



EUROPEAN CENTRAL BANK

EUROSYSTEM

# Financial literacy and monetary policy transmission

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*Member of the Executive Board  
of the ECB*



MAIS Lecture, Bayes Business School  
London, 27 March 2025

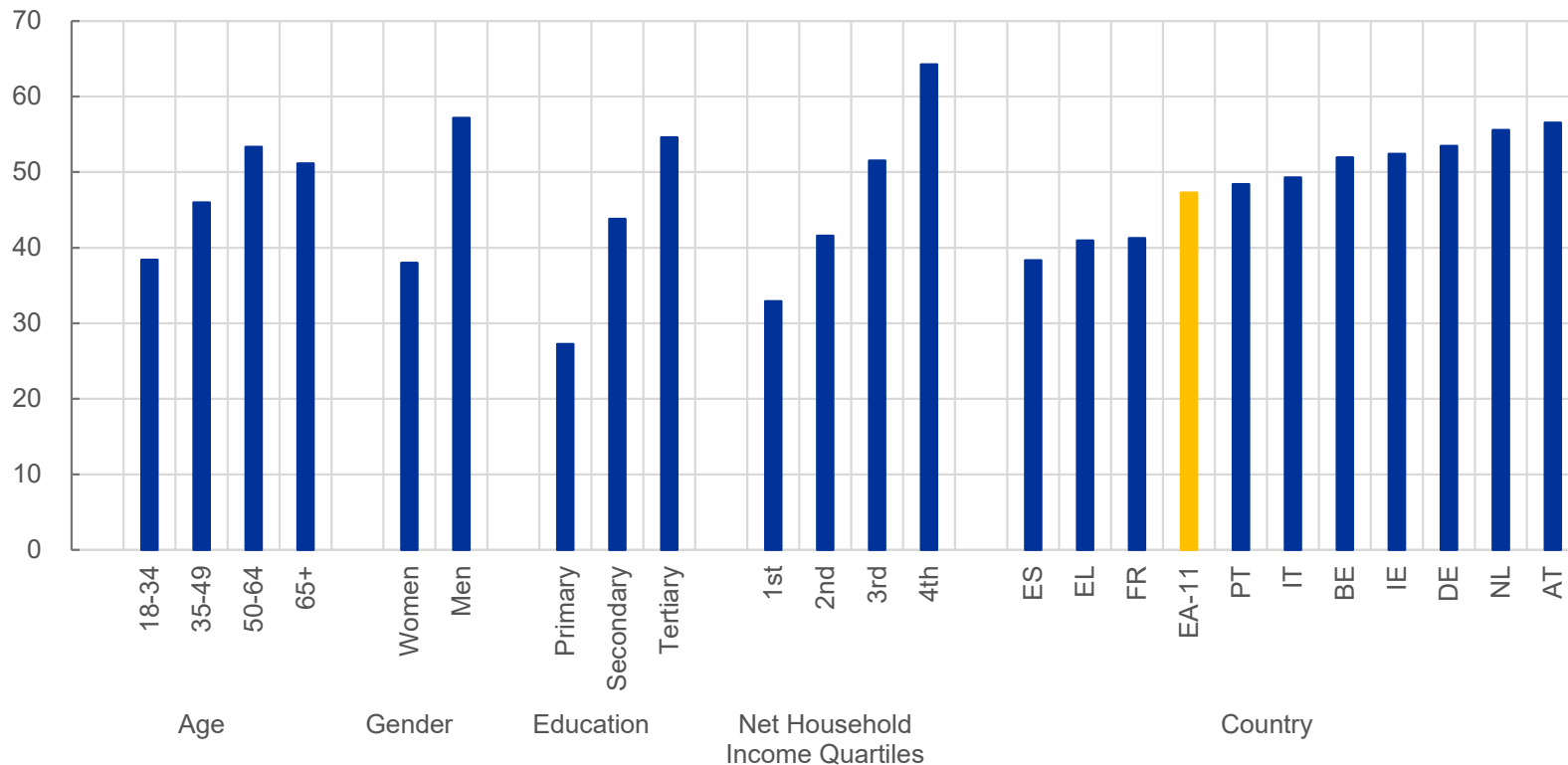
1. Suppose you had 100 € in a savings account and the interest rate was 2% per year. After five years, how much do you think you would have in the account if you left the money to grow?
  - a) **more than 102 €**
  - b) exactly 102 €
  - c) less than 102 €
  - d) don't know

2. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
- a) more than today
  - b) exactly the same
  - c) less than today**
  - d) don't know

3. Do you think the following statement is true or false?  
Buying shares in a single company usually provides a safer return than buying shares in a mutual fund.
- a) true
  - b) false**
  - c) don't know

## Share of households with high financial literacy

(percent of consumers)

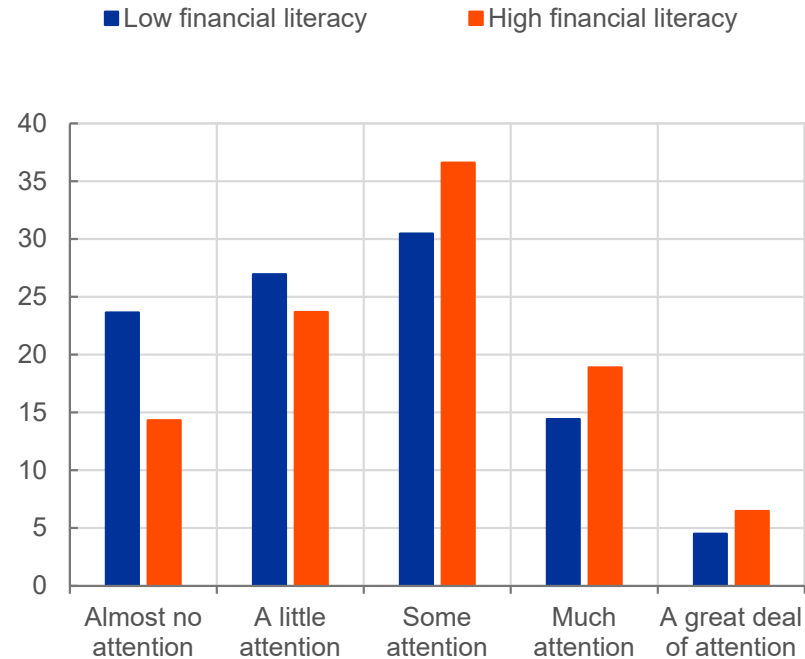


Source: ECB Consumer Expectations Survey (CES).

Notes: Weighted data. Data is pooled from April 2020 to February 2025. The CES elicits financial literacy by asking three questions on consumers' understanding of interest rate compounding, nominal vs. real values and portfolio risk diversification ("Big-3") following Lusardi, A. and Mitchell, O.S., 2011, Financial literacy around the world: an overview. *Journal of pension economics & finance*, 10(4), pp.497-508.

