Who needs a guidance from a financial adviser? Japanese survey evidence

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Three questions

- What are the actual and desirables sources of financial
- information and knowledge for Japanese households?
- What types of households prefer to seek guidance from financial experts?
- Do households with better financial knowledge invest more in
- risky assets than safe assets?

Get answers from the following questions in the Survey of Household Finances 2010-2017

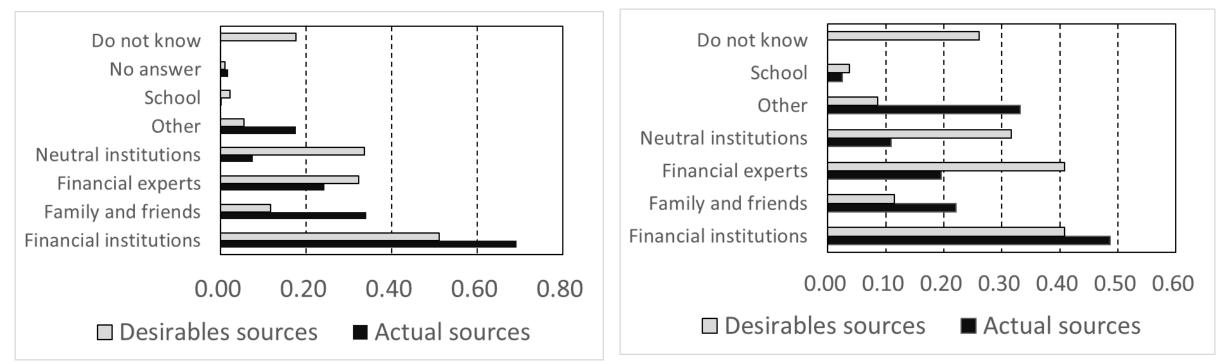
"What is your main sources of knowledge and information on finance? Choose up to three from: financial institutions, financial experts, a neutral institution that does not reflect the interest of a particular industry, family and friends, school, other.

"Who should provide knowledge and information on finance? Choose up to three from: financial institutions, financial experts, a neutral institution that does not reflect the interest of a particular industry, family and friends, school, <u>do not</u> <u>know</u>, other."

Actual and desirable sources of financial information and knowledge: the SHF 2010-16

Family household

Single-person household



Note: Which sources of knowledge and information correspond to Other? A similar question on the sources of knowledge and information in FLS 2016 suggests that it could encompass mass media (newspaper, television, radio, etc.) and websites. In FLS 2016, 16% and 24% of respondents selected these two unavailable choices in the SHF, respectively.

Better financial knowledge, more guidance

Households choosing <u>actual</u> sources of financial information and knowledge involving financial experts have better financial knowledge, as measured by knowledge about the Deposit Insurance Corporation of Japan (DICJ), and are more willing to purchase high-yielding financial products entailing the possibility of a capital loss within one to two years.

Households choosing <u>desirable</u> sources involving financial experts and neutral institutions also have better financial knowledge.

Better financial knowledge, more guidance, but not necessarily higher ratio of risky assets

It is unclear whether households seeking guidance from financial experts tend to have a higher ratio of stocks to total financial assets than households selecting financial institutions as their source of financial information and knowledge.

For example, in the single-person household data, the ATEs on the ratio of stocks to total financial assets for choosing exclusively experts, exclusively family and friends, and exclusively other compared with those for choosing financial institutions are all positive and statistically significant.

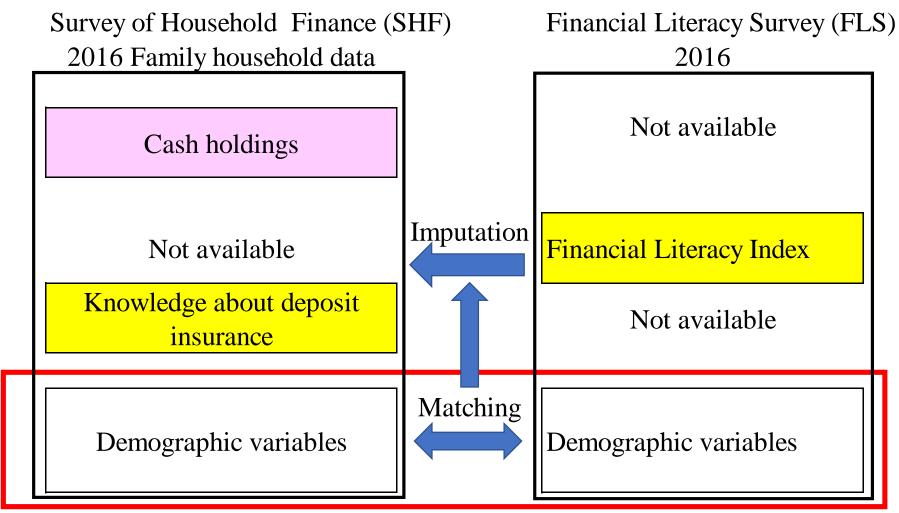
Note on the measurement of household's financial knowledge

Economists measure financial literacy by a financial literacy index that counts the number of correct answers to three questions on compound interest rates, inflation and the real value of financial assets, and diversified investment (Lusardi and Mitchell (2014)).

Are the dummy variables for households that know or have heard about the role of the DICJ good proxy variables for a household's financial knowledge ?

Fujiki (2018) finds that the imputed financial literacy variables using four different matching methods yield high values for agents with better knowledge about the DICJ.

