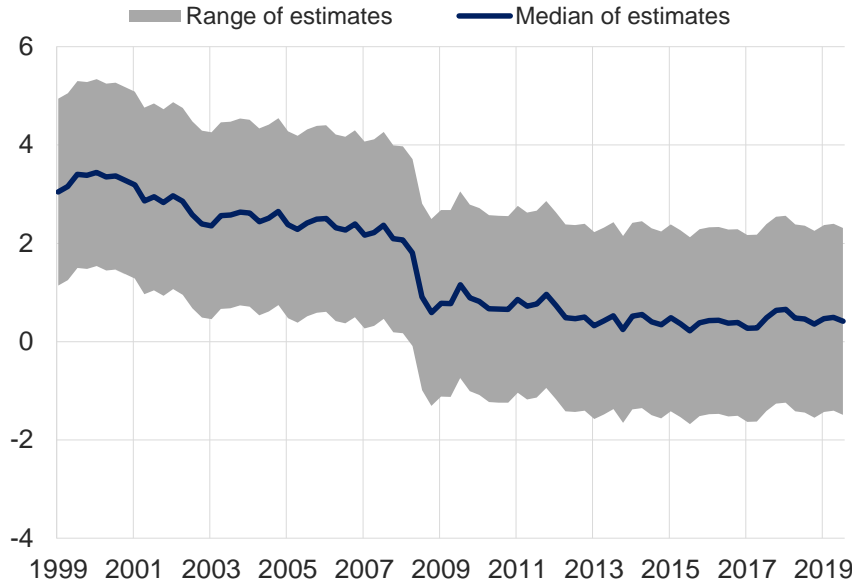# A new strategy for a changing world

Isabel Schnabel, Member of the ECB Executive Board

Peterson Institute for International Economics, 14 July 2021

Structural forces putting downward pressure on real equilibrium interest rates

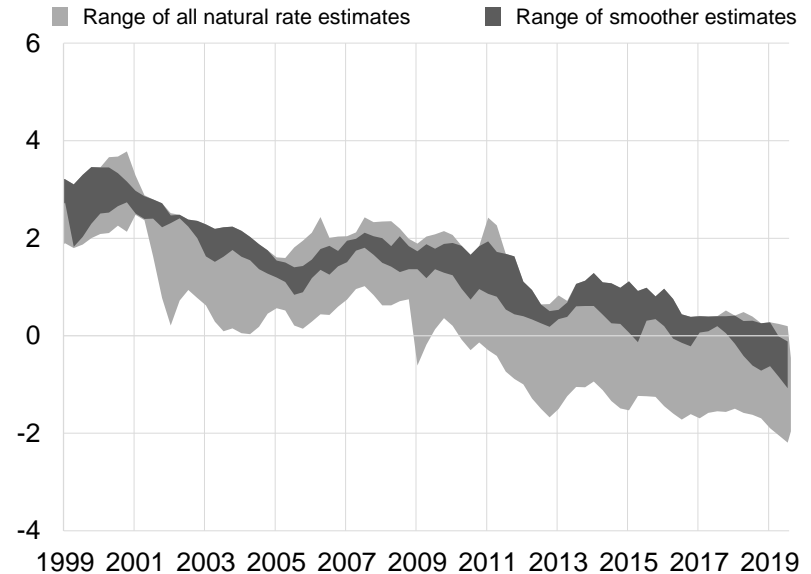## Estimates of US equilibrium rate
(percentage per annum)

Range of estimates   Median of estimates

Estimates of euro area equilibrium rate
(percentages per annum)

