



EUROPEAN CENTRAL BANK

EUROSYSTEM

Lessons from an unusual crisis

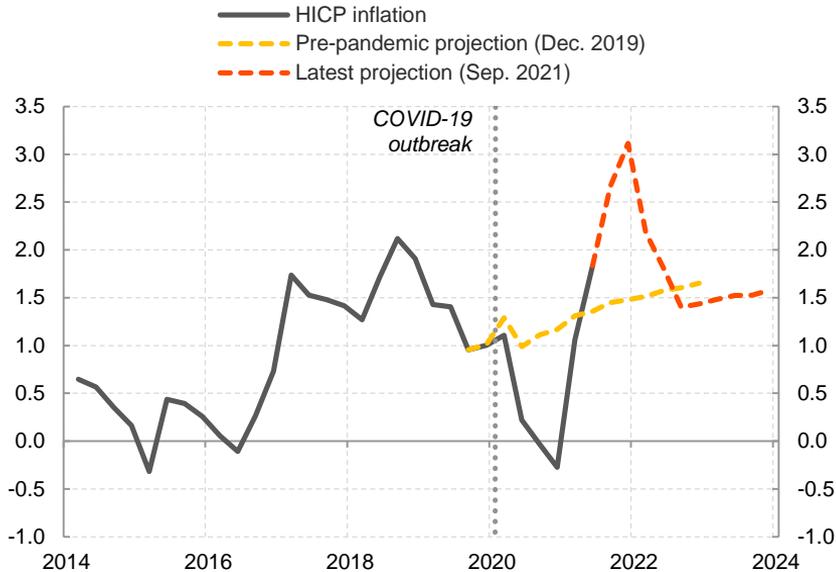
FRBNY Conference on “Implications of Federal Reserve Actions in Response to the COVID-19 Pandemic”, 1 October 2021



Isabel Schnabel
Member of the ECB Executive Board

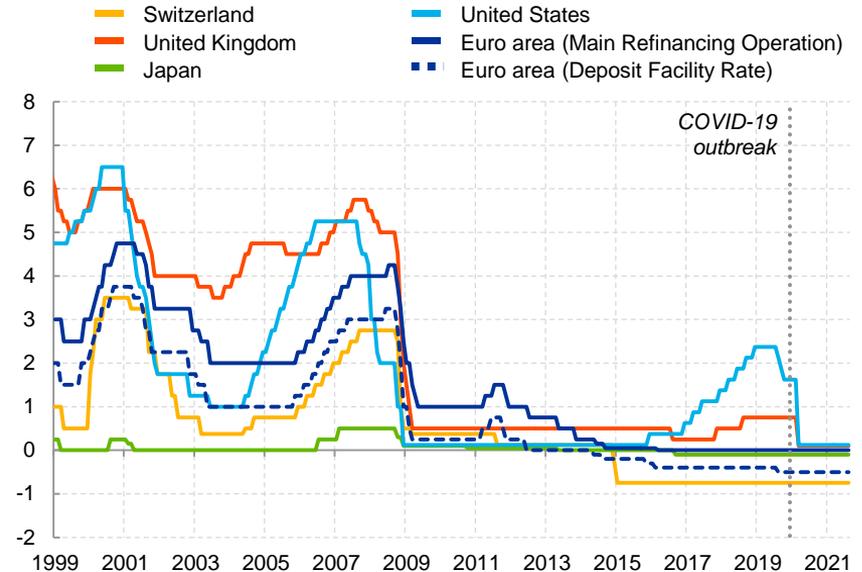
Subdued inflation outlook in the euro area implied highly accommodative monetary policy already before the pandemic

Realised and projected path of inflation in the euro area (annual percentage change)



Sources: ECB calculations.
Latest observation: Q2 2021.

