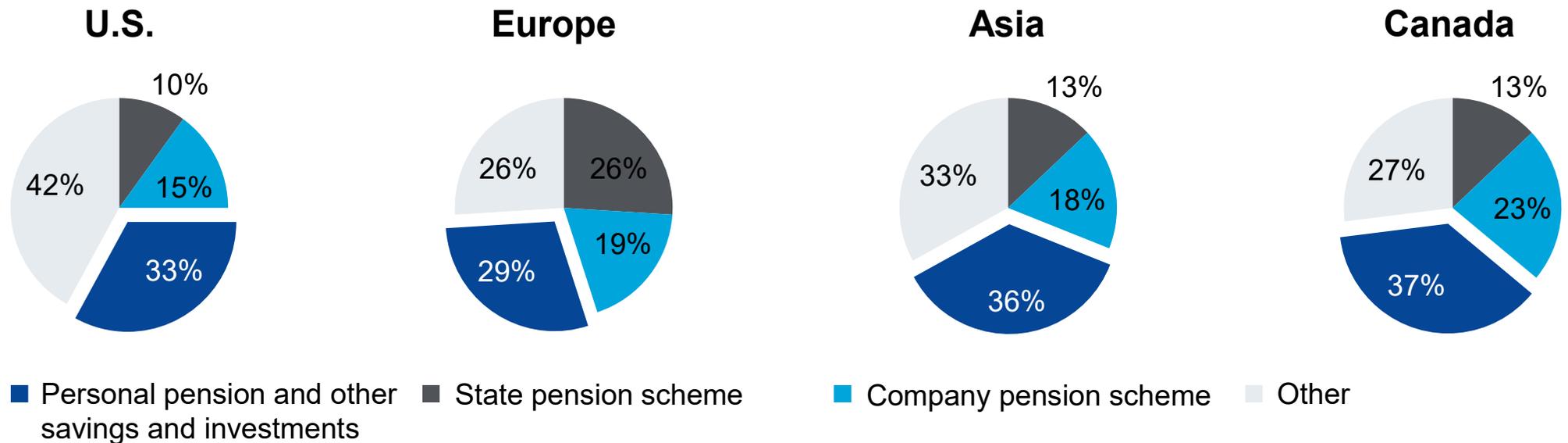

Financial Advice and Retirement Savings

Daniel Hoechle, Stefan Ruenzi, Nic Schaub, Markus Schmid

3rd CEAR-RSI Household Finance Workshop, Montreal

Motivation

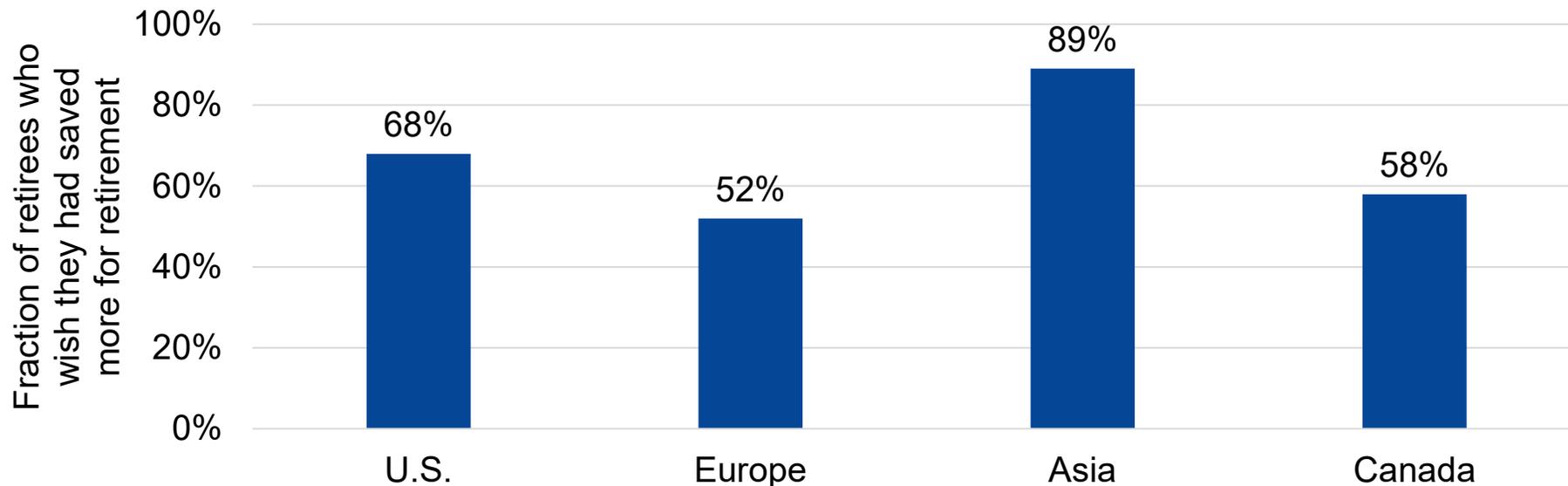
- Demographic change puts pressure on pension systems.
- Many countries shift(ed) responsibility for pensions from the state to individuals.
- Individuals are increasingly required to make their own provisions for income in old age.



Source: Schröder Global Investor Study, 2017

Some observations

- Many individual investors suffer from limited financial literacy, time-inconsistent preferences, and other behavioral biases (e.g., Madrian and Shea, 2001; Choi et al., 2011; Lusardi and Mitchell, 2011).
- This can lead to severe under-saving for retirement.



Source: Schröder Global Investor Study, 2017

More observations

- Many individuals do not take advantage from tax-advantaged retirement accounts or subsidized employer sponsored plans ('money left on the table').
 - In Switzerland, only 60% of employees hold a tax-advantaged retirement account.
 - In the U.S. 36% of employees leave all 401-k benefits on the table (Choi et al., 2011)
- Despite the high equity risk premium (Mehra and Prescott, 1985, Dimson et al., 2020), many investors do not participate in stock markets
 - In Switzerland (USA, Australia), only 30% (56%, 50%) participate (directly or indirectly) in equity markets
- Certain groups of the population are at higher risk of insufficient preparation for retirement:
 - Women (Sunden and Surette, 1998, Niessen-Ruenzi and Schneider, 2022)
 - Poorer individuals (Dyner et al., 2004)
 - Less financially literate individuals (Lusardi and Mitchell, 2011)

This study

Do financial advisors help to better prepare for retirement

- 1) How does retirement-related financial advice impact holdings in tax-exempt retirement accounts?
- 2) How does retirement-related financial advice impact equity investments?
- 3) Are disadvantaged groups treated differently by advisors?
- 4) Do advisors help investors to save more overall?
- 5) Is financial retirement advice conflicted?

