#### Gender differences in financial advice

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#### Motivation

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## Preview

#### **1.** How is financial advice related to client gender?

- Women receive recommendations for less risky products controlling for risk preferences.
- Women pay on average **higher management fees** (TER) compared to men and are **less likely to receive a rebate** on the upfront load.
- Women are likely to receive recommendations for the **bank's own balanced funds**, which carry high product fees.

#### 2. What could be the mechanism?

- **Theoretical model** on interactions between financial advisors and their clients with a twist: advisors receive an informative but imprecise signal of clients' financial literacy.
  - Clients who appear less financially literacy (women) receive worse advice.
  - Clients signaling low financial literacy, but who are actually financially literate are more likely to reject advice. More financially **literate women** are more likely to **reject advice**.
- → Model predictions and empirical results are consistent.

## **Financial Advice**

#### • Theoretical/ Experimental papers:

Financial advice as a prototypical *credence good* with advisors being incentivized by kickbacks -> only knowledgeable clients are able to assess service quality (e.g., Chen/ Gesche 2018; Kerschbamer/Sutter 2017; Inderst/Ottaviani 2012)

- **Empirical papers**: Mixed evidence on general quality of advice
  - Reduction of financial biases like local bias, under-diversification, or disposition effect (Hoechle et al. 2018, 2016; Gaudecker 2015; Chalmers/Reuter 2015)
  - Negative overall impact on portfolio performance vs. "do-it-yourself" investment decisions (Hoechle et al. 2018; Chalmers/Reuter 2015; Hackethal et al. 2012)
- **Our paper:** documentation of differences in the quality of financial advice depending on client characteristics.

## Administrative Bank Data

- Data on **advisory minutes**: client-advisor interactions of a large German bank (random sample of clients)
- 27,617 advisory meetings between 13,723 retail clients and 4,649 advisors between January 2009 and December 2017.
- Client and meeting characteristics
- More than **36,000 fund recommendations** (type, volume, costs)
- Client transactions → adherence: implementation within 30 days
- Subsample of clients with survey information: 520 clients (1,341 product recommendations), e.g. information on test-based financial literacy and motives for consulting advisors







## Summary Statistics (selected)

Panel A: Client level information		All	Wor	men	M	en
	count	mean	count	mean	count	mean
Female	13723	0.45	6210	1	7513	0
Log financial wealth	13723	10.81	6210	10.73	7513	10.87
Married	13723	0.55	6210	0.45	7513	0.63
Age: older than 65	13723	0.52	6210	0.52	7513	0.52
Duration of the client bank relationship (in years)	13723	18.47	6210	18.46	7513	18.47
Foreign citicenship	13723	0.07	6210	0.06	7513	0.07
Panel B: Recommendation level information						
Fund equity share	35872	47.65	15267	43.65	20605	50.61
Bank owned fund	36083	0.65	15356	0.71	20727	0.6
Management fee	36083	1.95	15356	1.95	20727	1.95
Quintile of the fee rank	36083	3.85	15356	3.95	20727	3.78
Rebate	29763	0.24	13005	0.23	16758	0.24
Adherence to recommendation	36083	0.62	15356	0.64	20727	0.6
Advice in person	36083	0.84	15356	0.86	20727	0.83
Duration of the meeting longer than 30 min	36083	0.74	15356	0.75	20727	0.74
Vaule of the recommendation (in Euros)	36083	22241	15356	28905	20727	17304

### **Fund Recommendations**

Panel B: Recommendations by Fund Type and Gender 1 Share of Recommendations .8 6 4 2 0 Male Clients Female Clients Bank Owned Balanced Funds Other Balanced Funds Equity Funds Bond Funds Other Funds

Women get on average recommendations for balanced funds, specifically the banks' own balanced funds.

## Fund Risk

Panel A: Distribution of Risk Categories by Gender For each risk category the figure show the share of recommendations for male and female clients separately.



Women get recommendations for less risky funds.