Latest observations: February 2025.

## Attention to interest rates (percent of consumers)



Source: ECB Consumer Expectations Survey (CES), experimental data.

Notes: Weighted data. In August 2024, consumers were asked in the CES, on an experimental basis: "Thinking about yourself, how much attention do you currently pay to interest rates in the country you currently live in?". Weighted data.

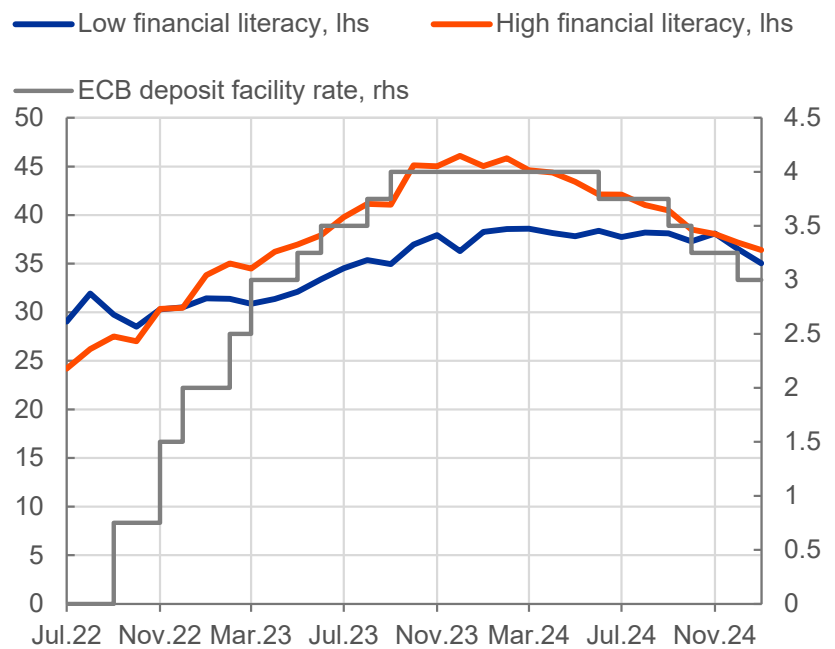
For more details, see Baldassarri, L., Georgarakos, D., Kenny, G. and Meyer, J., "Monetary policy transmission to households: The importance of consumers' attention to interest rates and financial literacy", *VoxEU*, 2024.

Latest observations: August 2024.

# Financially literate households respond more strongly to changes in interest rates

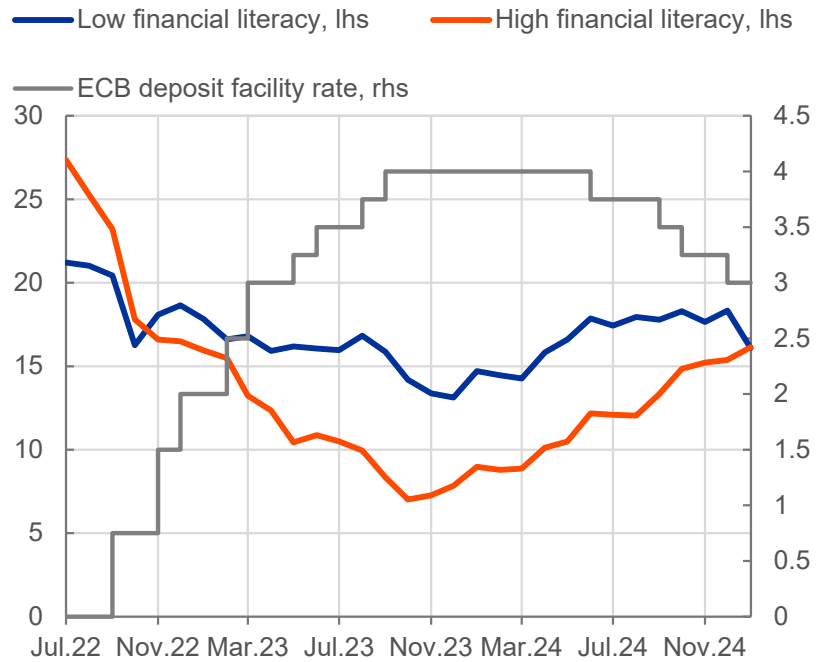
## Good time to save

(lhs: percent of consumers; rhs: percent per annum)



## Good time to borrow

(lhs: percent of consumers; rhs: percent per annum)



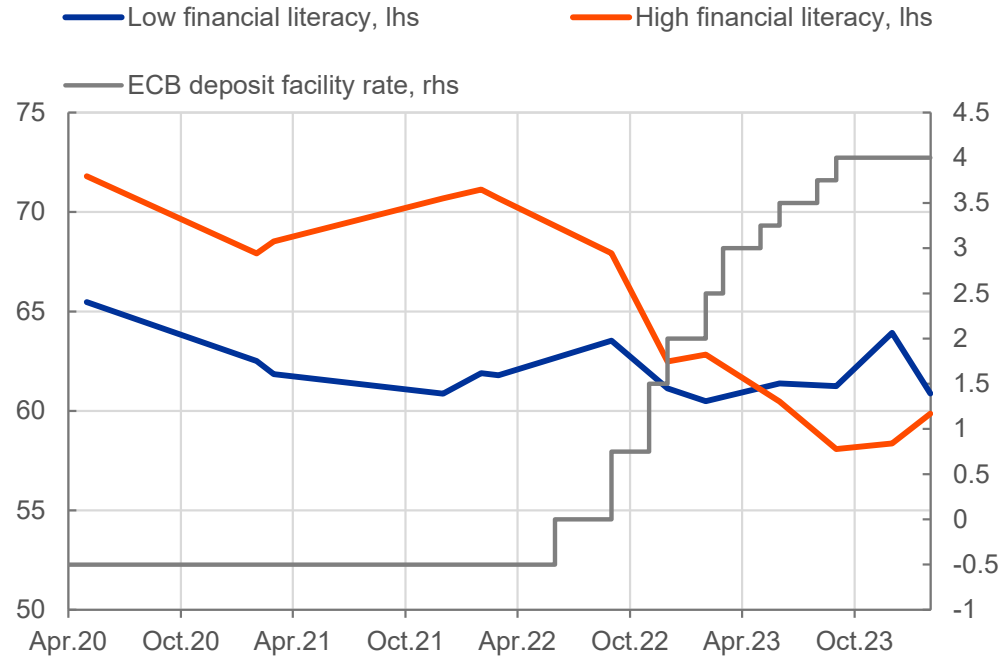
Source: ECB Consumer Expectations Survey (CES).

