Financial Advisors:
A Case of Babysitters?

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Motivation

- Household portfolios have become more involved

- Accumulating evidence on investment/debt mistakes and differential financial literacy
  - e.g. Campbell, 2006; Campbell, Calvet Sodini, 2008, Lusardi and Mitchell, 2007; Van Rooij, Lusardi, Alessie, 2008.

- Potential Remedies:
  - Financial education (seminars, advertising campaigns)
  - Default options and simpler products
  - Financial advisors

Existing Research on Financial Advice

- Theoretical:
  - Taking for granted that advisors are matched with uninformed customers, how can mis-selling be avoided through regulation?
- Empirical:
  - What is the potential contribution of stock analysts and financial advisors?
    - How much can they forecast?
    - Are they less subject to behavioral biases?

Theoretical Literature on Financial Advice

- Relatively scant

- 'Misselling': Inderst and Ottaviani (AER):
    - the practice of misdirecting clients to a financial product not suitable for them (e.g. for tax or horizon reasons)

- Conflicts of interest:
    - Between agent and customer:
        - arises endogenously from agent compensation set by the firm
    - Between firm and agent:
        - If product is sold to the wrong people, there is a probability with which the firm receives a complaint and a policy-determined fine it pays, in part to the disgruntled customer.

- Flavor: agents are more informed than customers and can misdirect them

Empirical Literature
Informational Advantage?

- Cowles (1933)
  - "45 professional agencies which have attempted, either to select specific common stocks which should prove superior in investment merit to the general run of equities, or to predict the future movements of the stock market itself."
- Barber and Loeffler (1993) on The Wall Street Journal's Dartboard column:
  - Some investors follow column recommendations and buy; part but not all of the price response gets reversed.
- Desai and Jain (1995) on "Superstar" money managers in Barron's Annual Roundtable
  - The buy recommendations earn significant abnormal returns from recommendation to publication (14 days) but nothing for one to three year post-publication day holding periods. So, following published advice does not help.

Empirical Literature
Informational Advantage?

- Womack (1996): Examines stock price movements following 'buy' or 'sell' recommendations by 14 major U.S. brokerage firms.
  - Significant price and volume reactions within a three-day interval
  - Significant stock price drift, especially for new 'sell' recommendations.
  - However: new 'buy' recommendations occur seven times more often than 'sell' recommendations
    - Brokers avoid harming potential investment banking relationships
    - maintain future information flows from managers
- Metrick (1999): recommendations of 153 investment newsletters
  - No evidence of superior stock-selection skill, in short or long horizon: e.g., average abnormal returns are close to zero.

Empirical Literature
Informational Advantage?

- Barber et al. (2001)
  - Compute abnormal gross returns from purchasing (selling short) stocks with the most (least) favorable consensus recommendations (from brokerage houses and analysts)
  - Once transactions costs are taken into account, abnormal net returns are not statistically significant.
- Begrstresser, Chalmers and Tufano (2008):
  - Compare performance of mutual fund 'classes' by distribution channel: sold directly versus through brokers
  - Funds sold through brokers:
    - offer inferior returns, even before the distribution fee
    - no superior aggregate market timing ability
    - same return-chasing behavior as direct-channel funds.

Empirical Literature
Behavioral Biases?

- **Disposition Effect:** Shapira and Venezia (2001):
  - Brokerage clients of an Israeli bank; trades in 1994
  - Bias found for both professional investors and self-directed retail investors, but less pronounced among professionals

- Overtrading (Barber and Odean, 2000)
  - Discount brokerage; more pronounced for males. Often attributed to overconfidence.
    - Odean, 1998; 1999; Barber and Odean, 2001; Niessen and Ruenzi, 2006: even professionals
  - But: Bilias, Georgarakos, Haliassos (2009):
    - Small proportion of households own brokerage accounts
    - Those who do, invest small fraction of their financial assets in them

Empirical Literature
Open questions

- Do investors actually use what advisors know?
- How about actual rather than theoretical portfolios, including transactions costs?
- Do investors with behavioral biases make use of financial advisors?
  - Barber and Odean data are from discount brokers
  - Guiso and Jappelli (2006): overconfident investors overvalue the precision of info they acquire and are less likely to approach advisors.
- Even if advisors are matched with biased investors, will they help them overcome their biases?
  - Overtrading?
  - Under-diversification? More promising

Our Paper

- ## Compare Actual Account Performance:
    - How do brokerage accounts actually perform when run by individuals without financial advisors, compared to accounts run by (or in consultation with) financial advisors?

- ## Analyze IFA Use:
    - Do financial advisors tend to be matched with poorer, uninformed investors or with richer, older but presumably busy investors?

- ## Estimate IFA Contribution to Performance:
    - Is the contribution of financial advisors to account performance positive, relative to what investors with the characteristics of their clients tend to obtain on their own?

The Data

- Administrative data for 2001-2006
  - One of the largest German internet brokers with about 1m customers
  - 32,751 randomly selected individual customers, 66 months
- Some accounts run by individuals themselves
- Other accounts run by, or with input from, a financial advisor (IFA)
  - Our sample did not change IFA status throughout
- Returns are net of transactions costs and commissions paid to IFAs by the brokerage house
- The brokerage does not compute performance data and does not evaluate IFAs on performance

Performance Record

- IFA accounts offer on average:
  - greater returns
    - Both total returns and excess returns
  - lower risk
    - Lower beta; lower fraction of unsystematic risk
  - lower probabilities of losses
    - and of substantial losses
  - greater shares in mutual funds

Distributions of Average Monthly Returns

DAX: -5.2% pa
Sample Means

-0.8%pm/-9.17% pa   -0.44% pm/-5.14% pa

Abnormal (log) returns

$$r_{p,t} - r_{f,t} = \alpha_p + \beta_p(r_{M,t} - r_{f,t}) + \varepsilon_{p,t}$$

where:

α_p = estimated abnormal return (Jensen's Alpha) for portfolio p;

β_p = estimated market beta for portfolio p;

$r_{M,t}$ = log return of the Euro-denominated MSCI-World Index

r_f = log return on the one month Euribor;

$\varepsilon_{p,t}$ = error term of regression for portfolio p.

