The Gender Gap in Financial Literacy: Does Ideology Matter?

Sarah Reiter

Munich Graduate School of Economics

joint work with

Elisabeth Beckmann
(Austrian Central Bank)

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Cherry Blossom Financial Education Institute

Motivation

- Women are on average less financially literate than men (Lusardi and Mitchell, 2014, Klapper and Lusardi, 2020, . . .)

- But: Gender gap in financial literacy is consistently smaller in countries which previously had communist or socialist regimes than in countries which did not (Cupák et al., 2018)

Motivation

- Women are on average less financially literate than men (Lusardi and Mitchell, 2014, Klapper and Lusardi, 2020, . . .)

- But: Gender gap in financial literacy is consistently smaller in countries which previously had communist or socialist regimes than in countries which did not (Cupák et al., 2018)

- Bucher-Koenen, Lusardi, Alessie, Van Rooij, 2017:

  "*Findings* [. . .] *could be interpreted as prima facie evidence that as financial markets develop, women are left behind in terms of financial knowledge. If this is the case, the* financial market development *of recent years may lead to the* emergence of a gender gap *in these* [*former socialist*] *societies as well*."

This Paper

Research Question

Does gender equality in financial literacy decrease as the communist legacy recedes?

Empirical Approach

- We conduct a cohort-based analysis
- Comparing financial literacy between two cohorts:
    - Individuals who lived under communism ("communist" cohort)
    - Individuals who did not ("post-communist" cohort)

Study Setting

- We focus on ten (formerly communist) Eastern European countries
- Using consistently collected data (comprising more than 60,000 observations) from the *OeNB Euro Survey*

Related Literature and Contribution

Which factors drive the gender gap in financial literacy?

- Financial decision-making within the household
  (Fonseca et al., 2012)

- Self-confidence (Bucher-Koenen et al., 2017, 2021)

- Stereotypes (Driva et al., 2016; Bottazzi and Lusardi, 2021)

- Cultural aspects (Rink et al., 2021)

What do we add?

- We study the role of communist ideology

Data: OeNB Euro Survey

- Cross-sectional survey of private individuals conducted by the Austrian Central Bank

- Covers 10 (formerly communist) countries in Eastern Europe

- 1,000 randomly selected individuals interviewed in each country and survey wave

- Data drawn from 7 survey waves between 2012 and 2019 → 67,016 observations

- Financial-literacy questions are asked in a harmonized way across countries and survey waves

Financial-Literacy Questions in the OeNB Euro Survey

Concept	Survey question
Interest rate	Suppose you had 100 [local currency] in a savings account and the interest rate was 2% per year. Disregarding any bank fees, how much do you think you would have in the account after 5 years if you left the money to grow: more than 102, exactly 102, less than 102 [local currency]?
	More than 102* / Exactly 102 / Less than 102 [local currency] / Do not know / No answer
Inflation	Suppose that the interest rate on your savings account was 4% per year and inflation was 5% per year. Again disregarding any bank fees – after 1 year, would you be able to buy more than, exactly the same as, or less than today with the money in this account?
	More / Exactly the same / Less* / Do not know / No answer
Risk diversification	When an investor spreads his money among different assets, does the risk of losing money
	Increase / Decrease* / Stay the same / Do not know / No answer
Exchange rates	Suppose that you have taken a loan in Euro. Then the exchange rate of the local currency depreciates against the Euro. How does this change the amount of local currency you need to make your installments?
	Increases* / Stays exactly the same / Decreases / Do not know / No answer

$\rightarrow$ Covering each concept, we compute a financial-literacy score, ranging from 0 to 4.