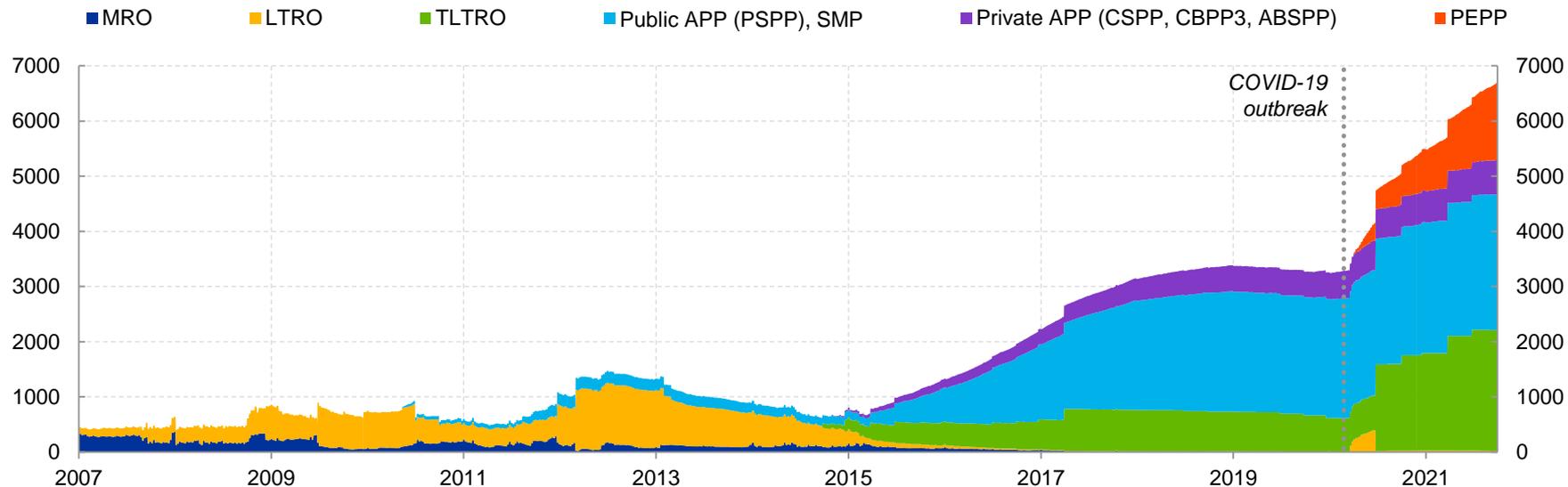
Central bank policy rates (percent)



Source: Bank for International Settlements (BIS).
Latest observation: August 2021.

Eurosystem balance sheet expanded markedly before the pandemic with sharp acceleration due to pandemic crisis measures

Evolution of the Eurosystem's monetary policy assets (EUR billion)



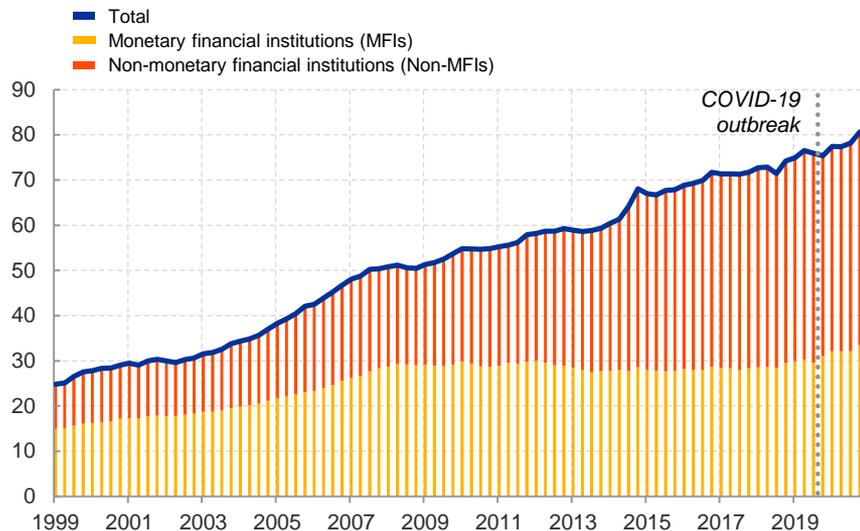
Source: ECB, ECB calculations.

Note: The chart shows the consolidated monetary policy assets held by the Eurosystem. It excludes non-monetary policy assets such as gold and gold receivables, claims on non-euro area residents and non-monetary policy securities held under the "Agreement on Net financial Assets" (ANFA).

