.673	0.235* (0.135)	0.213 (0.172)	0.928
Mean (no information; peer chose the asset) (condition A)	0.077 (0.078)	0.000 (0.000)	0.333	0.056 (0.056)	0.000 (0.000)	0.334

[a]This table replicates the results from Table III using a dummy variable equal to 1 if the investor invested more than the minimum amount instead of take-up rate as dependent variable. The financial sophistication variable is based on the self-assessment question conducted in the follow-up survey described in the text. Investors rated their financial knowledge from 1 (very low) to 7 (very high). Investors who reported 4 or higher were classified as financially sophisticated. * significant at 10%; ** significant at 5%; *** significant at 1%.

TABLE A.XIII

ROBUSTNESS TESTS[a]

Interaction of the Treatment Effects With:	Relationship With Investor 1 (= 1 if Family) (1)	Broker Experience Within the Experiment (2)
Learning alone	0.077	−0.001
	(0.305)	(0.008)
Learning and possession	0.417*	−0.003
	(0.232)	(0.008)
Possession alone	0.340	−0.001
	(0.220)	(0.007)

[a]This table presents coefficients on the interactions of the variables at the column heading with the treatment effects of interest. These results are based on the regressions used in the full specification of column 4 from Table II, including interactions of the group dummies ($I_{c,i}$, where $c \in$ {condition B, condition C, condition A^{neg}, investor 1}) with the corresponding variables. We also include the main effect of the corresponding variable. In column 1, we interact the treatment effects with a dummy variable equal to 1 if the investors 1 and 2 are family members. The omitted category is "friends." In column 2, we interact the treatment effects with a variable indicating the number of calls that the broker had made before the day of the call. * significant at 10%; ** significant at 5%; *** significant at 1%.

APPENDIX B: A SIMPLE MODEL OF FINANCIAL DECISIONS UNDER SOCIAL INFLUENCE

Our model studies an investment decision made by an individual under several conditions. First, we present the investment decision under uncertainty, but with no social influence. Second, we present the investment decision with social learning present, using the ingredients of a canonical social learning model: a peer makes an investment acting on a private signal, and this action can be used by another investor to make an informational inference before taking his own action. Third, we allow the ownership of an asset to affect a socially related investor's utility of owning the asset, aside from any learning—that is, we allow for a social utility effect. A peer's purchase decision typically will produce both social learning and social utility effects; we consider a case in which both effects are active (the full "peer effect") and a case in which the revealed preference purchase decision is decoupled from possession. This decoupling allows one to observe each channel through which peer effects work, and motivates our experimental design.

Investment Without Peer Effects

Consider an investor i's decision to invest in a risky asset.[22] The asset's return is given by x, with probability density function $f(x)$, and investor i's utility is $u_i(x) = u(x)$ for all i. In our field experiment, investors received calls from brokers who offered them a financial asset for purchase. The brokers attempted to convey the same information about the asset in every call using a prespecified script; thus, the information they provided can be thought of as a signal, s_i, coming from a single distribution, with probability density function $g(s_i)$. Importantly, not every investor would have received exactly the same information: calls evolve in different ways, investors ask different questions about the asset, etc., meaning that each investor received a different signal realization, s_i, from the common distribution of signals.

For expositional simplicity, assume that the conditional density $f(x|s_i)$ satisfies the monotone likelihood ratio property (MLRP) such that, intuitively, higher values of s_i are indicative of higher values of x. Under these conditions, investor i is willing to invest if and only if

$$\int u(x) f(x|s_i)\, dx \geq \bar{u}, \tag{2}$$

where $\bar{u}$ denotes the outside option of the investor. Given that $f(x|s_i)$ satisfies MLRP and given mild monotonicity assumptions on the utility function $u(\cdot)$

[22]Note that we implicitly assume that when investing in isolation, investor i does not take into consideration any investor j ($j \neq i$) at all—he is "unaware." In the context of our experiment, we believe that this assumption is reasonable, as we discuss in the text.

