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Financial Practices of Adults. What are the Educational Needs?



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Agenda



- 1 Introduction**
Financial Literacy
- 2 Prior research**
Focus on gender and migration
- 3 Methods**
PIAAC Cycle 2, Variables
- 4 Findings**
- 5 Discussion**
Which role do gender and migration play?



1

Financial Literacy

„In Huston's survey of 71 studies using 52 different datasets he finds that 72% of them did not even include an explicit definition of financial literacy.“ (Beckker, 2020)

“Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life.” (OECD, 2014, p. 33)



Financial literacy in the discussion about basic skills

- PIAAC (OECD, 2024)
 - Reading Skills, Numeracy Skills,
 - ICT-Skills (PS-TRE, Adaptive Problem Solving)
 - Skill use: **financial** practices (among others)
- LEO 2018 (Germany) (Buddeberg et al., 2020)
 - Reading and writing Skills (assessed)
 - **Financial**, digital, health and political practices and basic skills (self-reported)
- National Decade for Literacy and Basic Skills (Germany)
- European Commission (2018) LifeComp – Media, **Financial**, Environmental, and Health Literacies (Sala et al., 2020) (<https://publications.jrc.ec.europa.eu/repository/handle/JRC120911>)

What does financial literacy imply?

- “Knowledge and skills needed to make important financial decisions” (European Commission: https://finance.ec.europa.eu/consumer-finance-and-payments/financial-literacy_en)
- Understanding and **use** (Huston, 2010)
- Three components (OECD/INFE, 2020)
 - financial skills,
 - financial attitudes,
 - **financial behavior**



Skill Use
→ PIAAC variables

Strategy for Financial Literacy in Germany



www.bundesfinanzministerium.de

- Launched 2023 by former government
- Critically commented for being too much focused on financial education and individual responsibility but ignoring wider economic conditions. (Höhne 2024)

Starting Point: Vulnerable Subgroups

- The strategy for financial education in Germany strongly emphasizes individual responsibility.
- Stereotype: People with low incomes, such as unemployed adults, do not take enough care of their finances and are therefore responsible for their own situation (blaming the victim).
- PIAAC Cycle 1 showed for Germany that unemployed make significantly above-average calculations of prices and budgets in everyday life.
- **Interpretation:** Tight financial situations are reflected in daily calculations of available money.



Grotlueschen, A., Buddeberg, K., Redmer, A., Ansen, H., & Dannath, J. (2019). Vulnerable Subgroups and Numeracy Practices: How Poverty, Debt, and Unemployment Relate to Everyday Numeracy Practices. *Adult Education Quarterly*, 69(4), 251–270.

2

Prior research: Focus: Gender and Migration



Economic Conditions in Germany 2023 (Deutsche Bundesbank 2025)

- Inflation: The poorest quarter of the German population has the greatest inflation risks.
- Saving: 83% of households state that they save (-2% compared to 2021) and 13% state that they cannot save (+2% compared to 2021).
- Large differences in the net assets of different groups
 - East and West Germany
 - Couple households (with or without children) are significantly wealthier than single parents
 - Age groups

Material deprivation

- Proportion of people with **significant material deprivation**
 - Average 2.6%
 - Women 2.8%
 - Single parents 6.4%
 - Single household 6.6%
 - Below upper secondary 8.6%
 - Unemployed 23.6% (Bundesministerium für Arbeit und Soziales, 2021, p. 497)
- 2018: 17.9% cannot afford a week of holiday away from home every year (Buddeberg, 2020, p. 233)

General Remarks on Gender and Financial literacy

- Lower financial literacy of women reported for most countries, explained by...
 - Lower participation rates in adult education (Haupt and Yollu-Tok, 2017, p. 119)
 - Cultural and political factors (Sholevar and Harris 2020, p. 89-90; Stadelmann-Steffen 2007, p. 608-609)
 - Social norms (Cupák et al. 2018, p. 105, Bucher-Koenen and Lusardi, 2011, Klapper and Panos, 2011)
 - Lower female entrepreneurship levels (OECD 2013, p. 55)
 - **Less access for employment for women** (Sondergeld et al. 2024)
- At risk of old-age poverty due to higher life expectancy and lower employment participation (Sholevar and Harris 2020, p. 90)
- Gender gap appears to be independent of the GDP of the country (Hasler and Lusardi 2017, p. 16)
- No gender gaps in matriarchal states in India (unlike patriarchal states) (Filipiak and Walle 2015, p.3)

