Gender differences in financial advice

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joint with

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Motivation

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Motivation

- Widely documented pattern: women show lower levels of financial literacy and less confidence than men when it comes to financial decisions
  (e.g. Bucher-Koenen et al. 2017; Bucher-Koenen et al. 2020)

- Increasing evidence of differential treatment by financial institutions:
  - Alesina et al. (2013) provide evidence that female entrepreneurs are charged higher interest rates.
  - Brock and de Haas (2019) show discriminatory behavior by loan officers against female borrowers.
  - Women get financial advice towards underdiversification (home biased) (Bhattacharya et al. 2020)

- **This paper:** examine gender stereotyping in financial advice based on administrative bank and survey data

Research Question and Preview

1. Why should women get different financial advice?

Theoretical framework on interactions between financial advisors and their clients with a twist: advisors receive an informative but imprecise signal of clients' financial literacy.

- Clients clients who are stereotypically less financially literate (women) receive more advisor self-serving advice.
- Clients with 'bad' signals, but high actual aptitude, receive sub-optimal advice AND recognize this ➔ More financially **literate women** are more likely to **reject advice.**

2. Are women more likely to get advice aligned with advisors' incentives?

We provide robust systematic empirical evidence:

- Women are **less likely to receive a rebate** on upfront load
- Women are more likely to receive recommendations for (low effort) bank own products and especially the **(high fee) bank-own balanced funds**
- Effects are **stronger for male advisors** and advisors seem to be **aware of stereotyping**

Analytical Framework

Why would advisors recommend different products to women compared to men?

Model in a nutshell:

- **Advisor** prefers selling certain investment alternatives over others
- If these products are optimal for the client, then no conflict of interest
- **Clients** with high financial aptitude can obtain better investment alternatives (lower search costs)
- Advisor has an incentive to provide better recommendations to customers with higher actual financial aptitude
- Advisor's assessment of an individual client's financial aptitude is influenced by the client's gender (stereotyping in line with Bordalo et al. 2016)
- **->** advice to **women** more in line with **advisors incentives**
- **->** seemingly low-aptitude **women**, who are **actually capable**, notice low-quality advice and **reject** it

Predictions

1. ***Miss-selling hypothesis***: Clients with lower signals of financial aptitude (women) receive financial recommendations more in line with advisor incentives.

    Moreover, the model allows us to derive an **additional testable hypothesis**:

2. ***Rejection hypothesis***: Clients with low signals of financial aptitude, but high actual financial aptitude, are more likely to detect unsuitable products and reject a given recommendation.

Data

Administrative Bank Data

- Data on **advisory minutes**: client-advisor interactions of a large German bank (random sample of clients)
- **27,000 advisory meetings** between **13,000 retail clients** and **4,600 advisors** between January 2009 and December 2017.
- Client and meeting characteristics
- More than **35,000 fund recommendations** (type, volume, costs)
- Client transactions ➜ adherence: implementation within 30 days

Bank Survey

- Subsample of clients with survey information: 485 clients (1,342 product recommendations), e.g. information on test-based financial literacy and motives for consulting advisors

Advisor Survey

- Subject assessment on bank clients (by gender) of 103 active advisors (July 2020)

Summary Statistics (selected)

Panel A: Client level information

	All		Women		Men	
	N	mean	N	mean	N	mean
Female	13,239	0.46	6,078	1	7,161	0
Risk tolerance: low	13,239	0.07	6,078	0.10	7,161	0.07
Risk tolerance: moderate	13,239	0.55	6,078	0.61	7,161	0.47
Risk tolerance: high	13,239	0.23	6,078	0.19	7,161	0.26
Risk tolerance: very high	13,239	0.17	6,078	0.10	7,161	0.20
Investment horizon: < 3 y.	13,239	0.01	6,078	0.01	7,161	0.01
Investment horizon: 3 - 5 y.	13,239	0.55	6,078	0.56	7,161	0.54
Investment horizon: > 5 y.	13,239	0.44	6,078	0.43	7,161	0.45
Financial wealth	13,239	108,515	6,078	98,336	7,161	
Married	13,239	0.55	6,078	0.45	7,161	
Age: younger than 50	13,239	0.17	6,078	0.18	7,161	
Age: 50 to 65	13,239	0.31	6,078	0.3	7,161	
Age: older than 65	13,239	0.52	6,078	0.52	7,161	

