# Increasing role of non-banks and bond financing in the euro area, with bank loans remaining the main debt instrument for corporates

## Financial asset holdings in the euro area
*(EUR trillion)*



Legend:
- Total
- Monetary financial institutions (MFIs)
- Non-monetary financial institutions (Non-MFIs)
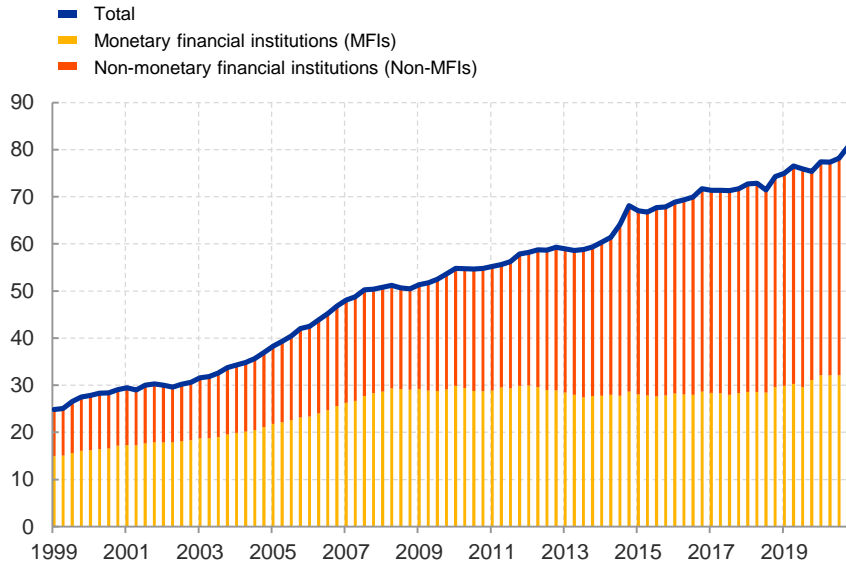
Source: Euro area accounts.
Notes: Non-MFIs include insurance companies and pension funds (ICPFs), investment funds (IFs), and other financial intermediaries (OFIs). MFIs exclude the Eurosystem. Calculations based on market values. Latest observation: Q1 2021.

## Ratio of bonds over loans in euro area non-financial corporations *(ratio)*



Legend:
- Euro area
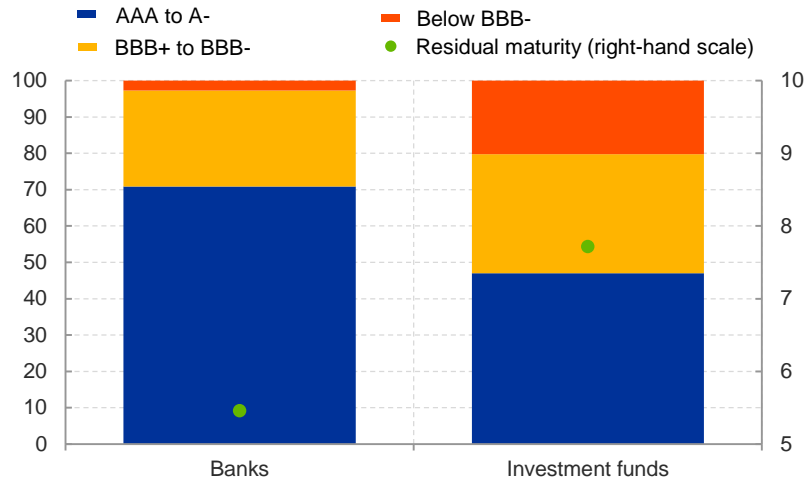- Cross-country standard deviation
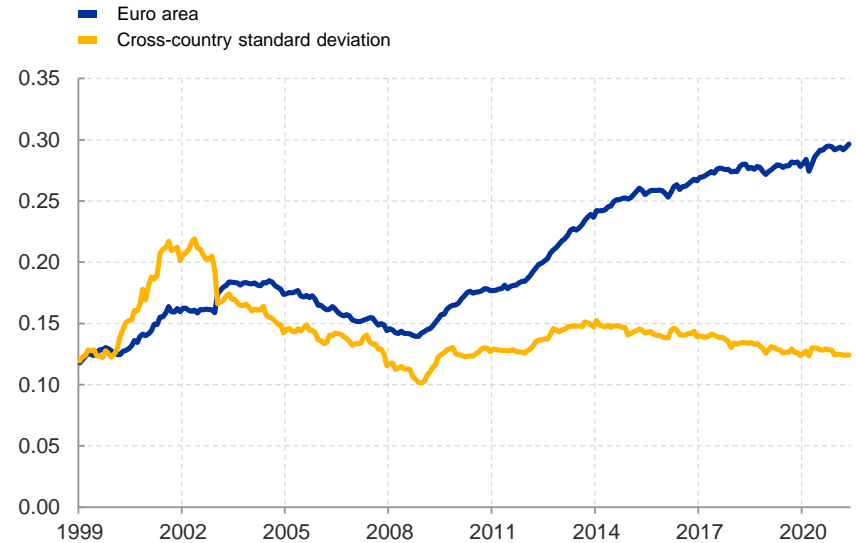
Sources: ECB (BSI, SEC).
Notes: Data cover non-financial corporations (NFCs); loans and bonds are notional stocks. Cross-country standard deviation is calculated excluding Greece. Latest observation: May 2021.