Distributions of Abnormal Monthly Returns
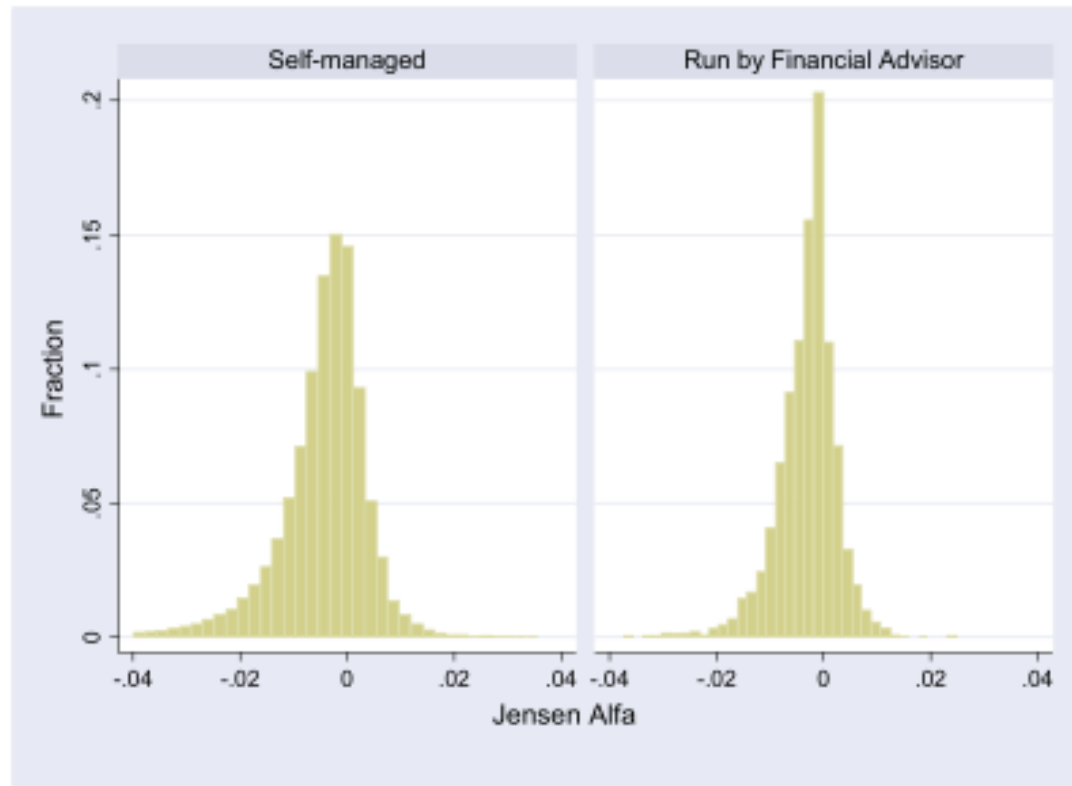
Sample Means

-0.5%   -0.3%

Decomposition of Portfolio Risk

$$\sigma_p^2 = \beta_p^2 \sigma_B^2 + \sigma_{\varepsilon,p}^2$$

where

σ_p^2 = total variance of log returns of portfolio p;

β_p^2 = square of estimated benchmark beta for portfolio p;

σ_B^2 = variance of log returns on Euro-denom. MSCI-World index;

$\sigma_{\varepsilon,p}^2$ = variance of error term from the regression.

Distributions of Variance of Account Returns
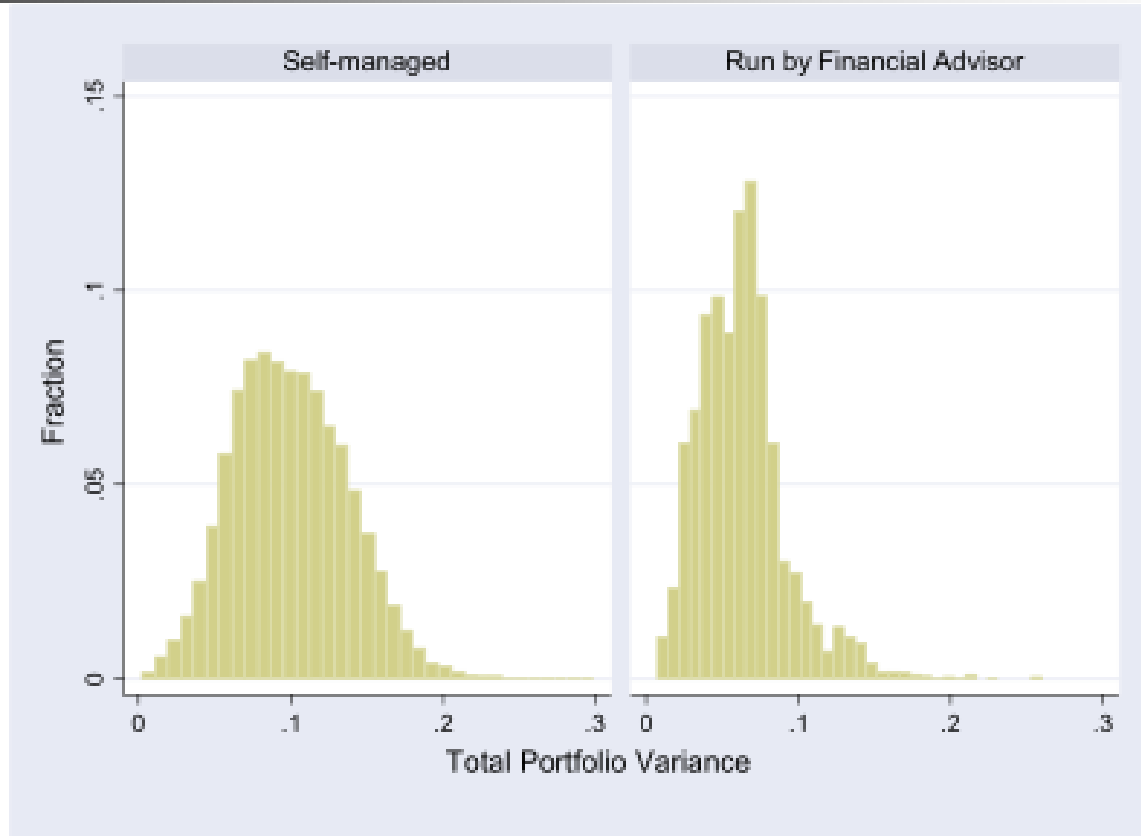
Sample Means