Latest observation: 29 September 2021.

Bank-based transmission remains highly relevant in the euro area in spite of the rise of non-banks and bond financing

Financial asset holdings of MFIs and non-MFIs in the euro area (EUR trillion)

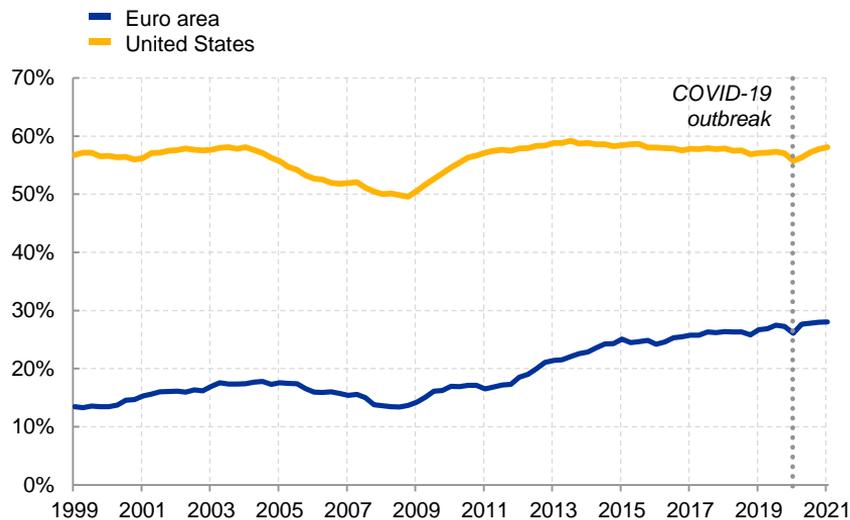


Source: Euro area accounts.

Note: 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.

Share of corporate debt securities in debt financing (percentage)



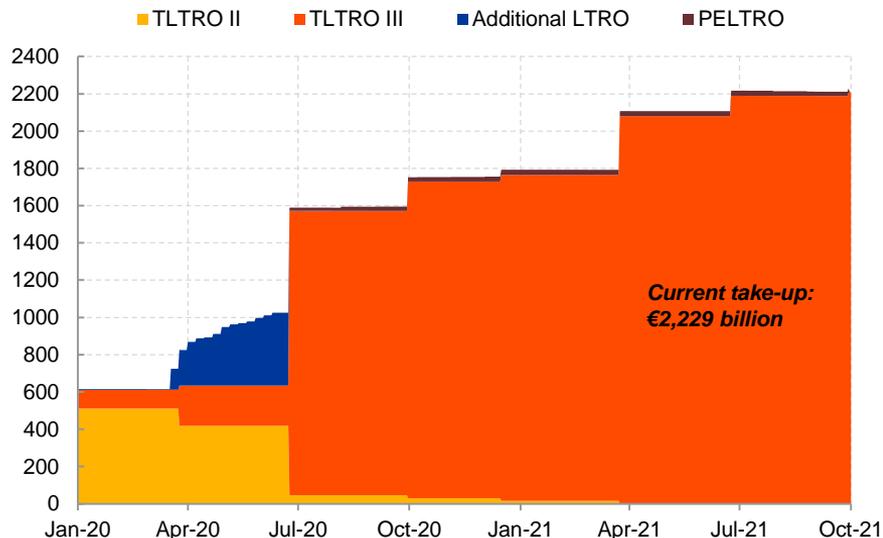
Sources: ECB and US Federal Reserve.

Note: The chart shows the volume of debt securities relative to the sum of bank loans and debt securities. Data cover the non-financial corporat (NFC) sector for the euro area and the non-financial business sector for the US series. Data on debt securities and bank loans are outstanding amounts (not seasonally adjusted).

Latest observation: Q1 2021.