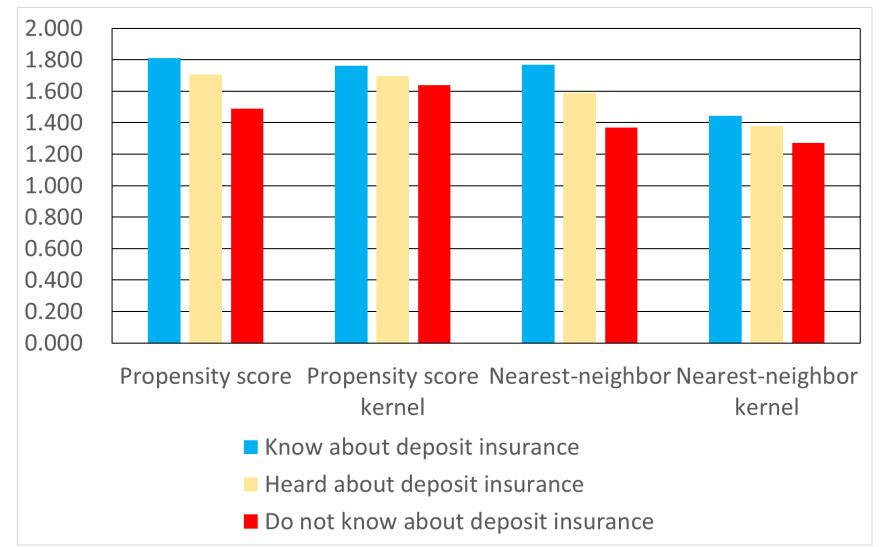
Imputation of financial literacy index for 2016 SHF data by matching 2016 FLS data



2,888 observations

25,000 observations

Average imputed financial literacy based on knowledge about deposit insurance (2016 family data)



Background 1: Heavy reliance on bank deposits

Debt securities (1.3%)Insurance, pension and Currency and deposits Equity standardized guarantees (1,829 trillion yen) (10.9%)(52.5%)(28.5%) Investment trusts Others (2.8%) (11.8%)Investment trusts Debt securities (4.0%)(5.9%)Insurance, pension and Equity standardized guarantees (81.7 trillion dollars) (36.2%) (30.2%)Others (2.8%) Currency and deposits (13.1%)Insurance, pension and Currency and deposits Equity (24.0 trillion euro) standardized guarantees (33.0%)(19.2%) (33.4%) Debt securities Investment trusts Others (2.2%) (2.5%)(9.6%)10 20 30 40 50 60 70 80 90 100 0

Chart 2. Financial assets held by households

Background 2: Changing landscape of retirement savings in Japan

The prolonged period of low economic growth and interest rates that has accompanied rapid population aging in Japan over the past two decades

Very low investment return from conventional safe assets

Many Japanese corporations have begun to implement defined contribution corporate pension plans

The Financial Services Agency (FSA) of Japan has been actively promoting investment in FSA-selected no-load and simple investment trusts through tax exemptions on dividend and interest earnings on securities, up to 400,000 yen per year for up to 20 years.

Are Japanese households ready to purchase risky assets?

Why do we study financial guidance in Japan?

To quickly improve financial knowledge, it is common in the US and Europe for households to seek guidance from financial advisers.

Do Japanese households have sufficient financial knowledge to seek guidance from financial advisers?

Will more Japanese households take advantage of the presence of financial advisers in the future to help make better decisions?

Literature

- Guidance from financial advisers Theory and survey: Inderst and Ottaviani (2012) Calcagnoa and Monticonec (2015) Italian data, Collins (2012) U.S. data, Yamori (2014) same Japanese data but regional aggregates
- The measurement of financial literacy A survey by Lusardi and Mitchell (2014), Atkinson and Messy (2012) Japanese data: Sekita (2011) using the PPS 2010 and Yoshino et al. (2016) using the FLS 2016, Shimizutani and Yamada (2018) using JSTAR 2009, Clark et al. (2013) using NSWF 2010.
- 3. The relationship between investment decisions and financial knowledge and financial adviser guidance

Bianchi (2018), Lusardi, Michaud and Mitchel (2017), von Gaudecker (2015), Jappelli and Padula (2015) Georgarakos and Inderst (2014), Jappelli and Padula (2013), van Rooij, Lusardi and Alessie (2012), Rooija, Lusardic, and Alessie (2011), Guiso and Jappelli (2008).

Japanese data: Yoshino et al. (2017), Ito et al (2017), Kadoya and Khan (2016, 2017a,b,c), Iwaisako et al (2018, 2015), Mori (2017), Nogata and Takemura (2017),

A simplified Calcagno and Monticone (2015) model

 $E(W) - \frac{1}{2}\gamma Var(W) = \overline{W} - \frac{1}{2}\gamma (E(W^2) - \overline{W}^2), where \ \overline{W} = E(W).$

Household's total financial asset W, initial financial asset be W_0 , the share of investment in the risky asset be v, the level of financial knowledge, k. The optimal investment ratio v^* and U^* , the level of utility attained at v^* , is $v^* =$

 $\frac{\mathrm{E}(\tilde{r})}{\gamma W_0 \mathrm{Var}(\tilde{r})}$ and $U^* = \frac{1}{2} \frac{\mathrm{E}(\tilde{r})^2}{\gamma \mathrm{Var}(\tilde{r})}$

The returns from the risky asset and the safe asset are \tilde{r} and r_{f} . \tilde{r} : either r_{H} or r_{L} .

A household assumes that the probability of realization of r_H will be 0.5.