of the investor, there exists a unique threshold $\bar{s}_1$ such that, for any $s_i \geq \bar{s}_1$, investor i is willing to invest. Denote the decision to buy the asset made by investor i by $b_i = \{0, 1\}$. Hence, for an investor making a purchase decision in isolation, we have

$$b_i = 1 \quad \Leftrightarrow \quad s_i \geq \bar{s}_1. \tag{3}$$

Investment With Social Learning Alone

Suppose that instead of making his investment choice in isolation, before making his own decision, investor i observes the investment decision of investor j, which is given by b_j. Assume that investor j made his choice $b_j = 1$ in isolation and hence his decision rule is given by (3).[23] Thus, when investor i observes $b_j = 1$, he correctly infers that $s_j \geq \bar{s}_1$ and he is willing to invest if and only if

$$\int u(x) f(x|s_i; s_j \geq \bar{s}_1)\, dx \geq \bar{u}. \tag{4}$$

Furthermore, given that $f(x|s_i; s_j)$ satisfies MLRP, we have

$$\int u(x) f(x|s_i; s_j \geq \bar{s}_1)\, dx \geq \int u(x) f(x|s_i)\, dx \tag{5}$$

for all s_i. It is straightforward to show by comparing (4) and (2) that the signal realization threshold for investor i that is necessary to induce purchase of the asset is lower when $b_j = 1$ is observed than when investor i makes his choice in isolation. This is because in the former case, regardless of his own private information summarized by s_i, investor i has additional favorable information about the asset from observing the purchase of investor j. This is the pure social learning effect.

Denote the threshold for s_i when investor i observes $b_j = 1$ by $\bar{s}_2$ and note that $\bar{s}_2 \leq \bar{s}_1$. In particular, after observing a purchase decision made by investor j, the decision rule of investor i is given by

$$b_i = 1 \quad \Leftrightarrow \quad s_i \geq \bar{s}_2. \tag{6}$$

Social Utility and Social Learning

We now consider the situation in which both social utility and social learning effects are present. Our focus (following much of the literature on peer effects

[23] We focus on the case of investor i observing that investor j chose to purchase the asset (rather than choosing *not* to purchase it) because, in the experimental design, we were not allowed to inform investors that their peer chose not to purchase the asset.

in financial decisions) is on social utility effects that result in a *positive* effect of a peer's possession of an asset (denoted by $p_j = \{0, 1\}$) on one's own utility.[24] In particular, when investor i considers purchasing the asset, we assume that $u(x|p_j = 1) \geq u(x|p_j = 0)$ for all x. That is, investor i's utility is higher for all asset return realizations if the asset is also possessed by an investor j who is a peer of investor i. Using the notation of our model, an investor j's purchase of an asset, $b_j = 1$, typically implies both that investor i infers favorable information about the asset, $s_j \geq \bar{s}_1$, and that investor j now possesses the asset, $p_j = 1$, which might affect investor i's utility of owning the asset (due to a taste for joint consumption, "keeping-up-with-the-Joneses" preferences).

When investor i observes that investor j expressed an intention to invest, $b_j = 1$, and was allowed to invest, $p_j = 1$, both investor i's utility $u(x|p_j = 1)$ *and* his information about the asset $f(x|s_i; s_j \geq \bar{s}_1)$ are affected, relative to his choice in isolation (i.e., relative to $u(x) = u(x|p_j = 0)$ and $f(x|s_i)$).[25] In this case, one observes the "full" peer effect, and investor i invests if and only if

$$\int u(x|p_j = 1) f(x|s_i; s_j \geq \bar{s}_1)\, dx \geq \bar{u}. \tag{7}$$

Denote the threshold for s_i above which investor i is willing to invest when exposed to both peer effects channels by $\bar{s}_3$. Then, the decision rule for investor i is given by

$$b_i = 1 \quad \Leftrightarrow \quad s_i \geq \bar{s}_3. \tag{8}$$

To separate the effects of social learning and social utility, we need to decouple willingness to purchase (and the informative signal of the purchase decision) from possession. Consider the situation where investor i observes that investor j expressed a revealed preference to invest, but was not allowed to do so (perhaps due to capacity constraints). In this case, investor i infers that $s_j \geq \bar{s}_1$, but also knows that investor j did not obtain the asset, so $p_j = 0$. This condition is equivalent to the "social learning alone" problem discussed above: there is no direct effect of possession on investor i's utility from the asset, but there is social learning. Thus, investor i purchases the asset if and only if (4) is satisfied (since $u(x) = u(x|p_j = 0)$) and this leads to the same decision rule as (6) with the threshold $\bar{s}_2$.

