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Financial Practices of Vulnerable Subgroups

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with the co-operation of Johanna Husting

Mannheim, 30.09.2025



Agenda

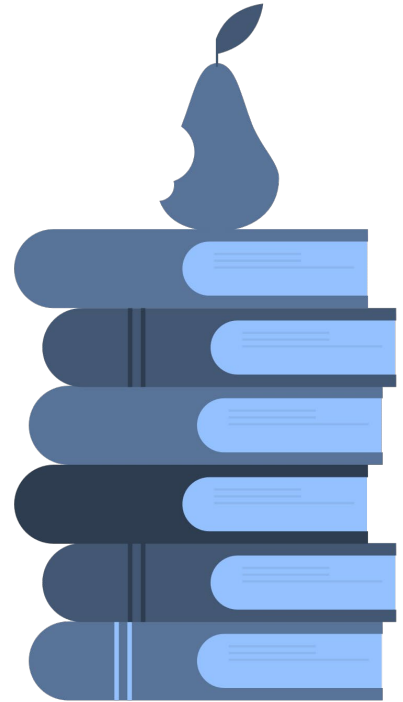


- 1** Financial Literacy and Financial Practices
- 2** Research Questions
- 3** Methods
- 4** Findings
- 5** Discussion



1

Financial Literacy and Financial Practices



What does financial literacy imply?

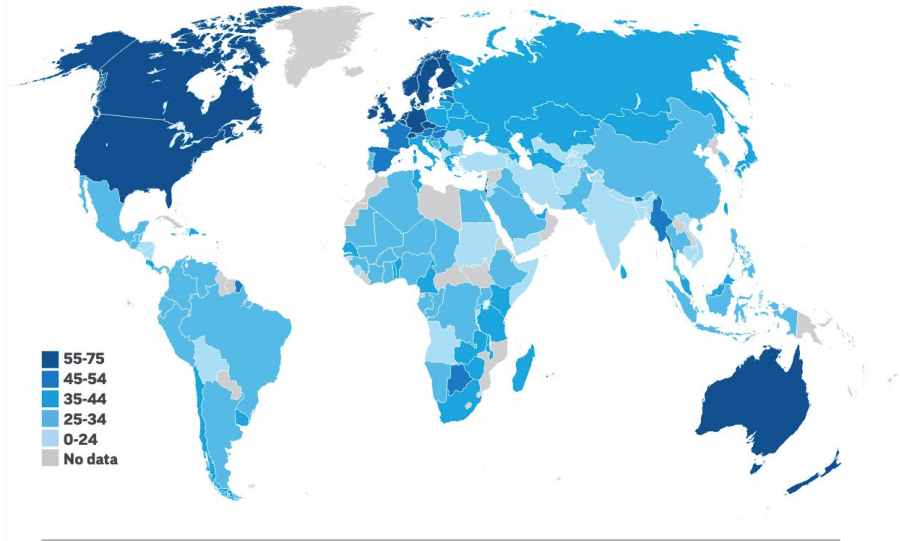
- European Commission: “Knowledge and skills needed to make important financial decisions” (https://finance.ec.europa.eu/consumer-finance-and-payments/financial-literacy_en)
- Understanding and **use** (Huston, 2010)
- Three components (OECD/INFE, 2020)
 - financial skills
 - financial attitudes
 - **financial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



PIAAC
Skill Use Variables

General Findings on Financial Literacy

MAP 1: GLOBAL VARIATIONS IN FINANCIAL LITERACY
(% OF ADULTS WHO ARE FINANCIALLY LITERATE)