Notes: Weighted data. Each month in the CES, consumers are asked: "Generally speaking, do you think now is a good time or a bad time to ...?" (i) "Save money in savings accounts", (ii) "Borrow money from a bank" on a 5-point-scale from "very bad" to "very good". For more details, see Baldassarri et al. (2024) and Charalambakis, E., Kouvavas, O. and Neves, P. "Rate hikes: How financial knowledge affects people's reactions", *ECB Blog*, 15 August 2024.

Latest observations: January 2025.

## Hypothetical mortgage choice: fixed interest rate

(lhs: percent of consumers; rhs: percent per annum)



Source: ECB Consumer Expectations Survey (CES), experimental data.

Notes: Weighted data. Consumers are asked: "Suppose you had to take out a mortgage to finance the purchase of a house/apartment today. Which one of the following types would you choose?" given three options (fixed, variable or mixed interest rate). The chart depicts the percentage of consumers, by financial literacy, who choose a fixed interest rate mortgage.

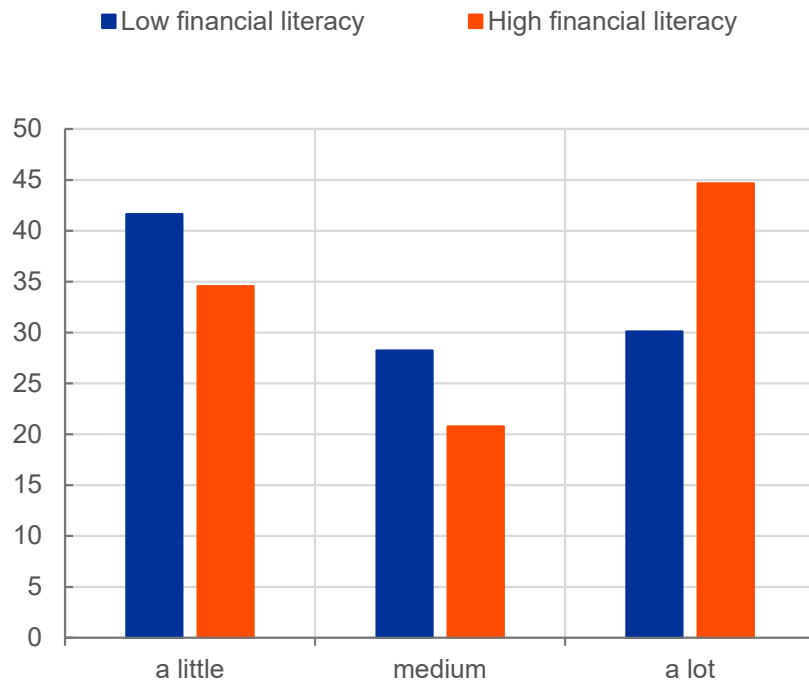
Latest observations: February 2024.



# Financially literate households search for best interest rate on loans and deposits

## Shopping around for debt products

(percent of consumers)

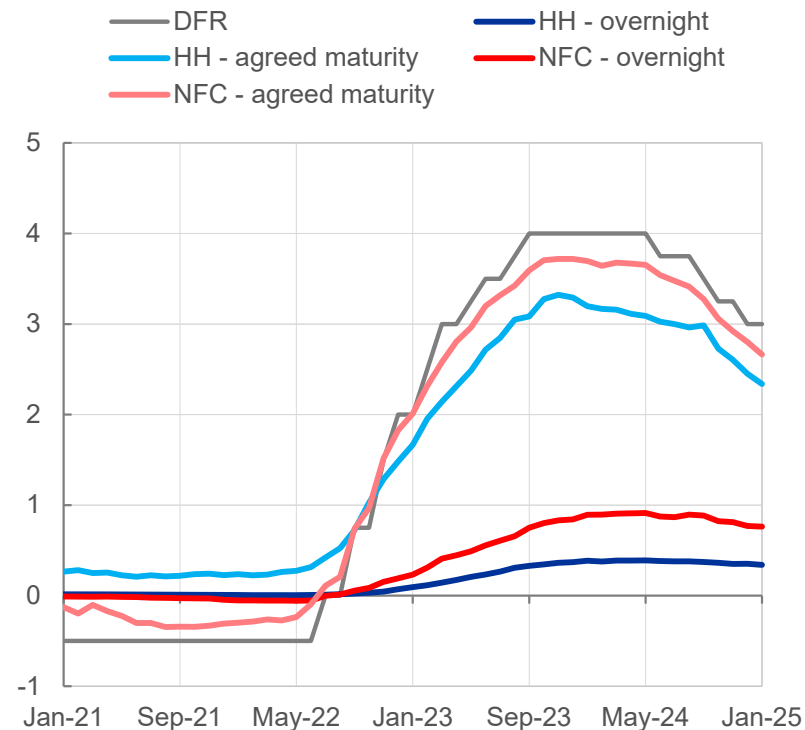


Source: ECB Consumer Expectations Survey (CES), experimental data.

Notes: Consumers are asked: "When making major decisions about borrowing money or obtaining credit, some people search for the very best terms while others don't. What best describes you and your household?" on a 11-point-scale from 0 (*no searching*) to 10 (*a great deal of searching*). Answers are grouped to *a little* (0 to 3), *medium* (4 to 6) and *a lot* (7 to 10) of searching. Latest observations: November 2024.

## Deposit rates

(percent per annum)

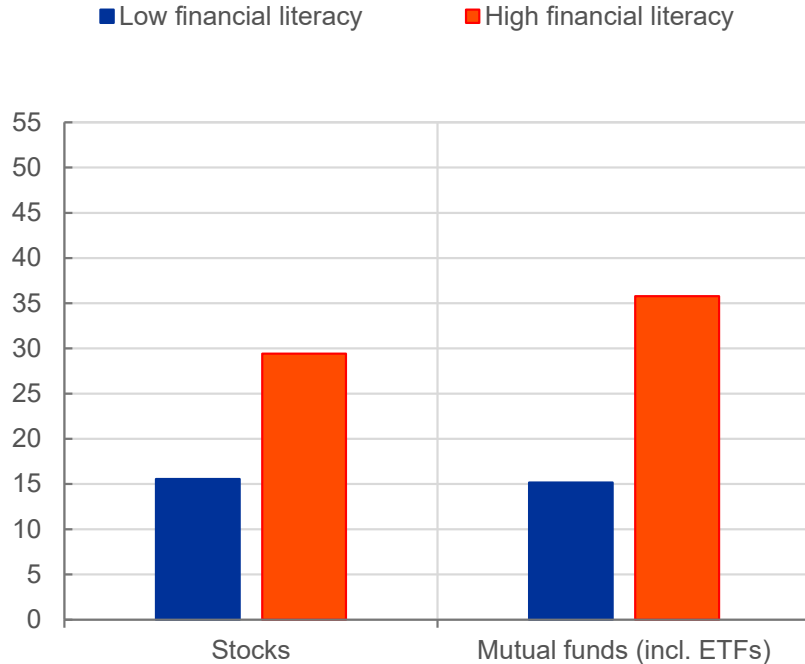


Sources: ECB (MIR) and ECB calculations.

