QUADERNO DI RICERCA N.8

Assessing gender gaps in financial knowledge and overconfidence: Evidence from OECD countries

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Assessing gender gaps in financial knowledge and overconfidence: Evidence from OECD countries

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Abstract

In this paper, we use internationally comparable microdata on adult financial literacy to assess differences in financial knowledge and confidence between women and men. We find significant gender differentials in objective financial knowledge and in the number of "Don't know/Refused" responses. Furthermore, we provide first international evidences on gender gaps in financial knowledge overconfidence. Results from detailed nonlinear Blinder-Oaxaca decompositions highlight that most of these gaps remain unexplained by differences in observed characteristics between women and men and may be due instead to cultural factors and social norms about women's participation in financial decision making.

Keywords: financial knowledge; self-confidence; financial overconfidence; gender differences; Blinder-Oaxaca decomposition.

JEL Classification: A20; D14; G41; G53; I24.

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Introduction

Gender disparities in financial literacy are widely documented in the literature and are found to exacerbate women's difficulties in securing their economic well-being over time, through a confidently participation in economic and financial activities (OECD, 2020).

Previous studies have demonstrated that less financially knowledgeable individuals are less likely to participate to financial markets (Van Rooij *et al.*, 2011), are subjected to higher-cost borrowing or less advantageous financial contracts (Lusardi and Tufano, 2015) and display a lower financial resilience, being less able to handle unexpected financial difficulties (Lusardi and Mitchell, 2018). In particular, financially illiterate women are less willing to invest even in standard financial assets, have greater difficulties in accumulating wealth over time and fail in planning for retirement (Lusardi and Mitchell, 2008; Bannier and Neubert, 2016). This, combined with lower labour incomes and a longer life expectancy, makes women significantly more exposed to old-age poverty risk than men.

Recently, a growing attention has been paid to factors associated with an individual's personality, non-cognitive skills, self-confidence and motivations, which may contribute to explain the gender differences in financial literacy and financial choices. Among others, Bucher-Koenen *et al.* (2017) find that women are more likely than men to indicate that they do not know the answer to financial knowledge questions and suggest that this may reflect a lack of confidence in the answer rather than simply a lack of knowledge. Accordingly, Kim and Mountain (2019) point out that women have a higher tendency to select "Don't know/Refused" (DK/RF) responses rather than substantive answers and show that observed gender gaps in objective financial knowledge are almost entirely due to the bias attributable to non-random preferences for DK/RF answers.

Recent studies have also assessed gender differences in self-assessed financial knowledge, pointing out that men are more likely to be overconfident in their financial competencies than women (Angrisani and Casanova, 2019). Financial knowledge overconfidence, defined as the difference between one's own objective and subjective financial knowledge, is associated with various risky behaviours, that can have detrimental effects on financial health (Porto and Xiao, 2016). In particular, overestimating actual financial capabilities results in a lower propensity to seek financial advice (Kramer, 2016), leads to riskier financial behaviour and excessive trading (Barber and Odean, 2001), and makes more vulnerable to financial frauds (Di Salvatore *et al.*, 2018).

This study offers new insights into gender gaps in financial knowledge and self-confidence. We further contribute to the literature by providing first international evidence on differences in financial

overconfidence between women and men. To this aim, we employ nonlinear decomposition methods and assess the role of observable and unobservable factors in explaining gender differentials.

Data and empirical methods

We use data from the OECD/INFE (International Network for Financial Education) survey on Adult Financial Literacy Competencies, which provides harmonized cross-country information on financial literacy competencies and self-reported financial knowledge. Our dataset consists of 20083 non-missing respondent observations from 14 countries, for which microdata were made available.[1]

We focus on gender differentials in three main variables. First, as in most empirical studies (e.g. Lusardi and Mitchell, 2014) we consider the financial knowledge score, defined as the number of correct answers to seven financial knowledge questions.[2] Second, we consider the number of DK/RF answers to financial knowledge questions, which does not simply reflect lack of knowledge, but also lack of confidence in one's own financial competencies (see Bucher-Koenen *et al.*, 2017). Finally, we focus on financial knowledge overconfidence, defined as the mismatch between high self-assessed and low actual financial knowledge, which may result in poor financial decisions and hazardous behaviours (Kramer, 2016). Specifically, we define a binary indicator identifying as overconfident those individuals ranked below the national median of the financial knowledge score, but whose self-reported financial knowledge is above the national median.[3]

Figure 1 presents the average values of the three dependent variables by gender for each country. On average, women have significantly lower financial knowledge scores (panel *a)*) and display a higher propensity to indicate that they do not know the answer to financial knowledge questions (panel *b)*) than men in almost all the countries. At the same time, women are significantly less likely to be overconfident and overestimate their financial knowledge than men in Brazil, Croatia, Italy, Jordan, Norway, South Africa and the United Kingdom (panel *c)*).

[1] The countries considered are: Austria (AT), Brazil (BR), Canada (CA), Croatia (HR), Finland (FI), Hong Kong (HK), Hungary (HU), Italy (IT), Jordan (JO), Netherlands (NL), Norway (NO), Russia (RU), South Africa (ZA) and the United Kingdom (UK).

[2] OECD/INFE financial knowledge questions related to time-value of money, interest paid on a loan, interest plus principal, compound interest, risk and return, inflation, and risk diversification.

[3] Self-reported level of financial knowledge is based on question QK1 "Could you tell me how you would rate your overall knowledge about financial matters compared with other adults in <name of the Country>?", which allows five possible answers: very high (1), quite high (2), about average (3), quite low (4), very low (5). In our analysis, we drop observations for which we have DK/RF responses to question QK1 and revert the scale so that 1 corresponds to the lowest level of self-reported knowledge and 5 to the highest.

[Insert Figure 1 about here]

Due to the different nature of the dependent variables considered, we adopt different nonlinear regression approaches. Specifically, we employ a negative binomial (NB2) count model to assess the determinants of the financial knowledge score and of the number of DK/RF answers. Moreover, given our definition of overconfidence, we use a probit model with endogenous sample selection to properly analyse the probability of being above the national median of the self-reported level of financial knowledge, conditional on being below the national median of the knowledge score. We assume that the financial knowledge score, the number of DK/RF answers and overconfidence probability depend on socio-demographic characteristics (gender, age, educational attainments, working status, household type) and on variables related to financial resilience, behaviours and attitudes and to risk tolerance.[4] Table 1 presents summary statistics by country for all the variables considered, while Table A1 in the Appendix reports complete variable definitions.