Panel B: Recommendation level (R) and meeting (M) information

	All		Women		Men	
	N	mean	N	mean	N	mean
Advice in person (M)	26,747	0.85	12,080	0.86	14,667	0.84
Meeting duration > 30 min. (M)	26,747	0.74	12,080	0.75	14,667	0.74
Number of recommendations (M)	26,747	1.31	12,080	1.24	14,667	1.36
Share stock funds (R)	34,895	0.19	14,989	0.14	19,906	0.23
Fund equity share in percent (R)	34,895	46.68	14,989	42.82	19,906	49.59
Fund risk category (R)	34,895	4.06	14,989	3.91	19,906	4.17
Bank-own balanced fund (R)	34,895	0.64	14,989	0.71	19,906	0.60
Annual expense ratio (R)	34,895	1.88	14,989	1.91	19,906	1.87
Fee rank (quintile) (R)	34,895	4.10	14,989	4.25	19,906	3.98
Rebate (R)	21,084	0.26	9,342	0.25	11,742	0.27
Recomm. value (in Euros) (R)	34,895	22,597	14,989	29,323	19,906	17,533
Adherence (R)	34,895	0.62	14,989	0.64	19,906	0.60

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

1. Gender differences in sales charges

	Rebate on Upfront Load			Size Rebate
	(1)	(2)	(3)	(4)
			>50 recomm.	
Female	-0.02**	-0.03***	-0.02***	-0.02***
	(0.01)	(0.01)	(0.01)	(0.01)
ln (value of the recomm.)		0.06***	0.06***	0.04***
		(0.00)	(0.00)	(0.00)
Age Groups	Y	Y	Y	Y
Risk Tolerance Groups	Y	Y	Y	Y
Month x year FE	Y	Y	Y	Y
Advisor FE	Y	Y	Y	Y
Fund (ISIN) FE	Y	Y	Y	Y
Observations	21,032	21,032	19,773	21,032
Adjusted R-squared	0.226	0.255	0.255	0.190

24% of all recommendations come with a rebate on the upfront load.

Women are on average 8.5% less likely to receive a rebate.

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

**1. Gender differences in sales charges: a matter of negotiation skills?**

Figure: Advisors' perceptions of negotiation skills
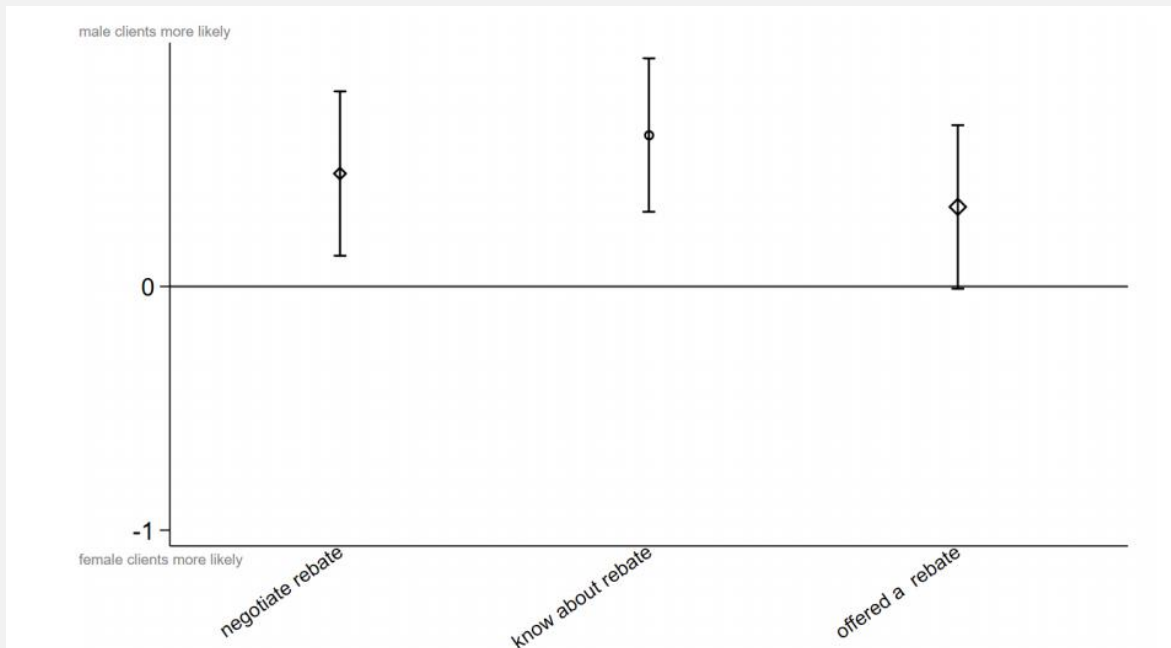
Male clients are more likely to know about rebates and advisors are more likely to offer rebates to male clients without being prompted.