General Remarks on Migration and Financial literacy

- Migrants as vulnerable group due to **language barriers** and a lack of familiarity with the financial system (Atkinson and Messy 2015)
- Programs for financial education are usually not specified for migrants (Atkinson and Messy 2015, p. 14)
- Early intervention is important after immigration (International Rescue Committee 2017, p. 31)
- It is important to be aware of the diversity among migrants and not to categorize them solely based on their countries of origin (Öztürk 2021, p. 34)

Research Questions



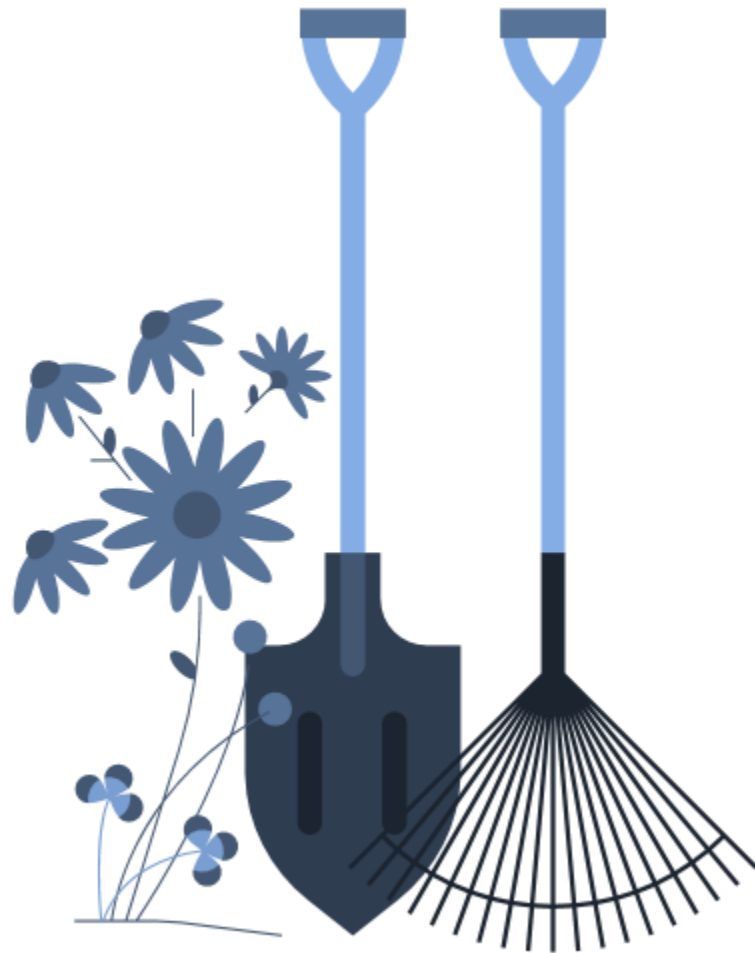
PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. Does this hold true for Germany in the **second cycle of PIAAC**?
2. Does this hold true for other **countries**?
3. Do **gender** and **migration** show significant correlations with frequent calculations?

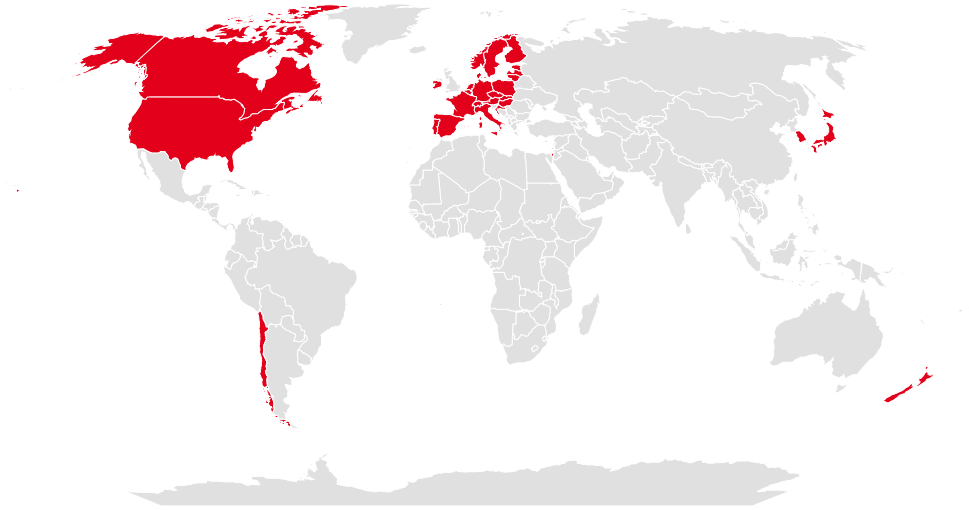
3

Methods:
How does PIAAC
inform us about
financial literacy?