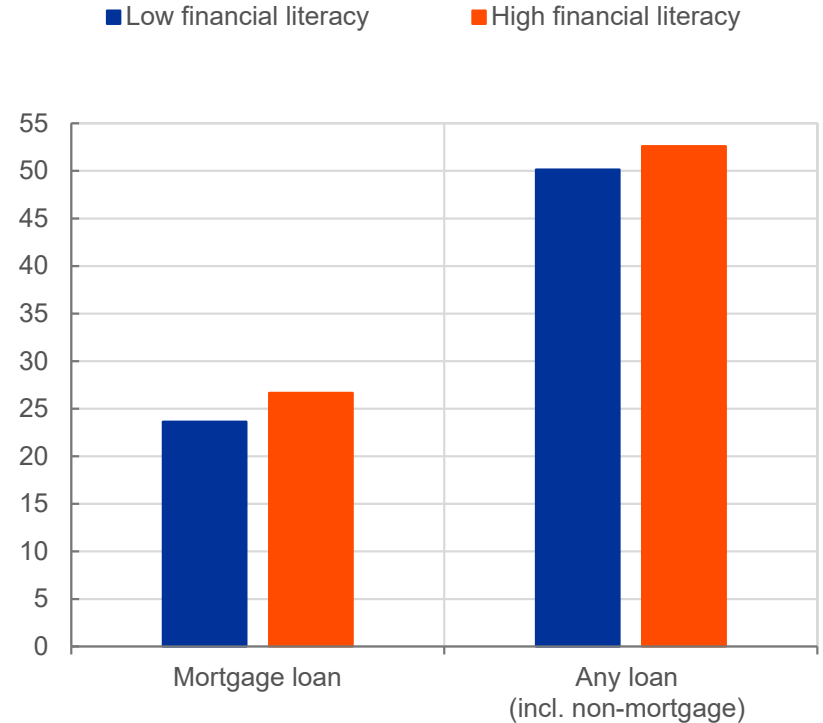
Notes: 'HH' stands for households. 'NFC' stands for non-financial corporations. Latest observation: January 2025.

# Financially literate households are more likely to invest in stocks and take up debt

## Stock market participation (percent of consumers)



## Debt take-up (percent of consumers)

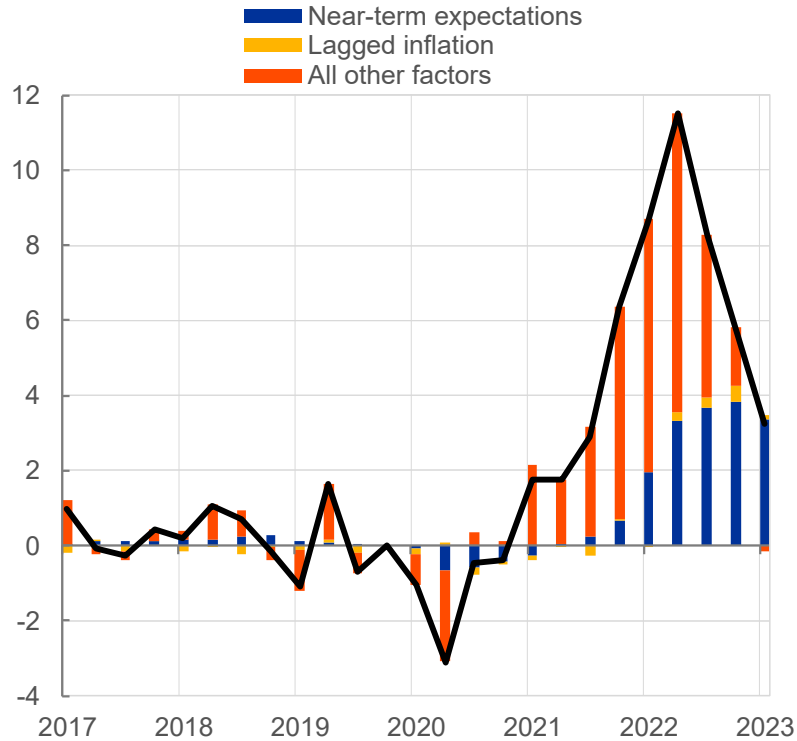


Source: ECB Consumer Expectations Survey (CES), experimental data.  
Notes: Weighted and pooled data from November 2022, 2023 and 2024. Each November the CES asks consumers on an experimental basis about their asset holdings including *stocks* and *mutual funds (incl. ETFs)*. For more details, see Christelis, D., Georgarakos, D., Jappelli, T. and Kenny, G., 2024, Consumer risk-taking and stock market investment: Insights using the CES's consumer finance module, *Research Bulletin*, 119.  
Latest observations: November 2024.

Source: ECB Consumer Expectations Survey (CES), experimental data.  
Notes: Weighted and pooled data from November 2022, 2023 and 2024. The chart depicts mortgage liabilities when consumers enter the CES. In addition, each November the CES asks consumers on experimental basis about their liabilities, including loans for *credit lines or overdrafts, leasing arrangements, car loans, student loans, loans from family and friends and other loans*.  
Latest observations: November 2024.

## Contributors to recent inflation dynamics for advanced economies

(percentage point change from Q4 2019)



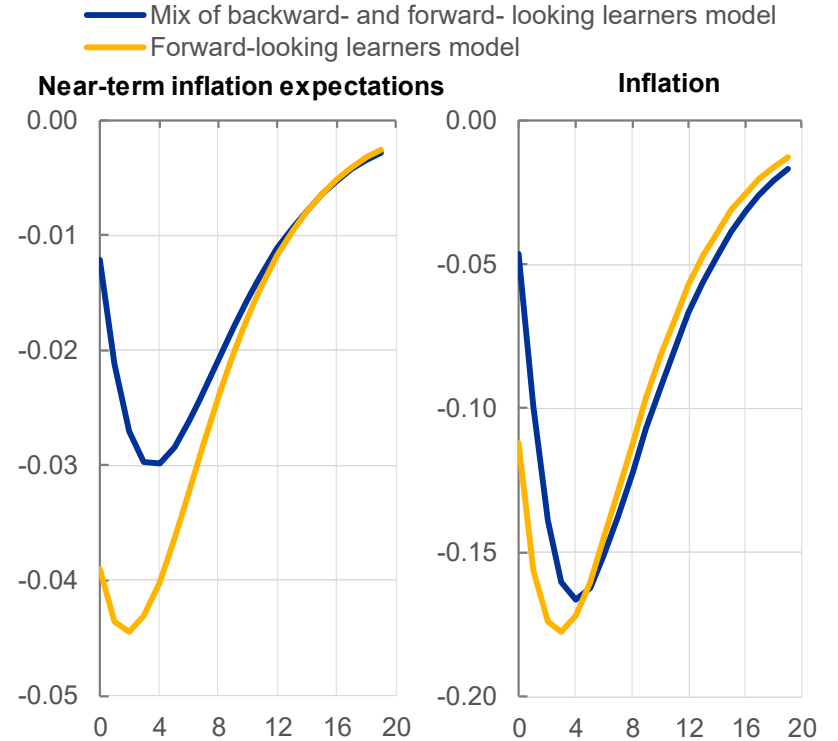
Source: IMF staff calculations. IMF WEO (2023).