The following proposition summarizes investor i's purchase decisions across conditions.

PROPOSITION 1: *The threshold for the signal s_i above which investor i is willing to purchase the asset* (*and*, *the likelihood of a purchase of the asset by investor i*) *is*

[24]One could also imagine a *negative* correlation, for example, out of a desire to insure one's peers, or to differentiate oneself. See Clark and Oswald (1998).

[25]We are assuming here that the utility function discussed above, $u(x)$, is the same as $u(x|p_j = 0)$ here. In addition, we are assuming that investor j made his decision in isolation.

highest (*lowest*) *when the investor makes his decision in isolation*, *lower* (*higher*) *when he observes that investor j intended to purchase the asset but did not obtain it*, *and lowest* (*highest*) *when investor j intended to purchase the asset*, *and obtained it*: $\bar{s}_1 \geq \bar{s}_2 \geq \bar{s}_3$ (*and* $\Pr(s_i \geq \bar{s}_3) \geq \Pr(s_i \geq \bar{s}_2) \geq \Pr(s_i \geq \bar{s}_1)$).

PROOF: The relationship between $\bar{s}_1$ and $\bar{s}_2$ follows immediately from comparing the inequalities (2) and (4) and the monotone likelihood ratio property of $f(x|s_i; s_j)$. Similarly, comparison of the inequalities (4) and (7) and $u(x) = u(x|p_j = 0) \leq u(x|p_j = 1)$ establishes that $\bar{s}_2 \geq \bar{s}_3$. Finally, $\Pr(s_i \geq \bar{s}_3) \geq \Pr(s_i \geq \bar{s}_2) \geq \Pr(s_i \geq \bar{s}_1)$ follows from the ranking of the thresholds. *Q.E.D.*

The difference between $\bar{s}_2$ and $\bar{s}_3$ is the result of a difference in investor j's possession of the asset.[26] In one situation, investor j received favorable information and expressed an intent to purchase the asset, but was unable to execute the purchase due to supply restrictions. In the other situation, investor j received a favorable signal and was also able to obtain the asset. Thus, in the two cases, investor i infers the same information (via investor j's choice) about the potential returns of asset x. However, only in the latter case is investor i's utility directly influenced by the investment *outcome* (and not just the purchase *intention*) of investor j. This is the social utility effect that raises the expected utility of purchasing the asset for investor i over and above the social learning effect. In the inequalities in Proposition 1, the effect of social learning is captured by the difference between $\Pr(s_i \geq \bar{s}_2)$ and $\Pr(s_i \geq \bar{s}_1)$, and the effect of social utility is the difference between $\Pr(s_i \geq \bar{s}_3)$ and $\Pr(s_i \geq \bar{s}_2)$. The total peer effect is the difference between $\Pr(s_i \geq \bar{s}_3)$ and $\Pr(s_i \geq \bar{s}_1)$.

Our analysis readily extends to the case in which investor i's investment choice is continuous rather than limited to a binary decision. In particular, since $f(x|s_i; s_j)$ satisfies MLRP, the optimal investment in the asset is increasing in s_i and s_j and the expected equilibrium investment amounts will follow exactly the prediction regarding purchase rates in Proposition 1. Suppose individual i chooses an investment magnitude q_i^*, rather than making a binary investment decision. Since $f(x|s_i; s_j)$ satisfies MLRP, the optimal investment in the asset is increasing in s_i and s_j and we can rank the expected equilibrium investment amounts.

PROPOSITION 2: *The expected equilibrium investment amount* q_i^* *of investor i is lowest when the investor makes his decision in isolation*, *higher when he observes that investor j intended to purchase the asset but did not obtain it*, *and highest when investor j intended to purchase*, *and obtained*, *the asset*.

[26]Note that the difference between $\bar{s}_2$ and $\bar{s}_3$ measures the impact of possession conditional on the presence of social learning. This is consistent with our experimental design, in which we are not able to measure the impact of possession in the absence of social learning.