0.100   0.063

Distributions of betas, proportional to systematic risk

Sample Means

1.289   0.843

Distributions of Unsystematic Risk
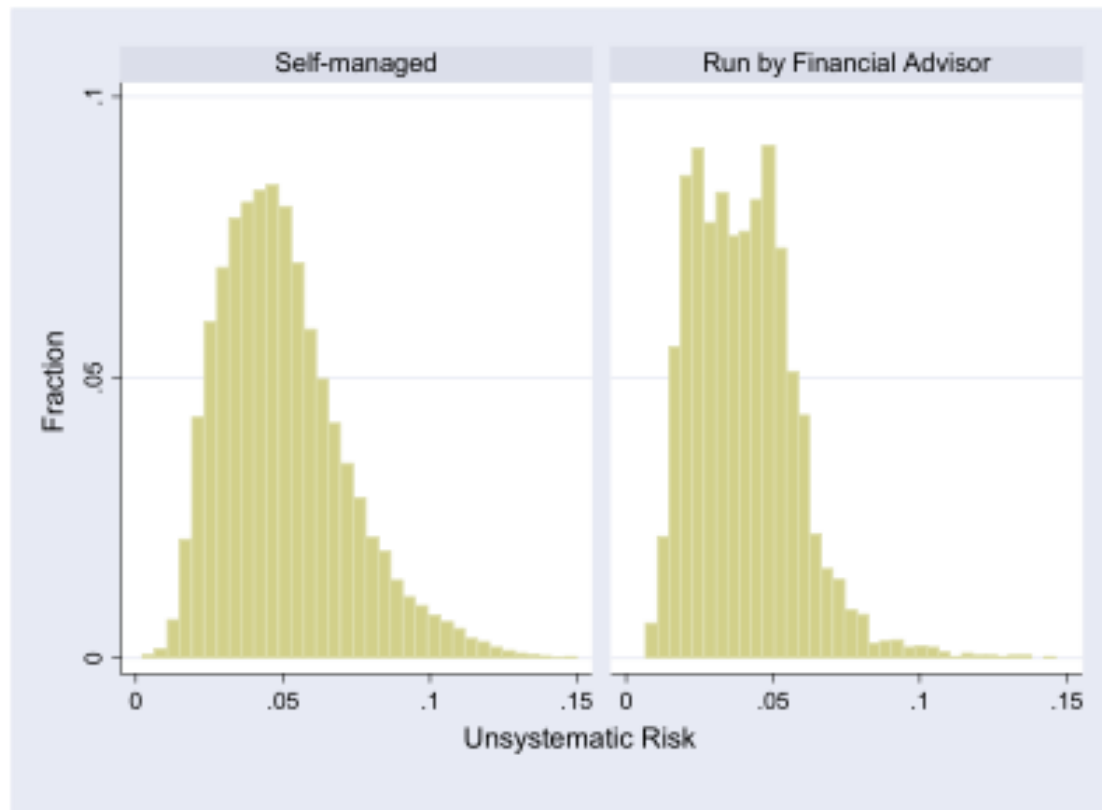
Sample Means

0.050   0.040

The Distribution of Number of Trades (per 1000 euro in account)
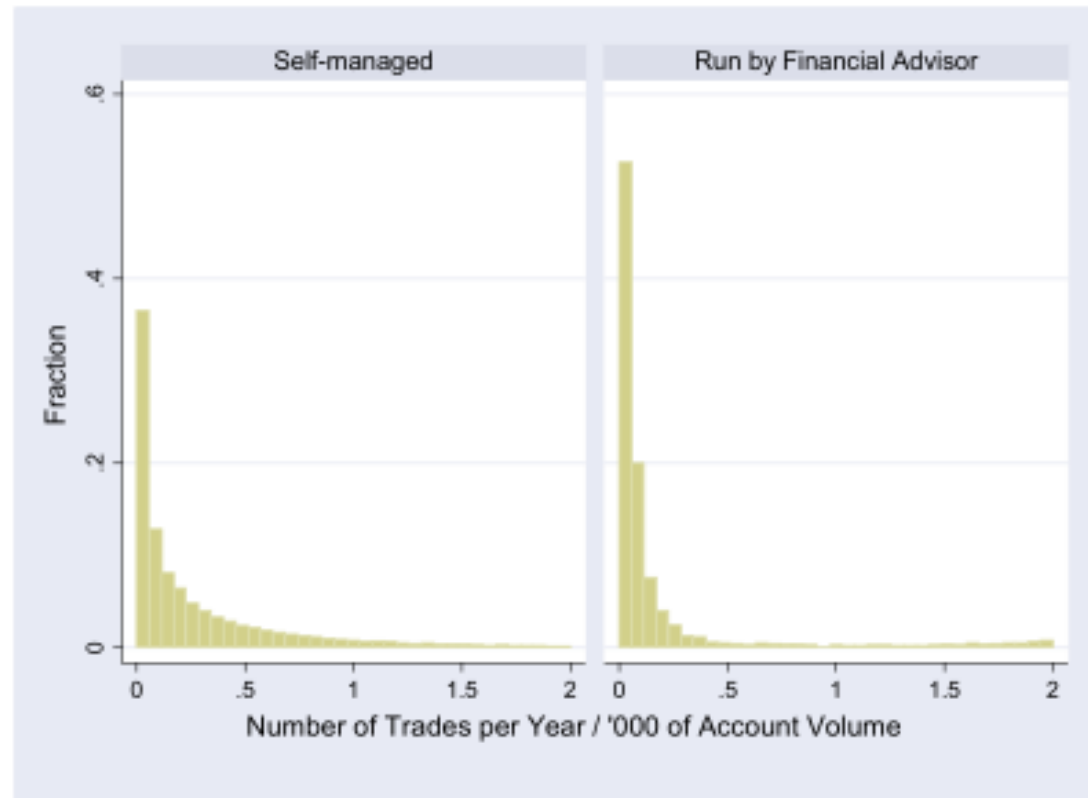
Sample Means