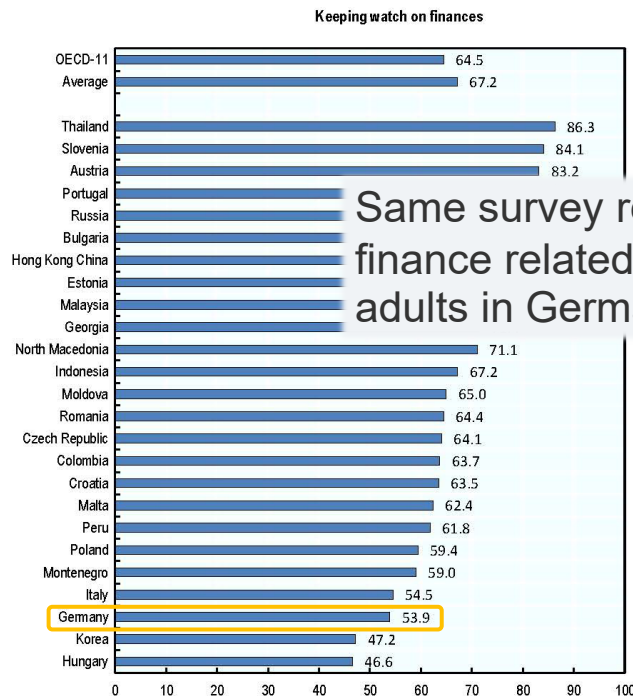
Source: S&P Global FinLit Survey.

High proportion of financially literate adults in Germany...

Klapper, L., Lusardi, A., & van Oudheusden, P. (2015). *Financial Literacy around the World* (Standard & Poor's Ratings Services Global Financial Literacy Survey), p. 7
<https://gflec.org/initiatives/sp-global-finlit-survey/>

Figure 13. Keeping watch over finances

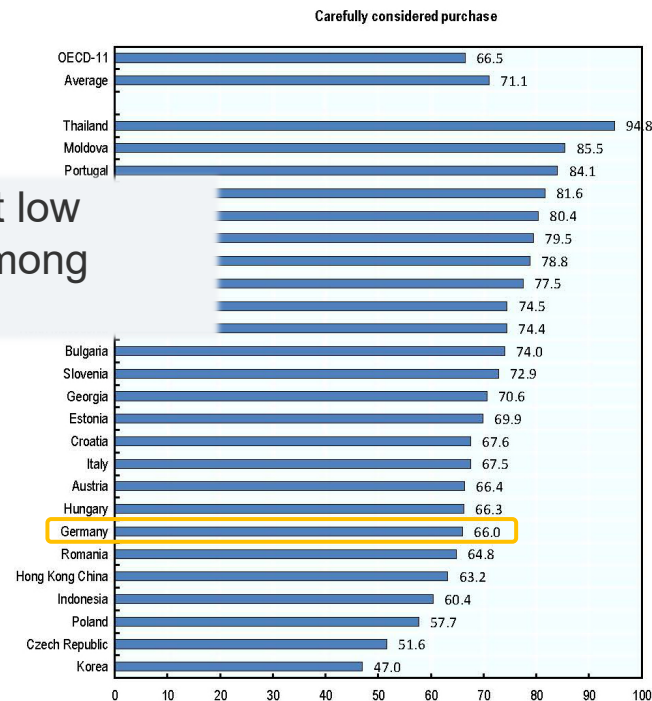
Percentage of respondents who suggested they keep a keen watch over their finances.



Same survey reports about low finance related activities among adults in Germany.

Figure 15. Carefully considering expenditure

Percentage of adults who responded they carefully consider every purchase.



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

Diagram illustrating the relationship between financial practices at work and at home, categorized by frequency of practice.

Practices at work (Left Column):

- F2_Q01f – Read financial statements
- F2_Q03a – Undertake calculations

Practices at home (Right Column):

- G2_Q01f – Read financial statements
- G2_Q03a – Undertake calculations
- G2_Q03b – Use information to make financial decisions
- G2_Q06d – Use digital device for online banking

Frequency of Practice (Bottom):

- “everyday practice” (Blue box, associated with F2_Q03a and G2_Q03a)
- “long term practice” (Red box, associated with G2_Q03b and G2_Q06d)

Arrows indicate the flow of practice from work to home and from everyday to long term practice.