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

2. Gender differences in product recommendations
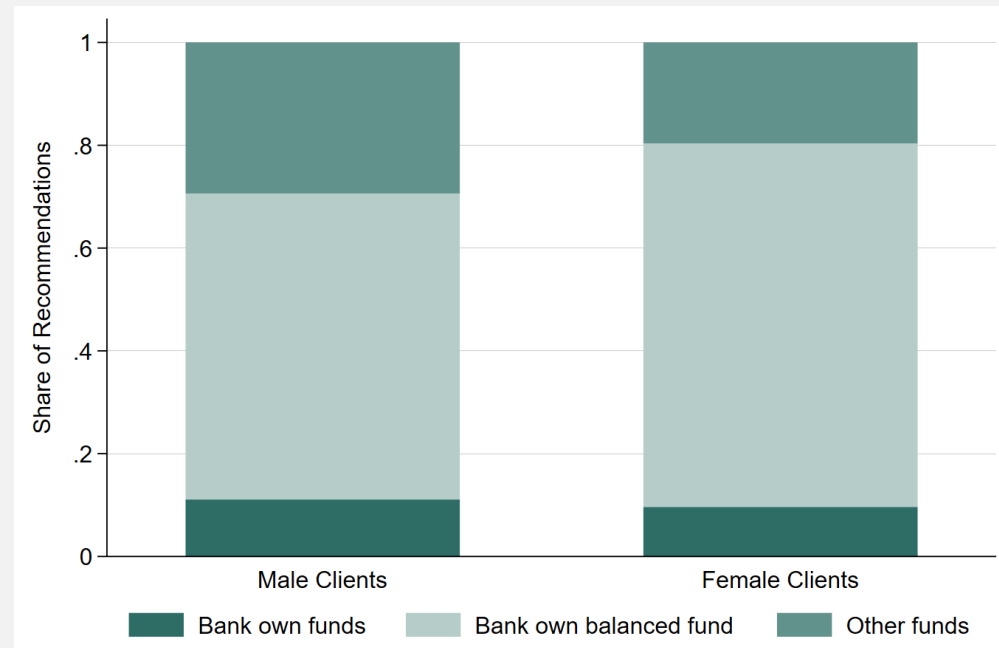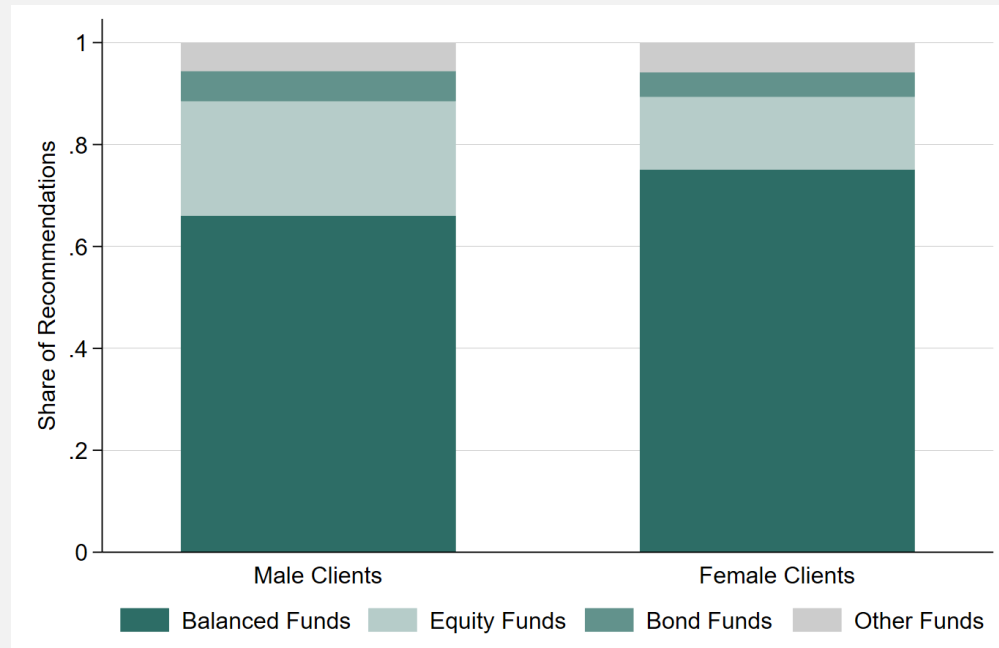
Women on average receive recommendations for balanced funds substantially more often, specifically the bank's own balanced funds.