A financial adviser access a better information set I_A and knows that with probability $\theta > 0.5$, r_H will be realized

The household must incur cost f(k) to consider investing into the risky asset

The net benefit of seeking guidance from a financial adviser $\phi(k)$

(Benefit of knowing higher return, $E(\bar{r}) = \theta r_H + (1 - \theta)r_L$ and lower variance, $Var(\bar{r}) = (1 - \theta)\theta(r_H - r_L)^2$ minus cost of spending time to understand the advice given)

Investment decisions with and without guidance from a financial adviser

		Demand for risky	Demand for a
		asset	financial adviser
$v^*=0,$	No		
$v^*(\mathbf{I}_A) = 0$	$\phi(k) < f(k)$	No	No
$U^*(\mathbf{I}_A) = 0$	$\phi(k) > f(k)$	No	Yes
$v^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) < f(k)$	No	No
$U^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) > f(k)$	Yes	Yes
$v^* > 0, l$	$J^* \leq f(k)$	No	
$v^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) < f(k)$	No	No
$U^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) > f(k)$	Yes	Yes
$v^* > 0, l$	$J^* > f(k)$	Yes	
$v^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) < U^*$	Yes	No
$U^*(\mathbf{I}_A) > 0$	$U^*(\mathbf{I}_A) + \phi(k) > U^*$	Yes	Yes

Empirical Predictions

Households that seek the guidance of a financial adviser tend to have better financial knowledge

Suppose we identify a household that does not currently seek the guidance of a financial adviser, but believes it is desirable to obtain such guidance. This household would also tend to have better financial knowledge

Among households investing in the risky asset, households with better financial knowledge will seek the guidance of a financial adviser, whereas households with poor financial knowledge will invest in the risky asset using only their own information

Empirical Methodology

Employ the *Survey of Household Finances* 2010–2017 in Japan.

Identify the actual and desirable sources of financial knowledge and information.

Examine the determinants of them by a multinomial logit model.

Compute average treatment effects of choosing financial experts instead of financial institutions on the ratio of stocks and investment trusts to total financial assets by propensity score matching.

The Survey of Household Finances (SHF)

- An annual survey by the Central Council for Financial Services Information
 - Question regarding a household's actual and desirable sources of knowledge and information on finance
 - Various individual characteristics such as income, the amount of financial assets held, occupation, area of residence, gender, age, and knowledge about the Deposit Insurance Corporation of Japan
- From 2010 to 2017
- Family household data: 3,300–4,000 samples
- Single-person household data: 2,500 samples (20–69 years old)

SHF's question on the actual and desirable sources of financial knowledge and information

"What is your main sources of knowledge and information on finance? Choose up to three from: <u>financial institutions</u> (e.g. financial service representatives and tellers, brochures and advertisements, websites), <u>financial experts</u> (e.g., books, lectures, seminars, websites, and television programs), <u>a neutral institution that does not reflect the</u> <u>interest of a particular industry</u> (e.g., brochures, lectures, seminars, advertisement, and websites), <u>family and friends</u> (word-of-mouth communications), <u>school</u> (e.g. classes and lectures), <u>other</u>.

"Who should provide knowledge and information on finance? Choose up to three from: financial institutions, financial experts, a neutral institution that does not reflect the interest of a particular industry, family and friends, school, <u>do not know</u>, other."

Actual and desirable sources of financial knowledge and information

	Actual sources	s: Top 10 choices			Desirable sources: Top 10 choices					
Family hou	usehold	Single-person	household		Family ho	usehold	Single-person	household		
Choice	Frequency	Choice	Frequency		Choice	Frequency	Choice	Frequency		
Exclusively FI	0.312	Exclusively Other	0.264	_	Exclusively FI	0.208	Don't know	0.261		
FI and FF	0.160	Exclusively FI	0.258		Don't know	0.176	Exclusively FI	0.165		
Exclusively Other	0.096	Exclusively FF	0.090		Exclusively NI	0.098	Exclusively NI	0.095		
FI and E	0.078	FI and FF	0.064		FI and E	0.082	FI, E and NI	0.071		
Exclusively FF	0.075	Exclusively E	0.054		FI, <mark>E</mark> and NI	0.071	FI and E	0.055		
Exclusively E	0.049	FI and E	0.051		E and NI	0.064	E and NI	0.048		
FI, E and FF	0.041	Exclusively NI	0.030		FI and NI	0.056	Exclusively E	0.044		
FI and Other	0.030	FI and Other	0.026		Exclusively E	0.053	Exclusively Other	0.043		
E and FF	0.022	FI, E and NI	0.025		FI and FF	0.039	FI and NI	0.040		
FI, E and NI	0.021	FI, E and FF	0.017		Exclusively FF	0.018	Exclusively FF	0.030		

Note: FI stands for financial institutions, E stands for experts, NI stands for neutral institutions, FF stands for family and friends.

Actual sources typically differ from desirable sources

	Actual and	desirable sources of far	nily households: Top 3 actu	al choices	
Actual choice	Exclusively FI	Actual choice	FI and FF	Actual choice	Exclusively Other
Desirable choice	Conditonal Frequency	Desirable choice	Conditonal Frequency	Desirable choice	Conditonal Frequency
Exclusively FI	0.429	Exclusively FI	0.181	Don't know	0.504
Don't know	0.152	FI and FF	0.141	Exclusively Other	0.113
Exclusively NI	0.100	Don't know	0.114	Exclusively NI	0.111
FI and E	0.075	FI and E	0.097	ExclusivelyFI	0.087
FI and NI	0.064	FI and NI	0.081	Exclusively E	0.040
Exclusively E	0.046	Exclusively NI	0.070	E and NI	0.025
FI, E and NI	0.037	E and NI	0.063	FI and E	0.019
E and NI	0.036	FI, E and NI	0.060	FI, E and NI	0.014
FI and FF	0.018	Exclusively E	0.041	NI and Other	0.013
ExclusivelyFF	0.005	FI, E, and FF	0.031	FI and NI	0.012

Actual and desirable sources of single-person households: Top 3 actual choices

	E 1 1 0 1				
A ctual choice	Exclusively Other	Actual choice	Exclusively FI	Actual choice	Exclusively FF
Desirable choice	Conditonal Frequency	Desirable choice	Conditonal Frequency	Desirable choice	Conditonal Frequency
Don't know	0.615	Exclusively FI	0.439	Don't know	0.225
Exclusively Other	0.116	Don't know	0.144	Exclusively FF	0.215
Exclusively NI	0.075	Exclusively NI	0.086	Exclusively NI	0.094
Exclusively FI	0.055	FI and E	0.068	Exclusively FI	0.091
E and NI	0.019	FI and NI	0.063	Exclusively E	0.050
Exclusively E	0.019	FI, E and NI	0.060	FI and FF	0.043
FI and E	0.017	ExclusivelyE	0.038	NI and FF	0.040
FI, E and NI	0.012	E and NI	0.027	E and NI	0.029
NI and Other	0.010	FI and FF	0.015	FI and E	0.028
FI_NI_	0.009	ExclusivelyOther	0.011	FI, E and NI	0.025

Note: FI stands for financial institutions, E stands for experts, NI stands for neutral institutions, FF stands for family and friends.