Range of all natural rate estimates   Range of smoother estimates

Secular decline in euro area inflation

Headline HICP
(annual percentage changes)
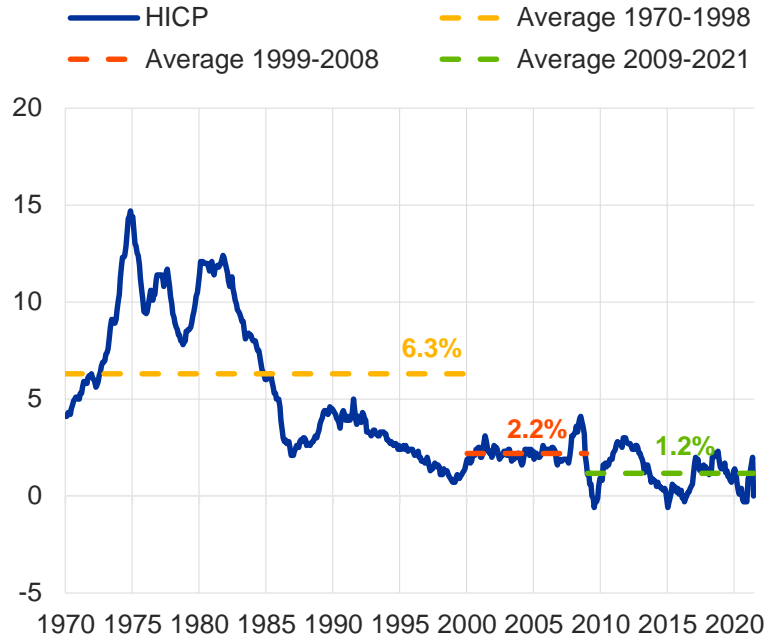
Sources: Eurostat and ECB calculations.
Latest observation: June 2021 (flash).

HICP excluding energy and food
(annual percentage changes)
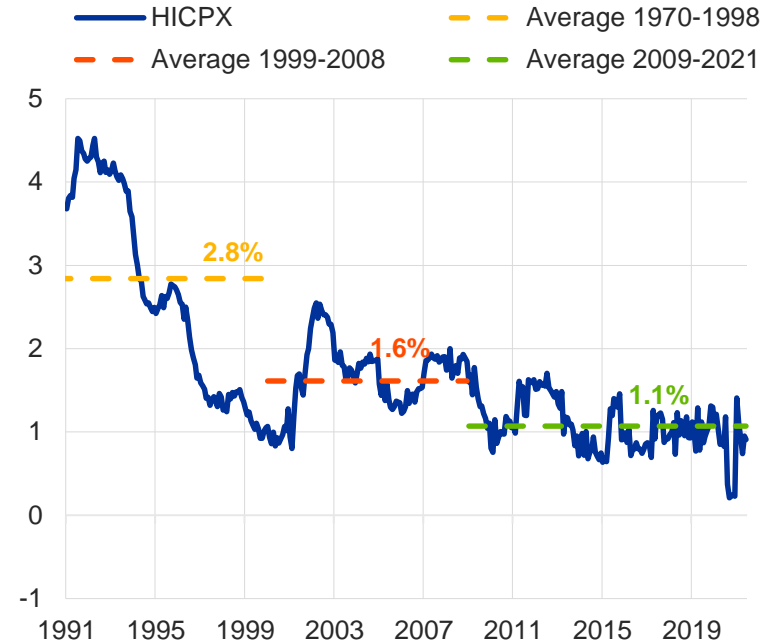
Sources: Eurostat and ECB calculations.
Note: HICPX refers to HICP excluding energy and food.
Latest observation: June 2021 (flash).

House prices rising more quickly than consumer prices

HICP and residential property prices
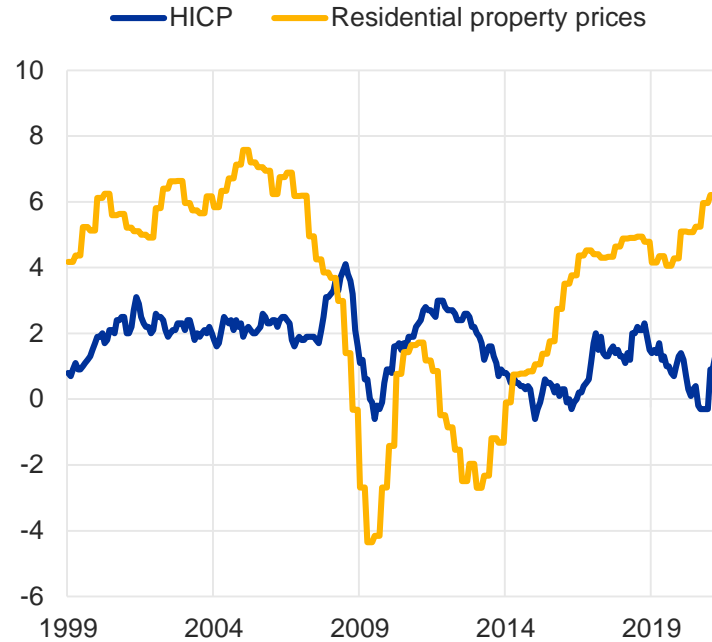### (annual percentage changes)