Relevant population categories for analysis

- Unemployment / low income (Grotlüschen et al. 2019)
- Gender
 - International surveys report lower financial literacy among women than men in many countries (OECD / INFE 2020, p. 57)
 - Gender specific money management; small money / big money (Lave 1988, S. 134–138)
- Age
 - Relevance of transitions for educational demand (Hof & Bernhard, 2022)
 - E.g., adolescence to adulthood; working life to retirement



Grotlüschen, 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



Research Questions



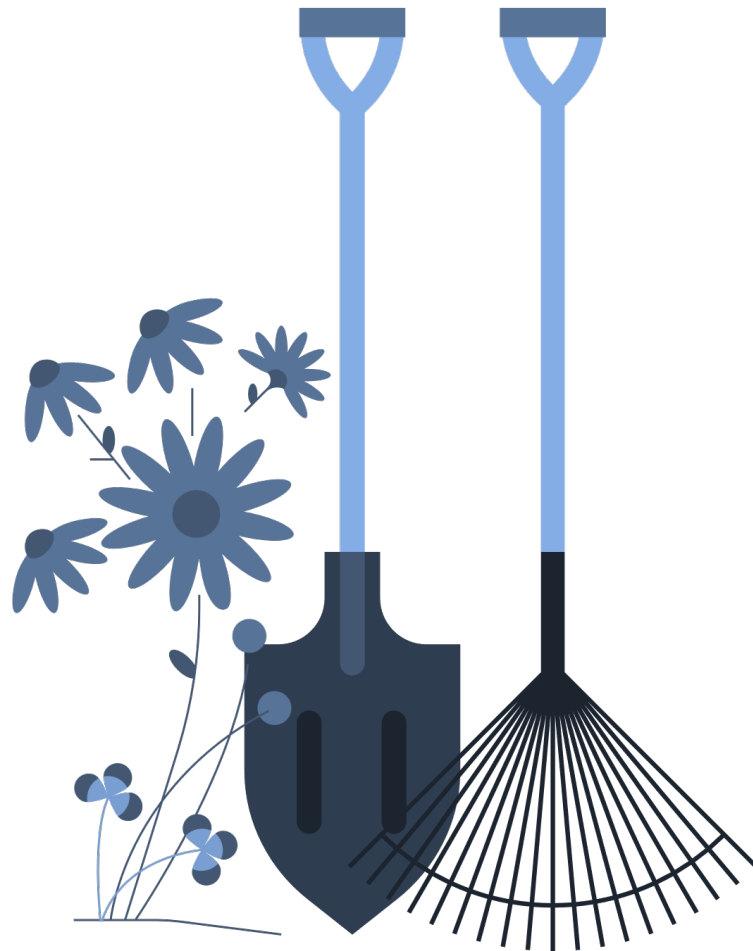
Research Questions

- 1) Do the results based on PIAAC Cycle 1 hold true for Cycle 2?
- 2) Does the frequency of practices differ depending on whether they are more everyday, or more long-term oriented?
(regarding employment, gender and age)



3

Methods



Dependent Variables

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

- G2_Q03a: **undertake calculations, such as calculating prices, costs or quantities?**
- G2_Q03a: **use information to make financial decisions?**

- Response categories
 - Every day, at least once a week, at least once a month, less than once a month, never
- 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 Germany PIAAC cycle 1 and 2