0.44   0.32

The Distribution of Turnover

Sample Means

0.041   0.089

The distribution of shares in directly held stocks

Sample Means

0.588   0.211

Who has an IFA?
Regression Analysis

- IFAs tend to be matched with:
  - Richer
  - Older
  - Female investors

The determinants of having the account run by a financial advisor.
Probit estimates

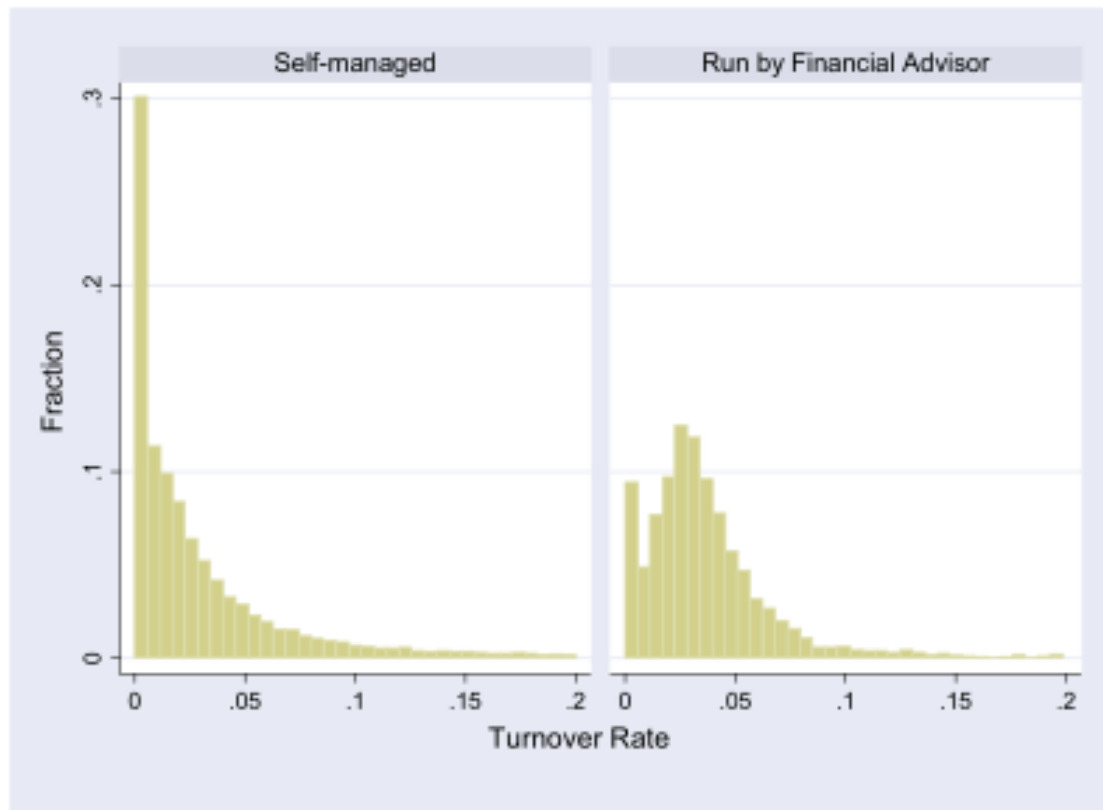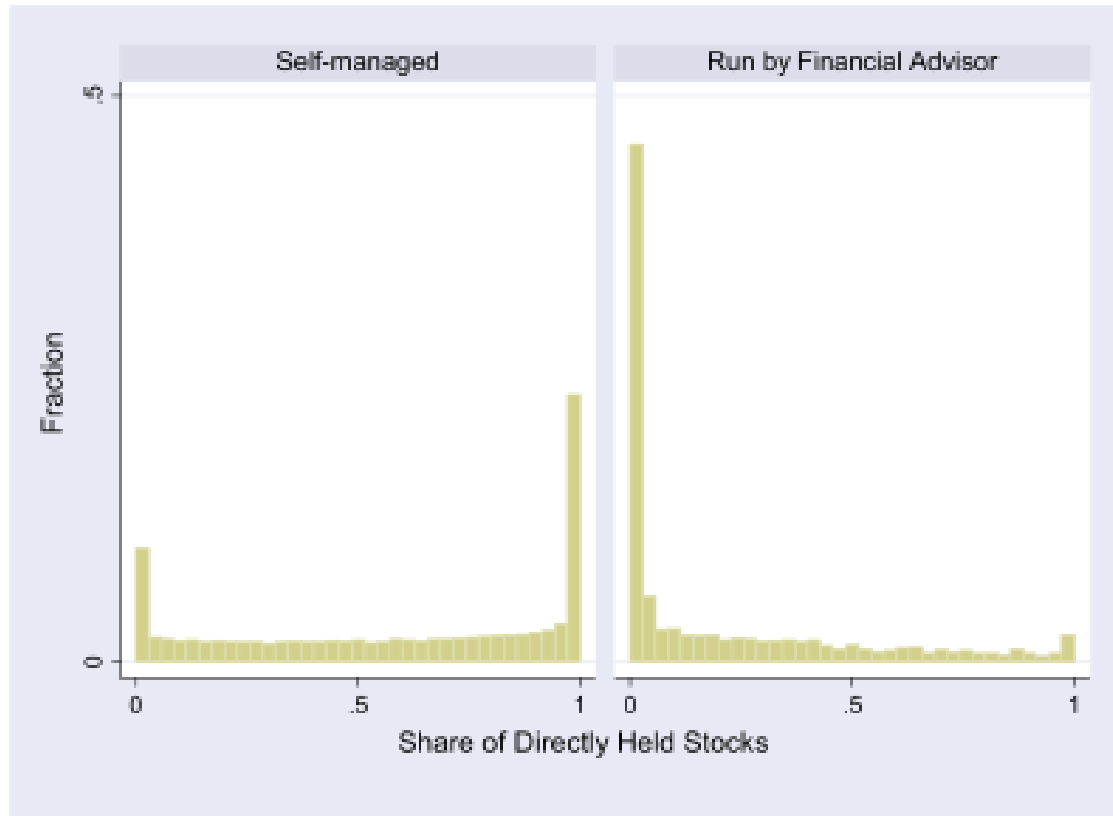|	(1)	(2)	(3)
Male	-0.060***	-0.066***	-0.069***
	(12.77)	(14.81)	(15.67)
Married	-0.018***	-0.015***	-0.019***
	(4.74)	(4.17)	(5.02)
Employee	0.035	0.038*	0.038**
	(1.62)	(1.94)	(1.96)
Self-employed	0.064**	0.046*	0.048*
	(2.31)	(1.83)	(1.92)
Experience	0.003***	0.000	0.001
	(10.80)	(1.17)	(1.44)
30< Age <=40	-0.035***	-0.035***	-0.033***
	(3.51)	(3.88)	(3.51)
40< Age <=50	0.014	-0.012	-0.010
	(1.34)	(1.31)	(1.01)
50< Age <=60	0.057***	0.003	0.004
	(4.97)	(0.34)	(0.39)
Age > 60	0.143***	0.037***	0.039***
	(11.12)	(3.49)	(3.36)
Log Account Volume in 2001		0.059***	0.060***
		(41.51)	(38.76)
Bank Branches per Capita			-0.005
			(0.27)
Log Income in Region			-0.009**
			(2.27)
Voter Participation			0.049
			(0.40)
Population with college degree (fraction)			-0.197***
			(3.95)
Observations	28631	28631	28264