PROOF: The inference problem of investor i is the same as in Proposition 1. Thus, for a given signal s_i, the described relationship holds for the actual equilibrium investment amount and follows immediately from comparing the expression for the utilities on the left-hand side of the inequalities (2), (4), and (7) and by noting that the optimal investment amount is increasing in s_i and s_j. Finally, taking expectations over the signal realizations s_i yields the ranking in expected investment amounts. *Q.E.D.*

Heterogeneous Investors

In practice, some investors are more financially sophisticated than others, and one would expect that this variation will affect the peer effects we study here—especially the impact of social learning. In particular, an unsophisticated investor may have much more to learn about an asset from the purchase decision of his peer than does a sophisticated investor, as the sophisticated investor likely has a very good sense of the asset's quality from his signal alone. Differing financial sophistication can be captured in our model by allowing the signals s_i and s_j to be drawn from distributions with differing precision. For simplicity, we make the assumption that, in contrast to unsophisticated investors, sophisticated investors receive perfectly informative signals. This assumption generates the following prediction of heterogeneous effects of social learning.

PROPOSITION 3: *The thresholds $\bar{s}_1$ and $\bar{s}_2$ for the signal s_i above which investor i is willing to purchase the asset* (*and hence the likelihood of investor i purchasing the asset*) *are identical if investor i is financially sophisticated* (*i.e., signal s_i is perfectly informative*). *If investor j is sophisticated, then investor i follows the choice of investor j when observing the decision of investor j.*

PROOF: If s_i is perfectly informative (i.e., investor i is sophisticated), then s_i is a sufficient statistic for x. As a result, s_j, and hence the purchase decision of investor j, has no informational value for sophisticated investor i and does not influence the threshold $\bar{s}_1$. Hence, $\bar{s}_1 = \bar{s}_2$. If s_j is perfectly informative, then investor j knows the value of x and makes a perfectly informed investment decision. As a result, investor i follows investor j's choice. *Q.E.D.*

Proposition 3 suggests that social learning will be limited (in fact, given the simplifying assumptions made, will be nonexistent) for sophisticated investors. These investors are sufficiently well-informed that they are not influenced by the revealed preference of another investor. The proposition further shows that social learning will have relatively strong effects on investment choices if the investor whose choice is observed is sophisticated.[27]

[27]We have assumed that sophisticated investors receive perfectly informative signals. Our results can be extended to the case in which sophisticated investors receive more informative, but

APPENDIX C: EXPERIMENTAL DOCUMENTATION

We enclose here English versions of the Qualtrics scripts used by the brokers in the sales phone calls, first to investor 1's and then to investor 2's. Then we enclose English versions of the follow-up survey questionnaires. After these documents, we enclose a picture of the implementation of the experiment, displaying the brokers and the RA.

still imperfectly informative, signals. While results for general distributions of x, s_i, and s_j that satisfy MLRP do not exist, it is straightforward to show that, for binary signal structures, the impact of social learning will be relatively small when the observing investor is sophisticated and relatively large when the observed investor is sophisticated. Finally, it is worth noting that another investor's *possession* of the asset could still affect financially sophisticated investors' choices; similarly a financially unsophisticated investor's purchase decision—when accompanied by possession—could influence a peer's choice. Both of these effects would work through the social utility channel. Thus, we emphasize that these predictions of heterogeneous treatment effects apply to social learning effects alone, but not necessarily the overall peer effect.

Client number

Name of broker making phone call

Client number

Introduction

Description of asset

Combination of two investments:
- Fundo Long-Short multi-mercado (read brochure)
- LCI de 98% do CDI (read brochure)

Minimum investment:
- R$1,000 in LCI and R$1,000 in Fundo Long-Short
Maximum investment:
-R$10,000 in LCI and no limits in Fundo Long-Short

Observations to be told to client:
1) Special LCI usually not avaliable to clients. LCI typically available to clients has return of 97% of CDI and minimum investment of R$10,000

2) Emphasize that product can only be purchased during this call (take it or leave it): will not be sold on other occasions

3) Remind that LCI is exempt from income tax

4) Explain that only new resources will be accepted (and not resources already invested with the brokerage)

Limited supply

This is a special asset, only available in limited supply, and only to special clients l ke you.