Source: ECB, Eurostat.
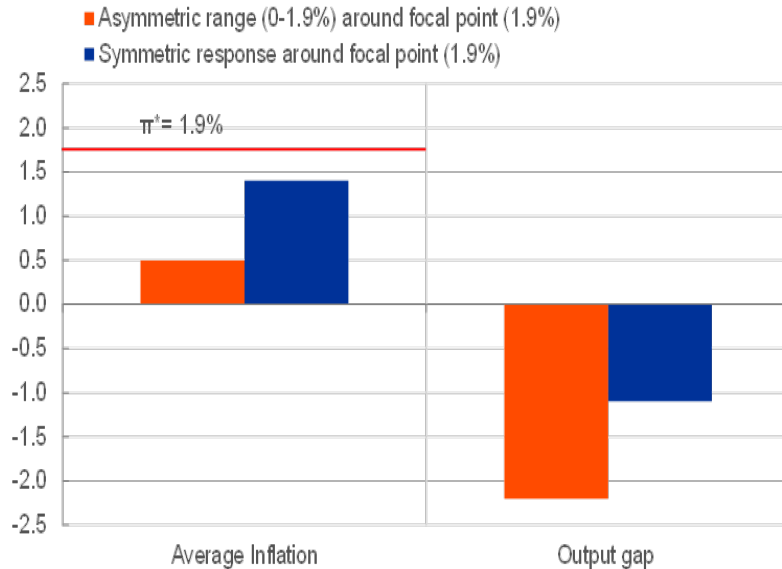Latest observations: June 2021 for HICP (flash) and 2021 Q1 for ECB residential property price index.

Perceptions of asymmetric reaction function affecting inflation expectations

Macroeconomic outcomes over the longer-run: symmetry around 1.9% versus asymmetry
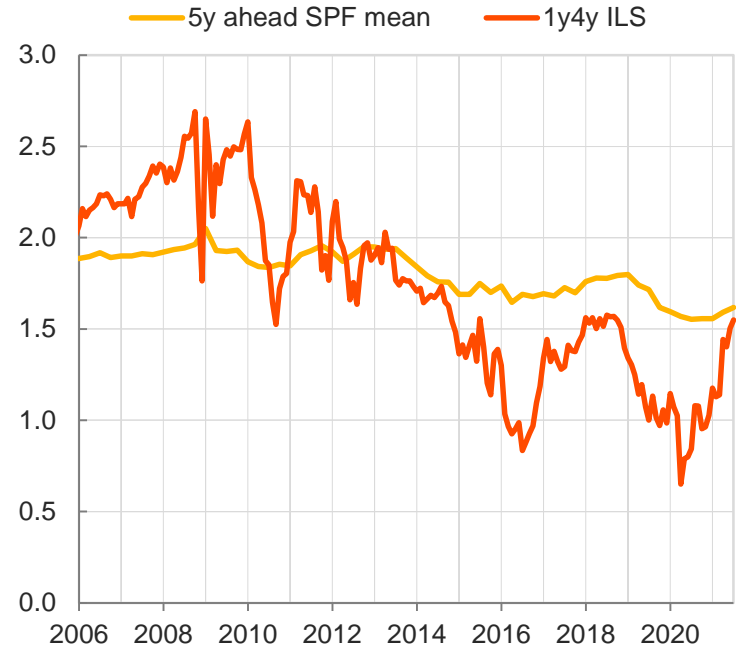(annual % changes and % deviation)

Survey- and market-based measures of inflation expectations
(annual percentage changes)