High take-up of TLTROs and sharp rise in bank lending to firms

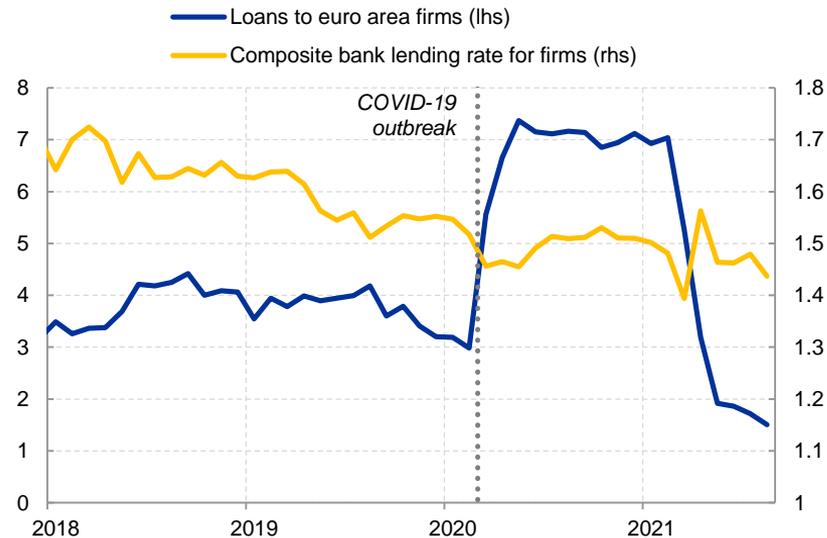
Take-up of ECB liquidity-providing operations
(EUR billion)



Source: ECB.

Note: TLTRO III refers to the sum of TLTRO III.1-9.
Latest observation: 1 October 2021.

Bank loan growth and lending rate for firms
(annual percentage changes and percentages per annum)

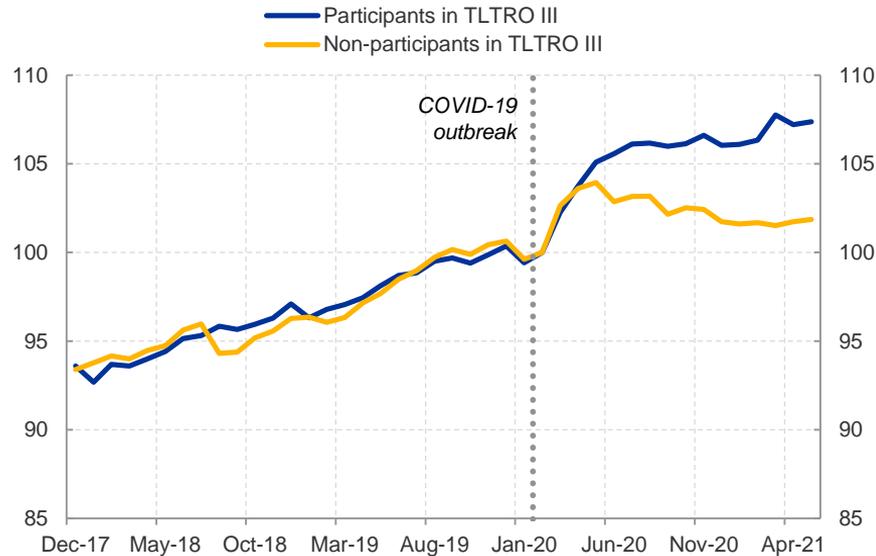


Source: ECB.

Notes: Loans to non-financial corporations (NFCs) are adjusted for loan sales, securitisation and for notional cash pooling. Composite bank lending rates are calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes.
Latest observation: August 2021.