Effect of IFAs?
Regression Analysis

- In regression analysis, important to instrument use of IFA.
    - For example, an unobserved factor (such as being quite risk averse) could simultaneously make customers use an IFA and achieve low returns.
    - In this case, IFA use is correlated with low performance but the reason is risk aversion and not the use of an IFA per se.
- Instruments
    - We match customer zip codes to 500 broader regions for which we have information from a second data set: the destatis files of the German Federal Statistical Office:
        - log income in the region
        - voter participation
        - fraction of the population with college degree
    - From a third, commercial, data set:
        - bank branches per capita
    - Standard errors of estimates are corrected for clustering at the zip code level.
- Our instruments pass the test of over-identifying restrictions and the rank test.
    - The F-test rejects the null hypothesis that the coefficients of the four instruments are jointly equal to zero in the first-stage regression at the 1% level and implies that the rank condition is satisfied

Effect of IFAs?
Regression Analysis

- Relative to what account owners with these characteristics tend to achieve on their own, IFAs tend to:
  - lower total and excess returns

The determinants of log returns and Jensen's Alpha.
Instrumental variable estimates

	Log returns		Alfa	
	(1)	(2)	(3)	(4)
Financial Advisor	-0.020***	-0.019***	-0.019***	-0.018***
	(4.39)	(5.35)	(4.57)	(5.58)
Male	-0.003***	-0.003***	-0.002***	-0.002***
	(8.04)	(9.70)	(7.81)	(9.29)
Married	-0.000	-0.000	-0.000	-0.000
	(0.72)	(0.61)	(0.55)	(0.49)
Employee	-0.001	-0.000	-0.001	-0.000
	(0.78)	(0.66)	(0.82)	(0.66)
Self-employed	-0.001	-0.001	-0.001	-0.001
	(0.66)	(1.45)	(0.75)	(1.47)
Experience	0.0002***	0.0001***	0.0002***	0.0001***
	(9.89)	(9.23)	(9.59)	(8.74)
$30 < Age \leq 40$	-0.001**	-0.001***	-0.001*	-0.001**
	(2.28)	(3.12)	(1.69)	(2.46)
$40 < Age \leq 50$	-0.000	-0.001***	-0.000	-0.001***
	(0.95)	(3.92)	(0.51)	(3.29)
$50 < Age \leq 60$	0.001**	-0.001**	0.001**	-0.001
	(2.25)	(1.99)	(2.40)	(1.56)
$Age > 60$	0.004***	0.001***	0.004***	0.001***
	(5.61)	(3.23)	(5.28)	(2.83)
Log Account Volume in 2001		0.002***		0.002***
		(8.45)		(8.16)
Constant	-0.005***	-0.024***	-0.002**	-0.019***
	(5.13)	(11.19)	(2.19)	(9.63)
Observations	28264	28264	28264	28264

Effect of IFAs?
Regression Analysis

- Relative to what account owners with these characteristics tend to achieve on their own, IFAs tend to:
  - lower total and excess returns
  - raise account risk: both components (systematic and unsystematic)

The determinants of portfolio variance, Beta, unsystematic risk.
Instrumental variable estimates