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

2. Gender differences in product recommendations

	Bank own fund		Bank own **balanced** fund		Share bank own **balanced** fund
	(1)	(2)	(3)	(4)	(5)
Female	0.04***	0.01***	0.06***	0.03***	0.04***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Risk tol. moderate		0.01		0.17***	0.16***
		(0.01)		(0.01)	(0.01)
Risk tol. high		-0.06***		0.07***	0.05***
		(0.01)		(0.01)	(0.01)
Risk tol. very high		-0.22***		-0.14***	-0.14***
		(0.01)		(0.02)	(0.02)
ln (value meeting recomm.)		0.04***		0.01***	-0.01***
		(0.00)		(0.00)	(0.00)

Women have a 5% higher probability to get a recommendation for the bank's own balanced funds.

Robustness (different preferences?):

- Effects even stronger if we exclude recommendation initiated by the client
- Women not more likely to adhere when recommended these funds

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

2. Gender differences in product recommendations – differences in costs?

Good advice:
- broadly diversified, low-cost portfolio (Mullainathan et al. 2012)
- Variations in risk-adjusted returns on mutual fund portfolios result largely from differences in fees (Grinblatt et al. 2016)

Annual expense ratios on average sig. higher for women,
but economically comparable (1.90 vs. 1.87)

but: Men receive recommendations for more risky funds
(which are on average more expensive)

Mis-selling Hypothesis: Are recommendations to women more beneficial to advisors?

2. Gender differences in product recommendations – differences in costs?
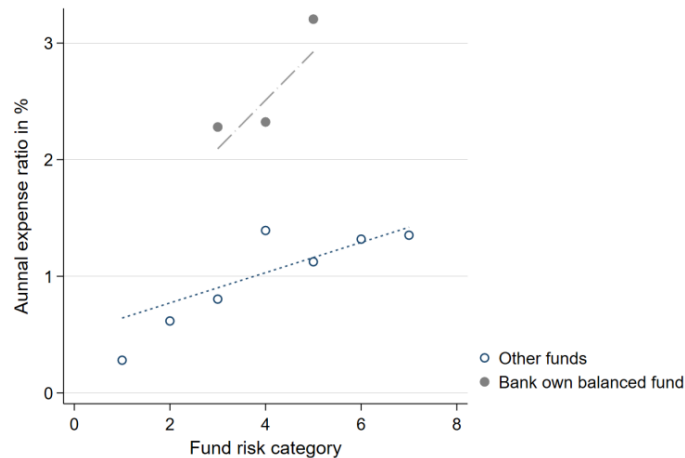
The bank's own balanced funds are on average more expensive than comparable products in the same risk category.