Contribution – Retirement Savings

– Retirement savings:

- **Undersaving in general:** e.g., Crawford and O’Dea (2012), Bösch-Supan et al. (2015), Knoef et al. (2016), Gomes et al. (2020).
- **Undersaving of certain groups (female, poorer, less-educated):** e.g., Sundén and Surette (1998), Dynan et al. (2004), Lusardi and Mitchell (2008, 2011), Bucher-Koenen and Lusardi (2011), Brown and Graf (2013), Niessen-Ruenzi and Schneider (2022).
- The first paper to use actual retirement-related financial decisions to analyze the impact of financial advice on personal pension savings (and to analyze cross-sectional differences).

Contribution – Financial Advice

- **Financial advice:**

- **Negative impact:**

- Papers mainly focus on performance implications of advice (e.g., Bergstresser et al. (2009); Foerster et al. (2017), Hoechle et al. (2017, 2018), Chalmers and Reuter (2020)).
 - Some behavioral biases are even re-inforced (Hoechle et al., 2017)

- **Positive impact:**

- Advice often in line with basic economic theory (d’Astous, Gemmo, and Michaud, 2022)
 - Tax efficiency of investments (Cici et al., 2016)
 - Stock market participation (Linnainmaa et al., 2020)
 - Reduction of some behavioral biases (e.g., Hoechle et al., 2017, Kramer 2012)

- One of a few papers that shed light on potential benefits of financial advice.

- Only paper on explicitly retirement-related financial advice.

Institutional Background: Pension System

- The Swiss pension system is based on three pillars:
 - 1) State pension system
 - 2) Occupational pension provisions
 - 3) **Private pension provisions**
 - Retirement savings (~80%) and fund (~20%) accounts
 - Independent retirement savings
- Payments into retirement accounts are tax exempt (up to a certain limit).
- The median Swiss employee loses the equivalent of about 2% of annual income every year by not investing in tax-exempt retirement accounts.
- Retirement savings accounts pay higher interest rates than normal savings accounts and there are no fees on these accounts.

Institutional Background: Financial Advice

- In Switzerland, financial advice is typically provided by bank employees.
- This includes advice on retirement savings.
- Advice is typically provided for free by the advisors.
- Bank is compensated for advice based on commissions, kick-backs, and sales provisions.
- Conflict of interest exists that might hurt investors (Hoechle et al., 2018).

Data

- Brokerage account data from a large Swiss retail bank.
- The bank offers a broad range of financial products and services to its clients (e.g., checking accounts, normal savings accounts, retirement savings accounts, securities accounts, mortgages, loans).
- Sample period: January 2011 to June 2021
- Random sample of the bank's private clients whose wealth at the bank exceeds CHF 75,000 (~ USD 79,000) at least once during our sample period.
- 20,529 clients (excluding foreign and retired clients)
- Data on:
 - all trades (daily) as well as account balances monthly,
 - all advisors contacts including initiation as well as topic of contact &
 - profitability of clients from the bank's point of view.

Descriptive statistics: Clients

	Mean	Min.	Median	Max.	Std. dev.	N
Panel A: Client characteristics						
Male (d)	0.575	0.000	1.000	1.000	0.494	20,529
Age (years)	44.51	18.00	46.00	64.00	11.19	20,529
University degree (d)	0.167	0.000	0.000	1.000	0.373	10,576
Employed (d)	0.839	0.000	1.000	1.000	0.368	20,529
Self-employed (d)	0.111	0.000	0.000	1.000	0.314	20,529
Income (CHF)	89,161	45,000	45,000	200,000	53,748	14,980
Length of bank relationship (years)	6.82	0.00	5.08	24.25	6.68	14,191

Descriptive statistics: Bank Wealth & Contacts

	Mean	Min.	Median	Max.	Std. dev.	N
Avg. bank wealth (CHF)	155,940	0	81,256	5,601,885	304,666	20,529
Avg. retirement account (CHF)	23,351	0	4,443	744,680	36,418	20,529
- thereof retirement funds	4,171	0	0	693,117	16,664	20,529
Has retirement account in 2011 (d)	0.451	0.000	0.000	1.000	0.498	15,900
Opens retirement account (d)	0.154	0.000	0.000	1.000	0.361	20,529
Avg. equity investments (CHF)	26,845	0	0	5,336,301	140,695	20,529
- thereof equity mutual funds	3,849	0	0	2,473,788	31,191	20,529
Has equity investments in 2011 (d)	0.283	0.000	0.000	1.000	0.451	15,900
Starts to invest in equity (d)	0.080	0.000	0.000	1.000	0.271	20,529
Avg. checking account (CHF)	45,046	0	15,572	4,340,524	130,439	20,529
Avg. savings account (CHF)	39,784	0	11,902	2,870,633	93,798	20,529
Avg. other investments (CHF)	19,845	-142,055	0	3,598,620	105,387	20,529
Panel C: Contact characteristics						
Avg. # contacts p.a.	1.18	0.00	0.76	45.33	1.70	20,529
Avg. # retirement-related contacts p.a.	0.13	0.00	0.00	5.45	0.23	20,529