TLTROs safeguarded bank-based transmission during the pandemic

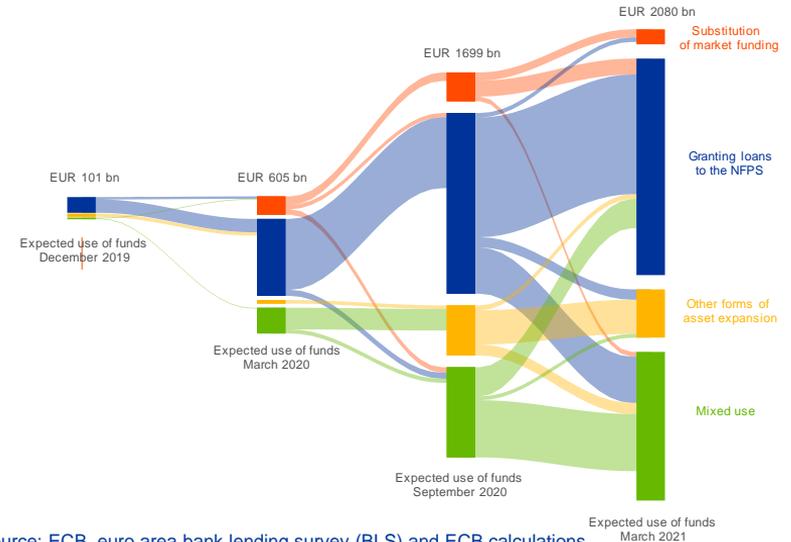
Evolution of eligible loans for TLTRO III participants and non-participants (notional stock, February 2020 = 100)



Sources: ECB and ECB calculations.

Notes: The chart displays the evolution of eligible loans for banks participating (blue line) and banks not participating (yellow line) in TLTRO III until May 2021. For details, see Barbiero et al. (2021), "TLTRO III and bank lending conditions", Economic Bulletin, Issue 6, ECB.

Evolution of expected use of TLTRO III funds (share of respondents weighted by TLTRO III amounts)

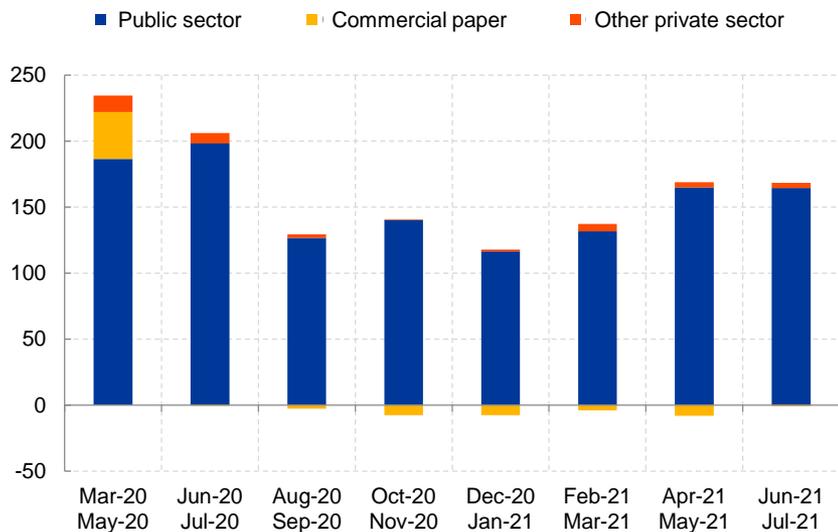


Source: ECB, euro area bank lending survey (BLS) and ECB calculations.

Notes: Other forms of asset expansion include government securities, cash holdings, financing other financial entities, and others. Shaded areas report take-up of banks that change their expected use of funds between survey waves. NFPs refers to non-financial private sector. For details, see Barbiero et al. (2021), "TLTRO III and bank lending conditions", Economic Bulletin, Issue 6, ECB. Latest observation: Q1 2021 (April 2021 BLS).

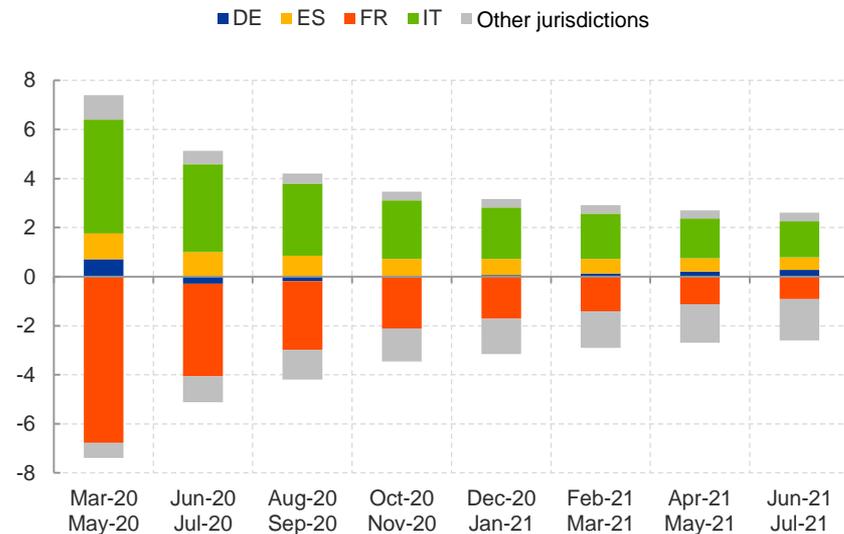
PEPP flexibility restored market functioning and countered risks of fragmentation