As so, unfortunately, some of the clients that want the asset will not be able to actually purchase it.

Since we are a company that always wants to be as fair as possible, we want to give a chance to all the special clients we are calling and who are interested in the product. In addition to that, we would like to give the same chance to everyone.

Because of that, we will use a lottery to determine which clients will actually be able to implement the purchase, among those that chose to purchase the asset.

In this lottery half (50%) of the clients that choose to purchase the asset will have their choices authorized and implemented.

The lottery consists in drawing a random integer number between 1 and 100. If the number is 50 or less, the lottery will not authorize the investment. If the number is greater than 50, the lottery will authorize and make the investment.

It is important that you know that the decision you will make now if final. If you decide to purchase the asset, you will be authorizing the purchase. Therefore, if the lottery authorizes the purchase, the investment will be made.

Take advantage of this great opportunity to buy this exclusive product!

Investment decision

[redacted]

Ask the client what their decision is

- Wants to invest
- Does not want to invest

How much does he want to invest in the Fundo Long-Short multi-mercado?

How much does he want to invest in the LCI?

Investment authorization

A random number will now be drawn to determine whether or not you will be able to actually make the investment. The random number is ${e://Field/random}

Due to the outcome of the lottery, your investment was not authorized.

Due to the outcome of the lottery, your investment was authorized.

Was the investment authorized?

- Yes
- No

End of Call and Summary

Finish the call

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID20/ChoiceTextEntryValue}

Did this client want to invest in the product? Yes

Amount invested in the Fundo Long-Short: ${q://QID18/ChoiceTextEntryValue}

Amount invested in the LCI: ${q://QID26/ChoiceTextEntryValue}

Was this client authorized to make the investment? Yes

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID20/ChoiceTextEntryValue}

Did this client want to invest in the product? Yes

Amount invested in the Fundo Long-Short: ${q://QID18/ChoiceTextEntryValue}

Amount invested in the LCI: ${q://QID26/ChoiceTextEntryValue}

Was this client authorized to make the investment? No

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID20/ChoiceTextEntryValue}

Did this client want to invest in the product? No

Amount invested in the Fundo Long-Short: 0

Amount invested in the LCI: 0

Was this client authorized to make the investment? N/A

Client number

Name of broker making phone call

Client number

Number of client of the (first) friend of this investor

Previous Choice by FRIEND 1

Did the first friend of this investor want to invest in this asset?

- Yes
- No

Was the first friend of this investor authorized to make the investment?

- Yes
- No

Introduction

Description of Asset

Combination of two investments:
- Fundo Long-Short multi-mercado (read brochure)
- LCI de 98% do CDI (read brochure)

Minimum investment:
- R$1,000 in LCI and R$1,000 in Fundo Long-Short
Maximum investment:
-R$10,000 in LCI and no limits in Fundo Long-Short

Observations to be told to client:
1) Special LCI usually not avaliable to clients. LCI typically available to clients has return of 97% of CDI and minimum
investment of R$10,000

2) Emphasize that product can only be purchased during this call (take it or leave it): will not be sold on other occasions

3) Remind that LCI is exempt from income tax

4) Explain that only new resources will be accepted (and not resources already invested with the brokerage)

Limited Supply

This is a special asset, only available in limited supply, and only to special clients l ke you.

As so, unfortunately, some of the clients that want the asset will not be able to actually purchase it.

Since we are a company that always wants to be as fair as possible, we want to give a chance to all the special clients we are calling and who are interested in the product. In addition to that, we would like to give the same chance to everyone.

Because of that, we will use a lottery to determine which clients will actually be able to implement the purchase, among those that chose to purchase the asset.

In this lottery half (50%) of the clients that choose to purchase the asset will have their choices authorized and implemented.

The lottery consists in drawing a random integer number between 1 and 100. If the number is 50 or less, the lottery will
not authorize the investment. If the number is greater than 50, the lottery will authorize and make the investment.

It is important that you know that the decision you will make now if final. If you decide to purchase the asset, you will be authorizing the purchase. Therefore, if the lottery authorizes the purchase, the investment will be made.

Take advantage of this great opportunity to buy this exclusive product!