<https://www.oecd.org/en/about/programmes/piaac/piaac-data.html>

Calculations carried out with R/R-Studio, Package Rrepest

4

Findings



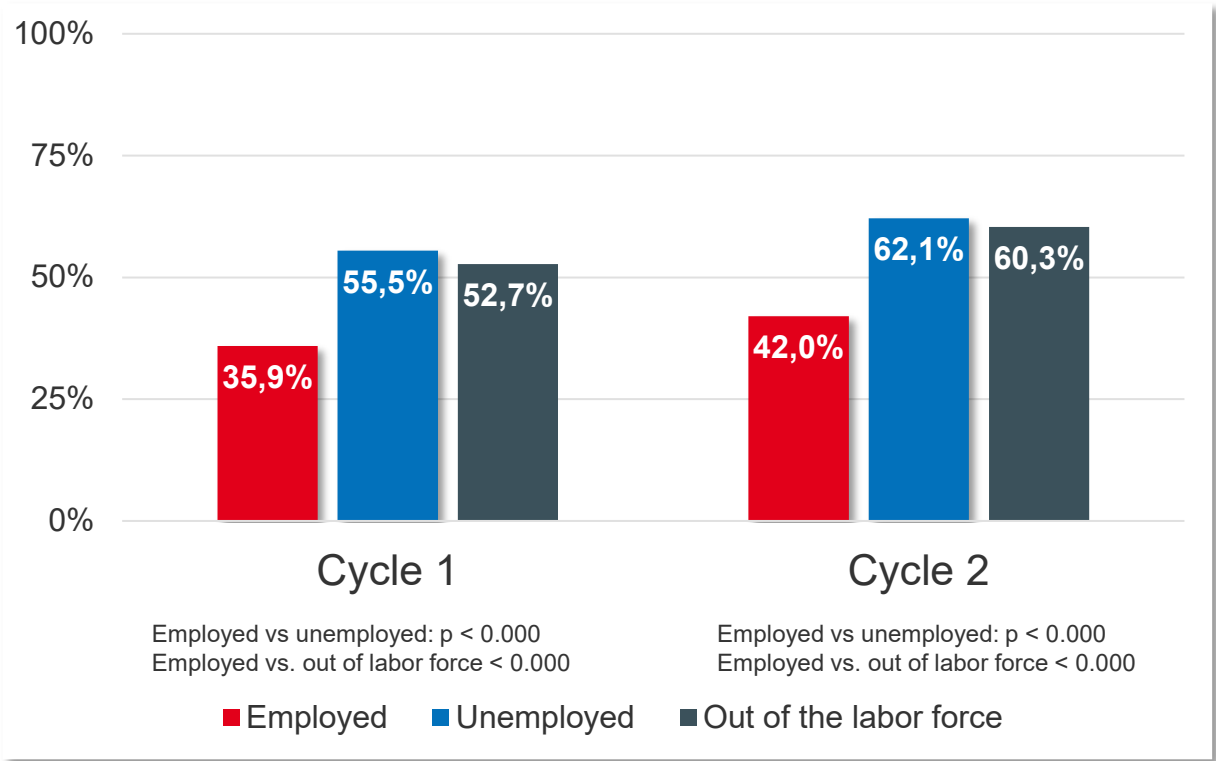
Research Questions

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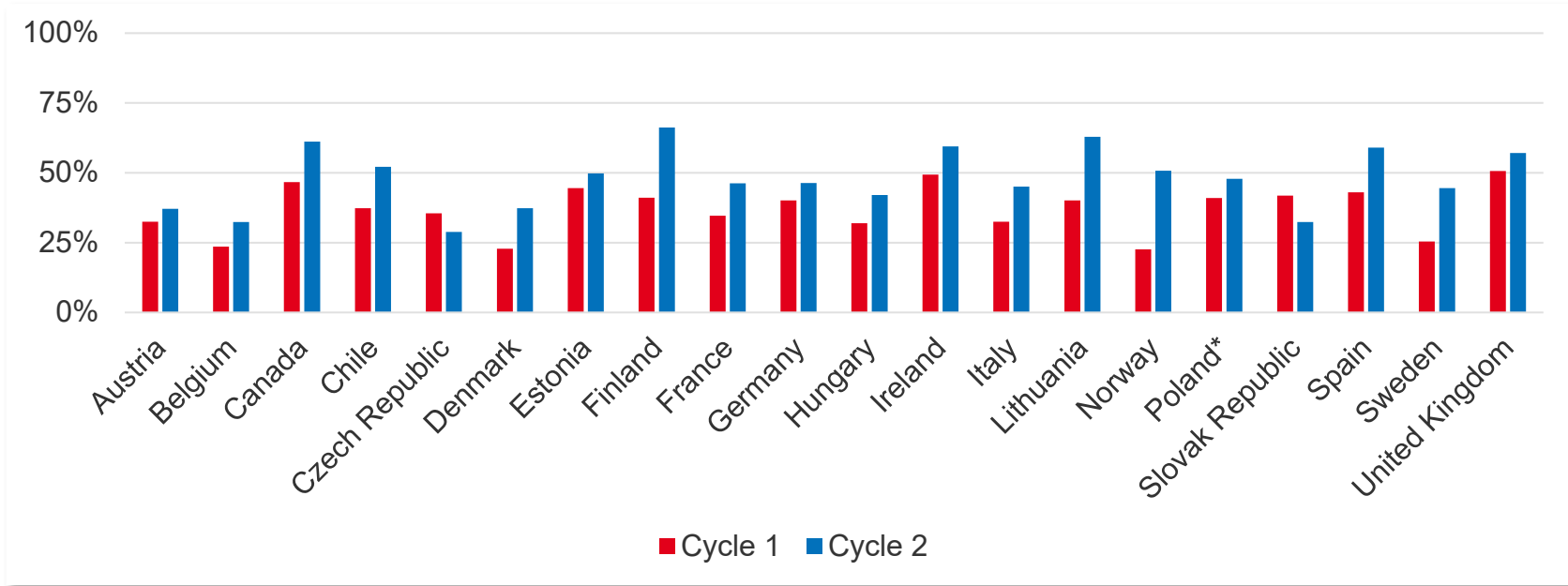