Net asset purchases under PEPP by asset class
(EUR billion)



Source: ECB website.
Latest observation: July 2021.

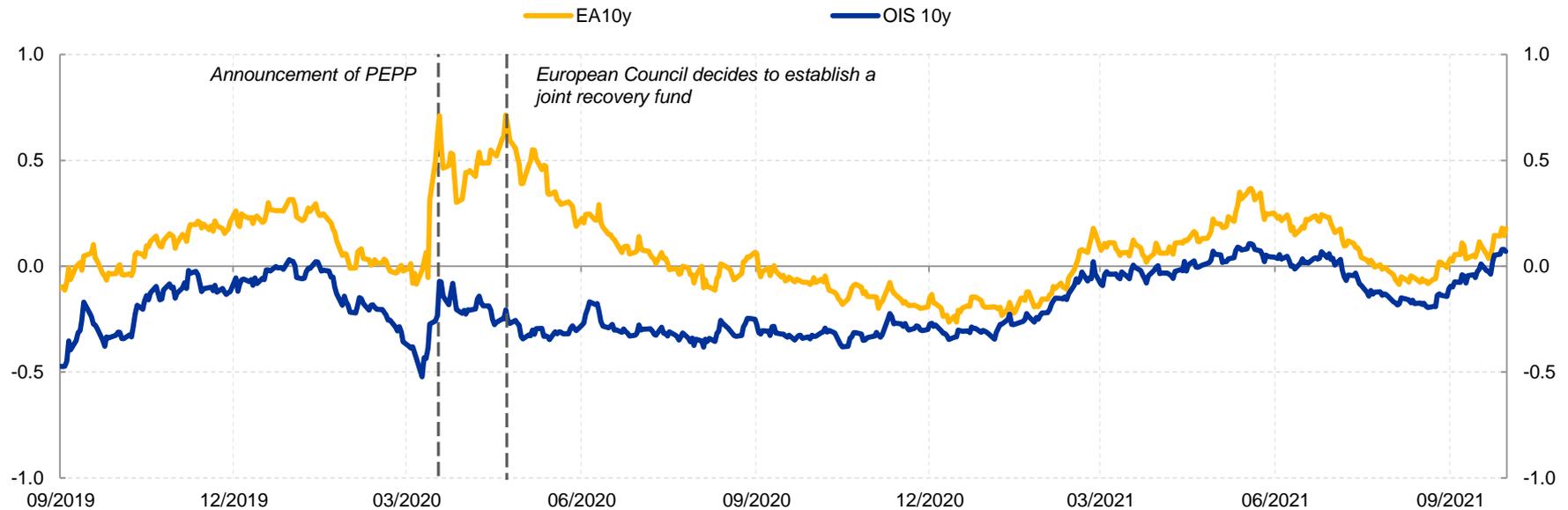
Capital key deviations under PEPP
(percentage points)



Source: ECB website, ECB calculations.
Notes: Capital key deviations for public sector purchases calculated in bi-monthly stock terms. DE – Germany, ES – Spain, FR – France, IT – Italy.
Latest observation: July 2021.