Diminishing and state-contingent effectiveness of monetary policy

Effect of monetary policy-induced FCI easing on industrial production growth during different policy regimes
(annualised percentage, cumulated after 6 months)
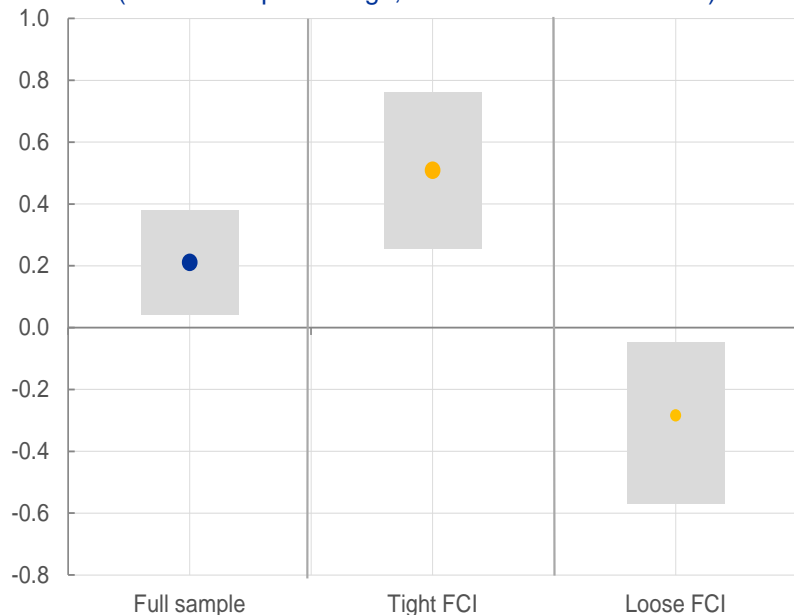
Source: ECB staff calculations.
Notes: The dot represents the mean response of industrial production growth in a panel of advanced economies (USA, EA, GBR, JPN) following a 0.1 change in the FCI as caused by monetary policy shocks. The monetary-policy induced FCI is generated using country-specific BVAR models and the effect on industrial production is estimated using panel threshold local projections. "Full sample" refers to the estimates over the complete sample period, "tight (loose) FCI" to when the FCI is in an endogenously estimated tight (loose) FCI regime.

Effect of monetary policy-induced FCI easing on industrial production growth during different business cycle phases
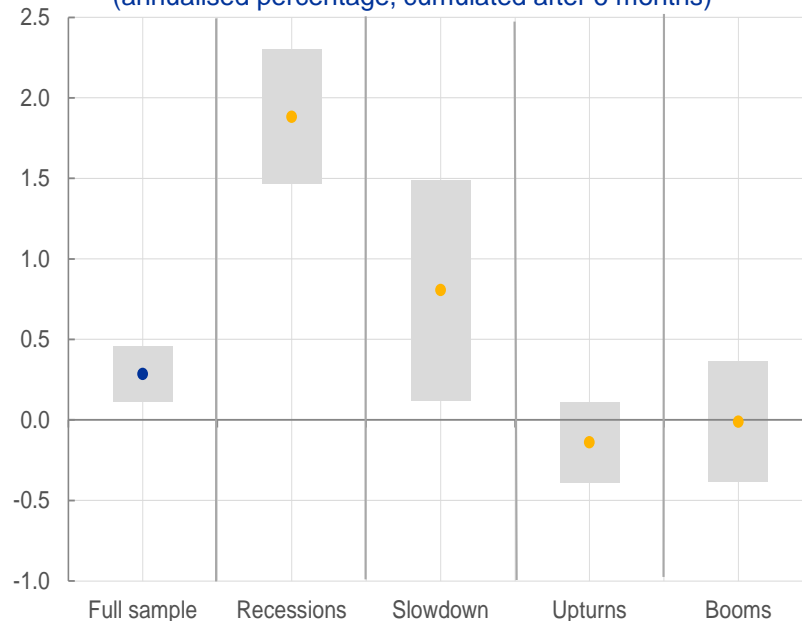### (annualised percentage, cumulated after 6 months)

Source: ECB staff calculations..
Note: The dot represents the mean response of industrial production growth in a panel of advanced economies (USA, EA, GBR, JPN) following a 0.1 change in the FCI as caused by monetary policy shocks. The monetary-policy induced FCI is generated using country-specific BVAR models and the effect on industrial production is estimated using panel threshold local projections. "Slowdowns" are periods when GDP is growing below potential and the output gap is negative, "Upturns" are when GDP is growing above potential but the output gap is negative and "Booms" when GDP grows above potential and the output gap is positive. The "Slowdown" episode is only tested for the EA and shows the response after 12 months.