Germany

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**



Proportions of adults who frequently undertake calculations



Own calculations PIAAC Cycle 1 and 2, Public Use Files: <https://www.oecd.org/en/data/datasets/>

*Poland: Due to the high proportion of respondents with unusual response behavior, caution is required when interpreting the results.

Research Questions

- 1) Do the results based on PIAAC Cycle 1 hold true for Cycle 2?
- 2) Does the frequency of practices differ depending on whether they are more everyday, or more long-term oriented? (by employment, gender and age)



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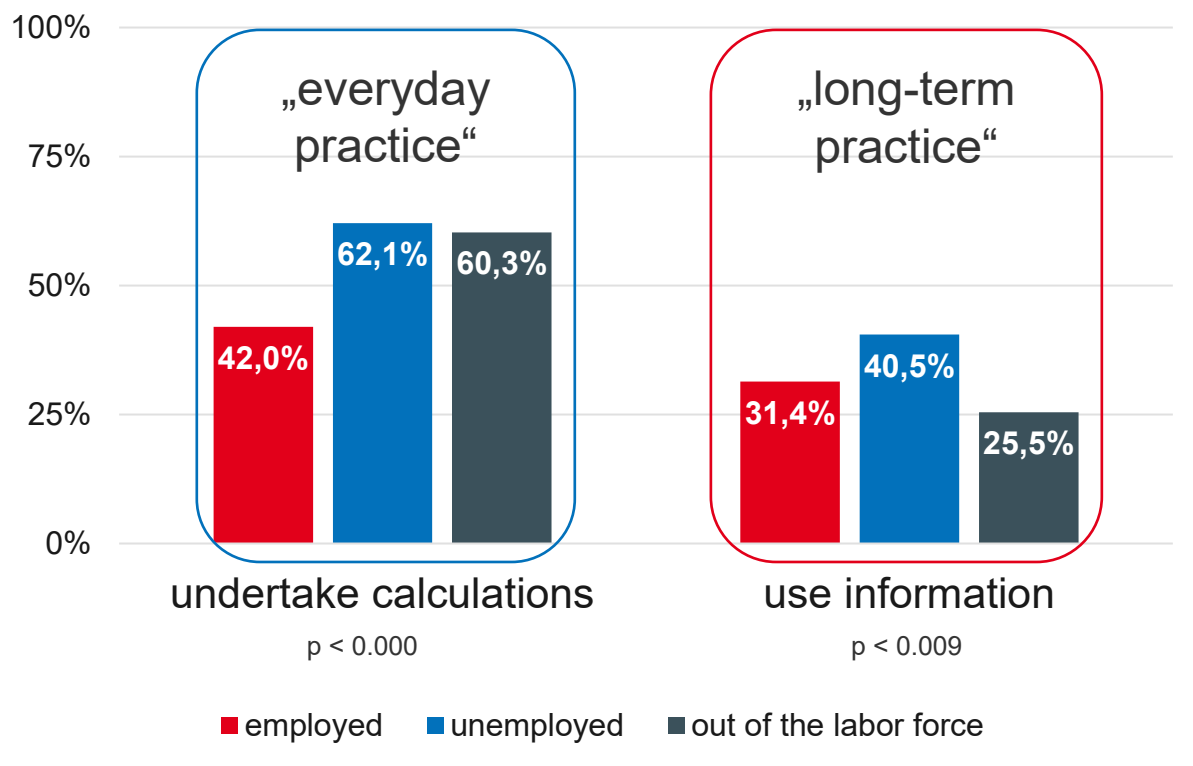
PIAAC Cycle 2 Germany

Percentage of adults who perform financial practices at least once a week or every day