	Average Annual Expenses		Average Fee Rank			Average Annual Expenses
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.02**	0.01**	0.15***	0.13***	0.01	-0.00
	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.00)
Bank own **balanced** fund					2.23***	0.90***
					(0.02)	(0.01)

Within fund risk category, women get recommendations for funds with higher TER.

Differences in Motives for Advice Seeking and Tailored Fund Recommendations

Figure: Differences in preference for delegation

"It would be a great relief to delegate my financial decisions"
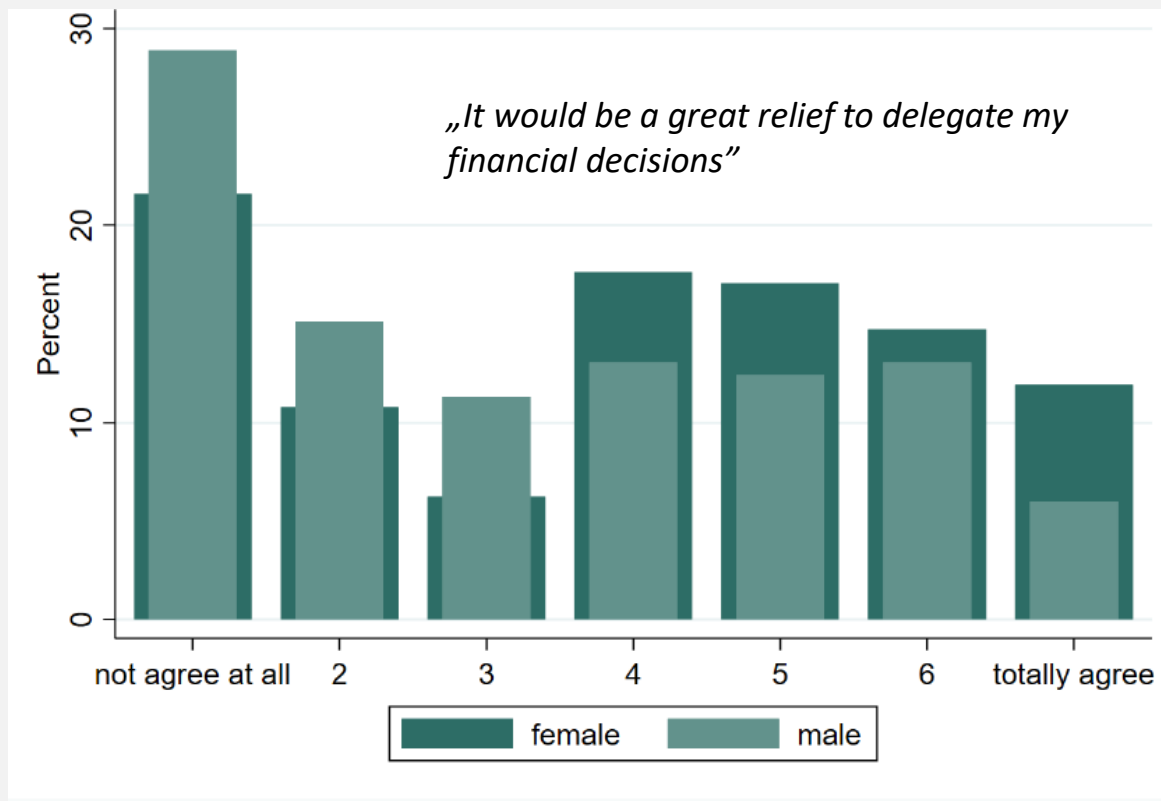
In addition:

Men are looking for a **second opinion, women** need a **motivation to deal with their finances**

Motives mirrored in advisor perception (taken from advisor survey)