Notes: Bars in the figure show the contributions to average headline inflation relative to the contribution observed in 2019 Q4.

Latest observation: Q1 2023.

## Inflation response to monetary policy shock

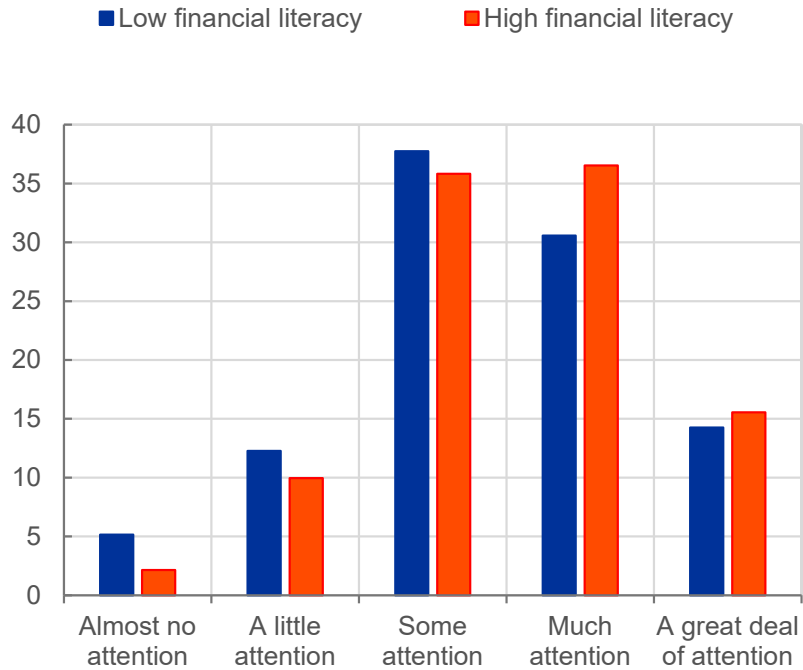
(percentage points)



Source: IMF staff calculations. IMF WEO (2023).

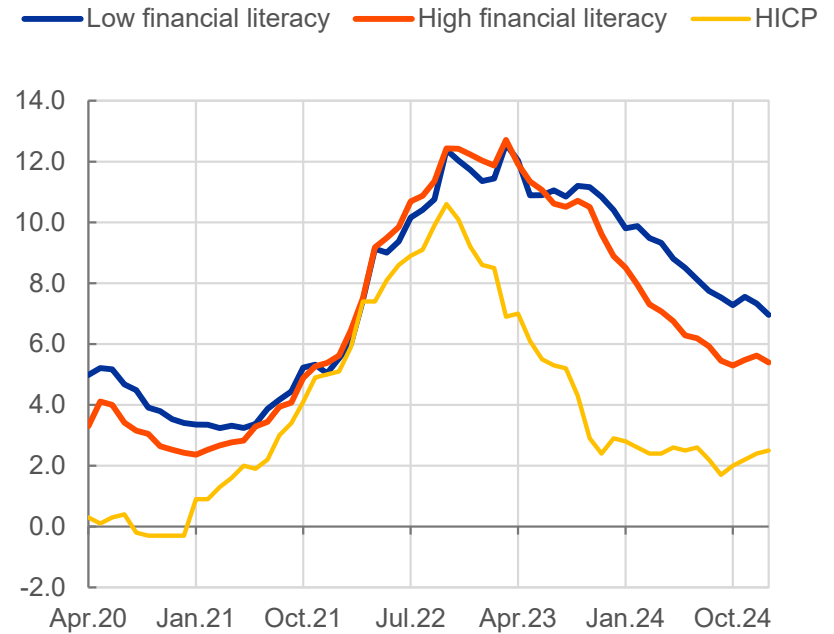
Notes: Charts show the dynamic responses of the indicated variable to a temporary monetary policy shock that increases the policy rate by 100 basis points. Numbers on the horizontal axes show quarters.

## Attention to inflation (percent of consumers)



Source: ECB Consumer Expectations Survey (CES), experimental data.  
 Notes: Weighted data. In December 2023, consumers were asked in the CES, on an experimental basis: "Thinking about yourself, how much attention do you currently pay to changes in prices in general in the country you currently live in?". Weighted estimates. Latest observations: December 2023.

## Inflation perceptions and HICP inflation (annual percentage change)

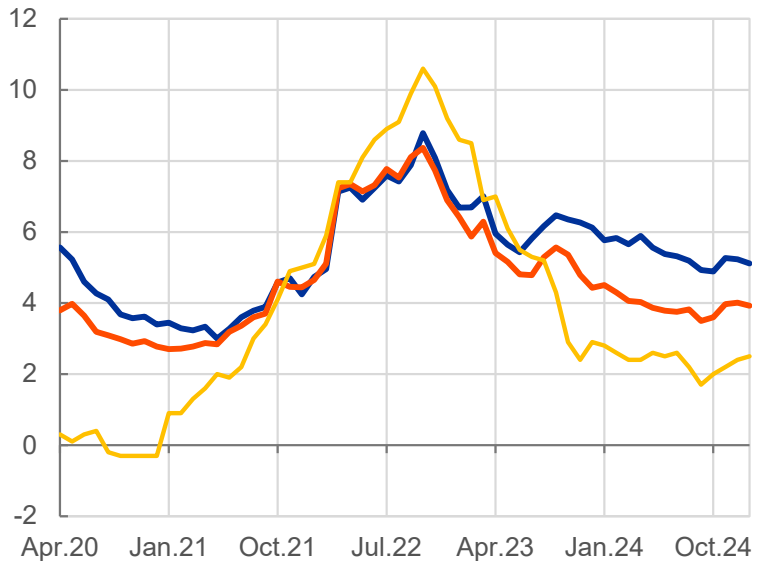


Source: ECB SDW and ECB Consumer Expectations Survey (CES).  
 Notes: Weighted data. Each month, consumers are asked in the CES: "How much higher/lower do you think prices in general are now compared with 12 months ago in the country you currently live in?". Data for the CES are population-weighted for the EA-11 countries covered by the CES. HICP inflation refers to the EA Harmonised Index of Consumer Prices. Latest observations: January 2025.