Only Learning Treatment

Before asking whether or not the client wants to purchase the asset, tell him the information associated with the choice of the first friend and the outcome of the lottery for the first friend:

"We would like to inform you, before you make your decision, that [FIRST FRIEND'S NAME], your [RELATIONSHIP TO THIS CLIENT], received the same offer today. He/she chose to purchase the product. However, the lottery did not authorize him/her to make the purchase, so he/she will not make the investment."

SUMMARIZING: He/she wanted to make the investment but was not able to invest.

Possession and Learning Treatment

Before asking whether or not the client wants to purchase the asset, tell him the information associated with the choice of the first friend and the outcome of the lottery for the first friend:

"We would like to inform you, before you make your decision, that [FIRST FRIEND'S NAME], your [RELATIONSHIP TO THIS CLIENT], received the same offer today. He/she chose to purchase the product. The lottery authorized him/her to make the purchase, so he/she will make the investment."

SUMMARIZING: He/she wanted to make the investment and was able to invest.

Investment Decision

Ask the client what their decision is

- ( ) Wants to invest
- ( ) Does not want to invest

How much does he want to invest in the Fundo Long-Short multi-mercado?

How much does he want to invest in the LCI?

Investment Authorization

A random number will now be drawn to determine whether or not you will be able to actually make the investment. The random number is ${e://Field/random}

Due to the outcome of the lottery, your investment was not authorized.

Due to the outcome of the lottery, your investment was authorized.

Was the investment authorized?

- Yes
- No

Relationship with First Investor, End of Call, and Summary

Had you previously heard about this offer/this product from [FIRST FRIEND'S NAME]?

- Yes
- No

What is your degree of relationship with [FIRST FRIEND'S NAME]? Examples: sibling, parent, friend, co-worker, etc.

Finish the phone call

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID27/ChoiceTextEntryValue}

First friend's client number: ${q://QID30/ChoiceTextEntryValue}

Did the first friend want to invest in the product? ${q://QID21/ChoiceGroup/SelectedChoices}

Was the first friend authorized to make the investment? ${q://QID25/ChoiceGroup/SelectedChoices}

Did this client (second friend) want to invest in the product? Yes

Amount invested in the Fundo Long-Short: ${q://QID28/ChoiceTextEntryValue}

Amount invested in the LCI: ${q://QID38/ChoiceTextEntryValue}

Was this client authorized to make the investment? Yes

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID27/ChoiceTextEntryValue}

First friend's client number: ${q://QID30/ChoiceTextEntryValue}

Did the first friend want to invest in the product? ${q://QID21/ChoiceGroup/SelectedChoices}

Was the first friend authorized to make the investment? ${q://QID25/ChoiceGroup/SelectedChoices}

Did this client (second friend) want to invest in the product? Yes

Amount invested in the Fundo Long-Short: ${q://QID28/ChoiceTextEntryValue}

Amount invested in the LCI: ${q://QID38/ChoiceTextEntryValue}

Was this client authorized to make the investment?: No

This is the summary of the call. Please put the following information in your Excel spreadsheet of communication with the clients:

Client number: ${q://QID27/ChoiceTextEntryValue}

First friend's client number: ${q://QID30/ChoiceTextEntryValue}

Did the first friend want to invest in the product? ${q://QID21/ChoiceGroup/SelectedChoices}

Was the first friend authorized to make the investment? ${q://QID25/ChoiceGroup/SelectedChoices}

Did this client (second friend) want to invest in the product? No

Amount invested in the Fundo Long-Short: 0

Amount invested in the LCI: 0

Was this client authorized to make the investment?: N/A

Follow-Up Survey

Financial Literacy Survey

This survey was administered to investor 2's in conditions 1 and 2, and to their associated investor 1's.

(1) On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?