	Portfolio Variance		Beta		Unsystematic Risk	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial Advisor	0.060***	0.049***	0.440**	0.361***	0.034***	0.028***
	(3.20)	(3.61)	(2.45)	(2.72)	(3.71)	(4.15)
Male	0.014***	0.014***	0.105***	0.107***	0.007***	0.008***
	(10.12)	(12.41)	(7.97)	(9.61)	(11.17)	(13.46)
Married	-0.001**	-0.002***	0.003	0.001	-0.001***	-0.001***
	(1.98)	(2.70)	(0.40)	(0.18)	(3.32)	(4.25)
Employee	0.002	0.002	0.021	0.017	0.001	0.001
	(0.68)	(0.61)	(0.58)	(0.50)	(0.49)	(0.38)
Self-employed	0.003	0.006*	0.019	0.038	0.002	0.004**
	(0.95)	(1.89)	(0.48)	(1.08)	(1.18)	(2.15)
Experience	-0.001***	-0.001***	-0.009***	-0.005***	-0.000***	-0.000***
	(11.52)	(11.41)	(10.22)	(10.17)	(10.70)	(8.76)
30< Age <=40	0.006***	0.007***	0.069***	0.077***	0.002**	0.003***
	(4.09)	(5.19)	(4.74)	(5.63)	(2.44)	(3.33)
40< Age <=50	0.003**	0.008***	0.037***	0.075***	0.001	0.003***
	(2.24)	(5.84)	(2.66)	(5.62)	(0.86)	(4.29)
50< Age <=60	-0.003	0.005***	-0.014	0.051***	-0.002**	0.002***
	(1.49)	(3.76)	(0.81)	(3.67)	(2.26)	(2.89)
Age > 60	-0.018***	-0.005***	-0.166***	-0.058***	-0.009***	-0.001
	(5.92)	(2.89)	(5.69)	(3.63)	(5.62)	(1.58)
Log Account Volume in 2001		-0.009***		-0.076***		-0.005***
		(9.55)		(7.94)		(10.45)
Constant	0.084***	0.170***	1.144***	1.843***	0.043***	0.090***
	(22.13)	(20.15)	(28.22)	(21.93)	(21.62)	(21.12)
Observations	28264	28264	28264	28264	28264	28264

32

Effect of IFAs?
Regression Analysis

- Relative to what account owners with these characteristics tend to achieve on their own, IFAs tend to:
  - lower total and excess returns
  - raise account risk (systematic and unsystematic)
  - increase the probabilities of losses and of substantial losses

Determinants of probability of low returns
Instrumental variable estimates

	Probability of return less than −5%		Probability of return less than 0	
	(1)	(2)	(3)	(4)
Financial Advisor	0.094***	0.088***	0.071***	0.068***
	(3.29)	(4.03)	(3.15)	(3.76)
Male	0.021***	0.022***	0.014***	0.015***
	(9.81)	(11.67)	(8.62)	(9.90)
Married	-0.001	-0.001	-0.001	-0.001
	(0.98)	(1.21)	(1.21)	(1.38)
Employee	0.015**	0.014**	0.014***	0.013***
	(2.33)	(2.31)	(2.67)	(2.67)
Self-employed	0.018***	0.021***	0.018***	0.020***
	(2.69)	(3.46)	(3.34)	(4.07)
Experience	-0.002***	-0.001***	-0.001***	-0.001***
	(11.05)	(10.50)	(11.46)	(11.48)
30< Age <=40	0.007***	0.009***	0.003	0.004**
	(2.75)	(3.56)	(1.49)	(2.14)
40< Age <=50	0.005**	0.012***	0.002	0.007***
	(2.09)	(4.92)	(0.96)	(3.32)
50< Age <=60	-0.003	0.008***	-0.004	0.005**
	(0.97)	(3.29)	(1.42)	(2.11)
Age > 60	-0.025***	-0.007**	-0.018***	-0.005**
	(5.22)	(2.39)	(4.76)	(2.21)
Log Account Volume in 2001		-0.014***		-0.010***
		(8.77)		(7.70)
Constant	0.416***	0.541***	0.454***	0.544***
	(61.78)	(38.12)	(82.96)	(47.07)
Observations	28264	28264	28264	28264

34

Effect of IFAs?
Regression Analysis

- Relative to what account owners with these characteristics tend to achieve on their own, IFAs tend to:
    - lower total and excess returns
    - raise account risk (systematic and unsystematic)
    - increase the probabilities of losses and of substantial losses
    - increase trading frequency and portfolio turnover
    - have no significant effect on the share of directly held stocks

The determinants of trading frequency, turnover, and share of directly held stocks
Instrumental variable estimates

	Number of Trades per '000 Account Volume		Turnover		Share of Directly Held Stocks	
	(1)	(2)	(3)	(4)	(5)	(6)
Financial Advisor	1.396***	1.306***	0.304***	0.280***	-0.235	-0.192
	(2.69)	(3.07)	(6.16)	(7.11)	(1.46)	(1.51)
Male	0.254***	0.269***	0.032***	0.032***	0.101***	0.104***
	(7.61)	(8.98)	(9.08)	(10.32)	(8.80)	(9.97)
Married	0.033*	0.031*	0.006***	0.006***	-0.017***	-0.016***
	(1.88)	(1.90)	(3.40)	(3.50)	(2.89)	(2.90)
Employee	-0.004	-0.025	-0.009	-0.010	0.080**	0.077**
	(0.07)	(0.41)	(0.99)	(1.23)	(2.53)	(2.47)
Self-employed	-0.140*	-0.090	-0.020**	-0.015*	0.121***	0.117***
	(1.90)	(1.43)	(2.01)	(1.77)	(3.67)	(3.67)
Experience	-0.017***	-0.006***	-0.002***	-0.001***	-0.007***	-0.008***
	(8.78)	(5.40)	(8.41)	(7.59)	(10.41)	(17.45)
30< Age <=40	0.034	0.063	0.010***	0.011***	0.012	0.013
	(0.78)	(1.54)	(2.72)	(3.46)	(0.90)	(0.98)
40< Age <=50	-0.025	0.091**	0.003	0.012***	0.020	0.019
	(0.60)	(2.34)	(0.82)	(3.60)	(1.54)	(1.45)
50< Age <=60	-0.113**	0.081**	-0.004	0.012***	0.036**	0.034**
	(2.34)	(2.06)	(0.90)	(3.38)	(2.36)	(2.54)
Age > 60	-0.341***	-0.024	-0.034***	-0.008*	0.030	0.024
	(3.83)	(0.46)	(4.29)	(1.84)	(1.17)	(1.57)
Log Account Volume in 2001		-0.240***		-0.018***		-0.000
		(8.54)		(6.57)		(0.01)
Constant	0.274***	2.461***	0.010	0.176***	0.394***	0.391***
	(3.54)	(10.54)	(1.01)	(7.38)	(11.27)	(5.00)
Observations	28264	28264	28264	28264	28264	28264