[Insert Table 1 about here]

Extending the analysis of Cupák *et al.* (2018), we employ a generalized Blinder-Oaxaca (BO) decomposition to disentangle the role of observable and unobservable characteristics on the observed gender gaps in objective financial knowledge, number of DK/RF answers and financial overconfidence. In a nonlinear regression context, as discussed in Aristei and Gallo (2016), a BO decomposition of the mean difference of an outcome variable Y_i can be obtained using conditional expectations evaluated at different coefficient estimates. Formally, after having estimated the nonlinear model separately for women (w) and men (m), the estimated difference in the conditional expectations of Y_i between the two groups can be decomposed as:

$$\begin{aligned}\widehat{\Delta}_{wm} &= \left[S\left(\hat{\boldsymbol{\theta}}_w, \mathbf{X}_{iw}\right) - S\left(\hat{\boldsymbol{\theta}}_m, \mathbf{X}_{im}\right)\right] \\ &= \underbrace{\left[S\left(\hat{\boldsymbol{\theta}}^*, \mathbf{X}_{iw}\right) - S\left(\hat{\boldsymbol{\theta}}^*, \mathbf{X}_{im}\right)\right]}_{\widehat{\Delta}_{wm}^{Explained}} + \underbrace{\left\{\left[S\left(\hat{\boldsymbol{\theta}}_w, \mathbf{X}_{iw}\right) - S\left(\hat{\boldsymbol{\theta}}^*, \mathbf{X}_{iw}\right)\right] + \left[S\left(\hat{\boldsymbol{\theta}}^*, \mathbf{X}_{im}\right) - S\left(\hat{\boldsymbol{\theta}}_m, \mathbf{X}_{im}\right)\right]\right\}}_{\widehat{\Delta}_{wm}^{Unexplained}} \end{aligned} \quad (1)$$

where $\mathbf{X}_{iw}$ and $\mathbf{X}_{im}$ are the vectors of covariates for the two groups, $\hat{\boldsymbol{\theta}}_w$ and $\hat{\boldsymbol{\theta}}_m$ are the corresponding vectors of estimated parameters, $\hat{\boldsymbol{\theta}}^*$ is the counterfactual coefficient vector estimated from a pooled

[4] As in Di Salvatore et al. (2018), the number of DK/RF answers is also assumed to depend on self-reported financial knowledge. Furthermore, we use the *Short-term attitude* indicator as identification variable in the probit model with endogenous selection for the analysis of overconfidence probability.

regression over the two groups, and $S(\hat{\boldsymbol{\theta}}_g, \mathbf{X}_{ig})$, $S(\hat{\boldsymbol{\theta}}_h, \mathbf{X}_{ig})$ and $S(\hat{\boldsymbol{\theta}}^*, \mathbf{X}_{ig})$ are the sample counterpart of the conditional expectations $E_{\boldsymbol{\theta}_g}(Y_{ig}|\mathbf{X}_{ig})$, $E_{\boldsymbol{\theta}_h}(Y_{ig}|\mathbf{X}_{ig})$ and $E_{\boldsymbol{\theta}^*}(Y_{ig}|\mathbf{X}_{ig})$, for $g, h = w, m$ and $g \neq h$. The first term of the two-fold decomposition in (1) is the part of the estimated gap in Y_i explained by group differences in observable characteristics ($\widehat{\Delta}_{wm}^{Explained}$), while the second is the unexplained part that is due to differences in estimated coefficients ($\widehat{\Delta}_{wm}^{Unexplained}$). In addition to the aggregate decomposition, we further assess the individual contributions of the covariates to the explained and unexplained parts of the gender gaps, by means of a detailed decomposition based on the linearization method and the averaging approach to identification proposed by Yun (2004, 2005).

Results

Table 2 shows the results of the BO decomposition of gender differences in financial knowledge scores.[5] We find negative and highly significant gaps in 11 of the 14 countries considered, clearly indicating that, on average, women have a significantly lower financial knowledge than men. Furthermore, differences between men and women are higher in more developed countries, as for example Canada, Netherlands and Norway, suggesting that economic and financial development seems to widen differences in financial literacy instead of reducing them. Gender differentials are instead not statically significant in Croatia and Russia, while the gap is only weakly significant in Hungary. Coherently with Bucher-Koenen *et al.* (2017) and Cupák *et al.* (2019), this evidence may be related to fact that former socialist countries were more egalitarian on gender roles within the society. Decomposition of gender differences shows that, with the exception of Jordan, the unexplained part of the gap is larger than the part explained by differences in individual characteristics. Results from the detailed decomposition (panel *c)* of Table 2) show that the explained part of the gap mainly depends on differences in occupational status, education, and risk and planning attitudes. Conversely, differences in slope coefficients does not significantly contribute to the unexplained gaps, which are almost entirely determined by differences in the intercepts (i.e. the "true" unexplained component). This evidence suggests that most of the gender gap in financial knowledge remains unexplained and may be due to psychological and behavioural factors or to social norms about women's participation in financial decision making.

[5] Owing to space constraints, we only report results related to the decomposition analysis. Complete model estimation results are available upon request.

[Insert Table 2 about here]

Table 3 presents results of the BO decomposition of gender gaps in the number of DK/RF answers. Differences between women and men are always positive and statistically significant, showing that in all the countries considered women have a disproportionately higher propensity to indicate that they do not know the answer than men. Gender gaps are particularly high in those countries where even gender gaps in financial knowledge are more evident (Jordan, Netherlands, Norway and the United Kingdom). This result may be indicative of women's lower self-confidence in answering, but also of a better awareness of their actual knowledge and of a lower propensity to guess the answer if they do not know it (Bucher-Koenen *et al.*, 2017). Coherently with Kim and Mountain (2019), the evidence obtained also suggests that gender differences in the propensity to choose DK/RF responses are not random, and this should be taken into account to avoid distortions when measuring objective financial knowledge. Decomposition results show that the unexplained part is higher than that explained in all the countries, with the exception of Jordan and South Africa, where about 60% of the gap is explained by differences in observable characteristics. Results from the detailed decomposition (panel *c)* of Table 3) show that in most countries differences in self-assessed financial knowledge and risk attitude provide a significant contribution to the explained part of the gender gap, stressing that self-confidence plays a crucial role in determining the propensity to admit to not knowing the answer. Again, the unexplained part is almost entirely due to differences in the intercepts and, in some countries, in the effects of self-assessed financial knowledge, confirming the relevance psychological traits and beliefs in shaping differences in response behaviour between women and men.

[Insert Table 3 about here]

Table 4 shows that women are significantly less likely to be overconfident in their financial knowledge than men in Brazil, Croatia, Italy, Jordan, Norway, South Africa and the United Kingdom, with estimated gender gaps ranging from -5 to -17%. From the decomposition of gender differences, we notice that most of the gaps are due to unobserved factors; the only exception is Brazil, where the explained part is statistically significant at the 5% level and higher than that unexplained. Results from the detailed decomposition (panel *c)* of Table 4) highlight that differences in education, employment status and in the financial decision-making process exert a significant contribution to the

explained part of the gender gaps. Even in this case, the unexplained part is almost entirely due to differences in the intercepts, highlighting the relevant role of non-cognitive psychological and behavioural factors in influencing differences in excessive self-confidence between women and men. This evidence confirms the presence of a significant overconfidence bias in assessing one's own financial abilities, which may lead to wrong financial choices with long-term effects on the economic and social well-being, especially in those countries where average objective financial knowledge is particularly low.