Financial Advice and Tax-Exempt Retirement Accounts

Identification Challenges I

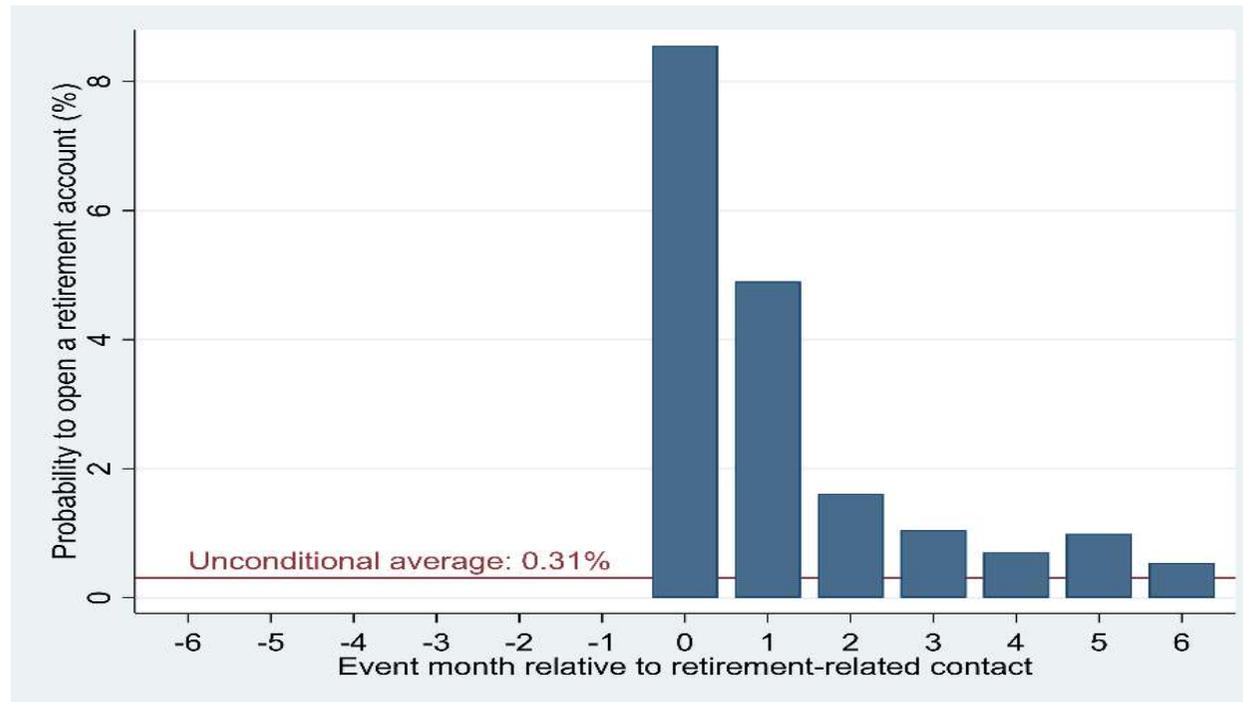
Studies on financial advice (and pension savings) face multiple identification challenges:

1. Advised clients are not identical to unadvised clients but differ systematically.
2. Even 'advised clients' conduct 80% of their trades independently (Hoechle et al., 2017).
3. Advisors contacts are not random. If a client approaches an advisor to discuss pensions, she might well have acted even without advice.

Our approach:

- Within person-analysis with client fixed effects (controls for all non-time varying client characteristics).
- We focus on activities right after *advisor-initiated retirement-related* contacts.

Financial advice and retirement accounts: Extensive Margin



- **Probability to open retirement account after advisor-initiated contact increases from 0.3% to more than 8%.**

Identification Challenges II: Contacts not random

	Retirement-related contact $(d)_t$	
	(1)	(2)
Male (d)	0.000 (0.80)	-0.000 (-0.44)
Log(age) $_t$	0.002*** (10.88)	0.003*** (9.25)
Log(bank wealth) $_{t-1}$	0.001*** (16.21)	0.001*** (13.46)
$\Delta\%$ bank wealth $_{t-1}$	0.000* (1.79)	-0.000 (-0.40)
Has retirement account (d) $_{t-1}$	0.008*** (56.38)	0.007*** (39.58)
Has equity investments (d) $_{t-1}$	0.000*** (4.78)	0.000*** (2.91)
University degree (d)		0.000** (2.00)
Year-month fixed effects	Yes	Yes
Pseudo R ²	0.278	0.252
N	1,998,161	1,048,303

- Disadvantaged clients are not more likely to be contacted by advisors, no gender-discrimination.
- Contacted clients differ systematically from non-contacted clients.
- However, idiosyncratic events seem to play a minor role for contacting.
- We will control for time-varying client characteristics.

Identification Challenges III: Contacts not random

- There might be certain times when it is more likely that clients think about retirement savings and when advisors are more likely to contact clients.
 - Calendar/seasonal effects (e.g., investors more likely to make plans for the future in January)
 - Event-driven effects (e.g., TV/newspapers discuss pensions more frequently, rules change, ...)
 - Bank-driven effects (e.g., marketing-campaigns by the bank).
- Could lead to a spurious correlation even between advisor-initiated contacts and client actions.
- Solution: Control for time-fixed effects (in addition to time-varying investor characteristics)

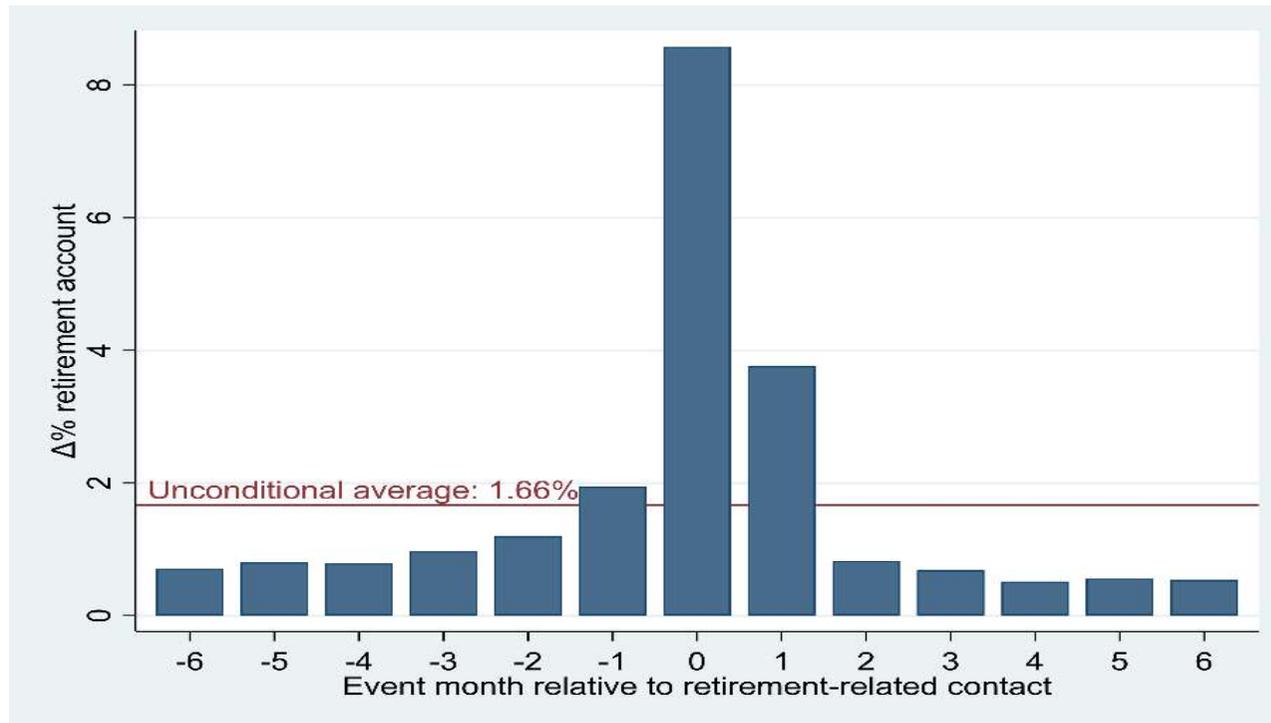
Retirement accounts:

Extensive margin – regression evidence

Panel A: Probability to open a retirement account

	Opens retirement account $(d)_t$			
	(1)	(2)	(3)	(4)
Retirement-related contact $(d)_t$	0.080*** (16.53)	0.067*** (15.79)	0.039*** (13.12)	1.746*** (15.00)
Male (d)		-0.000*** (-3.24)	-0.000*** (-3.34)	
Log(age) $_t$		-0.004*** (-27.51)	-0.002*** (-22.17)	
Log(bank wealth) $_{t-1}$		0.000*** (2.90)	0.000*** (2.78)	0.449*** (7.36)
$\Delta\%$ bank wealth $_{t-1}$		0.001*** (6.80)	0.000*** (4.67)	-0.067 (-1.10)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes
Pseudo R ²	0.034	0.049	0.119	0.432
N	953,849	953,849	953,849	142,931

Financial advice and retirement accounts: Intensive Margin



- Inflows of new money into retirement accounts increases about 5-fold after contacts

Retirement accounts:

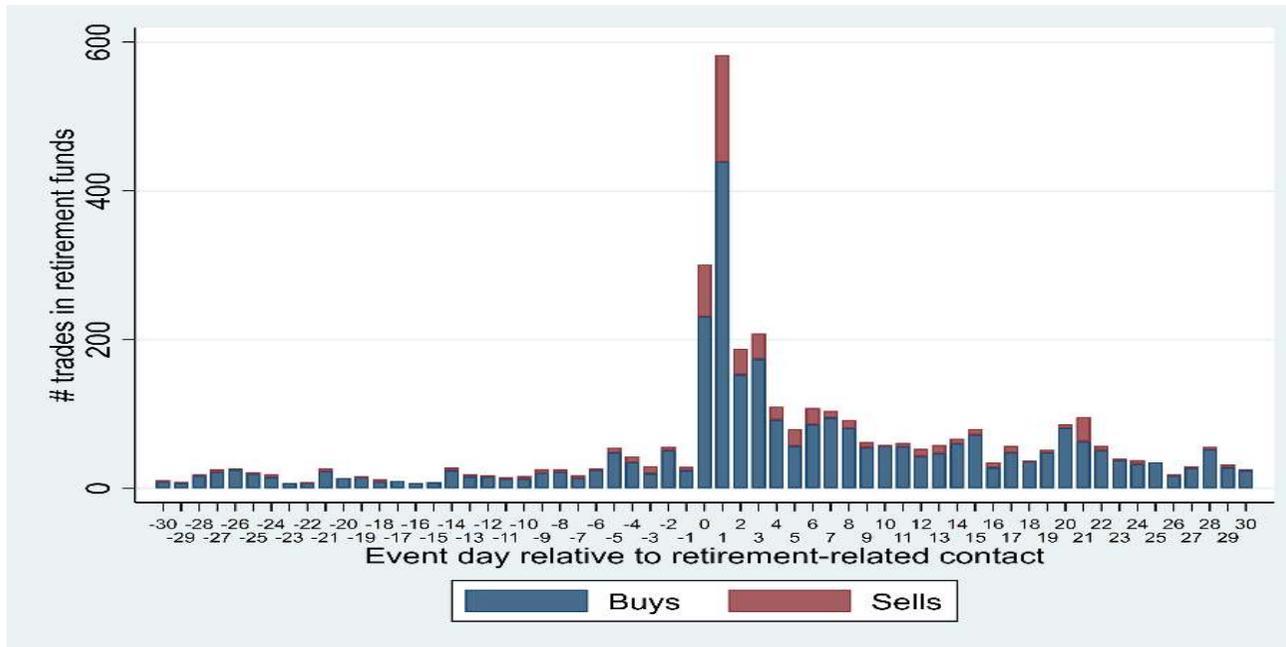
Intensive margin – regression evidence

Panel B: Changes in retirement accounts

	$\Delta\%$ retirement account _t			
	(1)	(2)	(3)	(4)
Retirement-related contact (d) _t	0.070** (2.49)	0.071*** (2.63)	0.037*** (2.80)	0.038*** (2.83)
Male (d)		-0.000 (-1.61)	-0.000 (-1.60)	
Log(age) _t		-0.025*** (-11.07)	-0.023*** (-11.65)	
Log(bank wealth) _{t-1}		-0.008*** (-10.74)	-0.008*** (-11.13)	-0.016*** (-12.96)
$\Delta\%$ bank wealth _{t-1}		0.018*** (8.97)	0.013*** (8.92)	0.012*** (8.49)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes
Adj. R ²	0.011	0.025	0.063	0.088
N	1,043,512	1,043,512	1,043,512	1,043,488