36

What Helps? What Hurts?
Regression Analysis

- **What helps account performance?**
  - Experience with financial products
  - Account volume
  - Age (maybe)
- **What hurts account performance?**
  - Being male!

IFAs as Babysitters?

- Babysitters:
    - are matched with well-to-do households
    - they perform a service that parents themselves could do better
    - they charge for it
    - but observed child achievement is often better than what people without babysitters obtain, because other contributing factors are favorable

How specific are our results to brokerage accounts?
Examining a different data set

- Very large German commercial bank
  - Broader customer base than brokerage customers
- Customers with investment accounts
  - Panel data over 34 months
  - Today: about 3,000 (cross-sectional) observations
- Financial advice:
  - All customers have access to bank advisors
  - Choose whether they consult one for a specific trade
    - Can measure intensity of advisor use
  - Dummy (here): Whether they have consulted an advisor for any single trade in the 34-month period
- Can allow for declared risk preferences

Risk Preference	Incidence among	
	Self-managed	Advised
speculator	10.2	7.6
growth	13.6	13.6
balanced	23.7	36.8
conservative	14.5	17.4
low risk	14.3	14.7
safe	23.7	9.9

Some descriptive statistics
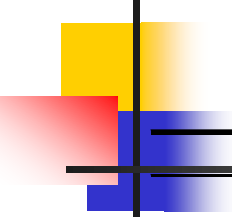
	Self-managed	Financial advisor	Total sample
Dummy for financial advice	0.000	1.000	0.621
Male	0.536	0.448	0.481
Age	51.476	56.978	54.895
Risk aversion = safe	0.237	0.099	0.137
Risk aversion = low risk	0.143	0.147	0.146
Risk aversion = conservative	0.145	0.174	0.166
Risk aversion = balbnced	0.237	0.368	0.332
Risk aversion = growth	0.136	0.136	0.136
Risk aversion = speculative	0.102	0.076	0.083
White collar	0.493	0.382	0.424
Blue collar	0.034	0.043	0.040
Manager	0.027	0.027	0.027
Retired	0.143	0.204	0.181
Housewife	0.061	0.102	0.087
Student	0.065	0.048	0.055
Missing occupation	0.177	0.193	0.187
Log net returns	0.007	0.004	0.005
Log gross returns	0.011	0.006	0.008
Variance of log net returns (annual)	0.107	0.042	0.064
Mutual funds /total stocks	0.314	0.645	0.521
N. of trades / account volume	1.480	0.577	0.919
Observations	1784	2929	4713

Probit for use of financial advice (ME)

Probit for Use of Financial Advisor (marginal effects)

	(1)	*(2)*	*(3)*
Male	-0.031*	-0.034**	-0.040**
	(1.91)	(2.11)	(2.42)
Age	0.001***	0.000	0.000
	(2.75)	(0.83)	(0.45)
Dummy for speculative	0.018	-0.006	0.001
	(0.54)	(0.17)	(0.03)
Dummy for growth	0.116***	0.091***	0.093***
	(3.88)	(2.93)	(2.88)
Dummy for balanced	0.129***	0.104***	0.098***
	(4.45)	(3.43)	(3.11)
Dummy for conservative	0.177***	0.157***	0.145***
	(6.49)	(5.64)	(4.98)
Dummy for low risk	0.081***	0.071**	0.062*
	(2.66)	(2.32)	(1.92)
Log account volume		0.030***	0.034***
		(4.60)	(4.95)
Mean disposable income in area (in '000 euro)			-0.010**
			(2.33)
Number of bank braches per '000 inhabitants			-0.016
			(0.29)
Voter participation in elections			-0.009**
			(2.37)
Area of region			-0.000
			(1.33)
Observations	3184	3184	3013

OLS Results

	(1)	(2)	(3)	(4)	(5)
	Monthly log net returns	Monthly log gross returns	Variance of portfolio returns	Share of mutual funds in total stocks	Number of trades / '000 Account volume
Dummy for financial advice	-0.001	-0.001***	0.014*	0.573***	-0.344***
	(1.61)	(3.81)	(1.81)	(14.67)	(3.65)
Male	0.001	0.001**	0.007	-0.109***	0.039
	(1.18)	(2.28)	(1.14)	(3.33)	(0.47)
Age	-0.000	-0.000***	-0.000	-0.001	-0.017***
	(1.13)	(4.35)	(0.62)	(0.49)	(5.85)
Dummy for speculative	0.011***	0.009***	-0.025*	-0.519***	0.718***
	(8.33)	(13.00)	(1.71)	(5.57)	(3.90)
Dummy for growth	0.009***	0.006***	-0.040***	-0.166*	-0.104
	(7.60)	(9.71)	(2.88)	(1.83)	(0.58)
Dummy for balanced	0.007***	0.004***	-0.028**	-0.061	-0.229
	(5.66)	(6.18)	(2.10)	(0.68)	(1.33)
Dummy for conservative	0.005***	0.002***	-0.045***	0.135	-0.266*
	(4.38)	(3.16)	(3.67)	(1.57)	(1.72)
Dummy for low risk	0.001	-0.001*	-0.048***	0.362***	-0.264
	(1.11)	(1.72)	(3.38)	(3.25)	(1.49)
Constant	0.001	0.007***	0.078***	0.401***	1.947***
	(0.61)	(8.54)	(4.20)	(3.57)	(8.42)
Observations	3208	3208	2963	2440	3208