Risky asset holdings

Participation in risky assets (% of household)

		Family ho	ouseholds	Si	Single-person households			
	With finar	ncial assets	No financial assets	With finar	ncial assets	No financial assets		
Risky assets holdings	Yes No		No	Yes	No	No		
Stock	15.27	49.73	34.99	19.54	43.34	37.12		
Investment trust	9.81	55.19	34.99	13.54	49.31	37.15		
Bond	4.01	61	34.99	5.71	57.16	37.13		
	De	fined Cont	ribution Plan	De	efined Cont	ribution Plan		
	Yes	No	NA	Yes No		NA		
Defined Contribution Plan	2.44	34.65	62.91	4.09 55.34		40.57		

Percentage share of risky assets to total financial assets conditional on positive financial assets holdings

		Family hou		Single-person households					
	Stock	Investment trust	Bond	DC plan	Stock	Investment trust	Bond	DC plan	
mean	4.917	3.082	1.126	64.813	7.820	4.135	1.261	49.939	
s.e.	13.886	11.004	6.390	745.033	18.035	12.391	6.052	528.335	
minimum	0	0	0	0.012	0	0	0	0.022	
maximum	100	100	100	20000	100	100	100	14000	
Ν	19,418	19,418	19,418	735	11,787	11,787	11,787	813	

Note: DC plan stands for Defined contribution plan. The amount of DC plan is not included in the total financial assets.

DC plan reports the figure for those who have positive outstanding amount of defined contribution plan.

Multinomial logit models for the sources of financial information and knowledge $D_{it} = X_{it}\beta + \varepsilon_{it}$, household *i* for *t*.

 D_{it} : Indicator variable for the choice of actual or desirable

sources of financial information and knowledge

X_{it}: Demographic variables

Annual after-tax disposable income, the outstanding amounts of financial products held as savings, age, gender, education of household members

Knowledge about the DICJ, the provision of a financial advisory service as one of the conditions for choosing a financial institution, makes mattress deposits to reduce investment risk, experience of suffering from capital losses, willing to purchase high-yielding financial products including the possibility of incurring a capital loss

The percentage share of bonds, stocks, investment trusts in total outstanding financial assets for each household, and the percentage share of contribution to a defined contribution pension plan

Employment status, whether a respondent is a homeowner, has debt, eight regions of residence, four size categories for cities of residence, household size, survey year dummies

Better financial knowledge, more guidance (Estimated coefficients of multinomial logit)

Family houshold		Multinomial	Multinomial logit model (base = Exclusively FI, actual source)									
	Exclusively E	FI and E	FI, E and FF	FI and FF	Exclusively FF	Exclusively Other						
Know Deposit Insurance	0.767***	0.864***	0.425***	-0.137***	-0.752***	-0.044						
Heard of Deposit Insurance	0.333***	0.358***	0.241**	0.112**	-0.228***	-0.266***						
Advice financial institution	-0.435**	0.586***	0.869***	0.206**	-0.599***	-1.238***						
% share stock	0.013***	0.008***	0.001	-0.003	0.004	0.013***						
% investment trust	-0.006*	0.002	-0.012***	-0.011***	-0.012**	-0.007**						
Capital loss experienced	0.167**	0.124**	0.006	-0.214***	-0.261***	-0.028						
Willing to have risk asset	0.997***	0.612***	0.777***	-0.251	-0.165	0.082						
Want to have risk asset a bit	0 419***	0 708***	0 576***	0.193***	-0.297***	-0.279***						
Ν						24580						
pseudoRsq						0.053						
LLR						-39700						
Single-person houshold	Μι	ultinomial logit mod	el (base =Exclusiv	ely FI, actual source	e)]						
Single-person houshold	Mu Exclusively E	ultinomial logit mod FI and E	el (base =Exclusiv FI and FF	ely FI, actual source Exclusively FF	e) Exclusively Other							
Single-person houshold Know Deposit Insurance				•								
	Exclusively E	FI and E	FI and FF	Exclusively FF	Exclusively Other							
Know Deposit Insurance	Exclusively E 0.226**	FI and E 0.756***	FI and FF 0.258***	Exclusively FF -0.767***	Exclusively Other -0.452***							
Know Deposit Insurance Heard of Deposit Insurance	Exclusively E 0.226** 0.08	FI and E 0.756*** 0.453***	FI and FF 0.258*** 0.241***	Exclusively FF -0.767*** -0.167**	Exclusively Other -0.452*** -0.516***							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution	Exclusively E 0.226** 0.08 0.259	FI and E 0.756*** 0.453*** 0.633***	FI and FF 0.258*** 0.241*** 0.089	Exclusively FF -0.767*** -0.167** -0.373	Exclusively Other -0.452*** -0.516*** -0.922***							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution % share stock	Exclusively E 0.226** 0.08 0.259 0.013***	FI and E 0.756*** 0.453*** 0.633*** 0.002	FI and FF 0.258*** 0.241*** 0.089 0.001	Exclusively FF -0.767*** -0.167** -0.373 0.009***	Exclusively Other -0.452*** -0.516*** -0.922*** 0.015***							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution % share stock % investment trust	Exclusively E 0.226** 0.08 0.259 0.013*** 0.001	FI and E 0.756*** 0.453*** 0.633*** 0.002 0.001	FI and FF 0.258*** 0.241*** 0.089 0.001 -0.003	Exclusively FF -0.767*** -0.167** -0.373 0.009*** -0.006	Exclusively Other -0.452*** -0.516*** -0.922*** 0.015*** -0.009***							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution % share stock % investment trust Capital loss experienced	Exclusively E 0.226** 0.08 0.259 0.013*** 0.001 0.243***	FI and E 0.756*** 0.453*** 0.633*** 0.002 0.001 0.188**	FI and FF 0.258*** 0.241*** 0.089 0.001 -0.003 -0.042	Exclusively FF -0.767*** -0.167** -0.373 0.009*** -0.006 -0.469***	Exclusively Other -0.452*** -0.516*** -0.922*** 0.015*** -0.009*** -0.076							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution % share stock % investment trust Capital loss experienced Willing to have risk asset	Exclusively E 0.226** 0.08 0.259 0.013*** 0.001 0.243*** 0.665***	FI and E 0.756*** 0.453*** 0.633*** 0.002 0.001 0.188** 0.747***	FI and FF 0.258*** 0.241*** 0.089 0.001 -0.003 -0.042 -0.670***	Exclusively FF -0.767*** -0.167** -0.373 0.009*** -0.006 -0.469*** -0.072	Exclusively Other -0.452*** -0.516*** -0.922*** 0.015*** -0.009*** -0.076 -0.117							
Know Deposit Insurance Heard of Deposit Insurance Advice financial institution % share stock % investment trust Capital loss experienced Willing to have risk asset Want to have risk asset a bit	Exclusively E 0.226** 0.08 0.259 0.013*** 0.001 0.243*** 0.665***	FI and E 0.756*** 0.453*** 0.633*** 0.002 0.001 0.188** 0.747***	FI and FF 0.258*** 0.241*** 0.089 0.001 -0.003 -0.042 -0.670***	Exclusively FF -0.767*** -0.167** -0.373 0.009*** -0.006 -0.469*** -0.072	Exclusively Other -0.452*** -0.516*** -0.922*** 0.015*** -0.009*** -0.076 -0.117 -0.280***							