Identification Challenges IV: Reverse Causality

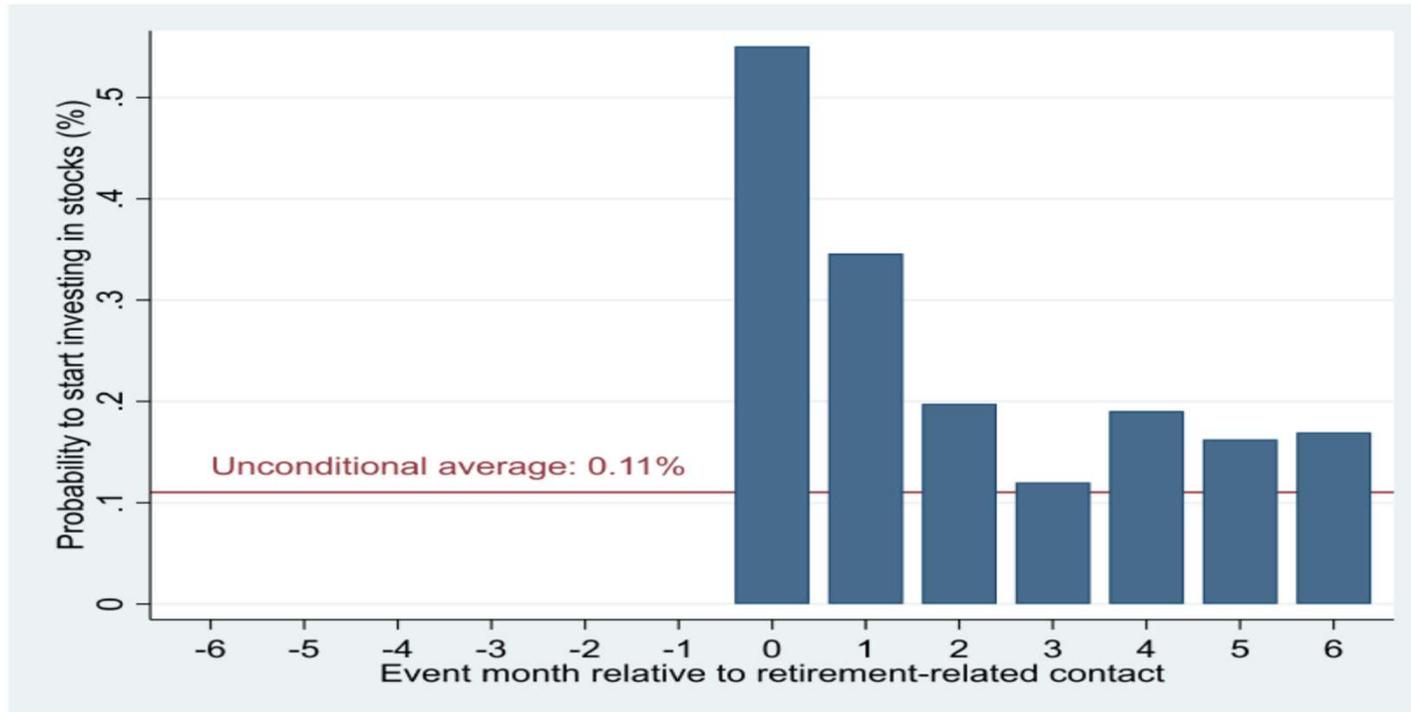
- The contemporaneous effect in month $t=0$ could be (partially) driven by advisors contacting clients after they observe that clients invest in retirement accounts.
- Solution: Use daily trade data in retirement fund accounts.



- More trading and more net-buying right after contacts.
- Effect strongest on day $t+1$.

Financial Advice and Stock Market Participation

Financial advice and equity investments: Extensive Margin



- **Probability to start equity market participation increases from 0.11% to more than 0.5% in months with contacts.**

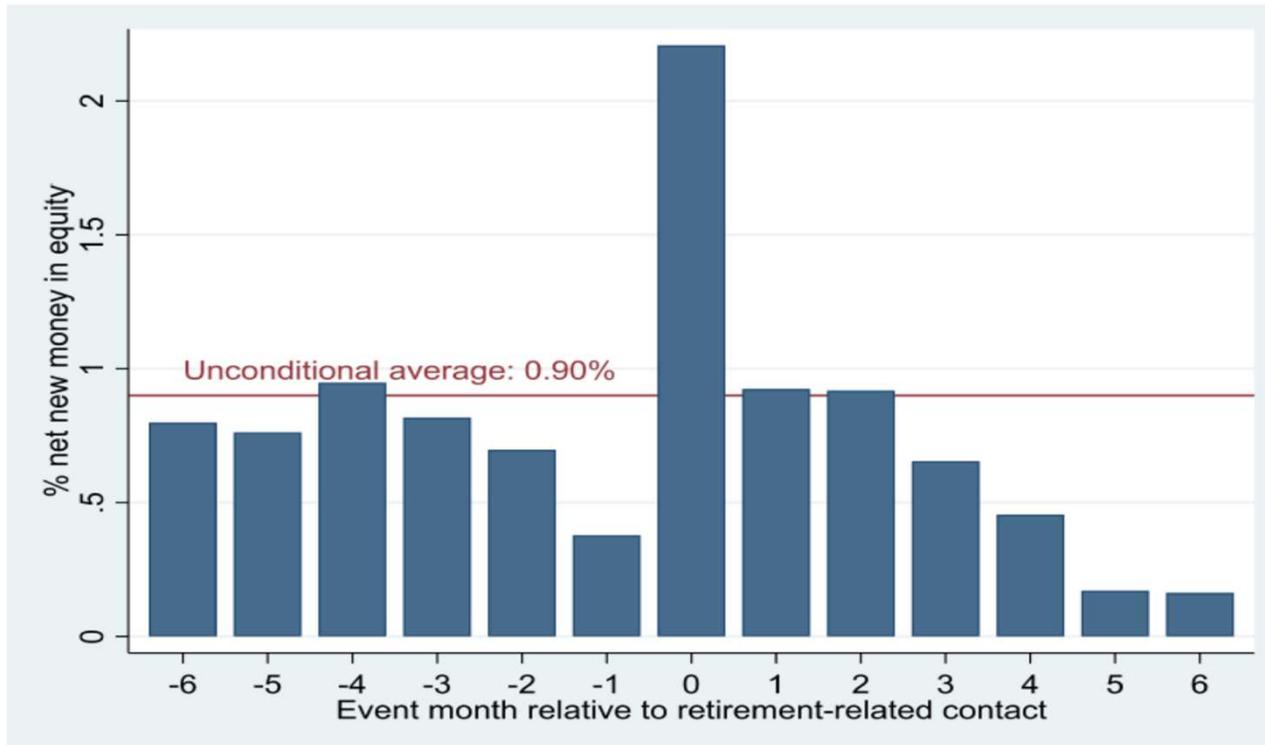
Equity Investments:

Extensive margin – regression evidence

Panel A: Probability to start investing in equity

	Starts investing in equity $(d)_t$			
	(1)	(2)	(3)	(4)
Retirement-related contact $(d)_t$	0.004*** (7.05)	0.003*** (6.86)	0.003*** (4.68)	1.207*** (7.83)
Male (d)		0.000 (0.73)	0.000 (0.67)	
Log(age) $_t$		-0.000*** (-3.69)	-0.000*** (-3.20)	
Log(bank wealth) $_{t-1}$		0.000*** (15.05)	0.000*** (15.18)	0.821*** (7.95)
$\Delta\%$ bank wealth $_{t-1}$		0.001*** (10.73)	0.000*** (10.21)	-0.050 (-0.63)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes

Financial Advice and Equity Investments: Intensive Margin



- Inflows of new money into equity instruments more than doubles

Equity Investments:

Intensive margin – regression evidence

Panel B: Net new money in equity

	% net new money in equity _t			
	(1)	(2)	(3)	(4)
Retirement-related contact (d) _t	0.013*** (2.75)	0.013*** (2.69)	0.016*** (3.91)	0.017*** (4.09)
Male (d)		0.004*** (5.31)	0.004*** (5.34)	
Log(age) _t		-0.007*** (-4.92)	-0.009*** (-5.94)	
Log(bank wealth) _{t-1}		0.002*** (4.12)	0.001*** (3.36)	-0.001 (-1.14)
Δ% bank wealth _{t-1}		0.035*** (8.66)	0.036*** (8.66)	0.031*** (8.00)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes

More on Causality

Identification Challenges V

- In our empirical model focusing on *advisor-initiated retirement-related contacts* with *time and client fixed effects*, we control for factors determining advisor-initiated contacts in a linear regression.
- Two potential problems remain:
 1. Observable factors might have a *non-linear* impact.
 2. *Unobservable time-varying, client-specific variables* might impact both, the decision of the advisor to contact the client and the clients decision to invest.
- Solutions: (1.) Propensity score matching based on observable variables and (2.) IV-regressions.

Retirement accounts – Propensity Score Matching

Extensive and intensive margin

Panel A: Probability to open a retirement account

	Opens retirement account $(d)_t$
	(1)
Retirement-related contact $(d)_t$	0.055*** (12.28)
Male (d)	-0.001 (-0.83)
Log(age) $_t$	-0.012*** (-3.81)
Log(bank wealth) $_{t-1}$	0.000 (0.28)
$\Delta\%$ bank wealth $_{t-1}$	0.000 (0.11)
Year-month fixed effects	Yes
Pseudo R ²	0.225
N	6,652

Panel B: Changes in retirement accounts

	$\Delta\%$ retirement account $_t$
	(1)
Retirement-related contact $(d)_t$	0.024*** (7.69)
Male (d)	-0.001 (-0.99)
Log(age) $_t$	-0.035*** (-4.44)
Log(bank wealth) $_{t-1}$	-0.010*** (-3.32)
$\Delta\%$ bank wealth $_{t-1}$	0.014* (1.86)
Year-month fixed effects	Yes
Adj. R ²	0.149
N	37,386

Equity Investments – Propensity Score Matching

Extensive and intensive margin

Panel A: Probability to start investing in equity

	Starts investing in equity $(d)_t$
	(1)
Retirement-related contact $(d)_t$	0.001** (2.02)
Male (d)	-0.000 (-1.01)
Log(age) $_t$	-0.000 (-1.04)
Log(bank wealth) $_{t-1}$	0.000** (2.05)
$\Delta\%$ bank wealth $_{t-1}$	0.000 (1.21)
Year-month fixed effects	Yes
Pseudo R ²	0.227
N	27,804

Panel B: Net new money in equity

	% net new money in equity $_t$
	(1)
Retirement-related contact $(d)_t$	0.021*** (4.12)
Male (d)	0.002 (0.45)
Log(age) $_t$	-0.014 (-1.33)
Log(bank wealth) $_{t-1}$	0.000 (0.12)
$\Delta\%$ bank wealth $_{t-1}$	0.032 (1.31)
Year-month fixed effects	Yes
Adj. R ²	0.003
N	16,294

Instrumental Variable Regressions

- IV should be a variable that influences the probability of a client being contacted (relevance), without having an impact on the client saving for retirement except through the advice channel (exclusion).
- Idea: advisors typically contact clients in a similar order (e.g. alphabetically). Thus, if a client was contacted in the same month as another client ('fellow client'), (s)he is also more likely to be contacted in a given month if the fellow client is contacted.
- Instrument: 'Fellow client contacted in the same month in the past'

Retirement Accounts

IV Regressions – Extensive Margin

Panel A: Probability to open a retirement account

	First stage	Second stage
	Retirement-related contact $(d)_t$	Opens retirement account $(d)_t$
	(1)	(2)
Retirement-related contact $(d)_t$		0.187* (1.81)
Log(bank wealth) $_{t-1}$	0.001*** (10.03)	0.001*** (7.74)
$\Delta\%$ bank wealth $_{t-1}$	0.000 (0.46)	0.000 (0.57)
At least one contact within last 36 months $(d)_{t-1}$	-0.011*** (-17.03)	0.007*** (5.68)
Advisor contacted fellow clients $(d)_t$	0.019*** (6.30)	
Year-month fixed effects	Yes	Yes
Client fixed effects	Yes	Yes
N	953,530	953,530
F-statistic	52.188	

Retirement Accounts

IV Regressions, Intensive Margin

Panel B: Changes in retirement accounts

	First stage	Second stage
	Retirement-related contact $(d)_t$	$\Delta\%$ retirement account $_t$
	(1)	(2)
Retirement-related contact $(d)_t$		0.069* (1.79)
Log(bank wealth) $_{t-1}$	0.002*** (3.78)	-0.016*** (-13.08)
$\Delta\%$ bank wealth $_{t-1}$	0.000 (0.22)	0.012*** (8.50)
At least one contact within last 36 months $(d)_{t-1}$	-0.010*** (-6.79)	0.000 (0.38)
Advisor contacted fellow clients $(d)_t$	0.028*** (7.88)	
Year-month fixed effects	Yes	Yes
Client fixed effects	Yes	Yes
N	1,043,488	1,043,488
F-statistic	62.050	