# Systematic differences in balance sheet structures and in responses to policy easing shocks between banks and non-banks

## Composition of bond holdings
*(left-hand scale: percentages, right-hand scale: years)*



Legend:
- AAA to A-
- BBB+ to BBB-
- Below BBB-
- Residual maturity (right-hand scale)

Categories: Banks, Investment funds

Source: ECB Securities Holdings Statistics by Sector and ECB calculations.
Latest observation: Q2 2021.

## Balance sheet responses to policy easing shock
*(percentages)*



- ◆ Short-rate shock
- ◆ Long-rate shock

Categories: Banks, IFs, Banks, IFs
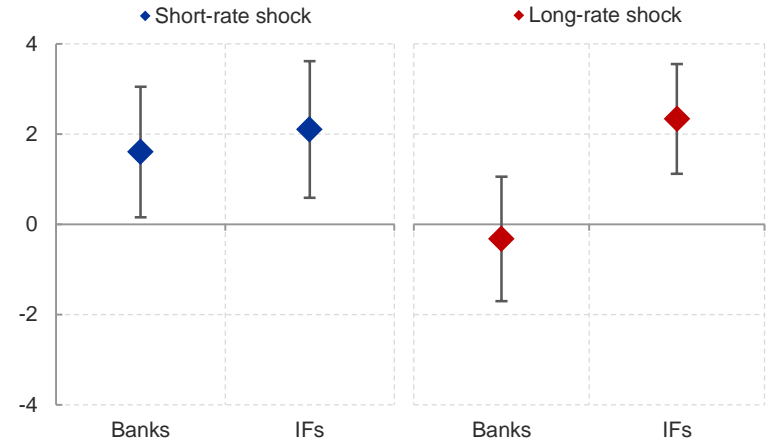
Source: Cappiello, L., Holm-Hadulla, F., Maddaloni, A., Mayordomo, S., Unger, R. et al. (forthcoming), "Non-bank financial intermediation", *ECB Strategy Review Workstream Report*.
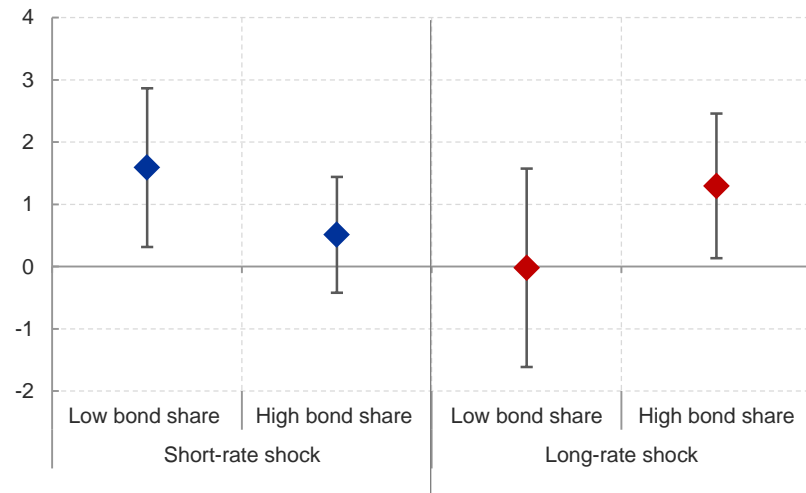Notes: Chart shows the response to monetary policy easing shocks after 12 months, identified via high-frequency surprises in a monthly euro area local projections model, that leads to a 25 basis point decline in interest rates. Dependent variables are total notional stocks of bank assets and investment fund (IF) shares, respectively. Short-rate (long-rate) shocks refer to surprises in the three-month overnight index swap (OIS) rate (ten-year Bund yield). Diamonds are point estimates; whiskers are 90% confidence intervals.