1. Very low
2.
3.
4.
5.
6.
7. Very high

(2) Suppose you had $100 in a savings account and the interest rate was 8% per year. After 5 years, how much do you think you would have in the account if you left the money in the account to grow:

a. More than $108
b. Exactly $108
c. Less than $108
d. Do not know
e. Refuse to answer

(3) Imagine that the interest rate on your savings account was 5% per year and inflation was 7% per year. After 1 year, using the money that will be in the account, would you be able to buy:

a. More than what you can buy today
b. Exactly the same as what you can buy today
c. Less than what you can buy today
d. Do not know
e. Refuse to answer

(4) Do you think that the following statement is true or false? "*Buying a single company stock usually provides a safer return than a stock mutual fund*."

a. True
b. False
c. Do not know
d. Refuse to answer

(5) If interest rates rise, what will typically happen to bond prices?

a. They will rise
b. They will fall
c. They will stay the same
d. There is no relationship between bond prices and the interest rates
e. Do not know
f. Refuse to answer

Questions Regarding the Sales Call

(1) *For investor 2's in conditions 1, 2, and 3*

When the asset was offered to you in the beginning of the year, we had to use a lottery given that the asset was in limited supply. At that moment, you decided to purchase (not purchase) the asset. Was the presence of the lottery a significant factor in your decision?

a. Yes
b. No

(2) *For investor 2's in conditions 1, 2, and 3*

Before the result of the lottery, you made a purchase decision. Did you believe you could have changed your decision after the lottery?

a. Yes
b. No

(3) *For investor 2's in conditions 2 and 3*

When the asset was offered to you, you were informed that *[NAME OF THE ASSOCIATED INVESTOR 1]* wanted the asset, but that he/she lost the lottery (and he/she won the lottery).

In the lottery, you had 50% chance of winning and 50% chance of losing, independently of the result for *[NAME OF THE ASSOCIATED INVESTOR 1]*. When you were informed that *[NAME OF THE ASSOCIATED INVESTOR 1]* lost (won) the lottery, how did this affect your beliefs about the likelihood of winning the lottery?

a. It would be more likely to win the lottery
b. It would be less likely to win the lottery
c. The likelihood of winning the lottery would remain unchanged

(4) *For investor 2's in conditions 2 and 3*

You were informed that *[NAME OF THE ASSOCIATED INVESTOR 1]* lost (won) the lottery. How did this affect your beliefs about the quality of the asset?

a. This should be a better investment
b. This should be a worse investment
c. No effect

(5) *For investor 2's in condition 2*

Was wanting (not wanting) an asset that *[NAME OF THE ASSOCIATED INVESTOR 1]* could not have because he/she lost the lottery a significant factor in your decision?

a. Yes
b. No

(6) *For investor 2's in conditions 2 and 3*

You were informed that *[NAME OF THE ASSOCIATED INVESTOR 1]* wanted to purchase the asset. How did this affect your beliefs about the quality of the asset?

a. This should be a better investment
b. This should be a worse investment
c. No effect

(7) *For investor 2's in condition 3 who decided to purchase the asset*

Was wanting to earn the same financial returns that *[NAME OF THE ASSOCIATED INVESTOR 1]* would earn a significant factor in your decision?

a. Yes
b. No

(8) *For investor 2's in condition 3 who decided to purchase the asset*

Was wanting the same asset that *[NAME OF THE ASSOCIATED INVESTOR 1]* had so that you could discuss the asset with him/her a significant factor in your decision?

a. Yes
b. No

(9) *For investor 2's in condition 3 who decided to purchase the asset*

Did you think about what *[NAME OF THE ASSOCIATED INVESTOR 1]* could do with the return from the asset when you made your decision?

a. Yes
b. No

(10) *For investor 2's in condition 3 who decided to purchase the asset*

You were informed that *[NAME OF THE ASSOCIATED INVESTOR 1]* had the asset. Was the fear of not having a return he/she could have a significant factor in your decision?

a. Yes
b. No

(11) *For investor 2's in conditions 2 and 3*

The broker informed you that *[NAME OF THE ASSOCIATED INVESTOR 1]* wanted to purchase the asset. Did you believe in this information?

a. Yes
b. No

(12) *For investor 2's in conditions 2 and 3*

Your choices were never revealed to other clients. Still, were you concerned about this possibility when you decided to purchase (not to purchase) the asset?

a. Yes
b. No

FIGURE C.1.—Picture from the implementation.

REFERENCE

CLARK, A. E., AND A. J. OSWALD (1998): "Comparison-Concave Utility and Following Behaviour in Social and Economic Settings," *Journal of Public Economics*, 70 (1), 133–155. [23]

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