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Better financial knowledge, more guidance (Marginal effects from multinomial logit)

Family houshold	Exclusively FF	Exclusively E	FI and E	FI, E a	and FF	FI and F	F	Exclusivel	y FF	Exclusive	ly Other
Know Deposit Insurance	-0.018 **	0.041 ***	0.069 ***	0.	017 ***	-0.03	3 ***	-0.067	***	-0.008	
Heard of Deposit Insurance	-0.014	0.017 ***	0.027 ***	0.	009 **	0.01	5 **	-0.022	***	-0.033	***
Advice financial institution	0.033	-0.021 **	0.056 ***	0.	045 ***	0.05	6 ***	-0.041	***	-0.128	***
% share stock	-0.001 ***	0.001 ***	0.000 ***	0.	000	-0.00	1 ***	0.000		0.001	***
% investment trust	0.002 ***	0.000	0.001 ***	0.	** 000	-0.00	1 ***	-0.001		0.000	
Capital loss experienced	0.018 **	0.012 ***	0.014 ***	0.	002	-0.03	1 ***	-0.018	***	0.003	
Willing to have risk asset	-0.038	0.052 ***	0.042 ***	0.	032 ***	-0.06	6 **	-0.021		-0.001	
Want to have risk asset a bit	-0.038 ***	0.018 ***	0.052 ***	0.	022 ***	0.01	9 **	-0.032	***	-0.041	***
0. 1 1 1 1							D 1 ·	1 1 1 1 1	F 1	· 1 0/	
Single-person houshold	Exclusively FI	Exclusively E	FI and E		FI and FF		Exclusi	vely FF	Exclu	usively Ot	her
Know Deposit Insurance	0.045 ***	0.023 **	* 0.052	***	0.032	***	-0.0	66 ***	-0).086 ***	
Heard of Deposit Insurance	0.041 ***	0.013 **	0.034	***	0.027	***	-0.0	03	-0).112 ***	
Advice financial institution	0.087 ***	0.034 **	* 0.052	***	0.025		-0.0	09	-0).190 ***	
% share stock	-0.002 ***	0.000 **	* 0.000	**	0.000	*	0.0	00	C	0.002 ***	
% investment trust	0.001 ***	0.000 *	0.000		0.000)	0.0	00	-0	0.002 ***	
Capital loss experienced	0.016	0.019 **	* 0.013	***	0.002		-0.0	44 ***	-0	0.006	
Willing to have risk asset	0.001	0.043 **	* 0.045	***	-0.052	***	-0.0	03	-0	0.034 **	
Want to have risk asset a bit	0.007	0.030 **	* 0.040	***	0.004		-0.0	07	-0	0.074 ***	

Better financial knowledge, guidance desirable (Estimated coefficients of multinomial logit)

Family houshold			Multinomial log	git model (base Exclu	usively FI as the de	sirable source)		
	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	FI and FF	Don't know
Know Deposit Insurance	0.287***	0.326***	0.965***	0.924***	0.914***	0.975***	-0.286***	-0.421***
Heard of Deposit Insurance	0.112	0.166**	0.724***	0.589***	0.656***	0.662***	-0.061	-0.181***
Advice financial institution	0.01	0.772***	0.223	0.566***	0.275*	-0.779***	0.353**	-0.953***
% share stock	0.011***	0.006**	0.008***	0.009***	0.007***	0.011***	-0.006	0.007***
% investment trust	0.002	0.005**	-0.001	-0.003	-0.006*	0.001	-0.023***	-0.002
Capital loss experienced	0.297***	0.261***	0.263***	0.331***	0.082	0.216***	-0.104	-0.001
Willing to have risk asset	0.257	0.497***	0.063	0.104	-0.591**	-0.793***	0.073	-0.775***
Want to have risk asset a bit	0.352***	0.382***	0.477***	0.527***	0.294***	0.059	0.293***	-0.351***
Ν								25722
pseudoRsq								0.054
LLR								-49700