Note: The fund risk categories are a standardized scale, which is provided to investors since 2011 in order to inform them about the risk-return profile of a fund in a transparent way (KID – key information document).

# Fund Risk

	(1)	(2)	(3)	(4)
VARIABLES	Equity fund	Equity share	Fund risk category	Bank own fund
Female	-0.02***	-1.69***	-0.08***	0.03***
	(0.00)	(0.39)	(0.01)	(0.01)
Risk tolerance very low [Ref.]				
Risk tolerance low	0.05***	12.90***	0.71***	0.16***
	(0.01)	(0.75)	(0.03)	(0.01)
Risk tolerance high	0.14***	25.98***	1.17***	0.06***
	(0.01)	(0.84)	(0.03)	(0.01)
Risk tolerance very high	0.29***	36.72***	1.50***	-0.08***
	(0.01)	(0.92)	(0.03)	(0.02)
In (value of the recommendation)	-0.05***	-4.01***	-0.17***	0.04***
	(0.00)	(0.13)	(0.00)	(0.00)
Controls	Х	Х	Х	Х
Month X Year Fixed Effects	Х	Х	Х	Х
Advisor Fixed Effects	Х	Х	Х	Х
Observations	36,083	35,872	36,083	36,083
R-squared	0.36	0.36	0.40	0.43

Note: Controls are log financial wealth, married, age dummies, employed, academic, manager, client-bank-relationship, foreign citizen, advice in person, duration of the meeting; standard errors are clustered at the individual level and reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### 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)

Management fee the same on average 1.95% for women and men, **but:** men receive recommendations for more risky funds

→ Fee Rank Quintile: fee rank within a fund's risk category, since riskier funds are generally more expensive (Linnainmaa et al. 2018)



Panel A: Distribution of Fee Rank by Gender



Women get recommendations for funds with higher TER, conditional on fund risk.

	(1)	(2)
VARIABLES	Fee Rank	Fee Rank
Female	0.08***	0.03*
	(0.02)	(0.02)
Bank own fund		
Risk tolerance very low [Ref.]		
Risk tolerance low		0.46***
		(0.03)
Risk tolerance high		0.41***
		(0.04)
Risk tolerance very high		0.08**
		(0.04)
In (value of the recommendation)		0.06***
		(0.01)
Controls		Х
Month X Year Fixed Effects	Х	Х
Advisor Fixed Effects	Χ	Χ
Observations	36,083	36,083
R-squared	0.28	0.3

Women get more expensive fund recommendations within the same risk category.

Note: Controls are log financial wealth, married, age dummies, employed, academic, manager, client-bankrelationship, foreign citizen, advice in person, duration of the meeting; standard errors are clustered at the individual level and reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



The bank's own balanced funds are on average more expensive than comparable products in the same risk category

	(1)	(2)	(3)	
VARIABLES	Fee Rank	Fee Rank	Fee Rank	
Female	0.08***	0.03*	-0.03**	
	(0.02)	(0.02)	(0.01)	
Bank own fund			2.00***	
			(0.01)	
Risk tolerance very low [Ref.]				
Risk tolerance low		0.46***	0.14***	Women get more expensive
		(0.03)	(0.03)	fund recommendations within
Risk tolerance high		0.41***	0.29***	the same risk category
		(0.04)	(0.03)	the same non category.
Risk tolerance very high		0.08**	0.25***	
		(0.04)	(0.03)	
In (value of the recommendation)		0.06***	-0.01***	
		(0.01)	(0.00)	
Controls		Х	Х	
Month X Year Fixed Effects	Х	Х	Х	
Advisor Fixed Effects	Х	Х	Х	
Observations	36,083	36,083	36,083	
R-squared	0.28	0.3	0.63	

### **Upfront Fees**



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

Women are on average less likely to receive a rebate.