# Transmission of monetary policy to the real economy depends on firms' debt financing structure

**Loan vs bond cost response to a monetary policy easing shock** *(percentage points)*
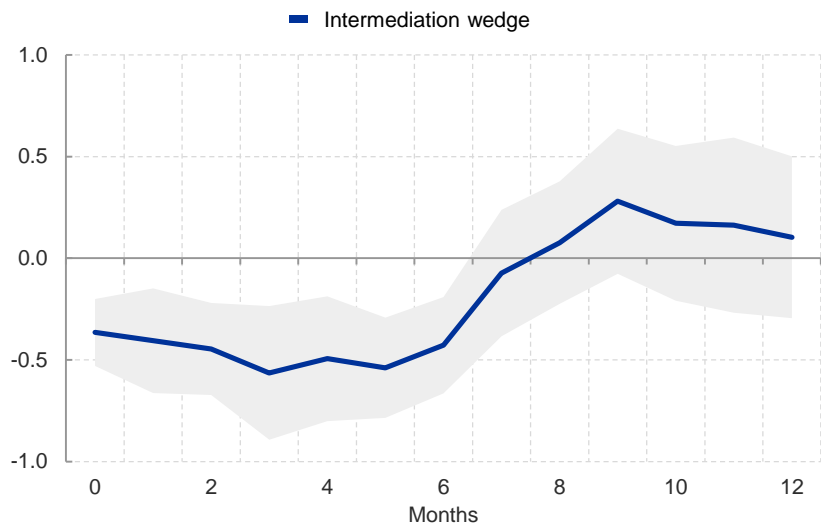
**GDP response to a monetary policy easing shock** *(percentage)*



Source: Holm-Hadulla, F. and Thürwächter, C. (2021), "Heterogeneity in corporate debt structures and the transmission of monetary policy", *European Economic Review*, Vol. 137.
Notes: Charts show impulse response functions (IRFs) to a monetary policy easing shock, identified via high-frequency surprises in a panel local projections model, using monthly data for euro area countries, that leads to a 25 basis point fall in interest rates. Shocks refer to surprises in the one-month overnight index swap (OIS) rate, except for the 'long-rate shock' which refers to five-year Bund yields. Intermediation wedge is the difference between a loan-financing vs bond-financing spread. Bond share is the ratio of bond volume to the sum of bond and loan volumes in non-financial corporation (NFC) sector of each country. Low (high) bond share refers to lower (upper) quintile of cross-country bond share distribution. The range in the left-hand panel denotes the 90% confidence interval. IRFs in the right-hand panel are smoothed. Diamonds are point estimates; whiskers are 90% confidence intervals.