Single-person houshold		Multinomial logit model (base FI desirable source)										
	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	Exclusively Other	Don't know				
Know Deposit Insurance	0.315***	0.555***	1.352***	1.228***	0.963***	0.964***	0.707***	-0.521***				
Heard of Deposit Insurance	0.261**	0.370***	0.914***	0.786***	0.648***	0.576***	0.251**	-0.244***				
Advice financial institution	0.474**	0.527***	-0.112	0.201	0.139	-0.496**	-0.979**	-1.019***				
% share stock	0.010***	0	0.006**	-0.002	-0.002	0.006***	0.014***	0.009***				
% investment trust	0.007**	0.009***	0	0.003	-0.005	-0.004	0.001	-0.006*				
Capital loss experienced	0.138	0.043	0.313***	0.045	0.076	0 245***	0.197*	0.058				
Willing to have risk asset	0.233*	0.109	0.035	0.101	-0.269*	-0.211*	0.257*	-0.836***				
Want to have risk asset a bit	0.437***	0.311***	0.386***	0.596***	0.157	0.088	0.103	-0.471***				
Ν								16425				
pseudoRsq								0.068				
LLR								-29900				

Better financial knowledge, guidance desirable (Marginal effects from multinomial logit)

Family houshold	Exclusively FI	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	FI and FF	Don't know
Know Deposit Insurance	-0.056 ***	0.000	0.002	0.044 ***	0.045 ***	0.038 ***	0.074 ***	-0.023 ***	-0.123 ***
Heard of Deposit Insurance	-0.044 ***	-0.007	-0.006	0.034 ***	0.026 ***	0.027 ***	0.048 ***	-0.011 ***	-0.068 ***
Advice financial institution	0.033 **	0.007	0.081 ***	0.021 **	0.050 ***	0.023 ***	-0.079 ***	0.022 ***	-0.158 ***
% share stock	-0.001 ***	0.000 ***	0.000	0.000	0.000 *	0.000	0.001 ***	0.000 ***	0.000
% investment trust	0.000	0.000	0.001 ***	0.000	0.000	0.000	0.000	-0.001 ***	0.000
Capital loss experienced	-0.026 ***	0.011 ***	0.013 ***	0.009 **	0.016 ***	-0.003	0.010 *	-0.009 **	-0.020 **
Willing to have risk asset	0.054 **	0.028 ***	0.065 ***	0.019	0.023 **	-0.026 *	-0.067 ***	0.013	-0.109 ***
Want to have risk asset a bit	-0.021 **	0.015 ***	0.024 ***	0.024 ***	0.030 ***	0.010 **	-0.008	0.010 **	-0.084 ***

Single-person houshold	Exclusively FI	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	Exclusively Othe	Don't know
Know Deposit Insurance	-0.049 ***	-0.001	0.014 ***	0.054 ***	0.070 ***	0.029 ***	0.070 ***	0.020 ***	-0.206 ***
Heard of Deposit Insurance	-0.036 ***	0.002	0.009	0.036 ***	0.043 ***	0.019 ***	0.038 ***	0.002	-0.113 ***
Advice financial institution	0.071 ***	0.041 ***	0.054 ***	0.009	0.039 ***	0.021 *	-0.020	-0.032 *	-0.182 ***
% share stock	-0.001 ***	0.000 **	0.000 *	0.000	-0.001 ***	0.000 **	0.000	0.000 ***	0.001 ***
% investment trust	0.000	0.000 ***	0.001 ***	0.000	0.000 *	0.000	0.000	0.000	-0.001 **
Capital loss experienced	-0.018 **	0.002	-0.003	0.012 ***	-0.005	-0.001	0.016 ***	0.005	-0.008
Willing to have risk asset	0.053 ***	0.024 ***	0.022 ***	0.009	0.025 ***	-0.002	0.002	0.026 ***	-0.158 ***
Want to have risk asset a bit	0.003	0.022 ***	0.018 ***	0.018 ***	0.045 ***	0.006	0.007	0.005	-0.123 ***

Discrepancy between actual and desirable sources (Estimated coefficients of multinomial logit)

Family houshold	Choice of desirable sources given the choice of exclusively FI as the actual source							
	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	Don't know	
Know Deposit Insurance	0.17	0.079	0.479**	0.505***	0.828***	0.862***	-0.289***	
Heard of Deposit Insurance	0.260*	0.178	0.645***	0.583***	0.698***	0.721***	0.068	
Advice financial institution	0.231	0.645***	0.338	0.037	0.227	-1.280***	-0.671***	
% share stock	0.007	0.002	0.005	0.006	0.007*	0.004	0.004	
% investment trust	0	0.007*	-0.002	-0.005	0.001	0.009**	0	
Capital loss experienced	0.211	0.384***	0.276*	0.459***	0.078	-0.022	-0.004	
Willing to have risk asset	-0.043	0.09	-0.706	-0.417	-0.867*	-0.577	-0.770**	
Want to have risk asset a bit	0.287*	0.086	0.405**	0.573***	0.142	0.084	-0.346***	
Ν							8891	
pseudoRsq							0.054	
LLR							-14100	
Single-person houshold	C	Choice of desirable s	sources given the ch	oice of Exclusively	FI as the actual so	urce		
	Exclusively E	FI and E	FI, E and NI	FI and NI	Exclusively N	I Don't know		
Know Deposit Insurance	0.217	0.527***	0.871***	1.266***	0.966***	0.064		
Heard of Deposit Insurance	0.215	0.298*	0.577***	0.779***	0.595***	0.328***		
Advice financial institution	0.787**	0.873***	-0.4	-0.39	-0.699	-0.284		
% share stock	-0.01	-0.01	-0.017**	-0.007	0.001	-0.005		
% investment trust	0.006	0.006	0.005	-0.002	-0.001	0.002		
Capital loss experienced	-0.116	0.032	-0.13	-0.01	0.175	0.161		
Willing to have risk asset	-0.404	-0.314	-0.041	-0.446*	-0.481**	-1.336***		
Want to have risk asset a bit	0.279	0.218	0.424***	0.197	-0.009	-0.443***		
N						4620		
pseudoRsq						0.062	28	
LLR						-6780.733		

