# Highly favourable financing conditions at time of December meeting

## Euro area GDP-weighted yield curve
(percentage per annum)

- Pre-PEPP announcement (18 Mar 2020)
- Pre-pandemic (18 Feb 2020)
- December GovC meeting (10 Dec 2020)



Maturity (years)
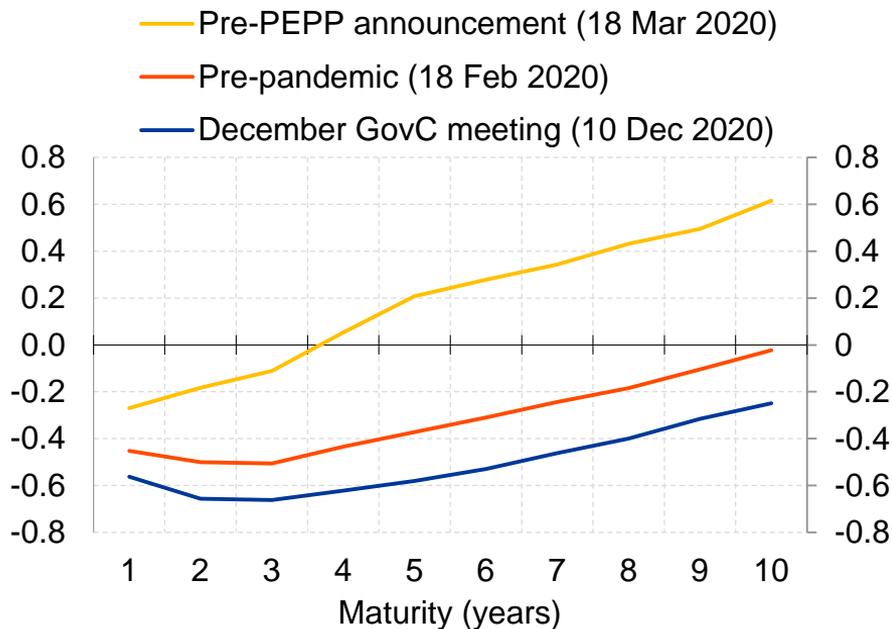
Source: Refinitiv, ECB calculations.

## Euro area 10-year real OIS rate
(percentage per annum)

- 10-year real OIS    - - Average since 2006



December GovC meeting

Source: Refinitiv, ECB calculations.
Notes: Real rates are calculated as the difference between the nominal OIS rates and inflation-linked swap rates. Last observation: 22 March 2021

# Containment measures and high uncertainty weighing on aggregate demand

Consumer survey: major purchases
over next 12 months (percent balance)

Consumer survey: savings over next 12 months
(percent balance)



Source: European Commission.
Latest observation: February 2021.

Source: European Commission.
Latest observation: February 2021.

# Lower bound and long period of low interest rates may reduce credit sensitivity

Weight of short-term loans in the cost of borrowing indicator to households for house purchases
(percentage)



Distributions of household deposit rates across individual MFIs in the euro area in January 2021
(x-axis: deposit rates in percentages per annum, y-axis: frequencies in percentages, weighted by volumes)
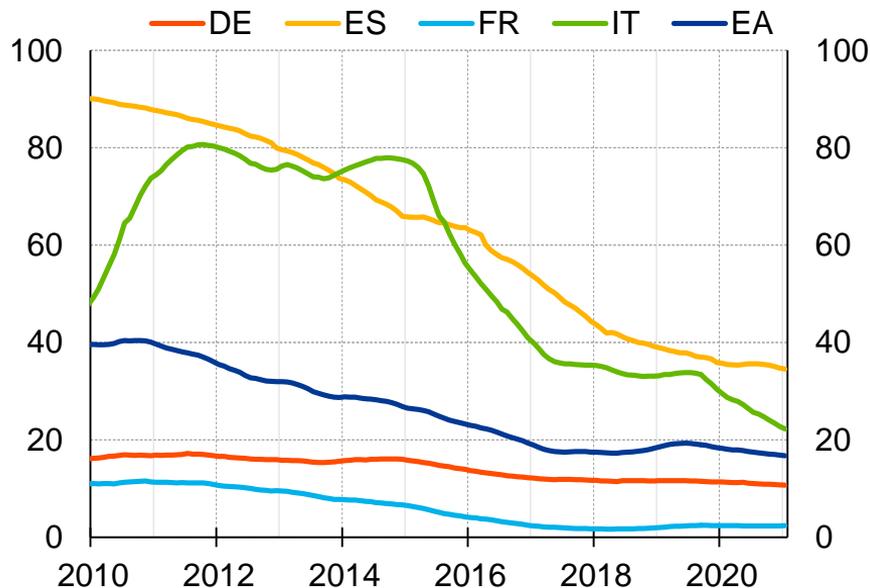