[Insert Table 4 about here]

Concluding remarks

Our main results highlight that women have, on average, lower financial knowledge scores than men in both advanced and emerging economies, confirming the findings of previous empirical studies (Cupak *et al.*, 2018; Bucher-Koenen *et al.*, 2017). These gender gaps in financial knowledge are only partly explained by observed differences between men and women, reflecting the effects of social norms and conventions. We also provide evidence of significant gender gaps in the number of DK/RF answers to financial knowledge questions in all the countries considered. These differentials might suggest that women have a lower confidence or a better awareness of their actual knowledge, and are characterized by a lower propensity to guess the answers with respect to men. Furthermore, in seven of the countries considered, we find that men are more likely to be overconfident in their financial knowledge than women and most of these gender differentials are due to unexplained factors.

Our findings suggest that financial knowledge measures might be significantly affected by confidence bias and measurement errors related to gender differences in financial behaviors. It follows that, in order to make instruments and programs of financial education effective in improving both financial knowledge level, and women's self-confidence, it is important to increase the access to information and education, to facilitate a confidently participation to financial activities by women, to encourage future-oriented financial planning focused on female needs.

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Figures

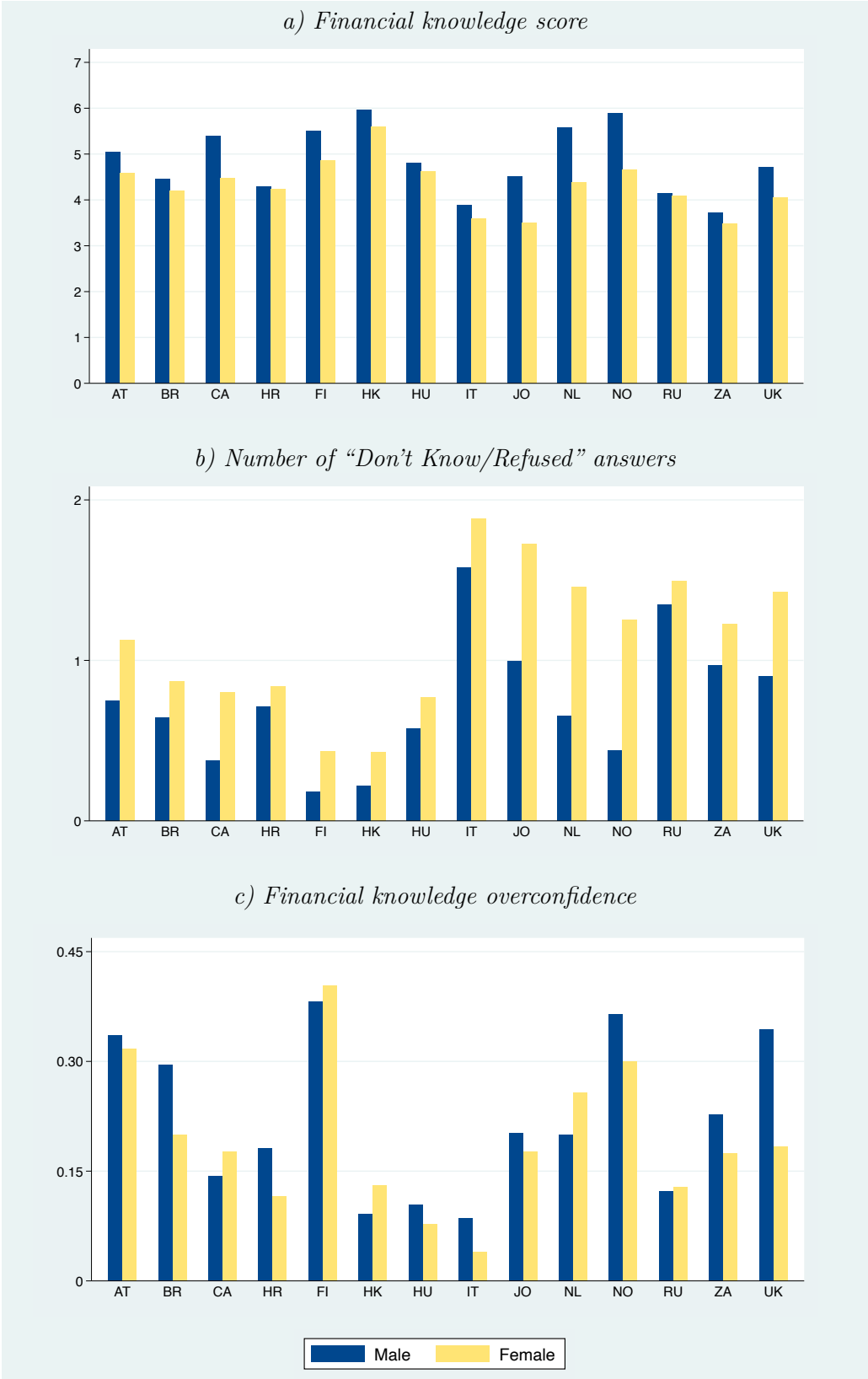

Figure 1 – Average financial knowledge scores, average number of "Don't Know/Refused" answers and proportion of financially overconfident individuals by gender