Instruments

- average income in the area
- area size
- voter participation
- number of banks per capita

IV Regressions

	(1)	(2)	(3)	(4)	(5)
	Monthly log net returns	Monthly log gross returns	Variance of portfolio returns	Share of mutual funds in total stocks	Number of trades / '000 Account volume
Dummy for financial advice	-0.016**	-0.012***	0.176**	0.929***	-0.369
	(2.54)	(2.85)	(2.49)	(4.82)	(0.34)
Male	-0.000	0.000	0.008	-0.012	-0.025
	(0.36)	(0.34)	(1.28)	(0.53)	(0.26)
Age	-0.000	-0.000***	-0.000	-0.001**	-0.013***
	(0.79)	(2.86)	(0.96)	(2.06)	(4.37)
Dummy for speculative	0.009***	0.009***	0.013	-0.378***	0.612***
	(8.35)	(11.79)	(1.04)	(6.90)	(3.11)
Dummy for growth	0.009***	0.009***	-0.014	-0.282***	0.037
	(7.03)	(8.87)	(0.95)	(5.01)	(0.15)
Dummy for balanced	0.007***	0.006***	-0.025*	-0.197***	-0.090
	(5.24)	(6.34)	(1.71)	(3.54)	(0.38)
Dummy for conservative	0.005***	0.005***	-0.019	-0.209***	-0.101
	(3.61)	(4.37)	(1.24)	(3.71)	(0.39)
Dummy for low risk	0.001	0.001	-0.013	-0.158**	-0.144
	(0.87)	(1.09)	(1.03)	(2.37)	(0.69)
Constant	0.012***	0.013***	-0.074	0.192	1.677**
	(3.13)	(4.84)	(1.55)	(1.33)	(2.52)
Observations	3013	3013	2802	2292	3013

IV Regressions with occupational dummies and account volume

	(1) Monthly log net returns	(2) Monthly log gross returns	(3) Variance of portfolio returns	(4) Share of mutual funds in total stocks	(5) Number of trades / '000 Account volume
Dummy for financial advice	-0.011**	-0.012***	0.119**	0.849***	-2.355**
	(2.09)	(3.13)	(2.10)	(5.03)	(2.37)
Male	0.000	0.000	0.007	-0.016	-0.040
	(0.03)	(0.55)	(1.25)	(0.70)	(0.39)
Age	-0.000**	-0.000**	0.000	-0.002	0.003
	(2.25)	(2.47)	(0.16)	(1.65)	(0.69)
Dummy for speculative	0.008***	0.009***	0.027**	-0.351***	1.077***
	(7.74)	(11.57)	(2.29)	(6.54)	(5.27)
Dummy for growth	0.008***	0.009***	0.005	-0.239***	0.843***
	(6.77)	(9.81)	(0.39)	(4.54)	(3.79)
Dummy for balanced	0.005***	0.006***	-0.005	-0.156***	0.752***
	(4.55)	(7.00)	(0.39)	(3.02)	(3.43)
Dummy for conservative	0.004***	0.004***	0.000	-0.176***	0.668***
	(2.96)	(4.94)	(0.02)	(3.40)	(2.88)
Dummy for low risk	0.000	0.001	-0.004	-0.130**	0.217
	(0.15)	(1.05)	(0.36)	(2.10)	(1.06)
Log account volume	0.001***	0.000	-0.014***	-0.030***	-0.548***
	(4.88)	(0.49)	(5.27)	(3.29)	(11.16)
Blue collar	0.000	0.002	-0.026	-0.052	0.047
	(0.14)	(1.44)	(1.53)	(0.87)	(0.16)
Manager	-0.000	0.000	0.017	-0.029	0.171
	(0.09)	(0.13)	(1.07)	(0.52)	(0.61)
Retired	0.001	0.001	-0.025***	0.015	0.216
	(1.02)	(1.51)	(2.65)	(0.48)	(1.30)
Housewife	0.001	0.001*	-0.018*	-0.040	0.105
	(1.49)	(1.87)	(1.68)	(1.06)	(0.55)
Student	0.002	0.001	-0.061***	-0.128*	0.023
	(1.21)	(0.90)	(3.12)	(1.95)	(0.07)
Missing occupation	-0.000	0.000	-0.024**	-0.078**	0.301
	(0.36)	(0.46)	(2.20)	(2.32)	(1.61)
Constant	0.007***	0.012***	0.007	0.364***	3.268***
	(2.77)	(6.33)	(0.22)	(3.51)	(6.55)
Observations	3013	3013	2802	2292	3013

Concluding Remarks

- Matching:
  - Not for granted that financial advisors are matched with uninformed novices and attract low-quality investors
    - Reliance on advisors to assist those likely to make mistakes
  - If many of them offer a luxury service to wealthy investors, how should we think about regulation?
- Contribution of financial advisors:
  - Even if advisors add value, they end up collecting more in fees and commissions than what they add
  - Seems robust across IFAs and BFAs and across brokerage and bank clients
- Interpretation:
  - Why do even high-quality investors at the brokerage pay this?
    - Pay for a service because they have no time (like babysitting)?
    - Think in relative terms? In first data set:
      - They get the DAX index return, which is better than others get
      - Half pay less relative to what they were paying to the bank
    - Do IFAs turn non-participants to participants?
- Policy implication for retirement financing:
  - Financial advice may not be a reliable substitute for financial literacy
  - More promising: simpler products and default options