Differences in Motives for Advice Seeking and Tailored Fund Recommendations

Figure: Differences in justifications for recommendations in the protocols
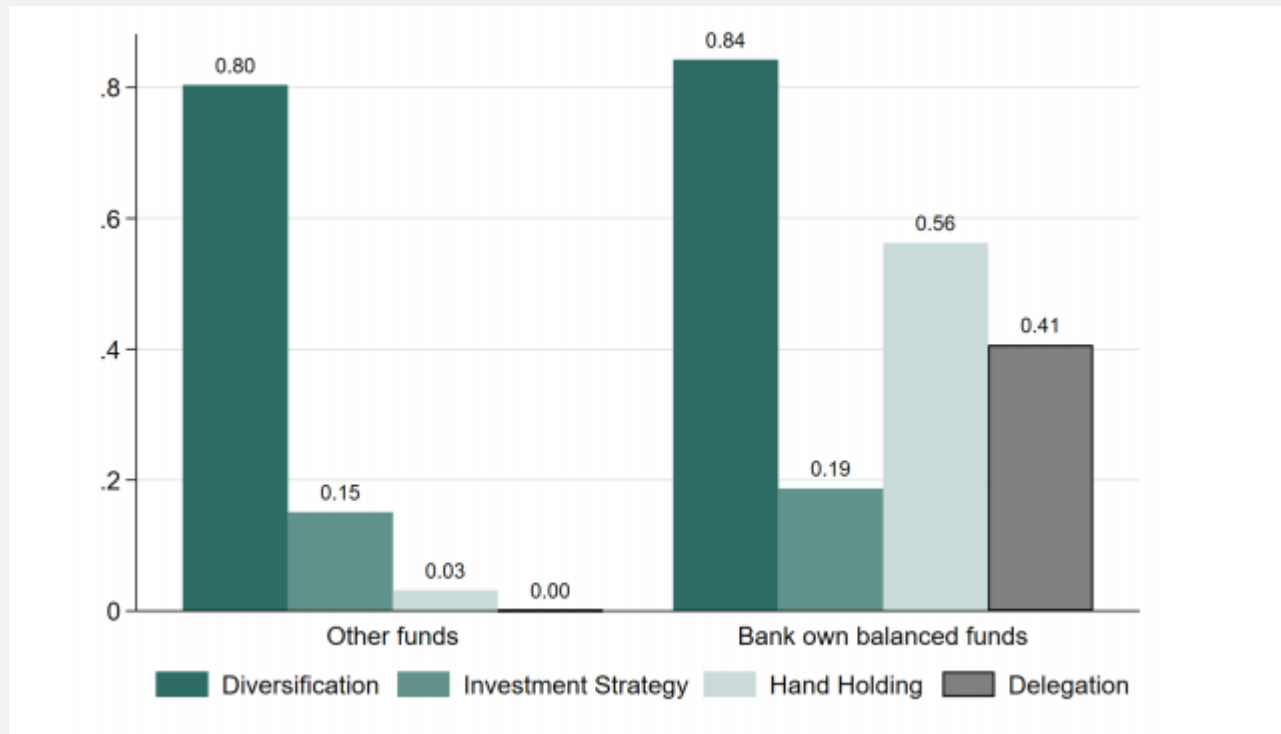
Preferences for delegation and hand holding are strongly tied to the recommendation of the bank own balanced funds (marketed as low maintenance products)

Stereotyping?

Gender gap in financial literacy around the world
(Bucher-Koenen et al. 2016)

- Lower financial literacy among women in the majority of countries around the world.

- Persistent for different subgroups of the population (young and old), different domains (pension literacy, economic literacy, debt literacy).

Gender gap in financial confidence
(e.g. Bucher-Koenen et al. 2020)