Survey of Adult Skills (PIAAC)

- Programme for the Assessment of Adult Competencies / Survey of Adults Skills by the OECD (OECD 2024)
- “PISA for Adults”
- Assessment of literacy (reading skills), numeracy, adaptive problem solving
- Cycle 1: 2013
- Cycle 2: 2023 in 31 countries (see map)



Unterstützt von Bing

How can the Survey of Adult Skills (PIAAC) inform us about financial literacy?

- PIAAC has no assessment (testing) of financial literacy but reports about numeracy and **financial practices**
- **Why practices?**
 - Financial behavior as one component of financial literacy (Beckker, 2020)
 - Literacy as Social Practice, New Literacy Studies (Barton & Hamilton, 2000; Yasukawa et al., 2018)
 - Practice Engagement Theory: Practices do not equal skills but are closely related and reinforce each other (Reder, 1994, 2017)
 - “Use it or lose it” (Bynner & Parsons, 1998)



Financial Practices in the PIAAC dataset

Practices at work	Practices at home
F2_Q01f - Read financial statements	G2_Q01f – Read financial statements
F2_Q03a - Undertake calculations	G2_Q03a – Undertake calculations
	G2_Q03b – Use information to make financial decisions
	G2_Q06d – Use digital device for online banking or e-commerce

- used in both PIAAC cycles
- applies for unemployed

Dependent Variables

In everyday life, how often do you usually ...

- G2_Q03a: **undertake calculations, such as calculating prices, costs or quantities?**
- Recoded to:
 - frequent use (every day or at least once a week)
 - low use (less than once a week or never)

Data: Public Use Files of participating countries in PIAAC cycle 2
<https://www.oecd.org/en/about/programmes/piaac/piaac-data.html>
Calculations carried out with R/R-Studio, Package Rrepest

Independent Variables

- Gender: *gender_r*
- Age: *ageg10lfs*
- born in country: *a2_q03a* and native language
- employment status: *c2_d05*
- formal education: *edu_bqdi_c*
- Parental education: *paredc2*
- Household size: *j2_q01_c*
- Participation in adult learning: *b2_q09*
- Use of smartphone in everyday life: *g2_q05a*

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Findings



Research Question 1

PIAAC Cycle 1 showed:

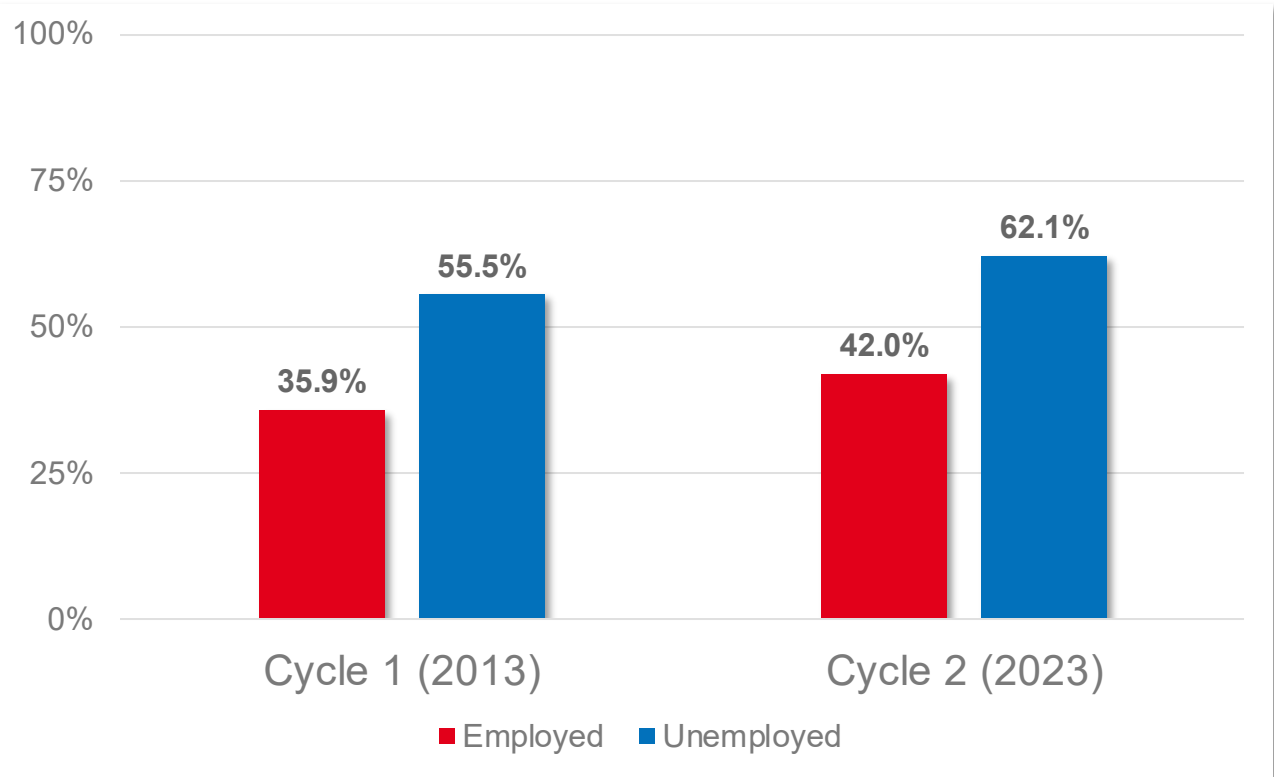
Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

- 1. Does this hold true for Germany in the second cycle of PIAAC?**
2. Does this hold true for other countries?
3. Do gender and migration show significant correlations with frequent calculations?

Germany

PIAAC Cycle 1 and 2:
Proportions of adults
who undertake
calculations, such as
calculating prices,
costs or quantities
**at least once a week
or every day**

by employment status



Research Question 1

PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. **Does this hold true for Germany in the second cycle of PIAAC?** ✓
2. Does this hold true for other countries?
3. Do gender and migration show significant correlations with frequent calculations?