"Unconventional" monetary policy tools effective in easing financing conditions

EA GDP-weighted yield curve
(percentage)

Legend: 10/06/2014 — Latest

Source: ECB Statistics Data Warehouse
Latest observation: 13 July 2021

Euro area financial conditions
(standardized index)

Legend: Euro area Financial Conditions Index

Easing

Tightening

Sources: Refinitiv Datastream, Bloomberg and ECB staff calculations.
Notes: The FCI is aggregated using GDP PPP shares and includes DE, ES, IT and FR. National FCIs are computed as a weighted average of five financial variables, i.e. 10-year government bond yields, short-term interest rates, NEER, PE ratio and corporate spread. Variables are standardized.
Latest observation: 12/07/2021.

Phillips curve models pointing to structural factors explaining low inflation

Euro area Phillips curves: coefficient on slack across range of models

Legend: 68% confidence band — Median
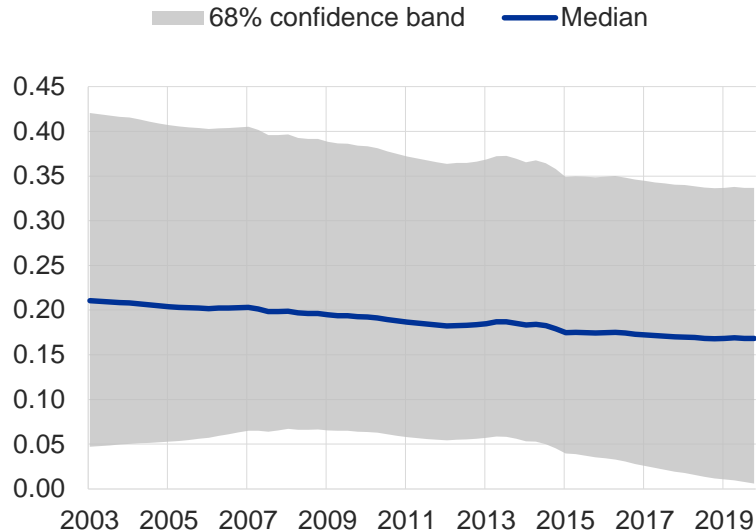
Sources: ECB staff calculation.
Note: Sample: 1999Q1 to 2019Q4. Based on a pool of models as detailed in Bobeica, E. and Sokol, A. (2019), "Drivers of underlying inflation in the euro area over time: a Phillips curve perspective," Economic Bulletin Article, European Central Bank, Vol. 4.

Euro area Phillips curves: decomposition of HICP excluding energy and food
(annual percentage changes and percentage points contributions)