Panel A: Distribution of Correct Answers to General Questions
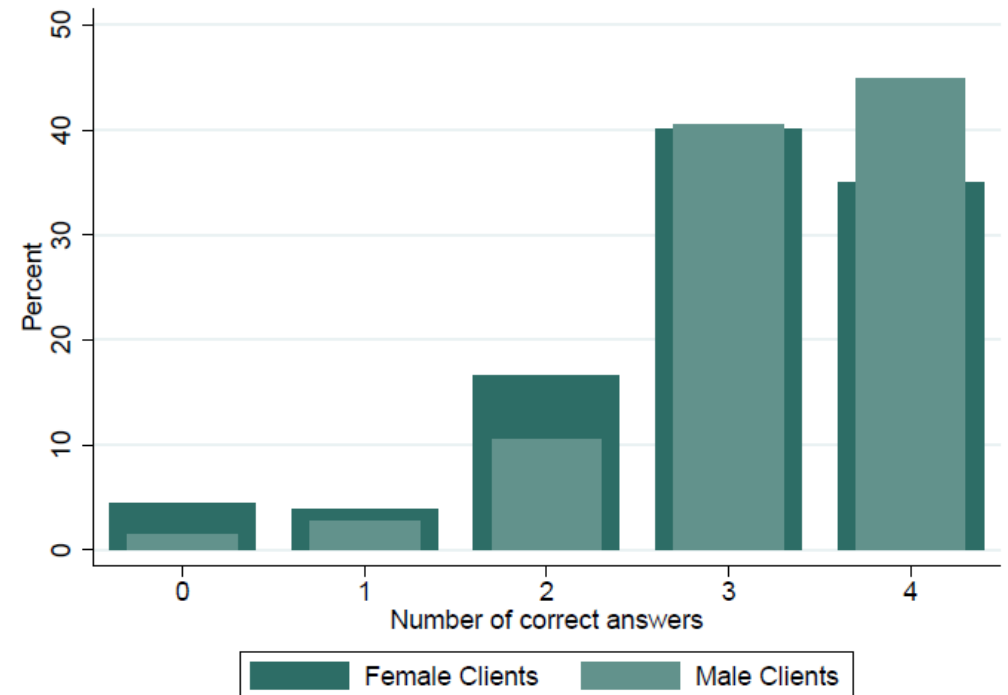
Testing the Rejection Hypothesis

	(1) adherence	(2) adherence	(3) adherence	(4) adherence	(5) adherence	(6) adherence
High fin. literacy	-0.08 (0.10)					
High fund literacy		-0.75** (0.36)				
High stock market			-0.19* (0.10)			
High lit. x female				-0.30* (0.17)		
High lit. x male				0.06 (0.11)		
High fund fit. x female					-0.79** (0.35)	
High fund lit. x male					-0.43 (0.36)	
High stock market x female						-0.28** (0.14)
High stock market x male						-0.15 (0.12)
Observations	1,342	675	1,342	1,342	675	1,342
Adjusted R-squared	0.0468	0.110	0.0439	0.0482	0.111	0.0436
Ftest, Prob > F				0.0750	0.0843	0.4185

Women with higher literacy/ confidence more likely to reject advice

* Adherence is an indicator that equals 1 if a recommendation was implemented within 30 days

Differences by advisor gender

	Rebate on Upfront Load		Bank own balanced fund		Fee Rank	
	(1) Female Advisor	(2) Male Advisor	(3) Female Advisor	(4) Male Advisor	(5) Female Advisor	(6) Male Advisor
Female	-0.02	-0.02*	0.02*	0.03***	0.07***	0.16***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.03)
Constant	-0.41**	-0.71***	0.44***	0.36***	3.09***	3.06***
	(0.06)	(0.06)	(0.21)	(0.18)	(0.17)	(0.11)
Controls	Y	Y	Y	Y	Y	Y
Month FE	Y	Y	Y	Y	Y	Y
Advisor FE	Y	Y	Y	Y	Y	Y
Fund FE	Y	Y				
Observations	9,172	11,858	12,049	14,846	12,049	14,846
Adjusted R-squared	0.282	0.322	0.358	0.231	0.254	
Ftest, Prob > F		**0.52**		**0.07**		**0.04**

Advisor survey: gender stereotyping?

Yes, women more subject to stereotyping
-> difference only sig. for male advisors.

Gender differences stronger among male advisors

Implications: Differences in Costs and Cost Awareness

Source: AdobeStock
Pathdoc
#101317132

Does it matter? What is the cost?