Discrepancy between actual and desirable sources (Marginal effects from multinomial logit)

Family houshold	Exclusively FI	Exclusively E	FI and E	E and NI	FI, E and NI	FI and NI	Exclusively NI	Don't know
Know Deposit Insurance	-0.063 ***	0.001	-0.007	0.011	0.011	0.043 ***	0.071 ***	-0.067 ***
Heard of Deposit Insurance	-0.089 ***	0.002	-0.003	0.015 **	0.013 *	0.031 ***	0.051 ***	-0.020 **
Advice financial institution	0.069 **	0.018	0.061 ***	0.018 *	0.007	0.026 *	-0.118 ***	-0.082 ***
% share stock	-0.001 *	0.000	0.000	0.000	0.000	0.000	0.000	0.000
% investment trust	-0.001	0.000	0.000 *	0.000	0.000	0.000	0.001 **	0.000
Capital loss experienced	-0.031 **	0.007	0.024 ***	0.007	0.014 ***	0.000	-0.010	-0.011
Willing to have risk asset	0.125 **	0.012	0.029	-0.015	-0.004	-0.038	-0.029	-0.079
Want to have risk asset a bit	-0.006	0.013 *	0.004	0.014 **	0.020 ***	0.007	0.005	-0.057 ***

Single-person houshold	Exclusively FI	Exclusively E	FI and E	FI, E and NI	FI and NI	Exclusively NI	Don't know
Know Deposit Insurance	-0.137 ***	-0.003	0.016	0.035 ***	0.064 ***	0.060 ***	-0.034 **
Heard of Deposit Insurance	-0.108 ***	-0.001	0.004	0.021 **	0.036 ***	0.032 **	0.016
Advice financial institution	0.030	0.035 **	0.069 ***	-0.022	-0.021	-0.057	-0.033
% share stock	0.002 **	0.000	0.000	-0.001 **	0.000	0.000	0.000
% investment trust	-0.001	0.000	0.000	0.000	0.000	0.000	0.000
Capital loss experienced	-0.015	-0.006	0.000	-0.010	-0.003	0.013	0.020
Willing to have risk asset	0.158 ***	-0.003	0.001	0.018	-0.008	-0.013	-0.153 ***
Want to have risk asset a bit	0.002	0.012	0.015	0.027 ***	0.013	-0.001	-0.067 ***

Better financial knowledge, more guidance, but not necessarily higher ratio of risky assets (1)

Family household								
Base Exclusively FI (actual)	FI and FF	Exclusively Other	FI and E	Exclusively FF	Exclusively E	FI, E and FF		
ATE on Sstock	-0.345**	1.453***	0.993***		1.153***	0.33		
ATE on Sinv_trust	-0.714***	-0.456**	-0.053	-0.701* 🙂	-0.133	-0.686***		
Ν	14323	12399	11846	11745	10957	10710		
pseudoRsq	0.019	0.049	0.095	0.075	0.041	0.049		
LLR	-8990.253	-6434.522	-5363.561	-5328.654	-4156.873	-3631.015		
% ccorrectly classified	66.31%	76.62%	80.80%	80.57%	86.51%	88.50%		
Area under ROC	0.5928	0.6513	0.7087	0.6924	0.6429	0.6655		
Family household	Family household FI Sstock average = 2.29, FI Sinv_trust average = 1.99							
Base Exclusively FI (actual)	FI and FF	Exclusively Other	FI and E	Exclusively FF	Exclusively E	FI, E and FF		
OLS dummy on Sstock	-0.422	0.702	3.493	-0.899	2.874	1.272		
OLS dummy on Sinv_trust	-0.792	-1.000	2.728	-1.437	0.259	0.192		

Better financial knowledge, more guidance, but not necessarily higher ratio of risky assets (2)

Single person h	ousehold
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Base Exclusively FI (actual)	Exclusively Other	Exclusively FF	FI and FF	Exclusively E	FI and E
ATE on Sstock	2.123***	0.893**	0.623	1.933***	0.509
ATE on Sinv_trust	-0.835***	-0.192	-0.366	-0.139	-0.123
Ν	10439	6954	6428	6234	6175
pseudoRsq	0.062	0.047	0.1	0.079	0.09
LLR	-6786.548	-2742.458	-3580.82	-2951.628	-2525.055
% ccorrectly classified	61.6%	74.8%	80.1%	82.6%	83.6%
Area under ROC	0.6634	0.7167	0.6983	0.6513	0.7111

Single person household	FI Sstock average = 3.32, FI Sinv_trust average = 2.60						
Base Exclusively FI (actual)	Exclusively Other	Exclusively FF	FI and FF	Exclusively E	FI and E		
OLS dummy on Sstock	1.053	X- 1.101	-0.752	5.037	3.306		
OLS dummy on Sinv_trust	-1.381	-1.673	-0.751	1.415	2.608		

Recap

Households choosing actual sources of information involving financial experts have better financial knowledge as measured by knowledge of the DICJ, and are willing to purchase high-yield financial products.

Households choosing desirable sources involving financial experts and neutral institutions also have better financial knowledge.

Among households whose actual sources differ from their desirable sources, households that regard a financial expert and a neutral institutions as a more desirable source tend to have better financial knowledge.

It is unclear whether households that seek guidance from a financial expert have a higher ratio of stock to total financial assets than those selecting financial institutions as their source of financial information and knowledge.