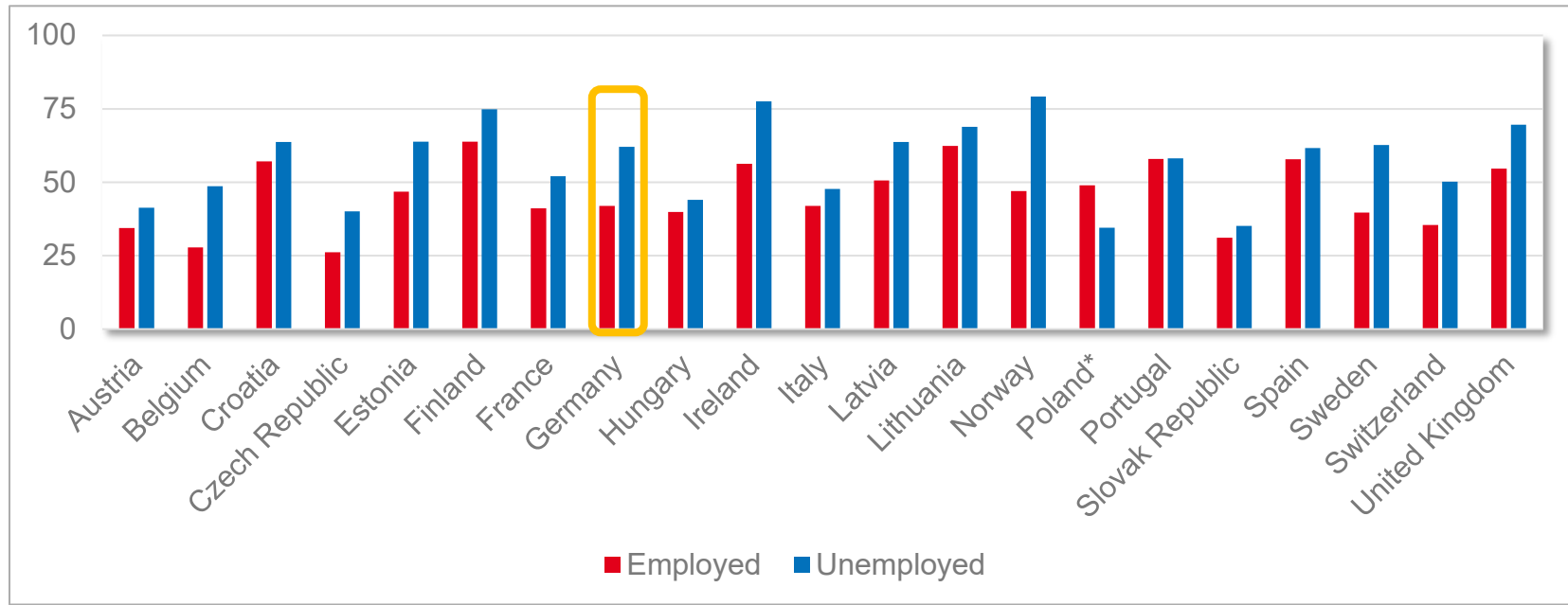
by employment

Data: PIAAC Cycle 2, Public Use File:
<https://www.oecd.org/en/data/datasets/>

N=4.793
Employed: n = 3.822
Unemployed: n = 111
Out of the labor force: n = 742



Proportions of adults who frequently undertake calculations (by employment status)