# Financially literate households also adjust inflation expectations more quickly

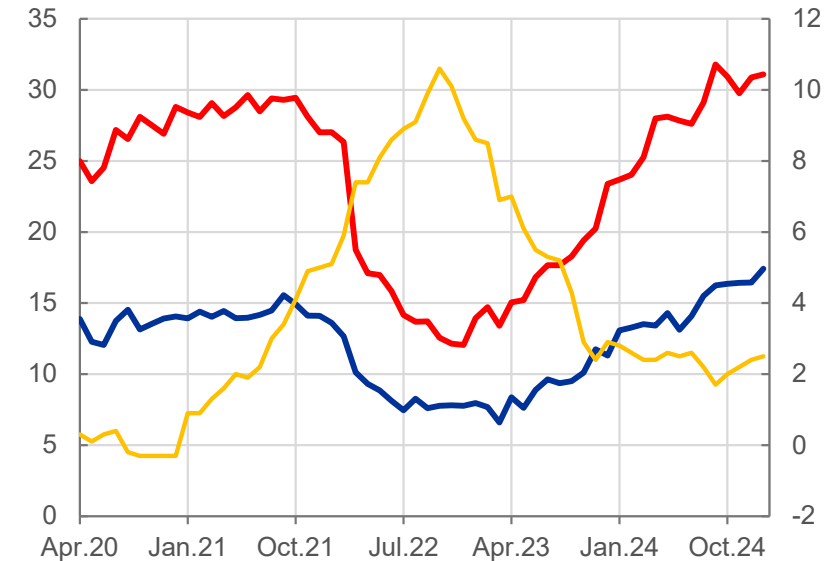
## Inflation expectations (1 year ahead) and HICP inflation (annual percentage change)

— Low financial literacy — High financial literacy — HICP



## Inflation expectations 3 years ahead between 1.5% and 2.5% (lhs: percent of consumers; rhs: annual percentage change)

— Low financial literacy, lhs — High financial literacy, lhs  
— HICP, rhs

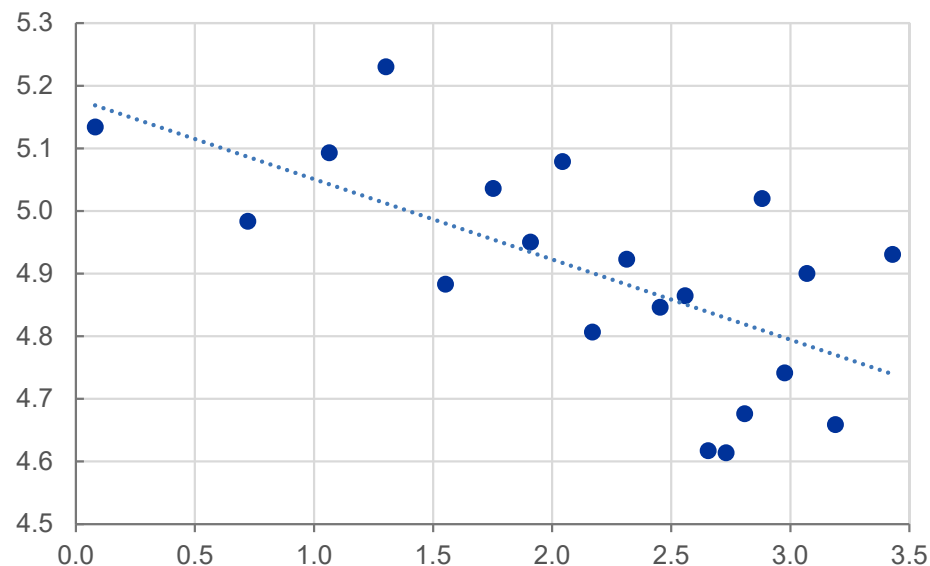


Source: ECB Consumer Expectations Survey (CES).  
 Notes: Weighted data. Each month, consumers are asked in the CES “How much higher/lower do you think prices in general will be 12 months from now in the country you currently live in?”. Data for the CES are population weighted for the EA-11 countries covered by the CES. HICP inflation refers to the EA Harmonised Index of Consumer Prices.  
 Latest observations: January 2025.

Source: ECB Consumer Expectations Survey (CES).  
 Notes: The Chart shows the percent of consumers for whom 3-years ahead inflation expectations lie in the interval 1.5 to 2.5. Each month, the CES asks consumers about a point-forecast of their inflation expectations over the 12 months period 3 years ahead. For more details on consumers’ inflation expectations, see: D’Acunto, F., Charalambakis, E., Georgarakos, D., Kenny, G., Meyer, Justus and Weber, M., 2024. Household Inflation Expectations: An Overview of Recent Insights for Monetary Policy. *ECB Discussion Paper No 24*.  
 Latest observations: January 2025.

## Subjective forecast errors and financial literacy

(x-axis: financial literacy score; y-axis: absolute subjective forecast error)



Source: ECB Consumer Expectations Survey (CES).

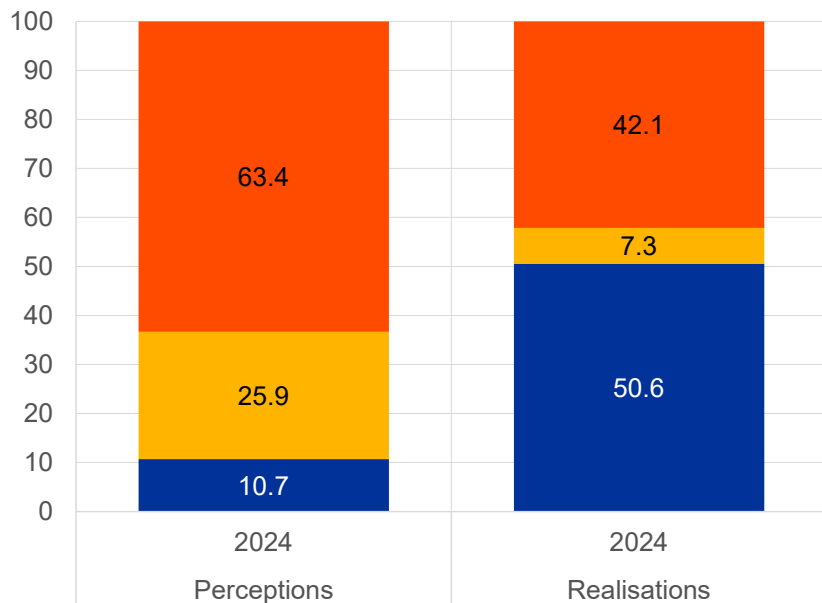
Notes: Weighted and pooled data from April 2020 to February 2025. The chart depicts the relationship between individual-level absolute forecast errors (y-axis:  $|\text{inflation forecast (t)} - \text{inflation perception (t+12)}|$ ) and the individual's level of financial literacy (x-axis, score ranging from 0 to 3) in form of a binned scatterplot. For this purpose, first both variables are residualised accounting for variation due to country and wave effects as well as demographics (age, gender, education). The residualised financial literacy score is then split into 20 equal-sized bins, and the mean of the x-variable and y-variable residuals within each bin are computed and plotted together with a line of best fit (using OLS).

