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# THE GENDER GAP IN FINANCIAL LITERACY IN PORTUGAL

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According to the S&P Global Financial Literacy Survey, Portugal ranks among the lowest countries in the European Union in terms of financial literacy, with only 26% of adults considered financially literate (Klapper & Lusardi, 2020). Financial literacy, as a critical life skill, plays a central role in individuals' economic well-being, decision-making, and long-term financial security. Previous research indicates that financial literacy levels differ systematically across demographic groups, particularly between males and females (Davoli & Rodríguez-Planas, 2024; Bottazzi & Lusardi, 2021). Understanding these gender differences is especially important in countries such as Portugal, where overall financial literacy remains comparatively low. Using data from the 2022 Programme for International Student Assessment (PISA), this policy paper examines the gender gap in financial literacy among adolescents in Portugal.

The PISA 2022 financial literacy assessment classifies students into five proficiency levels that reflect increasingly advanced financial knowledge and skills. Students at Level 1 demonstrate only a basic understanding of simple financial concepts, while Level 2 represents the international baseline, where students can apply straightforward financial knowledge in familiar situations. Levels 3 and 4 require stronger analytical abilities, such as interpreting financial information, budgeting, and assessing financial risks. Level 5 reflects advanced proficiency, including the ability to solve complex financial problems and make informed long-term financial decisions (OECD, 2024). Figure 1 presents the distribution of boys and girls across the five financial literacy proficiency levels in Portugal. Boys are more likely than girls to be among the highest-performing students, with 6.9% of boys reaching Level 5 compared with only 3.4% of girls. In contrast, the share of students who do not reach the baseline level of financial literacy is nearly identical for both genders, with 13.5% of boys and 13.4% of girls performing at Level 1. A clear majority of both boys and girls perform at the intermediate proficiency levels (Levels 3–4), suggesting that most adolescents possess moderate financial literacy skills.

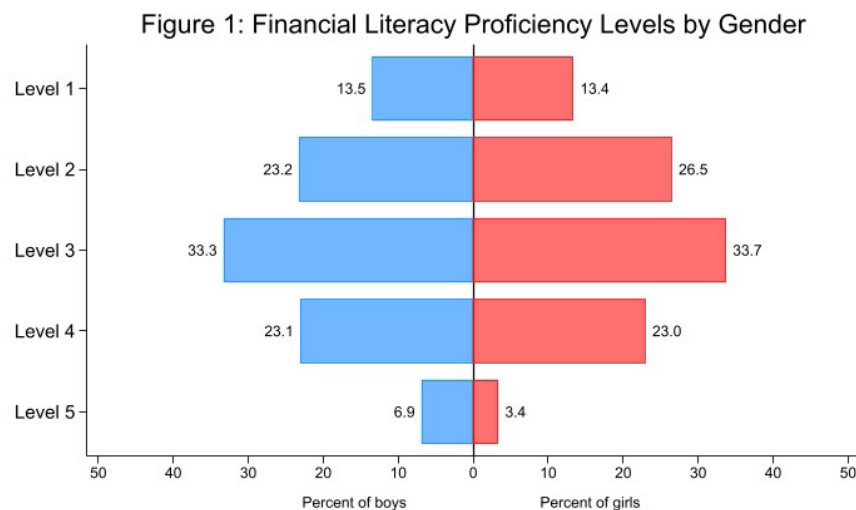


Table 1: The Gender Differences in Financial Literacy

|                         | (1)                        | (2)                        | (3)                        | (4)                        | (5)                        | (6)<br>Females    | (7)<br>Males      |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-------------------|-------------------|
| Female                  | <b>-10.71***</b><br>(3.33) | <b>-10.65***</b><br>(3.33) | <b>-10.49***</b><br>(3.24) | <b>-11.84***</b><br>(2.22) | <b>-11.47***</b><br>(2.22) | -                 | -                 |
| Age                     |                            | 11.44**<br>(5.34)          | 11.66**<br>(5.20)          | -0.78<br>(3.20)            | -1.42<br>(3.52)            | -2.48<br>(4.88)   | -0.09<br>(4.11)   |
| Immigrant               |                            | -22.54***<br>(5.34)        | -18.35***<br>(4.99)        | 1.09<br>(3.82)             | 0.54<br>(3.66)             | -0.61<br>(4.22)   | 1.15<br>(5.66)    |
| ESCS                    |                            |                            | 24.05***<br>(1.62)         | -3.80***<br>(1.24)         | -3.54***<br>(1.21)         | -3.68**<br>(1.58) | -3.67**<br>(1.59) |
| PIF                     |                            |                            | 1.53<br>(1.32)             | 2.55***<br>(0.91)          | 2.30**<br>(0.89)           | 2.49*<br>(1.35)   | 1.81*<br>(0.97)   |
| Math                    |                            |                            |                            | 0.50***<br>(0.03)          | 0.51***<br>(0.03)          | 0.51***<br>(0.03) | 0.50***<br>(0.04) |
| Reading                 |                            |                            |                            | 0.42***<br>(0.02)          | 0.41***<br>(0.02)          | 0.41***<br>(0.03) | 0.42***<br>(0.03) |
| School fixed effects    | No                         | No                         | No                         | No                         | Yes                        | Yes               | Yes               |
| Adjusted R <sup>2</sup> | 0.004                      | 0.012                      | 0.115                      | 0.877                      | 0.886                      | 0.882             | 0.890             |
| N                       | 3780                       | 3780                       | 3780                       | 3780                       | 3780                       | 1932              | 1848              |