Source: OECD/Infe data

Tables

Table 1 – Descriptive statistics by country

		AT	BR	CA	HR	FI	HK	HU	IT	JO	NL	NO	RU	ZA	UK
Dependent variables															
Financial knowledge score	Mean	4.735	4.329	4.924	4.250	5.123	5.759	4.704	3.599	4.062	4.933	5.247	4.113	3.603	4.161
	Median	5	4	5	4	5	6	5	4	4	5	6	4	4	4
	Std. Dev.	1.812	1.548	1.535	1.678	1.599	1.317	1.632	1.957	1.597	1.980	1.737	1.793	1.377	1.833
"Don't Know/Refused" answers	Mean	1.009	0.763	0.594	0.787	0.320	0.334	0.707	1.802	1.323	1.086	0.887	1.425	1.003	1.255
	Median	0	0	0	0	0	0	0	1	1	0	0	1	0	1
	Std. Dev.	1.636	1.229	1.059	1.355	0.798	0.835	1.233	1.852	1.427	1.637	1.376	1.661	1.457	1.621
Self-assessed financial knowledge	Median	3	3	3	3	4	3	3	3	3	3	3	3	3	3
Overconfident	Mean	0.320	0.264	0.170	0.191	0.399	0.116	0.105	0.145	0.204	0.307	0.354	0.242	0.247	0.266
Explanatory variables															
Female	Mean	0.519	0.524	0.516	0.528	0.495	0.543	0.526	0.521	0.449	0.493	0.501	0.527	0.519	0.513
Age class 18-29	Mean	0.211	0.258	0.186	0.198	0.260	0.193	0.200	0.152	0.473	0.168	0.202	0.251	0.393	0.174
Age class 30-49	Mean	0.348	0.429	0.350	0.352	0.354	0.390	0.362	0.354	0.387	0.374	0.422	0.355	0.360	0.340
Age class 50-69	Mean	0.287	0.269	0.376	0.334	0.278	0.345	0.336	0.313	0.131	0.375	0.286	0.358	0.198	0.340
Tertiary education	Mean	0.102	0.091	0.440	0.001	0.259	0.201	0.189	0.201	0.610	0.385	0.076	0.274	0.098	0.304
Secondary education	Mean	0.721	0.391	0.464	0.246	0.504	0.341	0.304	0.317	0.296	0.561	0.594	0.554	0.350	0.619
Employee	Mean	0.489	0.307	0.502	0.408	0.385	0.559	0.511	0.346	0.378	0.460	0.556	0.604	0.287	0.522
Self-employed	Mean	0.066	0.332	0.099	0.071	0.058	0.036	0.049	0.109	0.125	0.072	0.038	0.077	0.035	0.073
Retired	Mean	0.275	0.112	0.199	0.255	0.242	0.133	0.253	0.254	0.034	0.171	0.168	0.184	0.091	0.242
Single person household	Mean	–	0.086	0.175	0.171	0.309	0.063	0.163	0.131	0.088	0.217	0.235	0.152	–	0.229
Financial buffer at least 3 months	Mean	0.231	0.077	0.227	0.172	0.194	0.288	0.141	0.115	0.094	0.168	0.178	0.096	0.113	0.165
Making financial decisions alone	Mean	0.507	0.356	0.350	0.273	0.522	0.349	0.306	0.263	0.297	0.453	0.432	0.401	0.263	0.535
Prepared to risk	Mean	0.185	0.281	0.364	0.366	0.335	0.802	0.072	0.106	0.529	0.152	0.551	0.258	0.456	0.213
Short-term attitude	Mean	0.177	0.328	0.178	0.304	0.181	0.379	0.158	0.337	0.554	0.179	0.043	0.306	0.312	0.225
Number of observations		1979	1970	994	1025	1518	999	990	2210	1116	975	984	1528	2813	982

Note: summary statistics are computed using sample weights (except for Jordan and Russia, where weights were not provided).

Table 2 – Decomposition of gender differences in financial knowledge scores

	AT	BR	CA	HR	FI	HK	HU	IT	JO	NL	NO	RU	ZA	UK
a) Group means and difference:														
Women	4.591***	4.204***	4.485***	4.239***	4.867***	5.592***	4.629***	3.602***	3.509***	4.383***	4.669***	4.086***	3.487***	4.051***
	(0.054)	(0.046)	(0.060)	(0.071)	(0.054)	(0.058)	(0.069)	(0.056)	(0.067)	(0.088)	(0.077)	(0.062)	(0.032)	(0.072)
Men	5.049***	4.471***	5.399***	4.290***	5.515***	5.961***	4.815***	3.887***	4.512***	5.578***	5.886***	4.143***	3.716***	4.721***
	(0.054)	(0.049)	(0.059)	(0.075)	(0.051)	(0.050)	(0.068)	(0.058)	(0.055)	(0.070)	(0.059)	(0.066)	(0.042)	(0.073)
Difference	-0.458***	-0.268***	-0.914***	-0.051	-0.648***	-0.369***	-0.186*	-0.285***	-1.003***	-1.195***	-1.217***	-0.057	-0.229***	-0.670***
	(0.077)	(0.066)	(0.095)	(0.106)	(0.079)	(0.081)	(0.105)	(0.083)	(0.092)	(0.120)	(0.102)	(0.092)	(0.056)	(0.122)
b) Decomposition:														
Explained	-0.124***	0.014	-0.127***	-0.027	-0.020	-0.086**	-0.037	-0.012	-0.530***	-0.320***	-0.067	-0.022	-0.095***	-0.165***
	(0.028)	(0.027)	(0.049)	(0.029)	(0.035)	(0.044)	(0.043)	(0.033)	(0.062)	(0.069)	(0.042)	(0.028)	(0.022)	(0.062)
Unexplained	-0.334***	-0.282***	-0.787***	-0.024	-0.628***	-0.283***	-0.149	-0.273***	-0.473***	-0.875***	-1.150***	-0.035	-0.134***	-0.505***
	(0.072)	(0.058)	(0.090)	(2.061)	(0.074)	(0.072)	(0.092)	(0.078)	(0.078)	(0.114)	(0.102)	(0.086)	(0.052)	(0.103)