Impact of annual expense ratios for long term wealth accumulation

Annual Expense Ratios and Final Wealth
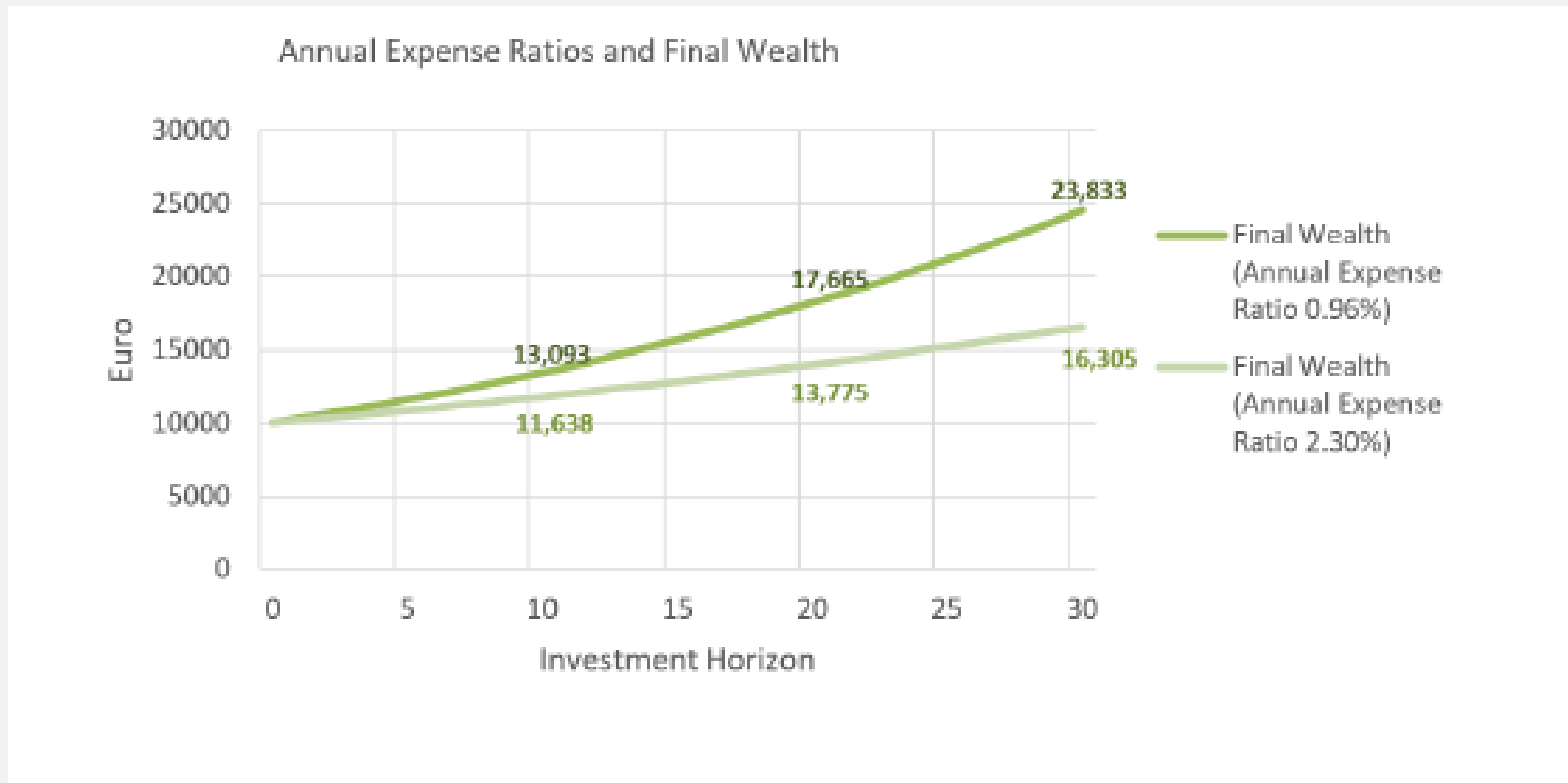
Differences in Fee Awareness

Women presumably not aware of the impact of (higher) annual expense ratios

Discussion

Yes, there are gender differences in financial advice

But: No conclusion about general importance of advice.

Policy Advice?

- Provide costless reliable information on financial product choice

- Provide clients with a set of right questions to ask.

- Make cost differences in products more salient (e.g., benchmarking)