Equity Investments

IV Regressions – Extensive Margin

Panel A: Probability to start investing in equity

	First stage	Second stage
	Retirement-related contact (d) _t	Starts investing in equity (d) _t
	(1)	(2)
Retirement-related contact (d) _t		0.042** (1.99)
Log(bank wealth) _{t-1}	0.001*** (16.57)	0.000*** (8.82)
Δ% bank wealth _{t-1}	-0.001*** (-3.95)	0.000*** (3.27)
At least one contact within last 36 months (d) _{t-1}	-0.010*** (-24.98)	0.001*** (4.05)
Advisor contacted fellow clients (d) _t	0.025*** (10.43)	
Year-month fixed effects	Yes	Yes
Client fixed effects	Yes	Yes
N	1,408,924	1,408,924
F-statistic	108.811	

Equity Investments

IV Regressions – Internal Margin

Panel B: Net new money in equity

	First stage	Second stage
	Retirement-related contact $(d)_t$	% net new money in equity $_t$
	(1)	(2)
Retirement-related contact $(d)_t$		0.047 (0.54)
Log(bank wealth) $_{t-1}$	0.003*** (6.60)	-0.001 (-1.21)
$\Delta\%$ bank wealth $_{t-1}$	0.000 (0.49)	0.031*** (8.00)
At least one contact within last 36 months $(d)_{t-1}$	-0.010*** (-3.76)	0.001 (0.62)
Advisor contacted fellow clients $(d)_t$	0.033*** (6.37)	
Year-month fixed effects	Yes	Yes
Client fixed effects	Yes	Yes
N	587,754	587,754
F-statistic	40.633	

Do Advisors Help Disadvantaged Clients More?

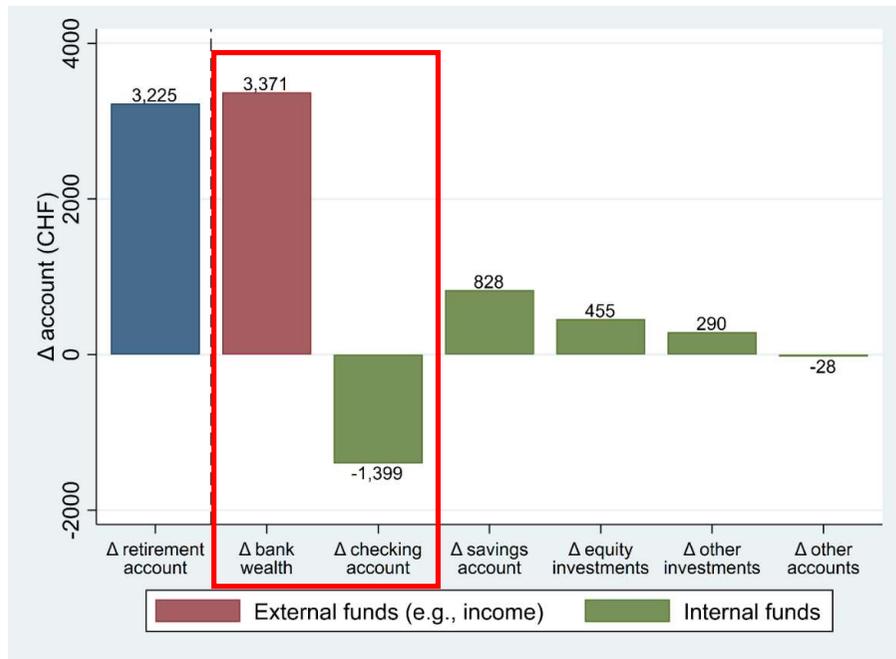
Disadvantaged Clients

- Poorer, female, less educated clients more likely to get in trouble.
 - Advisors more likely to contact the rich and educated (no differences w.r.t. gender).
 - But: are disadvantaged clients more or less likely to follow advice conditional on being contacted?
 - Retirement accounts:
 - No differences at the extensive or intensive margin.
 - Equity investments:
 - Females (poorer clients) slightly more (less) likely to act upon advice at the extensive margin.
No impact of education and no differences at the intensive margin.
- No uniform picture emerges! Advisors do not seem to particularly help disadvantaged clients, but they also do not seem to discourage them.

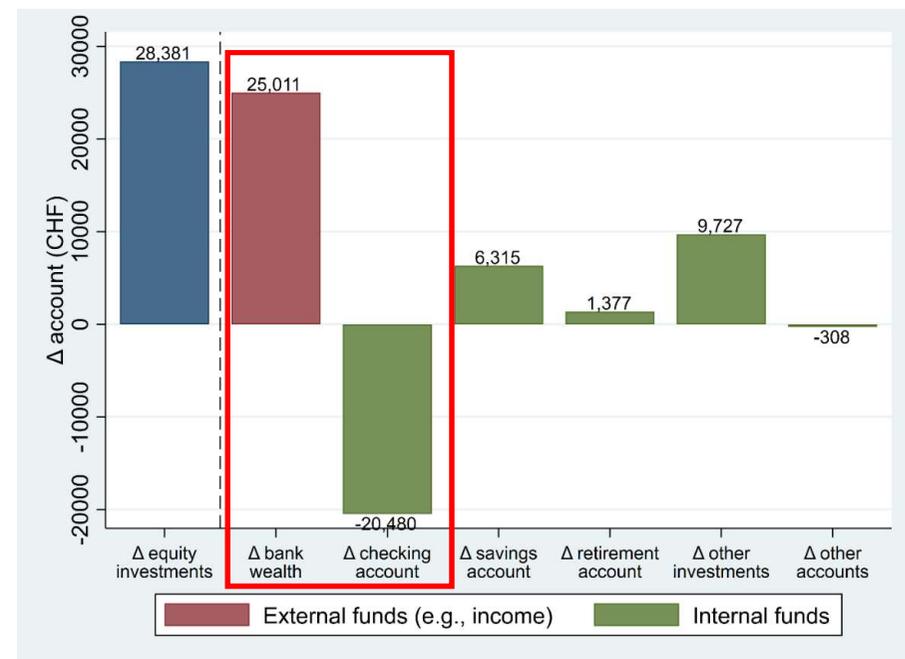
**Do Advisors Help Investors to Save
more Overall?**

How do clients fund retirement accounts and equity investments?

Retirement accounts



Equity investments



- Picture looks very similar independent on whether the investments follow advice or not.
- Advisors are **not** more (or less) likely to simply suggest re-allocation of existing saving.

Conflicts of Interest?