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   - expected if communism had achieved its goal of gender equality, e.g., with respect to educational attainment or labor-force participation.
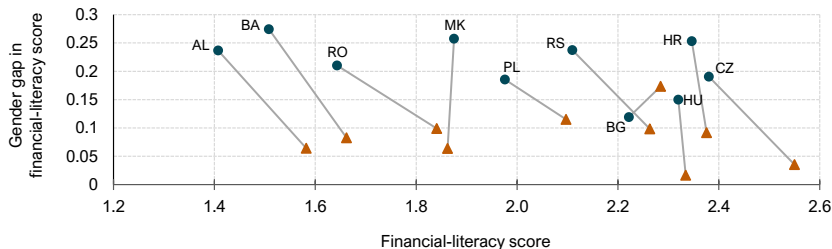
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3. For the post-communist cohort, the role of socio-economic characteristics in explaining the gender gap increases.

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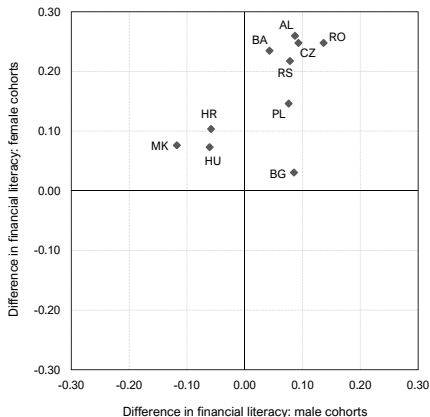
H1: Descriptive Results I

Is the gender gap in financial literacy smaller in the communist cohort than in the post-communist cohort?

Note: Dots indicate communist cohorts and
Triangles indicate post-communist cohorts.

H1: Descriptive Results II

Why is the gender gap not smaller for the communist cohort than for the post-communist cohort?

Note: The figure shows the differences in financial literacy between women (vertical axis) and men (horizontal axis). The difference is obtained by subtracting the average financial literacy of the communist cohort from the average financial literacy of the post-communist cohort.

H1: Regression Results

	(1) Financial-literacy score (0–4)
Female	-0.086***
	(0.013)
Post-communist	-0.030
	(0.022)
Female x Post-communist	0.013
	(0.018)
Control variables	✓
Time FE	✓
Country FE	✓
N	67 016
Mean DepVar	2.05
R^2	0.16

Note: Control variables: age, age squared, marital status, education, income, main income earner, financial decision-maker, employment status, risk attitude, and the share of questions in questionnaire answered with "don't know". Standard errors in parentheses are adjusted for clustering at the *primary-sampling-unit* and *time* level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

H1: Regression Results

	(1) Financial-literacy score (0–4)	(2) Number of questions on financial-literacy answered with "don't know" (0–4)
Female	-0.086***	0.103***
	(0.013)	(0.012)
Post-communist	-0.030	0.069***
	(0.022)	(0.018)
Female × Post-communist	0.013	-0.054***
	(0.018)	(0.016)
Control variables	✓	✓
Time FE	✓	✓
Country FE	✓	✓
N	67 016	67 016
Mean DepVar	2.05	0.65
R^2	0.16	0.23

Note: Control variables: age, age squared, marital status, education, income, main income earner, financial decision-maker, employment status, risk attitude, and the share of questions in questionnaire answered with "don't know". Standard errors in parentheses are adjusted for clustering at the *primary-sampling-unit* and *time* level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

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H2/3: Blinder-Oaxaca Decomposition I

We decompose the gender gap in financial literacy into parts

1. Explained by differences in observable individual characteristics across gender,

2. Unexplained by individual characteristics.

$$R = (\bar{X}_m - \bar{X}_f)'\beta^* + \{\bar{X}_m'(\beta_m - \beta^*) + \bar{X}_f'(\beta^* - \beta_f)\} \tag{1}$$

Difference in FinLit btw **m**ales and **f**emales   Explained   Unexplained

where **X** is a **vector of socioeconomic individual characteristics**, including . . .