Latest observations: February 2025.

## Realised and perceived real income changes

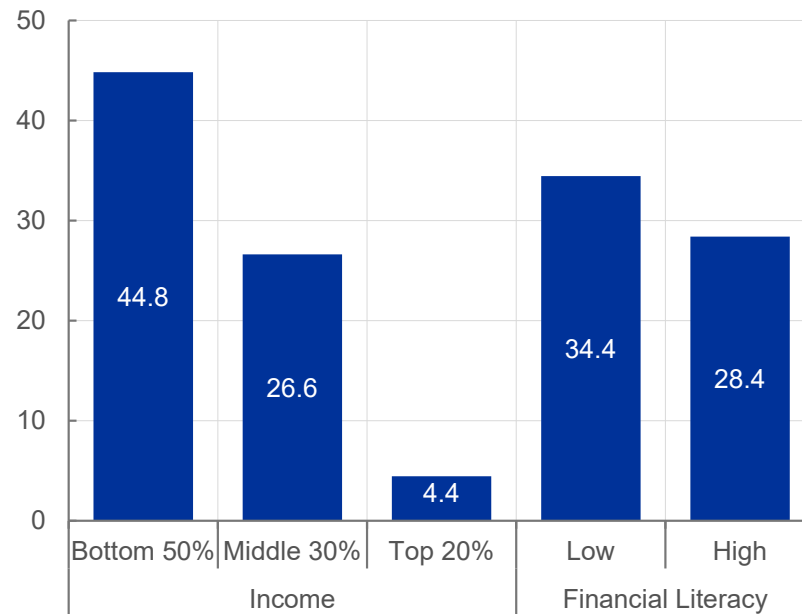
(percent of consumers)

■ Decrease ■ About the same ■ Increase



## Misperception of real income changes

(net percentage of pessimistic consumers)



Source: ECB Consumer Expectations Survey (CES), experimental data.

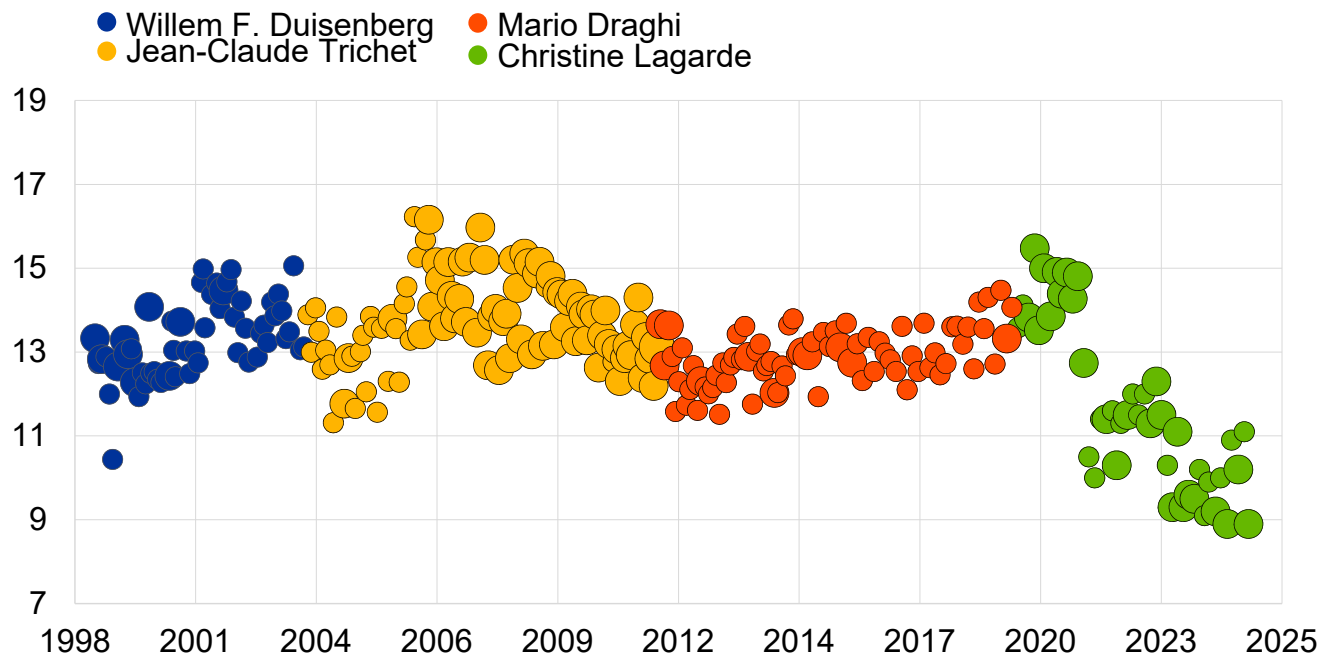
Notes: Weighted data. Data refer to 2024. Income realisations are based on actual self-reported nominal labour income levels and country-specific inflation based on the Harmonised Index of Consumer Prices (HICP). For more details see: "Are real incomes increasing or not? Household perceptions and their role for consumption", *Economic Bulletin*, Issue 1, ECB, 2025.

Source: ECB Consumer Expectations Survey (CES), experimental data.

Notes: Weighted data. "Net percentage of pessimism" refers to the difference in the percentage of households that perceived a decrease in real income while their implied real income increased and the percentage of households that perceived an increase in real income while their implied real income decreased. For more details see: "Are real incomes increasing or not? Household perceptions and their role for consumption", *Economic Bulletin*, Issue 1, ECB, 2025.

## Textual complexity of ECB monetary policy statements

(Flesch-Kincaid Grade Level score )



Sources: Updated data from analysis in Coenen, G., Ehrmann, M., Gaballo, G., Hoffmann, P., Nakov, A., Nardelli, S., Persson, E. and Strasser, G., "Communication of monetary policy in unconventional times", Working Paper Series, No 2080, ECB, Frankfurt am Main, June 2017.

Notes: The figure depicts the length and the complexity of the ECB's introductory statements, measured by the number of words (indicated by circle size). The difficulty of the language employed is measured using the Flesch-Kincaid Grade Level score (which indicates how many years of formal training are required to understand the text, based on the length of its sentences and words).