Retirement accounts, equity investments, and bank profits

	Profit (CHF) _t		
	(1)	(2)	(3)
Has retirement account (d) _t	5.991*** (2.65)		5.643** (2.50)
Has equity investments (d) _t		24.514*** (6.22)	24.400*** (6.18)
Control variables	Yes	Yes	Yes
Year-month fixed effects	Yes	Yes	Yes
Client fixed effects	Yes	Yes	Yes
Adj. R ²	0.586	0.587	0.587
N	1,998,118	1,998,114	1,998,114

Conclusion

- First paper on financial advice and personal retirement savings.
- Advised clients are more likely to take advantage of tax-exempt retirement accounts and to invest in equity.
- Beneficial advice does not primarily target those most in need.
- Advised clients use external sources and checking accounts for funding retirement savings.
- Saving (more) for retirement is associated with an increase bank profits, pointing toward a win-win situation for clients and advisors.

Thank you for your Attention

Hoechle/Ruenzi/Schaub/Schmid (2022): Financial Advice and Retirement Savings

APPENDIX

Quality of the PSM – Retirement Accounts

Panel A: Clients without retirement accounts

	Retirement- related contact (d) _t = 1	Retirement- related contact (d) _t = 0	Difference	t-value	N
Male (d)					
Before propensity score matching	0.588	0.567	0.020**	2.38	953,849
After propensity score matching	0.588	0.596	-0.008	-0.67	6,652
Log(age)_t					
Before propensity score matching	3.744	3.808	-0.064***	-12.92	953,849
After propensity score matching	3.744	3.746	-0.001	-0.18	6,652
Log(bank wealth)_{t-1}					
Before propensity score matching	11.093	10.657	0.437***	13.38	953,849
After propensity score matching	11.093	11.094	-0.000	-0.00	6,652
Δ% bank wealth_{t-1}					
Before propensity score matching	0.068	0.053	0.015**	2.17	953,849
After propensity score matching	0.068	0.073	-0.005	-0.52	6,652

Panel B: Clients with retirement accounts

	Retirement- related contact (d) _t = 1	Retirement- related contact (d) _t = 0	Difference	t-value	N
Male (d)					
Before propensity score matching	0.600	0.593	0.007**	1.97	1,043,512
After propensity score matching	0.600	0.601	-0.002	-0.31	37,386
Log(age)_t					
Before propensity score matching	3.869	3.845	0.024***	14.43	1,043,512
After propensity score matching	3.869	3.869	-0.000	-0.09	37,386
Log(bank wealth)_{t-1}					
Before propensity score matching	11.523	11.454	0.069***	9.81	1,043,512
After propensity score matching	11.523	11.529	-0.007	-0.64	37,386
Δ% bank wealth_{t-1}					
Before propensity score matching	0.024	0.018	0.006***	5.31	1,043,512
After propensity score matching	0.024	0.022	0.002	1.20	37,386

Quality of the PSM – Equity Investments

Panel A: Clients without equity investments

	Retirement- related contact (d) _t = 1	Retirement- related contact (d) _t = 0	Difference	t-value	N
Male (d)					
Before propensity score matching	0.585	0.569	0.016***	3.84	1,409,132
After propensity score matching	0.585	0.587	-0.002	-0.29	27,804
Log(age)_t					
Before propensity score matching	3.823	3.809	0.014***	6.38	1,409,132
After propensity score matching	3.823	3.824	-0.000	-0.09	27,804
Log(bank wealth)_{t-1}					
Before propensity score matching	11.063	10.710	0.352***	26.98	1,409,132
After propensity score matching	11.063	11.061	0.001	0.11	27,804
Δ% bank wealth_{t-1}					
Before propensity score matching	0.038	0.043	-0.005*	-1.78	1,409,132
After propensity score matching	0.038	0.033	0.005*	1.70	27,804

Panel B: Clients with equity investments

	Retirement- related contact (d) _t = 1	Retirement- related contact (d) _t = 0	Difference	t-value	N
Male (d)					
Before propensity score matching	0.620	0.608	0.012**	2.25	587,810
After propensity score matching	0.620	0.613	0.007	0.93	16,294
Log(age)_t					
Before propensity score matching	3.896	3.872	0.023***	9.44	587,810
After propensity score matching	3.896	3.897	-0.001	-0.37	16,294
Log(bank wealth)_{t-1}					
Before propensity score matching	12.127	11.935	0.192***	15.81	587,810
After propensity score matching	12.127	12.126	0.001	0.04	16,294
Δ% bank wealth_{t-1}					
Before propensity score matching	0.018	0.014	0.004**	2.06	587,810
After propensity score matching	0.018	0.018	-0.000	-0.13	16,294

Main Results for Subset of clients with less than 75.000 SFR

Panel A: Probability to open a retirement account

	Opens retirement account (d) _t			
	(1)	(2)	(3)	(4)
Retirement-related contact (d) _t	0.065*** (8.91)	0.039*** (7.94)	0.024*** (6.85)	2.164*** (9.59)
Male (d)		-0.000 (-1.50)	-0.000 (-1.49)	
Log(age) _t		-0.001*** (-5.59)	-0.000*** (-4.78)	
Log(bank wealth) _{t-1}		0.000*** (17.46)	0.000*** (15.30)	0.379*** (5.08)
Δ% bank wealth _{t-1}		-0.000** (-2.21)	-0.000** (-2.31)	-0.016** (-2.22)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes
Pseudo R ²	0.030	0.053	0.107	0.400
N	701,683	701,683	697,099	53,920

Panel B: Changes in retirement accounts

	Δ% retirement account _t			
	(1)	(2)	(3)	(4)
Retirement-related contact (d) _t	0.059*** (2.69)	0.058*** (2.68)	0.033** (2.60)	0.037*** (3.05)
Male (d)		0.001 (0.90)	0.001 (0.87)	
Log(age) _t		-0.032*** (-10.25)	-0.032*** (-10.29)	
Log(bank wealth) _{t-1}		-0.012*** (-9.17)	-0.013*** (-9.31)	-0.031*** (-13.57)
Δ% bank wealth _{t-1}		0.003*** (3.99)	0.003*** (3.63)	0.003*** (4.51)
Year-month fixed effects	No	No	Yes	Yes
Client fixed effects	No	No	No	Yes
Adj. R ²	0.002	0.022	0.050	0.129
N	128,874	128,874	128,874	128,858