## **Upfront Fees**

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Rebate	Rebate	Rebate	Rebate	Rebate	Rebate
					Freq recom	Only ext.
					funds	funds
Female	-0.02**	-0.02**	-0.02**	-0.02**	-0.02**	-0.04**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
In (value of the						
recommendation)			0.06***	0.06***	0.06***	0.06***
			(0.00)	(0.00)	(0.00)	(0.00)
Investment Horizon			Х	Х	Х	Х
Controls				Х	Х	Х
Month fixed effects	Х	Х	Х	Х	Х	Х
Fund (ISIN) fixed effects		Х	Х	Х	Х	Х
Observations	21,785	21,785	21,778	29,756	20,510	7,492
R-squared	0.29	0.32	0.34	0.34	0.34	0.46

Women are significantly less likely to receive a rebate on the fund load for any given product.

Note: Controls are risk preferences, log financial wealth, married, age dummies, employed, academic, manager, client-bank-relationship, foreign citizen, advice in person, duration of the meeting; standard errors are clustered at the individual level and reported in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## WHY?



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# WHY?

**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.
- World wide 35% of men and 30% of women are financially literate (S&P Global FinLit Suvey).
- Gender gap is found in advanced and emerging economies.
- Persistent for different subgroups of the population (young and old), different domains (pension literacy, economic literacy, debt literacy).





## **Analytical Framework**

#### Why do advisors recommend more costly products to women compared to men?

Model in a nutshell:

- Advisor is partially motivated by kickbacks for selling a certain alternative.
- Financially literate **clients** possess better do-it-yourself outside options when choosing investment.
- Advisor has an incentive to provide better services to smarter customers.
- If advisors cannot observe true client skills, but only a **noisy signal** that is on average informative, then *clients who appear to be knowledgeable will receive better advice*.
- Due to an imprecise signal, some seemingly incapable clients are actually capable. They will receive low-quality advice and reject it.

## Predictions

**1.** *Miss-selling hypothesis*: Clients with lower signals of financial aptitude (here: women) receive worse financial recommendations.

Empirical evidence: Women get recommendations for

- less risky funds controlling for their risk preferences
- high fee bank owned funds
- fewer rebates on the upfront loads
- **2.** *Rejection hypothesis*: Clients with low signals of financial literacy who are actually financially apt are more likely to detect unsuitable products and reject a given recommendation.

### Adherence

	(1)	(2)	(3)	(4)
VARIABLES	adherence	adherence	adherence	adherence
Financial literacy	-0.08			
	(0.10)			
Fund literacy		-0.75**		
		(0.36)		
Financial literacy*female			-0.30*	
			(0.17)	
Financial literacy*male			0.06	
			(0.11)	
Fund literacy* female				-0.79**
				(0.35)
Fund literacy*male				-0.43
				(0.36)
Female	-0.05	-0.11	0.05	-0.04
	(0.08)	(0.15)	(0.10)	(0.18)
Controls	X	X	X	X
Month seasonal fixed effects	Х	Х	Х	Х
Mundlac correction for advisors	Х	Х	Х	Х
Observations	1,342	675	1,342	675
R-squared	0.08	0.17	0.08	0.17

(1) Test-based financial literacy available for a subsample of 520 (258) clients with 1,342 product recommendations (2) Additional evidence from the SAVE survey (representative for German households, self-reported following behavior)

## What else?

• Do the bank owned funds achieve higher returns? NO.

- Catering to the clients request?
  - Results hold if we exclude meetings that were initiated by the client.
  - Women are not more likely to follow advice if they receive recommendations for bank owned funds.
  - Some evidence that women look for advice for different reasons (hand holding, delegation)





This figures shows the underlying reasons for advice seeking by gender.



# What else?

- Negotiation skills?
  Open Question.
- Are the results the same for male and female advisors? NO, results are stronger for male advisors.
- Is this a gender result?
  NO, some (weaker) evidence also for being a foreigner and those with lower education.

# Conclusion

- Even if advice is overall beneficial, lower quality advice can affect the less financially apt disproportionally.
- Costs associated with specific product recommendations are borne by women (immigrants and the lesser educated).

#### Policy Advice?

- Provide costless reliable information on financial product choice.
- Provide clients with a set of right questions to ask.