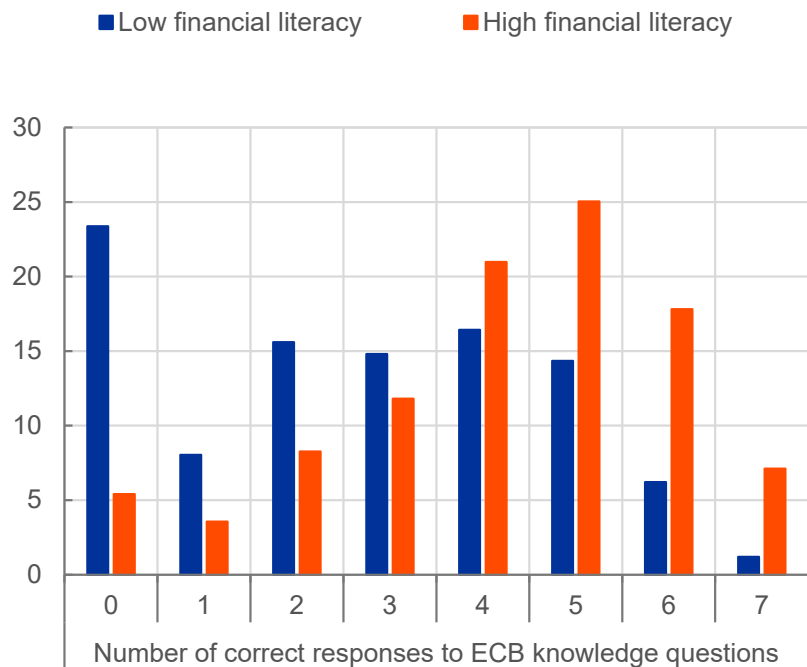
Latest observations: March 2025.



# Financially literate households are more knowledgeable about the ECB and inflation

## Knowledge about the ECB

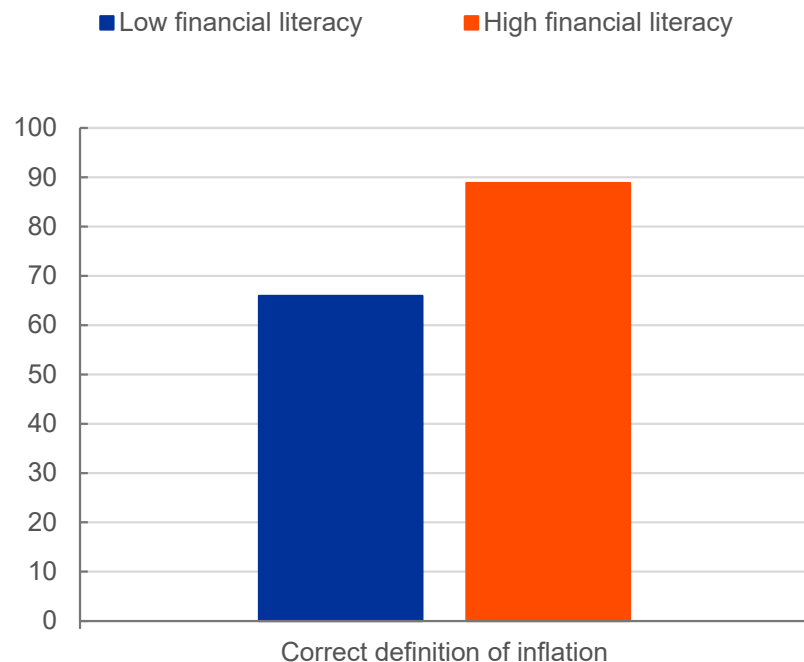
(percent of consumers)



Source: ECB Consumer Expectations Survey (CES), experimental data.  
Notes: Weighted data. In August 2024, consumers were asked to assess if seven statements about the ECB tasks and objectives are true or false (e.g. *an unemployment rate of 5% or below in the EA (F); an inflation rate that is 2% in the euro area over the medium term (T); supervision of large European banks (T)*). Don't know answers are counted as false answers. For more details, see also: Ehrmann *et al.* 2023.  
Latest observations: August 2024.

## Correct definition of inflation

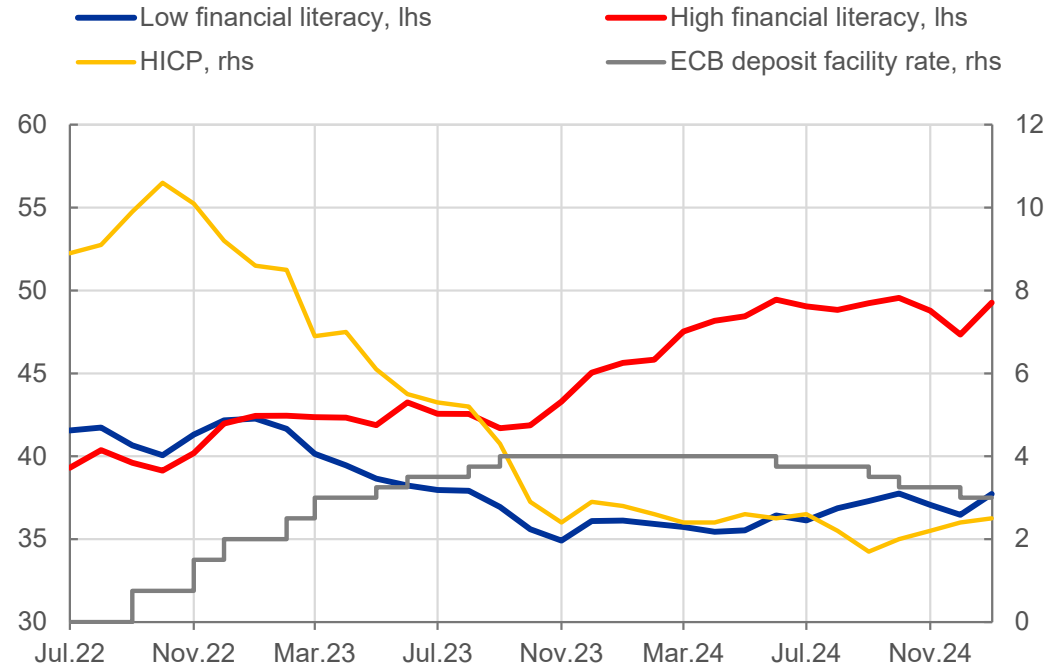
(percent of consumers)



Source: ECB Consumer Expectations Survey (CES), experimental data.  
Notes: Weighted data. In August 2024, consumers were asked: "To the best of your knowledge, inflation in an economy typically refers to an increase in which of the following items?" from a list of 5 options, with the correct answer being "The general level of prices of goods and services".  
Latest observations: August 2024.

## Confidence in ECB maintaining price stability

(lhs: percent of consumers; rhs: percent per annum)



Source: ECB Consumer Expectations Survey (CES).

Notes: Weighted data. The CES asks consumers: “How likely do you think it is that the European Central Bank (ECB) will maintain price stability in the euro area economy over the next 3 years”. For more details on this measure, see: Ehrmann, M., Georganakos, D. and Kenny, G., 2023. Credibility gains from communicating with the public: Evidence from the ECB's new monetary policy strategy, (No. 2785), *ECB Working Paper*.

Latest observations: January 2025.

**Thank you very much for your attention!**