# Risk-taking incentives of investment funds depend on monetary policy instrument

**Initial fund flow response to monetary policy shocks**
*(left-hand scale: percentage of net asset value, right-hand scale: EUR billions)*
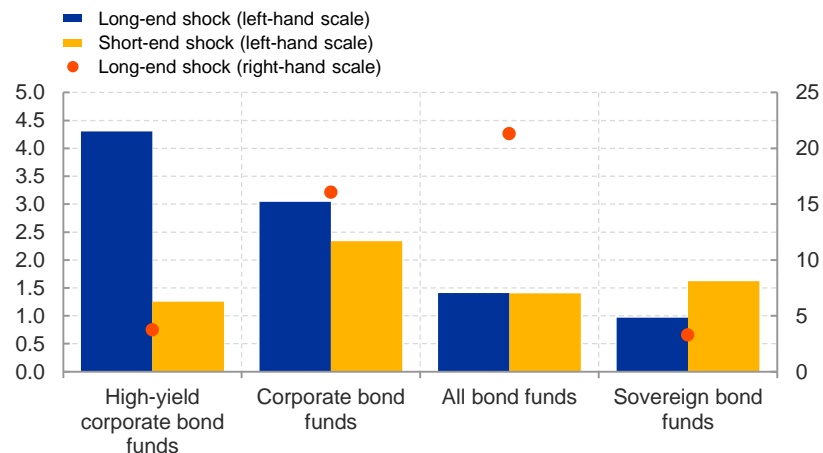
**Initial response of investment fund cash holdings over total assets to monetary policy shocks**
*(left-hand scale: change as percentage of total assets; right-hand scale: percentage of total assets)*
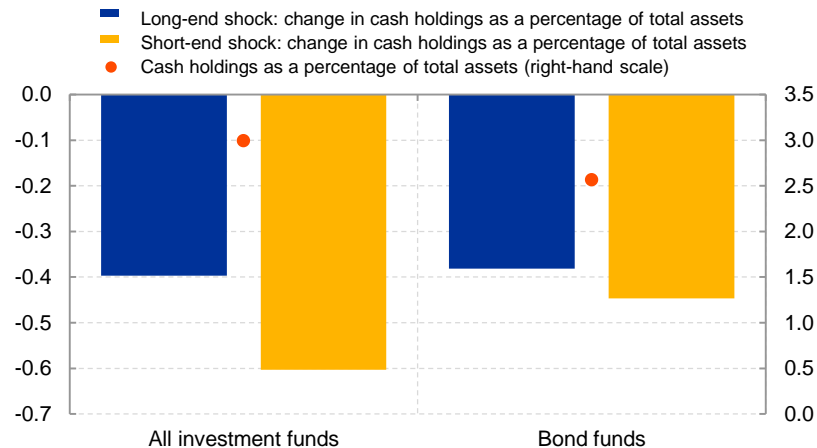


Source: Giuzio, M., Kaufmann, C., Ryan, E., and Cappiello, L. (2021, forthcoming), "Investment funds, risk-taking, and monetary policy in the euro area", *Working Paper Series*, ECB.
Notes: Estimates in both panels are based on a Bayesian vector autoregression (BVAR) model using monthly data between April 2007 and June 2019. Monetary policy shocks are identified using an adapted version of the method in Jarociński, M. and Karadi, P. (2020), "Deconstructing monetary policy surprises – the role of information shocks", *American Economic Journal: Macroeconomics*, Vol. 12, No 2, American Economic Association, April, pp. 1-43, and, using data provided by Altavilla, C., Brugnolini, L., Gürkaynak, R., Motto, R. and Ragusa, G. (2019), "Measuring euro area monetary policy", *Journal of Monetary Economics*, Vol. 108, December, pp. 162-179. The model includes the five-year Bund yield, the five-year euro area NFC bond spread, the EURO STOXX index and its volatility (VSTOXX). The left panel shows the median impulse response function (IRF), with areas shaded blue (grey) denoting 68% (90%) credibility intervals after a monetary policy shock equivalent to a 25 basis point reduction of the five-year euro area risk-free rate. The right panel shows the first-month response for different fund types. The monetary policy shocks are equivalent to a 25 basis point reduction in the five-year euro area risk-free rate for long-end shocks and in the three-month overnight index swap (OIS) for short-end shocks. Flows examined are to funds with euro area domicile and European investment focus.

# Thank you for your attention!