c) Detailed decomposition:														
Explained part														
Age	0.005	0.002	0.011	0.005	0.010	0.008	0.025	0.005	-0.059**	-0.028	-0.017	-0.010	0.001	-0.016
	(0.006)	(0.004)	(0.014)	(0.011)	(0.010)	(0.012)	(0.016)	(0.008)	(0.023)	(0.023)	(0.018)	(0.011)	(0.002)	(0.033)
Education	-0.103***	0.024	-0.003	-0.014	0.025	-0.027*	0.022	0.020	-0.032**	-0.083**	0.011	0.032**	-0.065***	-0.044
	(0.021)	(0.015)	(0.025)	(0.011)	(0.019)	(0.016)	(0.021)	(0.016)	(0.014)	(0.039)	(0.023)	(0.015)	(0.015)	(0.041)
Employment status	-0.017*	-0.038*	-0.044**	-0.021	-0.002	-0.049*	-0.018	-0.033*	-0.390***	-0.135***	-0.007	-0.015	-0.023*	-0.030*
	(0.009)	(0.019)	(0.017)	(0.017)	(0.010)	(0.028)	(0.021)	(0.019)	(0.054)	(0.035)	(0.015)	(0.018)	(0.012)	(0.018)
Financial decision making	-0.004	0.024*	-0.001	0.000	-0.013	-0.002	-0.095***	-0.008	0.003	0.007	0.002	-0.006	-0.002	-0.000
	(0.004)	(0.014)	(0.005)	(0.002)	(0.008)	(0.024)	(0.028)	(0.006)	(0.022)	(0.012)	(0.008)	(0.011)	(0.004)	(0.003)
Household type	–	0.002	-0.002	0.003	-0.002	-0.005	0.005	-0.013	0.001	-0.030	-0.005	-0.001	–	-0.000
		(0.005)	(0.004)	(0.012)	(0.006)	(0.011)	(0.008)	(0.010)	(0.003)	(0.019)	(0.006)	(0.005)		(0.001)
Financial buffer	-0.002	0.000	-0.001	0.001	-0.005	-0.001	0.002	-0.009	-0.004	0.002	0.000	-0.002	-0.001	0.003
	(0.003)	(0.006)	(0.004)	(0.004)	(0.005)	(0.005)	(0.004)	(0.006)	(0.007)	(0.008)	(0.001)	(0.004)	(0.001)	(0.004)
Risk attitude	-0.016	-0.001	-0.096***	-0.002	-0.047***	-0.010	0.008	0.006	-0.002	-0.074***	-0.054***	-0.020*	-0.005	-0.083***
	(0.010)	(0.002)	(0.023)	(0.005)	(0.015)	(0.018)	(0.008)	(0.005)	(0.006)	(0.025)	(0.021)	(0.012)	(0.005)	(0.024)
Planning attitude	0.013*	0.000	0.009	0.000	0.008	-0.000	0.013	0.021*	-0.047***	0.021	-0.000	0.001	0.000	0.005
	(0.007)	(0.004)	(0.012)	(0.001)	(0.010)	(0.001)	(0.011)	(0.011)	(0.016)	(0.013)	(0.002)	(0.004)	(0.001)	(0.013)
Unexplained part														
Age	0.033	-0.077	0.005	0.120	-0.013	0.070	-0.038	0.030	-0.022	0.036	-0.047	0.106	0.104**	0.091
	(0.031)	(0.086)	(0.059)	(0.079)	(0.040)	(0.066)	(0.070)	(0.045)	(0.202)	(0.084)	(0.061)	(0.124)	(0.046)	(0.059)
Education	0.119	-0.021	-0.020	-0.209	-0.005	0.014	0.025	0.053**	-0.143*	0.042	0.168*	-0.029	0.029	0.024
	(0.077)	(0.051)	(0.075)	(0.140)	(0.031)	(0.027)	(0.044)	(0.021)	(0.082)	(0.157)	(0.099)	(0.046)	(0.040)	(0.121)
Employment status	0.004	0.023	0.031	-0.078	0.029**	0.045	-0.064	-0.012	-0.039	-0.014	-0.137	-0.177**	-0.001	-0.012
	(0.067)	(0.042)	(0.057)	(0.074)	(0.012)	(0.100)	(0.087)	(0.037)	(0.159)	(0.092)	(0.108)	(0.084)	(0.059)	(0.087)
Financial decision making	0.033	-0.014	0.001	-0.020	0.020	-0.090	-0.001	-0.025	0.057	-0.044	-0.060	0.022	-0.045	0.024
	(0.080)	(0.058)	(0.078)	(0.096)	(0.090)	(0.068)	(0.082)	(0.060)	(0.052)	(0.130)	(0.103)	(0.082)	(0.041)	(0.130)
Household type	–	0.013	0.025	0.028	0.134**	0.049**	0.153**	-0.034	0.046*	0.035	0.055	-0.002	–	-0.005
		(0.023)	(0.051)	(0.074)	(0.063)	(0.024)	(0.061)	(0.038)	(0.027)	(0.079)	(0.068)	(0.045)		(0.061)
Financial buffer	0.056	-0.008	-0.027	-0.042	0.014	0.129***	-0.007	-0.023	-0.065**	0.083*	-0.017	-0.015	-0.031**	0.008
	(0.044)	(0.019)	(0.046)	(0.047)	(0.035)	(0.047)	(0.035)	(0.027)	(0.029)	(0.048)	(0.043)	(0.027)	(0.016)	(0.042)
Risk attitude	-0.026	0.004	-0.093	0.015	0.038	0.208	-0.013	-0.086***	-0.023	-0.009	-0.050	-0.077	0.026	-0.091
	(0.036)	(0.044)	(0.068)	(0.077)	(0.054)	(0.181)	(0.029)	(0.030)	(0.095)	(0.048)	(0.109)	(0.056)	(0.046)	(0.056)
Planning attitude	0.025	-0.032	0.046	0.034	0.007	-0.041	0.006	0.072	-0.192*	0.017	-0.039**	0.037	0.046	0.047
	(0.038)	(0.048)	(0.042)	(0.066)	(0.041)	(0.062)	(0.044)	(0.058)	(0.109)	(0.056)	(0.020)	(0.060)	(0.037)	(0.050)
Intercept	-0.577***	-0.167	-0.755***	0.128	-0.853***	-0.665***	-0.209	-0.248*	-0.092	-1.023***	-1.023***	0.097	-0.262**	-0.591**
	(0.171)	(0.141)	(0.176)	(0.219)	(0.139)	(0.249)	(0.178)	(0.132)	(0.276)	(0.273)	(0.240)	(0.207)	(0.118)	(0.243)