Legend: Economic slack, External prices, Inflation expectations, Unexplained, HICPX inflation
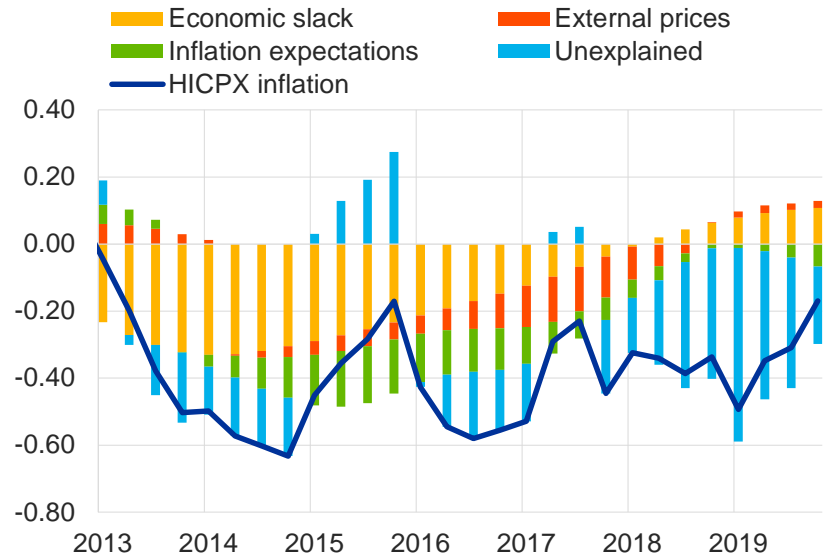
Sources: Eurostat and ECB staff calculations. The HICPX series is seasonally adjusted and displays a kink in 2015 due to a methodological change.
Notes: Same models used as for left-hand chart. All values are in terms of deviations from their averages since 1999 or later, depending on the specification. The bars show average contributions across specifications. The sample covers 1999Q1 to 2019Q4 to avoid the effect on estimation of the
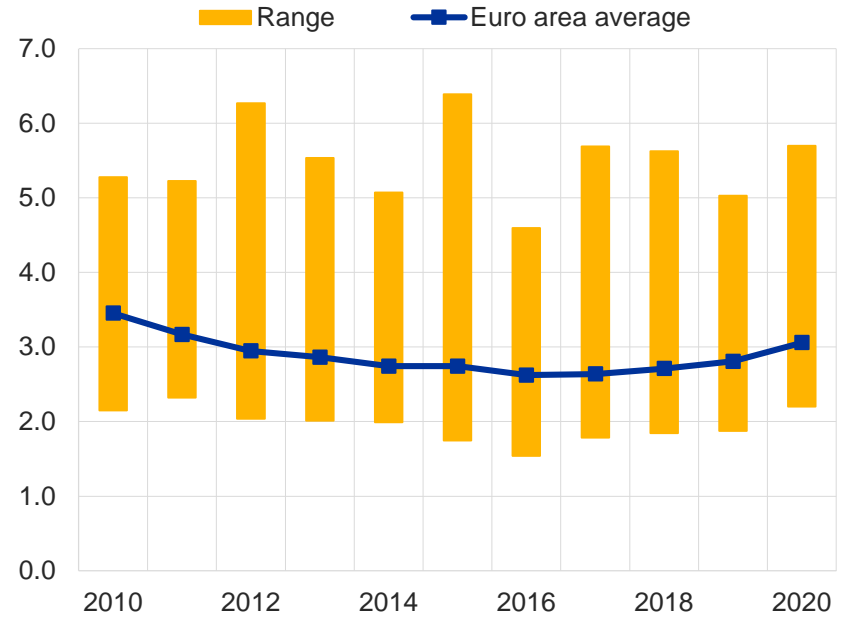
Pre-pandemic fiscal policy largely unresponsive to lower interest rates

Euro area primary balance
(% of GDP)
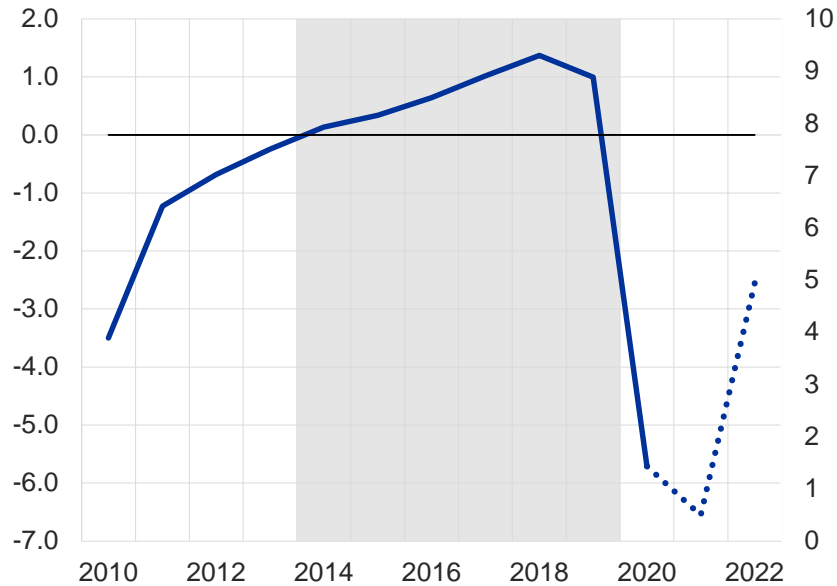
Source: AMECO

Euro area public investment
(% of GDP)