Spread of euro area GDP-weighted sovereign yields over risk-free rates declined after announcement of PEPP and EU recovery fund

Euro area GDP-weighted sovereign bond yields and OIS rates (percent)

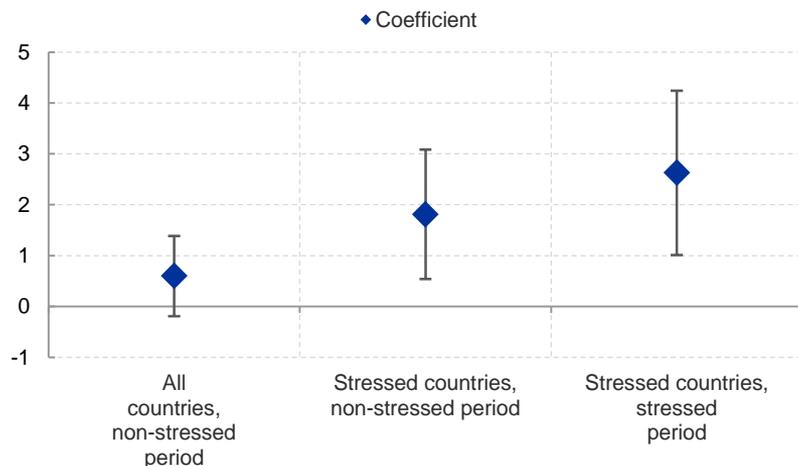


Sources: Refinitiv, ECB calculations.
Note: OIS refers to overnight index swap.
Last observation: 30 September 2021.

“Flow effect” of asset purchases matters more in stressed market conditions

“Flow effects” on daily bond returns

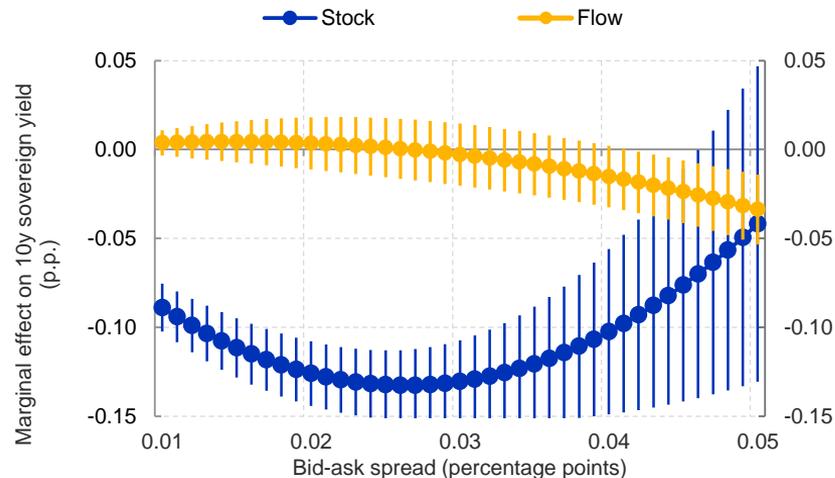
(impact of a 1 percentage point increase in purchases of security relative to its outstanding amount, in percent)



Source: ECB calculations.

Notes: The impact estimates derive from regressions of daily bond returns of individual central government securities on ECB purchases of these securities, scaled by their outstanding amounts, and a full set of security- and day-fixed effects. Purchase volumes are instrumented via the blackout periods embedded in the PSPP and PEPP design, as detailed in De Santis, R. and Holm-Hadulla, F. (2020), “Flow Effects of Central Bank Asset Purchases on Sovereign Bond Prices: Evidence from a Natural Experiment”, *Journal of Money, Credit and Banking*, Vol. 52, No 6, pp. 1467-1491. Diamonds are point estimates, whiskers are 95% confidence intervals.

“Stock” and “flow effects” on bond yields conditional on market liquidity (percentage points)



Source: ECB calculations.

Notes: Estimated marginal effect of stock and flow measures of asset purchases on 10-year bond yields conditional on market illiquidity, measured by bid-ask spreads based on a non-linear regression model. “Stock” is defined as the ratio of survey-implied total expected public sector purchases by the expected end of net asset purchases to total expected outstanding public sector debt. “Flow” is defined as the ratio of realised net purchases of public sector bonds to realised net issuances per month. Monthly frequency over a sample period from January 2015 until July 2021.

Thank you for your attention!