Notes: Estimated means, average gender gaps and Blinder-Oaxaca decompositions are based on the estimation of a negative binomial model of the number of correct answers to financial knowledge questions, for each country separately. Complete parameters estimates are available from the authors. The individual contributions of each covariate (or set of covariates) to the explained and unexplained parts of the gender gap have been estimated by means of the linearization method proposed by Yun (2004) and using normalized regressions to identify the contribution of categorical predictors. Bootstrapped (500 replications) standard errors are reported in parentheses below the estimates.
The sets of dummies used in normalized regressions are defined as follows: Age = Age class 18-29, Age class 30-49, Age class 50-69, Age class 70 and over; Education = Tertiary education, Secondary education, Primary education; Employment status = Employee, Self-employed, Retired, Other employment condition; Financial decision making = Making financial decision alone, Making financial decision with others; Household type = Single-person household, Multiple-person household; Financial buffer = At least 3 months, Less than 3 months, More than 3 months; Risk attitude = Prepared to risk, Not prepared to risk; Planning attitude = Short-term attitude, Long-term attitude.
***, ** and * denote significance at the 1, 5 and 10% levels, respectively.

Table 3 – Decomposition of gender differences in the number of "Don't Know/Refused" answers

	AT	BR	CA	HR	FI	HK	HU	IT	JO	NL	NO	RU	ZA	UK
a) Group means and difference:														
Women	1.124***	0.863***	0.815***	0.846***	0.441***	0.434***	0.773***	1.886***	1.726***	1.491***	1.264***	1.496***	1.219***	1.444***
	(0.051)	(0.039)	(0.054)	(0.0056)	(0.036)	(0.041)	(0.0056)	(0.054)	(0.067)	(0.089)	(0.067)	(0.059)	(0.034)	(0.071)
Men	0.762***	0.645***	0.387***	0.708***	0.189***	0.235***	0.575***	1.581***	1.008***	0.681***	0.447***	1.345***	0.964***	0.919***
	(0.043)	(0.035)	(0.034)	(0.058)	(0.019)	(0.027)	(0.044)	(0.052)	(0.049)	(0.052)	(0.039)	(0.058)	(0.041)	(0.061)
Difference	0.362***	0.218***	0.428***	0.138*	0.252***	0.199***	0.198***	0.305***	0.718***	0.810***	0.817***	0.151*	0.255***	0.525***
	(0.072)	(0.054)	(0.067)	(0.083)	(0.044)	(0.052)	(0.076)	(0.075)	(0.088)	(0.104)	(0.085)	(0.083)	(0.063)	(0.107)
b) Decomposition:														
Explained	0.168***	0.081***	0.118***	0.031	0.044**	0.059*	0.073**	0.120***	0.432***	0.255***	0.092**	0.044	0.163***	0.196***
	(0.033)	(0.030)	(0.041)	(0.046)	(0.018)	(0.033)	(0.037)	(0.034)	(0.057)	(0.065)	(0.044)	(0.031)	(0.030)	(0.062)
Unexplained	0.194***	0.137***	0.309***	0.107	0.208***	0.141***	0.125*	0.185***	0.286***	0.555***	0.726***	0.107	0.092*	0.329***
	(0.066)	(0.050)	(0.063)	(0.222)	(0.040)	(0.052)	(0.070)	(0.069)	(0.072)	(0.092)	(0.078)	(0.083)	(0.054)	(0.093)
c) Detailed decomposition:														
Explained part														
Self-assessed financial knowledge	0.036**	0.059***	0.064***	0.019	0.003	0.030**	0.050**	0.084***	0.099***	0.065***	0.048**	-0.001	0.085***	0.103***
	(0.014)	(0.014)	(0.018)	(0.026)	(0.003)	(0.013)	(0.019)	(0.017)	(0.029)	(0.020)	(0.020)	(0.012)	(0.017)	(0.025)
Age	0.000	0.004	0.004	0.007	0.004	-0.002	-0.007	-0.003	0.015	0.015	0.011	0.020*	0.005	0.005
	(0.005)	(0.006)	(0.008)	(0.011)	(0.005)	(0.008)	(0.012)	(0.007)	(0.022)	(0.016)	(0.013)	(0.012)	(0.009)	(0.022)
Education	0.084***	-0.009	0.006	0.004	-0.008	0.005	-0.009	-0.011	0.028**	0.051**	-0.002	-0.013	0.055***	0.028
	(0.019)	(0.008)	(0.012)	(0.008)	(0.007)	(0.006)	(0.008)	(0.010)	(0.013)	(0.024)	(0.015)	(0.009)	(0.010)	(0.031)
Employment status	0.020**	0.025	0.025**	0.003	0.003	0.012	0.018	0.039**	0.185***	0.079***	0.003	0.034*	0.006	0.025*
	(0.009)	(0.016)	(0.011)	(0.013)	(0.004)	(0.019)	(0.013)	(0.018)	(0.052)	(0.028)	(0.012)	(0.018)	(0.012)	(0.013)
Financial decision making	0.005	-0.007	-0.000	0.001	0.011**	0.011	0.017	-0.003	0.066***	-0.012	-0.002	-0.017*	0.000	0.002
	(0.005)	(0.011)	(0.001)	(0.002)	(0.005)	(0.014)	(0.014)	(0.004)	(0.023)	(0.010)	(0.006)	(0.010)	(0.001)	(0.003)
Household type	–	0.003	0.003	-0.002	0.004	-0.003	0.010	0.012	-0.001	0.021	0.004	0.001	–	0.000
		(0.004)	(0.006)	(0.008)	(0.004)	(0.007)	(0.009)	(0.009)	(0.003)	(0.015)	(0.005)	(0.005)		(0.001)
Financial buffer	0.001	0.008*	-0.001	0.001	0.003	0.000	-0.003	0.011*	0.012	-0.002	-0.000	0.002	0.004	-0.002
	(0.002)	(0.004)	(0.004)	(0.003)	(0.002)	(0.002)	(0.007)	(0.007)	(0.008)	(0.007)	(0.000)	(0.006)	(0.003)	(0.003)
Risk attitude	0.024***	-0.001	0.042***	0.001	0.026***	0.005	0.001	-0.000	-0.000	0.051**	0.030**	0.018*	0.009	0.036**
	(0.009)	(0.001)	(0.013)	(0.003)	(0.007)	(0.009)	(0.003)	(0.003)	(0.001)	(0.021)	(0.013)	(0.011)	(0.008)	(0.015)
Planning attitude	-0.002	-0.000	-0.005	-0.002	-0.001	0.001	-0.004	-0.009	0.027**	-0.013	-0.000	0.000	0.000	-0.002
	(0.004)	(0.001)	(0.007)	(0.006)	(0.002)	(0.002)	(0.005)	(0.005)	(0.012)	(0.009)	(0.002)	(0.001)	(0.000)	(0.004)
Unexplained part														
Self-assessed financial knowledge	-0.037*	0.009	-0.094**	0.027	-0.062	-0.015	0.045	0.193***	-0.157***	0.069	-0.131	0.009	0.023*	-0.096
	(0.023)	(0.007)	(0.044)	(0.025)	(0.065)	(0.037)	(0.045)	(0.065)	(0.051)	(0.054)	(0.121)	(0.042)	(0.013)	(0.077)
Age	-0.049*	-0.013	-0.010	-0.046	-0.038	-0.049	0.003	-0.073*	0.315*	-0.101	-0.020	-0.206	-0.135***	-0.140**
	(0.027)	(0.073)	(0.042)	(0.062)	(0.026)	(0.062)	(0.063)	(0.044)	(0.187)	(0.072)	(0.049)	(0.129)	(0.052)	(0.061)
Education	-0.055	0.084**	-0.135*	0.773***	-0.003	0.008	-0.010	-0.034*	-0.093	-0.011	-0.114	-0.000	-0.035	-0.064
	(0.065)	(0.034)	(0.070)	(0.112)	(0.018)	(0.013)	(0.027)	(0.018)	(0.075)	(0.143)	(0.096)	(0.045)	(0.034)	(0.139)
Employment status	0.004	0.014	0.003	0.038	-0.009	-0.087	-0.049	0.017	-0.391**	-0.033	0.161*	0.132*	0.023	0.022
	(0.054)	(0.034)	(0.038)	(0.053)	(0.006)	(0.064)	(0.048)	(0.032)	(0.159)	(0.075)	(0.092)	(0.080)	(0.060)	(0.066)
Financial decision making	-0.149**	0.007	0.003	0.058	0.074	0.007	0.048	0.014	-0.107*	-0.169	-0.062	-0.070	0.023	-0.070
	(0.069)	(0.044)	(0.057)	(0.073)	(0.049)	(0.042)	(0.055)	(0.053)	(0.055)	(0.105)	(0.079)	(0.073)	(0.043)	(0.107)
Household type	–	0.003	0.006	0.013	-0.067*	-0.020	-0.050	0.047	-0.013	0.032	0.043	0.044	–	0.022
		(0.017)	(0.038)	(0.057)	(0.035)	(0.015)	(0.047)	(0.034)	(0.022)	(0.064)	(0.052)	(0.041)		(0.054)
Financial buffer	0.009	0.008	0.029	0.012	0.010	-0.041	-0.009	0.034	0.013	-0.039	0.017	-0.008	0.004	0.000
	(0.036)	(0.013)	(0.029)	(0.035)	(0.020)	(0.029)	(0.020)	(0.023)	(0.025)	(0.035)	(0.035)	(0.023)	(0.016)	(0.035)
Risk attitude	0.009	0.009	0.050	0.040	-0.036	-0.087	-0.008	0.067**	0.196**	0.026	-0.056	0.034	-0.040	0.032
	(0.029)	(0.033)	(0.046)	(0.060)	(0.026)	(0.127)	(0.019)	(0.027)	(0.090)	(0.045)	(0.086)	(0.052)	(0.046)	(0.046)
Planning attitude	0.029	-0.017	-0.064*	0.007	-0.002	-0.026	-0.053	-0.047	0.387***	0.016	0.022	-0.120**	0.019	0.014
	(0.031)	(0.036)	(0.035)	(0.050)	(0.024)	(0.037)	(0.038)	(0.055)	(0.102)	(0.049)	(0.016)	(0.057)	(0.038)	(0.046)
Intercept	0.432***	0.033	0.521***	-0.838***	0.341***	0.451**	0.194	-0.024	0.136	0.767***	0.866***	0.281	0.210*	0.608**
	(0.152)	(0.108)	(0.148)	(0.169)	(0.105)	(0.185)	(0.134)	(0.133)	(0.259)	(0.246)	(0.230)	(0.200)	(0.122)	(0.243)