Legend: Range | Euro area average

Source: AMECO

Greater prominence for financial stability risks in new analytical framework

Monetary Policy Decisions

Policy Deliberations

Stance

Instrument choice and design

Proportionality assessment

Analytical inputs

Economic Analysis ⟷ Monetary and Financial Analysis

Macro-financial linkages

Transmission

Real and nominal developments

Enhanced financial stability analysis

Analysis over short, medium and longer-term horizons, covering central scenarios and risks

Rising physical risks of climate change

Global insured catastrophe losses
(left-hand scale: USD billions in 2020; right-hand scale: percentages)
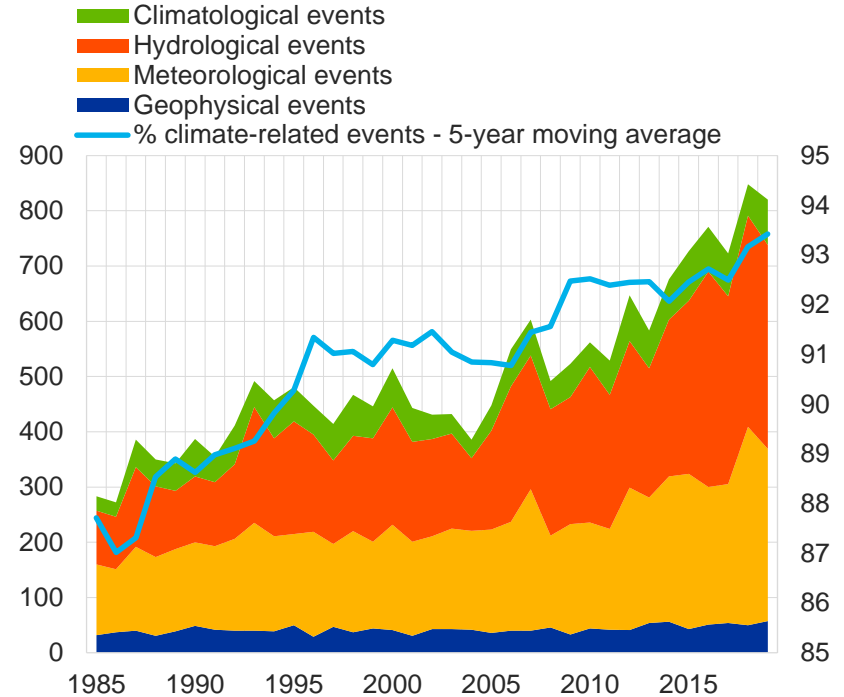
Number of relevant natural loss events globally
(left-hand scale: number of events; right-hand scale: percentages)
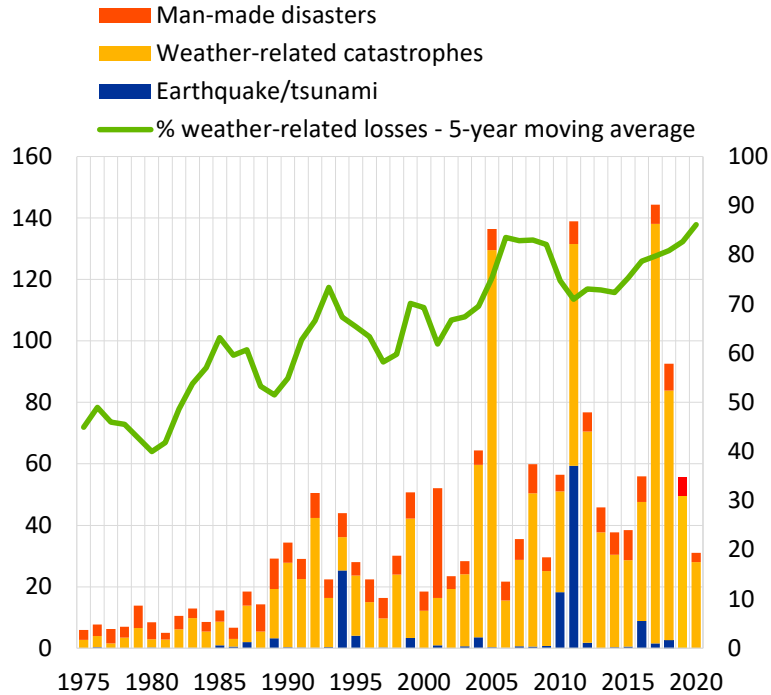
Source: Swiss Re institute and ECB calculations.
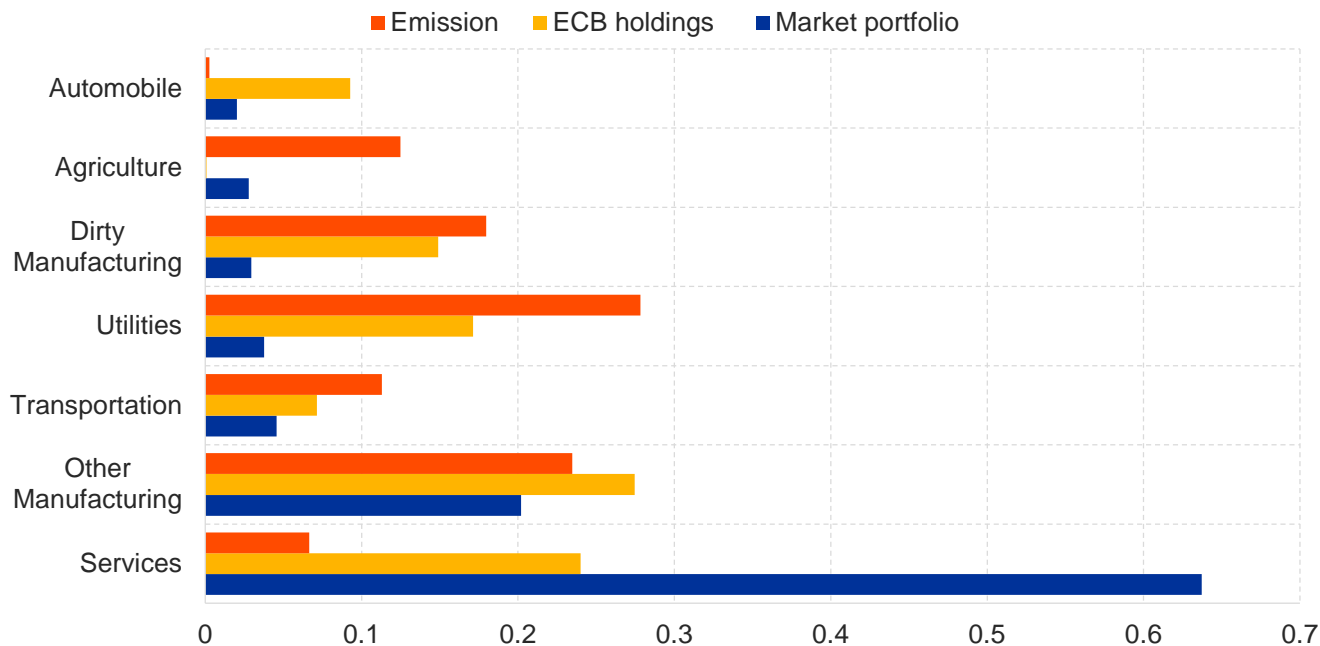Latest observation: June 2020.

Source: Munich Re NatCatService and ECB calculations.
Latest observations: December 2019.
Notes: Climatological events: drought and wildfire. Geophysical events: earthquake, tsunami, volcanic activity. Hydrological events: floods. Meteorological events: all types of storms.

Emission bias in the ECB's corporate bond portfolio

Market portfolio vs. ECB holdings vs. sectoral emission intensity
(market shares)

Legend: ■ Emission ■ ECB holdings ■ Market portfolio

Sectors (top to bottom): Automobile, Agriculture, Dirty Manufacturing, Utilities, Transportation, Other Manufacturing, Services

X-axis: 0, 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7

Source: Papoutsi, Piazzesi, Schneider (2021). Data sources: ECB (SHS & CSDB), Eurostat, Orbis. Notes: Market shares measured as capital income by sector. Emission intensity measured by Scope 1 air emissions by sector. "Dirty Manufacturing" = oil & coke, chemicals, basic metals, nonmetallic minerals. Other Manufacturing = food, beverages, tobacco, textiles, leather, wood, paper, pharmaceuticals, electronics, electrical equipment, machinery, furniture, construction, and other manufacturing.

Thank you for your attention