**Notes:** The dependent variable is the student's financial literacy score from PISA 2022. Financial literacy is measured using ten plausible values. Each model is estimated separately for all plausible values, and coefficients are combined using Rubin's rules. Estimates are obtained using Stata's `repest` command, which accounts for plausible values, student sampling weights, and BRR-Fay replicate weights. *Female* is a dummy variable equal to 1 if the student is female. *Age* denotes the student's age. *Immigrant* is a dummy variable equal to 1 if the student is a first- or second-generation immigrant. *ESCS* is the PISA index of the student's economic, social, and cultural status. *PIF* is the PISA index of parental involvement in matters of financial literacy that captures how frequently students discuss financial matters with their parents (e.g., spending, saving, the family budget, desired purchases, and financial news). For detailed information on the construction of these indices, see OECD (2024). *Math* and *Reading* denote students' PISA mathematics and reading test scores, respectively, each measured using ten plausible values. Columns (6) and (7) estimate the specification in column (5) separately for females and males. Robust standard errors are reported in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$ .

Table 1 presents OLS estimates of the determinants of financial literacy performance. We estimate a sequence of specifications in which explanatory variables are gradually added. This stepwise approach allows us to examine whether the gender gap in financial literacy can be explained by observable demographic characteristics, socioeconomic background, family financial socialization, academic skills, and school-level factors. Column (1) shows that the raw gender gap in financial literacy, in favor of boys, is statistically significant at the 1% level. On average, girls score 10.7 points lower than boys on the financial literacy assessment.<sup>1</sup> Column (2) adds age and immigrant status to the model. The estimated gender gap remains nearly unchanged and statistically significant at the 1% level, suggesting that demographic differences between male and female students do not explain the observed gap.

Column (3) incorporates socioeconomic background (ESCS) and parental involvement in financial matters (PIF). Consistent with previous research (OECD, 2024), higher socioeconomic status is positively associated with financial literacy performance. However, family financial socialization (PIF) is not statistically significant. Most importantly, the gender gap persists and remains close to 10.5 points. Column 4 also controls for mathematics and reading PISA scores. Both variables are strongly and positively associated with financial literacy, highlighting the importance of foundational academic skills for financial competence. In this specification, parental involvement in financial matters (PIF) becomes statistically significant at the 1% level. However, the estimated coefficient for socioeconomic background (ESCS) decreases substantially in magnitude and becomes negative. This finding suggests that the positive association between ESCS and financial literacy largely operates through students' academic skills. In line with this interpretation, OECD (2024) provides evidence that mathematics and reading performance in PISA account for a substantial share of the socioeconomic gradient in financial knowledge. Finally, the gender gap increases slightly from 10.5 points in column (3) to 11.8 points in column (4) and remains statistically significant at the 1% level. Representing our preferred specification, column (5) also includes school fixed effects, which account for unobserved differences across schools, such as variations in school resources, teaching quality, or institutional environments that may influence students' financial literacy outcomes. The results remain largely unchanged, and the estimated gender gap continues to be large and statistically significant at the 1% level. Columns (6) and (7) estimate our preferred specification separately for female and male students. The statistically significant determinants of financial literacy appear broadly similar across genders.

In sum, the results indicate that even after accounting for demographic characteristics, socioeconomic background, parental financial involvement, academic skills, and school-level factors, female students continue to score significantly lower than their male counterparts. Our findings have important policy implications. First, financial education initiatives should place greater emphasis on encouraging girls' engagement with financial topics and strengthening their confidence in financial decision-making. Because financial attitudes, confidence, and decision-making habits are often formed during adolescence, schools represent a critical setting for early financial education interventions. School-based programs that promote inclusive learning environments and actively engage girls may play a key role in reducing the gender gap in financial literacy. Second, addressing the gender gap may also require broader efforts beyond the classroom, including family engagement and initiatives aimed at challenging gender stereotypes related to financial competence. Public awareness campaigns, mentorship programs, and visible role models highlighting women's success in financial and economic fields may help promote greater interest and confidence among girls. Finally, continuous monitoring and evaluation are essential. Collecting gender-disaggregated data and using evidence from large-scale assessments such as PISA can help policymakers identify effective strategies for improving financial literacy outcomes for both boys and girls.

<sup>1</sup> On the PISA scale, a 20-point difference is roughly equivalent to one year of schooling (Avvisati and Givord, 2021). The estimated gender gap of 10.7 points corresponds to about half a year of schooling, indicating that the gap is economically meaningful.

## References

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