. . . *age, marital status, education, income, main income earner, financial decision-maker, employment status, risk attitude, and self-confidence.*

H2/3: Blinder-Oaxaca Decomposition II

	AL	BA	BG	HR	CZ	HU	MK	PL	RO	RS
Panel (b): Communist cohorts										
Difference	0.146***	0.252***	0.108**	0.188***	0.189***	0.101*	0.213***	0.208***	0.186***	0.203***
	(0.042)	(0.041)	(0.040)	(0.039)	(0.043)	(0.040)	(0.037)	(0.047)	(0.036)	(0.042)
Explained	0.118***	0.158***	0.101**	0.094***	0.211***	0.011	0.117***	0.152***	0.120***	0.048
	(0.025)	(0.024)	(0.032)	(0.023)	(0.038)	(0.024)	(0.024)	(0.032)	(0.022)	(0.029)
Unexplained	0.028	0.094*	0.007	0.094*	-0.022	0.090*	0.096*	0.056	0.066	0.155***
	(0.046)	(0.044)	(0.046)	(0.042)	(0.053)	(0.044)	(0.040)	(0.051)	(0.038)	(0.046)
N	2937	3559	3920	3675	3976	4119	3892	3517	4133	3464

Note: Results from a two-fold Blinder-Oaxaca decomposition. Dependent variable: financial-literacy score (0/4). Due to the low number of observations, we exclude students from the subsample of communist cohorts, and retirees from the subsample of post-communist cohorts. Robust standard errors in parentheses.

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N	2937	3559	3920	3675	3976	4119	3892	3517	4133	3464
Panel (c): Post-communist cohorts										
Difference	0.032	0.085	0.191***	0.092*	0.034	0.032	0.044	0.115*	0.104*	0.089*
	(0.038)	(0.045)	(0.048)	(0.043)	(0.048)	(0.048)	(0.043)	(0.048)	(0.044)	(0.043)
Explained	0.013	-0.026	0.058	-0.028	0.054	-0.049	0.012	0.021	0.009	0.016
	(0.017)	(0.019)	(0.033)	(0.020)	(0.037)	(0.028)	(0.023)	(0.029)	(0.025)	(0.022)
Unexplained	0.019	0.112*	0.133*	0.120**	-0.020	0.081	0.031	0.094	0.095*	0.073
	(0.040)	(0.046)	(0.052)	(0.044)	(0.057)	(0.052)	(0.046)	(0.049)	(0.048)	(0.046)
N	3920	2909	2692	3075	3062	2700	2604	3085	2665	3024

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Conclusion

Does the gender gap in financial literacy increase as the communist legacy recedes?

$\rightarrow$ Our analysis shows that after the regime change from planned to market economy, younger women do not fall behind their male peers, but rather catch up.

$\rightarrow$ Younger women might take advantage of an environment where the general mindset is supportive of equality (see Lippmann et al., 2020).

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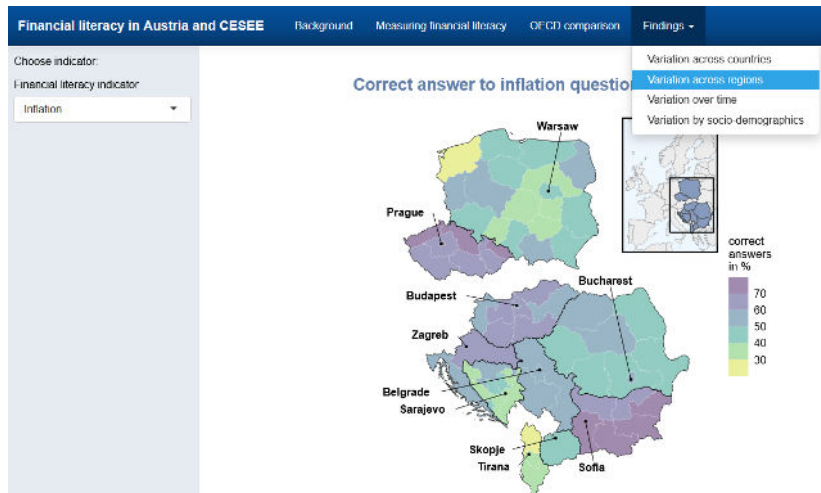Munich Graduate School of Economics

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— Further Information on Financial Literacy
in Central, Eastern, and Southeastern Europe

Interactive Dashboard on Financial Literacy in Central, Eastern, and Southeastern Europe (CESEE)

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