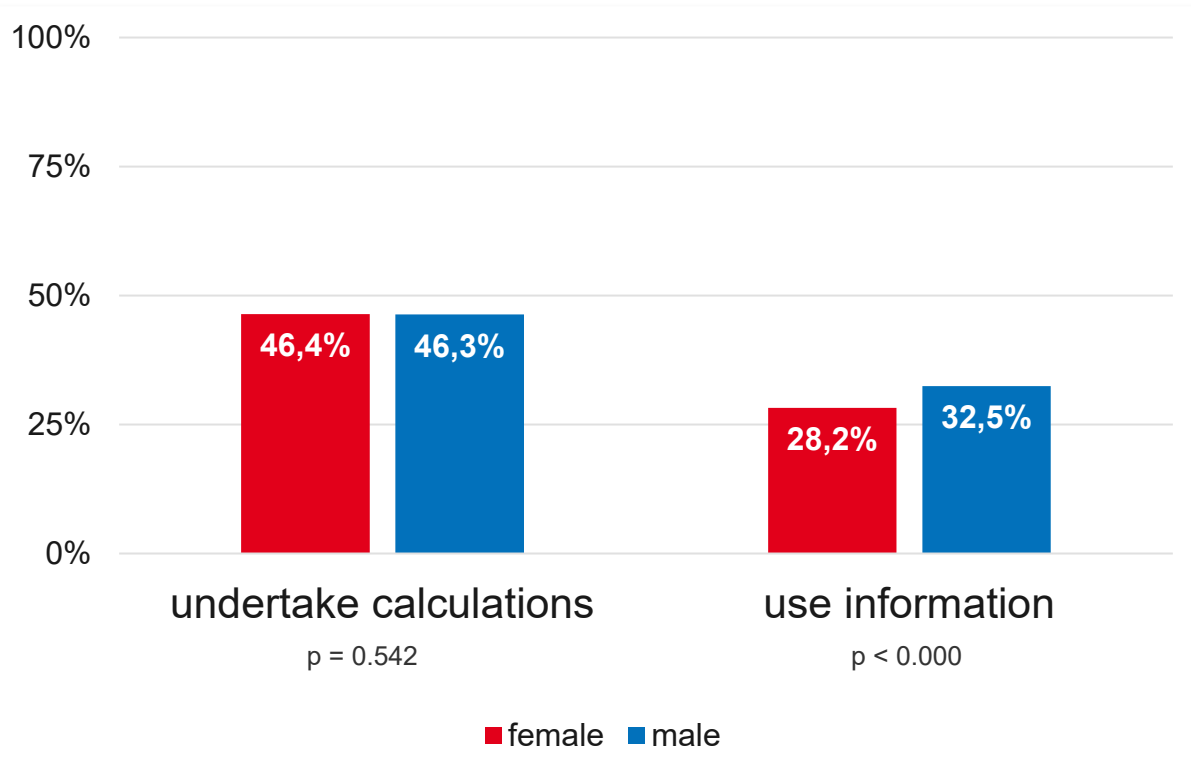
PIAAC Cycle 2 Germany

Percentage of adults who
perform financial
practices at least once a
week or every day