Policy Implications

- Our results suggest that family households willing to purchase risky assets would benefit from the guidance of a financial expert, and a family household that would only like to receive information about a relatively safe investment would benefit most from a neutral institution.
- Need to match the various types of financial advisers and households if we wish more Japanese households to seek financial adviser guidance.
- The National Consumer Affairs Center of Japan or The CCFSI might be the candidates for NI, but one of the SHF questions highlighted that about 90% of respondents from 2010 to 2017 only came to know about the CCFSI when they were invited to complete the survey.
- We do not provide any causal evidence, thus we should not overstate this claim.

Supplemental slides

The Japan Association for Financial Planners (JAFP)

- Established in 1987 to enlighten and promote financial planning to the general public and to foster financial planners as financial planning professionals
- Certified Financial Planner[®] (CFP)[®] certification (a globally credential)
- Affiliated Financial Planner (AFP) certification (a domestic credential)
- As of July 2017, 21,228 individuals have CFP[®] certification and 155,568 individuals have AFP certification
- About 50% of certified members work for financial institutions
- Many of these financial institutions joined JAFP as corporate members to support JAFP's activities
- See details at https://www.jafp.or.jp/eng/

Summary statistics (1)

Family household	Family households		olds	Family households		Single-person househ	olds
Income_200	0.114	Income_20	0.111			Age25_29	0.178
Income_200_260	0.062	Income_20_100	0.111	Age30_34	0.048	Age30_34	0.095
Income_260_300	0.106	Income_100_160	0.095	Age35_39	0.074	Age35_39	0.111
Income_300_370	0.072	Income_160_200	0.132	Age40_44	0.095	Age40_44	0.075
Income_370_407	0.086	Income_200_250	0.102	Age45_49	0.092	Age45_49	0.066
Income_407_500	0.137	Income_250_300	0.142	Age50_54	0.100	Age50_54	0.094
Income_500_600	0.084	Income_300_360	0.071	Age55_59	0.106	Age55_59	0.058
Income_600_700	0.061	Income_360_400	0.074	Age60_64	0.126	Age60_64	0.126
Income_700_900	0.074	Income_400_500	0.080	Age65_69	0.117	Age65_69	0.070
Income_900_	0.071	Income_500_	0.081	Age70_74	0.093	<u> </u>	
Income_NA	0.134			Age75_	0.118		
Asset_0	0.292	Asset_0	0.411	Age_NA	0.008		
Asset_0_100	0.061	Asset_0_52	0.052	Senior high	0.382	Senior high	0.240
Asset_100_253	0.060	Asset_52_125	0.054	Vocational college	0.074	Vocational college	0.098
Asset_253_420	0.063	Asset_125_225	0.055	Junior college	0.037	Junior college	0.094
Asset_420_600	0.068	Asset_225_400	0.064	University	0.260	University	0.451
Asset_600_900	0.069	Asset_400_608	0.050	Graduate	0.026	Graduate	0.089
Asset_900_1200	0.063	Asset_608_980	0.059	Education_NA	0.115		
Asset_1200_1670	0.061	Asset_980_1420	0.063	S_Senior high	0.379		
Asset_1670_2400	0.066	Asset_1420_2300	0.064	S_Vocational college	0.085		
Asset_2400_3886	0.064	Asset_2300_4360	0.064	S_Junior college	0.130		
Asset_3886_	0.067	Asset_4360_	0.066	S_University_Graduate_other	0.117		
Asset_NA	0.067			S_Education_NA	0.097		
Ν	30,359	Ν	20,000	N	30,359	Ν	20,000

Summary statistics (2)

Family households		Single-person households		Family households		Single-person households	
Know Deposit Insurance	0.388	Know Deposit Insurance	0.377	Full-time	0.517	Full-time	0.556
Heard of Deposit Insurance	0.381	Heard of Deposit Insurance	0.282	Part-time	0.068	Part-time	0.106
Dep_Ins_NA_	0.006			Self-employed	0.121	Self-employed	0.092
Choice_advice	0.033	Choice_advice	0.021	Job_NA	0.061	Student	0.077
Mattress	0.016	Mattress	0.013	S_Full-time	0.147		
Sbond	0.720	Sbond	0.743	S_Part-time	0.247		
Sbond_NA	0.360			S_Self-employed	0.044		
Sstock	3.145	Sstock	4.608	S_No job-student	0.385		
				S_Job_NA	0.060		
Sinv_trust	1.971	Sinv_trust	2.434	Male	0.920	Male	0.584
Sdcplan	1.569	Sdcplan	2.030	Male_NA	0.004		
Sdcplan_NA	0.976			Homeowner	0.721	Homeowner	0.258
Capitalloss_yes	0.248	Capitalloss_yes	0.319	Homeowner_NA	0.011		
Capitalloss_yes_NA	0.052		-	Debt	0.398	Debt	0.207
Risk_yes	0.018	Risk_yes	0.093	Debt_NA	0.010		
Risk_alittle	0.145	Risk_alittle	0.271	Ν	30,359	Ν	20,000
Risk_NA	0.016				·		
N	30,359	Ν	20,000				

Summary statistics (3)

Family households		Single-person households	
H_size4	0.231		
H_size5	0.094		
H_size6	0.035		
H_size6_	0.053		
H_size_NA	0.012		
Hokkaido	0.051	Hokkaido	0.054
Tohoku	0.083	Tohoku	0.054
Hokuriku	0.054	Hokuriku	0.029
Chubu	0.149	Chubu	0.121
Kinki	0.153	Kinki	0.160
Chugoku	0.068	Chugoku	0.051
Shikoku	0.033	Shikoku	0.026
Kyushu	0.128	Kyushu	0.107
Top20cities	0.240		
Cities_40k_	0.405		
Cities_20k_40k	0.253		
N	30,359	Ν	20,000