Notes: Estimated means, average gender gaps and Blinder-Oaxaca decompositions are based on the estimation of a negative binomial model of the number of "Don't Know/Refused" answers to financial knowledge questions, for each country separately. Complete parameters estimates are available from the authors. The individual contributions of each covariate (or set of covariates) to the explained and unexplained parts of the gender gap have been estimated by means of the linearization method proposed by Yun (2004) and using normalized regressions to identify the contribution of categorical predictors. Bootstrapped (500 replications) standard errors are reported in parentheses below the estimates.
The sets of dummies used in normalized regressions are defined as follows: Self-assessed financial knowledge = Higher than average, On average, Lower than average; Age = Age class 18-29, Age class 30-49, Age class 50-69, Age class 70 and over; Education = Tertiary education, Secondary education, Primary education; Employment status = Employee, Self-employed, Retired, Other employment condition; Financial decision making = Making financial decision alone, Making financial decision with others; Household type = Single-person household, Multiple-person household; Financial buffer = At least 3 months, Less than 3 months, More than 3 months; Risk attitude = Prepared to risk, Not prepared to risk; Planning attitude = Short-term attitude, Long-term attitude.

***, ** and * denote significance at the 1, 5 and 10% levels, respectively.

Table 4 – Decomposition of gender differences in financial knowledge overconfidence

	AT	BR	CA	HR	FI	HK	HU	IT	JO	NL	NO	RU	ZA	UK
a) Group means and difference:														
Women	0.360***	0.223***	0.201***	0.142***	0.399***	0.146***	0.080***	0.040***	0.149***	0.263***	0.304***	0.122***	0.192***	0.221***
	(0.025)	(0.027)	(0.031)	(0.027)	(0.028)	(0.026)	(0.019)	(0.008)	(0.019)	(0.037)	(0.027)	(0.019)	(0.014)	(0.042)
Men	0.370***	0.316***	0.190***	0.212***	0.381***	0.117***	0.117***	0.094***	0.233***	0.242***	0.395***	0.132***	0.281***	0.391***
	(0.032)	(0.032)	(0.045)	(0.034)	(0.044)	(0.041)	(0.026)	(0.015)	(0.026)	(0.060)	(0.049)	(0.022)	(0.023)	(0.049)
Difference	-0.010	-0.093**	0.011	-0.070*	0.018	0.029	-0.037	-0.054***	-0.084***	0.021	-0.091*	-0.010	-0.090***	-0.170***
	(0.040)	(0.041)	(0.055)	(0.040)	(0.052)	(0.049)	(0.033)	(0.017)	(0.033)	(0.070)	(0.051)	(0.028)	(0.026)	(0.066)
b) Decomposition:														
Explained	-0.032	-0.056**	-0.014	-0.021	0.016	-0.008	0.005	-0.002	-0.032*	-0.007	-0.004	0.000	-0.041***	-0.045**
	(0.024)	(0.024)	(0.014)	(0.015)	(0.014)	(0.016)	(0.012)	(0.005)	(0.019)	(0.026)	(0.012)	(0.010)	(0.009)	(0.019)
Unexplained	0.022	-0.037*	0.025	-0.049	0.002	0.037	-0.042	-0.051***	-0.052*	0.028	-0.087*	-0.009	-0.049**	-0.125**
	(0.018)	(0.021)	(0.054)	(0.041)	(0.051)	(0.047)	(0.030)	(0.016)	(0.030)	(0.071)	(0.052)	(0.027)	(0.024)	(0.063)
c) Detailed decomposition:														
Explained part														
Age	-0.006	-0.014**	-0.003	0.009	0.017	-0.008	0.001	-0.001	-0.011	-0.011	0.008	-0.000	-0.004	-0.000
	(0.005)	(0.007)	(0.005)	(0.009)	(0.014)	(0.008)	(0.005)	(0.001)	(0.009)	(0.008)	(0.008)	(0.005)	(0.003)	(0.005)
Education	-0.021**	-0.002	-0.007	-0.008	0.008	-0.007	0.010*	0.006**	0.014*	-0.003	-0.005	0.004	-0.005	0.006
	(0.010)	(0.005)	(0.006)	(0.005)	(0.008)	(0.012)	(0.006)	(0.003)	(0.008)	(0.004)	(0.004)	(0.004)	(0.005)	(0.009)
Employment status	-0.002	-0.026***	0.001	-0.015	-0.012	0.005	-0.003	-0.006*	-0.014	0.028*	-0.008	-0.010	-0.029***	-0.013**
	(0.003)	(0.011)	(0.006)	(0.010)	(0.012)	(0.007)	(0.005)	(0.003)	(0.021)	(0.017)	(0.007)	(0.007)	(0.006)	(0.006)
Financial decision making	0.000	-0.012*	-0.003	0.000	-0.001	0.003	0.003	0.005*	-0.058***	-0.006	0.003	0.004	-0.001	-0.004
	(0.001)	(0.007)	(0.004)	(0.001)	(0.005)	(0.006)	(0.005)	(0.003)	(0.016)	(0.005)	(0.004)	(0.004)	(0.001)	(0.013)
Household type	–	0.006	0.002	0.001	-0.004	-0.004	0.001	-0.004	0.008	-0.002	0.000	0.000	–	0.003
		(0.004)	(0.003)	(0.002)	(0.010)	(0.007)	(0.002)	(0.003)	(0.006)	(0.002)	(0.001)	(0.002)		(0.005)
Financial buffer	-0.001	-0.002	-0.000	0.003	0.000	0.003	0.003	0.001	0.059***	-0.003	0.000	0.000	-0.000	-0.002
	(0.004)	(0.003)	(0.002)	(0.004)	(0.001)	(0.004)	(0.003)	(0.001)	(0.013)	(0.003)	(0.001)	(0.001)	(0.001)	(0.004)
Risk attitude	-0.002	-0.008	-0.004	0.005	0.008	0.001	-0.006	-0.002	0.003	-0.007	-0.000	0.002	0.000	-0.011
	(0.002)	(0.009)	(0.004)	(0.007)	(0.007)	(0.002)	(0.005)	(0.001)	(0.004)	(0.005)	(0.002)	(0.003)	(0.001)	(0.009)
Unexplained part														
Age	-0.011	0.073***	0.001	0.013	0.037*	0.023*	0.027*	-0.002	0.112**	0.085*	0.017	0.004	0.012	-0.031*
	(0.012)	(0.028)	(0.024)	(0.015)	(0.022)	(0.013)	(0.016)	(0.006)	(0.048)	(0.051)	(0.028)	(0.034)	(0.017)	(0.018)
Education	0.037	0.092	-0.004	-0.041	0.039	-0.037	0.063*	0.014*	0.042	0.003	0.044	0.016	0.075*	-0.014
	(0.041)	(0.074)	(0.017)	(0.028)	(0.030)	(0.030)	(0.036)	(0.008)	(0.029)	(0.053)	(0.041)	(0.012)	(0.039)	(0.028)
Employment status	-0.007	-0.026**	0.040	-0.008	-0.021	-0.070*	0.044	0.005	-0.071	-0.030	0.040	0.046**	0.031	0.005
	(0.030)	(0.013)	(0.034)	(0.041)	(0.020)	(0.040)	(0.031)	(0.009)	(0.069)	(0.051)	(0.068)	(0.021)	(0.044)	(0.041)
Financial decision making	0.064*	-0.012	-0.000	-0.069	-0.070	0.005	-0.010	-0.038***	0.087***	-0.003	-0.059	-0.039	0.007	-0.038
	(0.037)	(0.034)	(0.040)	(0.044)	(0.060)	(0.028)	(0.031)	(0.014)	(0.033)	(0.054)	(0.054)	(0.027)	(0.018)	(0.061)
Household type	–	0.006	0.011	0.029	0.036	-0.003	0.001	0.022**	-0.005	0.008	0.054	-0.013	–	-0.016
		(0.012)	(0.023)	(0.034)	(0.043)	(0.010)	(0.020)	(0.009)	(0.015)	(0.038)	(0.036)	(0.015)		(0.034)
Financial buffer	0.007	0.004	-0.024	-0.001	0.033*	-0.017	0.014	0.001	0.016	-0.001	-0.017	-0.006	-0.007	-0.027
	(0.017)	(0.011)	(0.022)	(0.019)	(0.019)	(0.019)	(0.014)	(0.004)	(0.011)	(0.017)	(0.020)	(0.008)	(0.007)	(0.019)
Risk attitude	-0.014	0.020	0.022	-0.013	-0.041	-0.042	0.005	-0.005	0.123***	-0.021	-0.050	-0.004	0.003	-0.021
	(0.016)	(0.024)	(0.025)	(0.027)	(0.033)	(0.043)	(0.011)	(0.007)	(0.046)	(0.017)	(0.043)	(0.015)	(0.018)	(0.024)
Intercept	-0.076	-0.195**	-0.021	0.032	-0.010	0.178**	-0.187***	-0.047**	-0.357***	-0.013	-0.117	-0.013	-0.169**	0.018
	(0.076)	(0.093)	(0.065)	(0.078)	(0.082)	(0.084)	(0.064)	(0.022)	(0.116)	(0.102)	(0.113)	(0.058)	(0.073)	(0.080)