by gender

Data: PIAAC Cycle 2, Public Use File:
<https://www.oecd.org/en/data/datasets/>

N=4.793
Female: n = 2.437
Male: n = 2.356



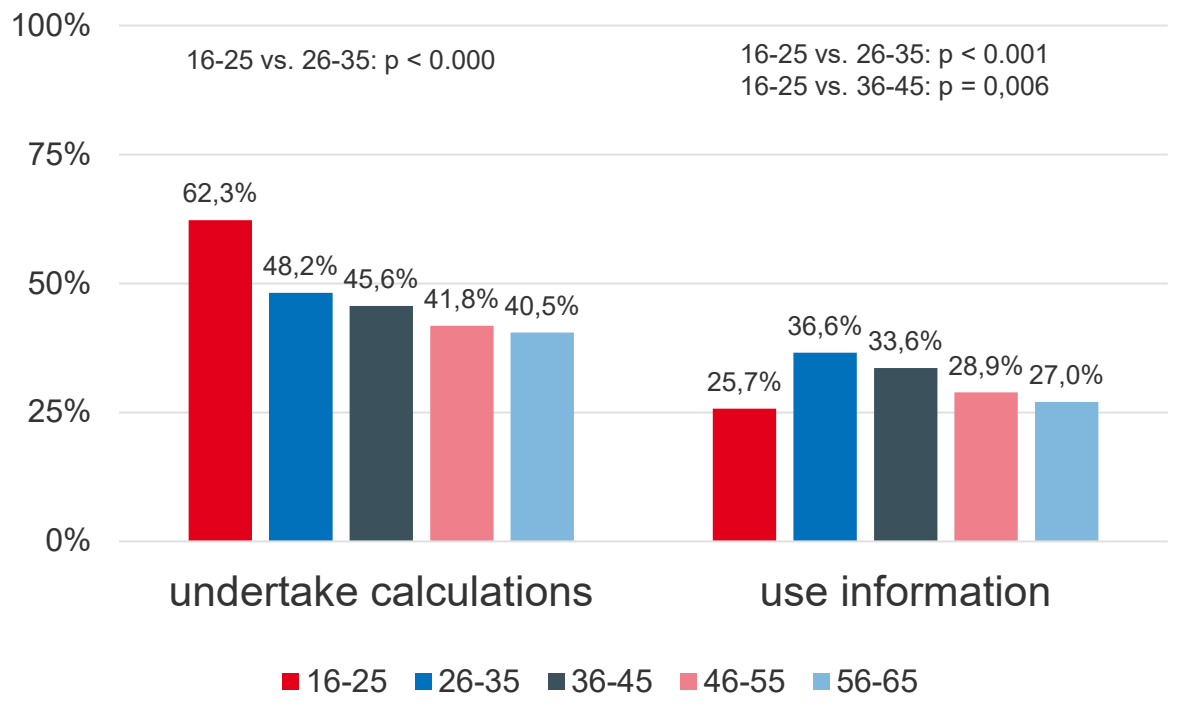
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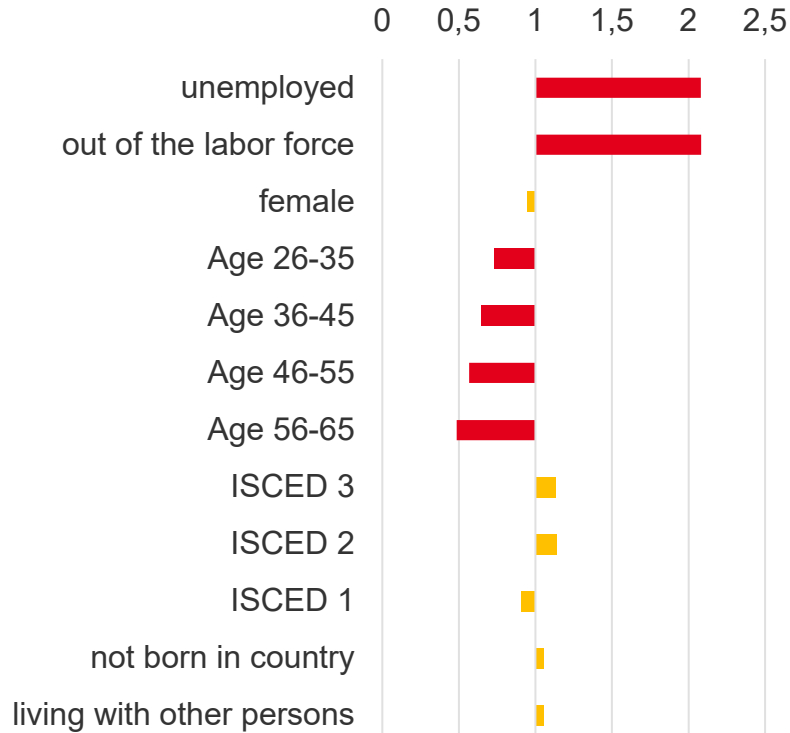
by age groups

Data: PIAAC Cycle 2, Public Use File:
<https://www.oecd.org/en/data/datasets/>;

N=4.793
16-25: n = 746
26-35: n = 963
36-45: n = 983
46-55: n = 915
56-65: n = 1.186



Odds ratios: undertake calculations



Odds ratios: use information



Research Questions

- 1) Do the results based on PIAAC Cycle 1 hold true for Cycle 2?
- 2) Does the frequency of practices differ depending on whether they are more everyday, or more long-term oriented? (by employment, gender and age)



5

Discussion



Growing proportion of frequent calculations in Germany and other European countries

- 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.

Frequent calculations among unemployed in virtually all countries

- Results based on PIAAC cycle 1 can be reproduced based on cycle 2
- Results regarding Germany can be generalized to other countries
- “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).

Gender-specific money management

- No gender gap regarding frequent calculations
 - Gender does not have an own effect on frequent calculations
 - Major effect of employment
 - Weaker economic situation of women (gender pay gap, part-time work, childcare)
- Gender gap regarding using information for financial decisions
 - More responsibility for strategic decisions by men
 - Big money (Lave 1988) as male domain

Younger adults show demand of financial orientation

- Transition from formal education to working life is phase of intense calculating (16-25).
- Making long term financial decisions (real estate, investment, retirement planning) highest in between 26 and 35 years.
- Content of financial education and financial counselling are age specific.

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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