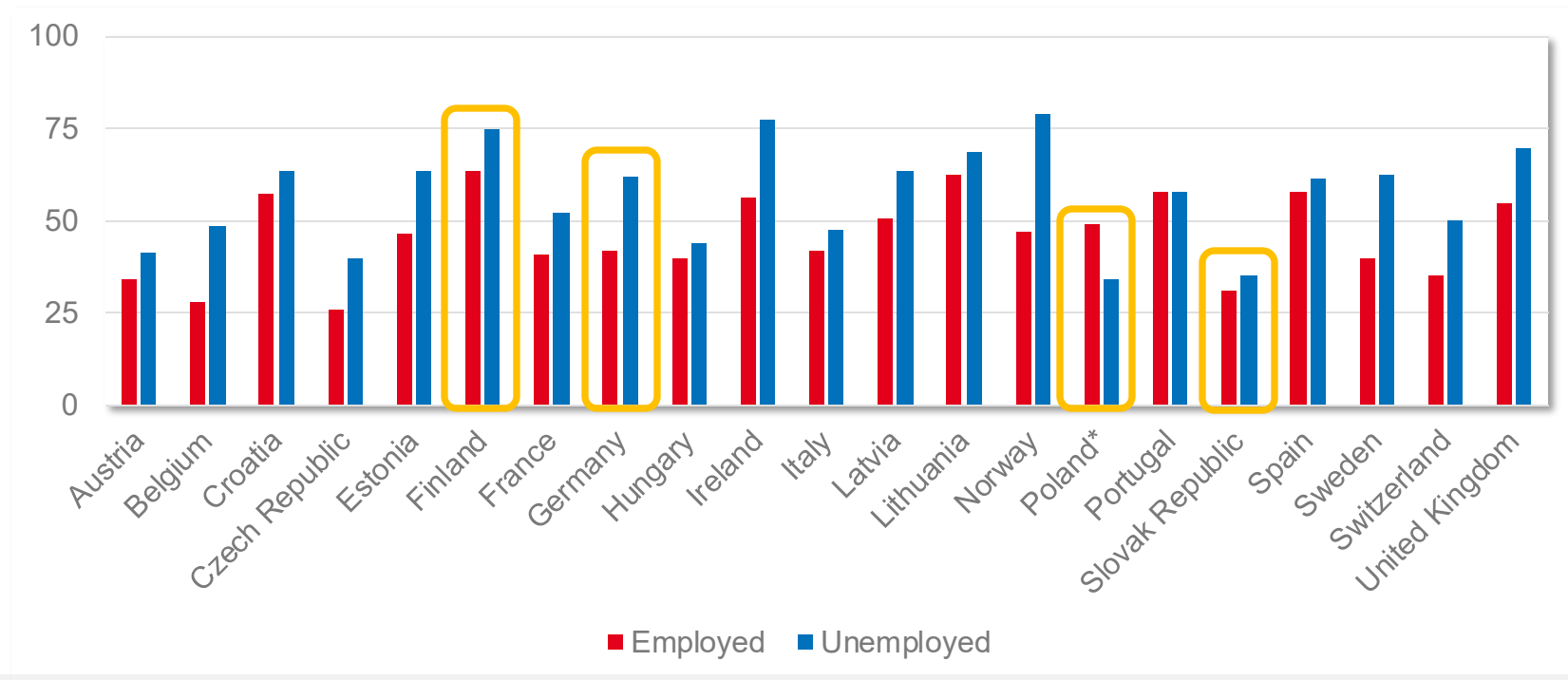
Research Question 2

PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. Does this hold true for Germany in the second cycle of PIAAC?
- 2. Does this hold true for other countries?**
3. Do gender and migration show significant correlations with frequent calculations?

Proportion of adults calculating costs and budgets at least once a week or every day (by employment status)



Research Question 2

PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. Does this hold true for Germany in the second cycle of PIAAC? ✓
- 2. Does this hold true for other countries? ✓**
3. Do gender and migration show significant correlations with frequent calculations?

Research Question 3

PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. Does this hold true for Germany in the second cycle of PIAAC?
2. Does this hold true for other countries?
- 3. Do gender and migration show significant correlations with frequent calculations?**

Undertake calculations at least once a week (Odds Ratios)



Research Question 3

PIAAC Cycle 1 showed:

Adult in tense financial situations calculate very often in their daily lives (e.g. costs, prices or budgets).

1. Does this hold true for Germany in the second cycle of PIAAC? ✓
2. Does this hold true for other countries? ✓
3. **Do gender and migration show significant correlations with frequent calculations?** ✗

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Discussion



Discussion #1

- Research Question 1: Growing proportion of frequent calculations in Germany
 - Suggested explanations
 - Ubiquitous and easy access to account balance via smartphone
 - Smartphone users 2013: 41% (14 and older)
 - Smartphone users 2023: 82% (entire population) (Statista 2024)
 - Proportionately more adults than in 2013 are in tight financial situations, forcing them to make daily calculations.



Discussion #2

- Research Question 2: Frequent calculations among unemployed in virtually all countries
 - Results regarding Germany can be generalized to other countries.
 - Earlier findings based on PIAAC cycle 1 are not specific to Germany.
 - “Generating very low income is not necessarily a result of too little numeracy or financial literacy. It could also be seen as the result of (very) low income, personal crises and personal upheavals, or the complexity of liberalized consumer markets” (Grotlüschen et al, 2019, p. 263-264).



Discussion #3

- Research Question 3: Gender and migration ***do not play*** a significant role for the frequency of calculating in daily life
 - It is not gender and migration as such, but the social and economic situation that leads people to regularly check their finances.
 - But low employment of women and migrants and low wages affect women and migrants in particular (gender pay gap, part-time work)

What do we learn from these findings?

- Adults in difficult economic situations are not responsible for their circumstances simply because they fail to keep track of their finances.
- Programmes and training measures that are limited to teaching skills only (as is implied by the financial education strategy in Germany, for example) do not take into account factors that lead to unemployment and the risk of poverty.
- Programmes and training measures should therefore offer not only **financial education**, but **economic education**.
- When teaching financial literacy, you can build on the fact that many potential participants are well practised in making everyday rough calculations.

Thank you very much for your attention!

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Research Project:
Everyday financial
practices of Adults



<https://uhh.de/ew-finbi>

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