Notes: Estimated means, average gender gaps and Blinder-Oaxaca decompositions are based on the estimation of a probit model with endogenous sample selection of the probability of being above the median of the self-assessed financial knowledge, conditional on being below the median of the objective financial knowledge score, for each country separately. We use the regressor "Short-term attitude" as identification variable. Complete parameters estimates are available from the authors. The individual contributions of each covariate (or set of covariates) to the explained and unexplained parts of the gender gap have been estimated by means of the linearization method proposed by Yun (2004) and using normalized regressions to identify the contribution of categorical predictors. Bootstrapped (500 replications) standard errors are reported in parentheses below the estimates.
The sets of dummies used in normalized regressions are defined as follows: Age = Age class 18-29, Age class 30-49, Age class 50-69, Age class 70 and over; Education = Tertiary education, Secondary education, Primary education; Employment status = Employee, Self-employed, Retired, Other employment condition; Financial decision making = Making financial decision alone, Making financial decision with others; Household type = Single-person household, Multiple-person household; Financial buffer = At least 3 months, Less than 3 months, More than 3 months; Risk attitude = Prepared to risk, Not prepared to risk.
***, ** and * denote significance at the 1, 5 and 10% levels, respectively.

Appendix

Table A1 – Variable definitions

Variable	Definition
Dependent variables	
Financial knowledge score	Number of correct answers to the seven financial knowledge questions (objective financial knowledge score)
"Don't Know/Refused" answers	Number of "Don't Know/Refused" answers to the seven financial knowledge questions
Self-assessed financial knowledge	Self-rated financial knowledge, measured on an ordinal scale from 1 (very low) to 5 (very high)
Low financial knowledge	Equals 1 if the respondent has a financial knowledge score below the national median; 0 otherwise
Overconfident	Conditional on *Low financial knowledge* being equal to 1, equals 1 if the respondent has a self-assessed financial knowledge above the national median; 0 otherwise
Explanatory variables	
Female	Equals 1 if the respondent is a woman; 0 otherwise
Age class 18-29	Equals 1 if the respondent is between 18 and 29 years old; 0 otherwise
Age class 30-49	Equals 1 if the respondent is between 30 and 49 years old; 0 otherwise
Age class 50-69	Equals 1 if the respondent is between 50 and 69 years old; 0 otherwise
Tertiary education	Equals 1 if the respondent has a tertiary education; 0 otherwise
Secondary education	Equals 1 if the respondent has a secondary/vocational education; 0 otherwise
Employee	Equals 1 if the respondent is an employee; 0 otherwise
Self-employed	Equals 1 if the respondent is self-employed; 0 otherwise
Retired	Equals 1 if the respondent is retired; 0 otherwise
Single person household	Equals 1 if the respondent lives in a single person household; 0 otherwise
Financial buffer at least 3 months	Equals 1 if the respondent's household is able to cover living expenses for at least three months (but not six months) in the case losing the main source of income; 0 otherwise
Making financial decisions alone	Equals 1 if the respondent is the only responsible for making day-to-day decisions about money in the household; 0 otherwise
Prepared to risk	Equals 1 if the respondent agrees or totally agrees to the statement "I am prepared to risk some of my own money when saving or making an investment"; 0 otherwise
Short-term attitude	Equals 1 if the respondent agrees or totally agrees to the statement "I tend to live for today and let tomorrow take care of itself"; 0 otherwise