Source: ECB.
Notes: The weight is a 24-month moving average of the fraction of new business volumes with initial fixation period up to 1 year over total new business volumes.
Latest observation: January 2021.
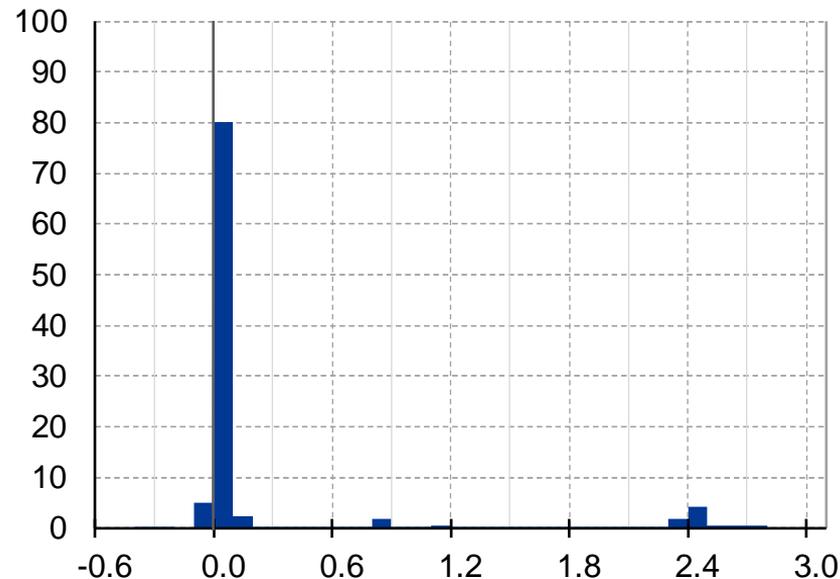
Sources: ECB and ECB calculations.
Notes: Deposit rates on outstanding amounts as reported by individual banks for each of the available product categories, weighted by the respective outstanding amounts. Deposits of households include non-profit institutions serving households (NPISH).

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# Risks of overvaluation in financial and real estate markets

## US excess PE yield by sector
(percentage)



## House price growth and residential real estate over-/undervaluation estimate in the euro area
(annual percentage changes)
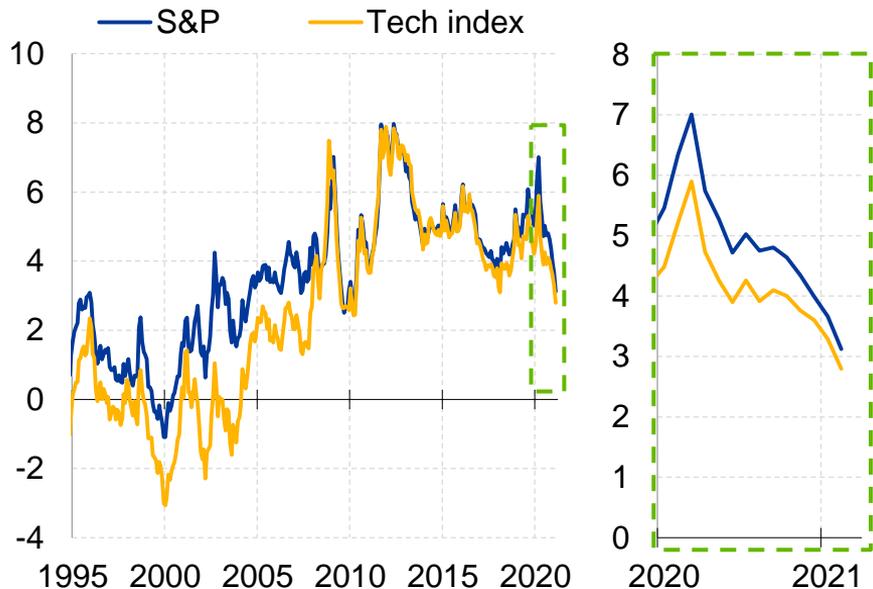


Source: Bloomberg and ECB calculations.
Notes: Core inflation is used for 10y real yields. Earnings yield on equities refers to the inverse of the price earnings (P/E) ratio.
Latest observation: February 2021.
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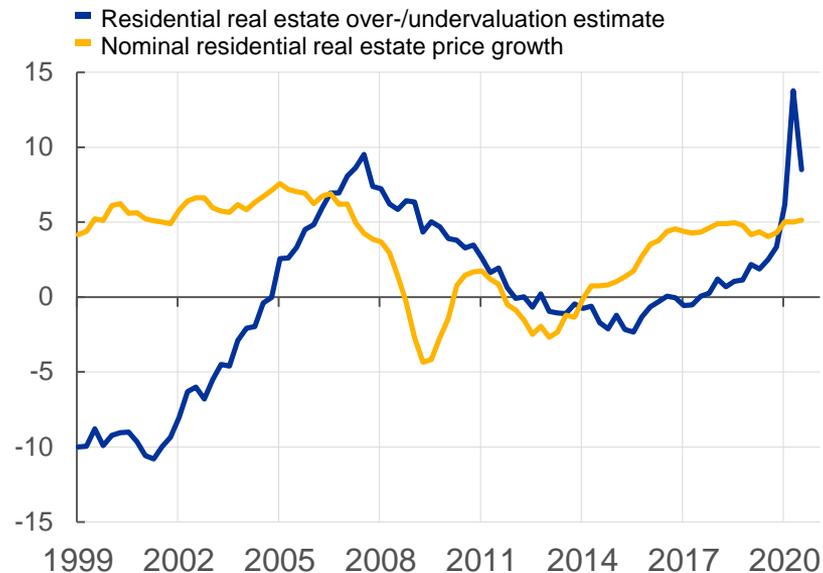
Source: ECB calculations.
Note: The blue line corresponds to the average of two estimates of the over/undervaluation of residential property prices – house price-to-income ratio and a model-based method (Bayesian static equation).
Latest observation: 2020 Q3.

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# Current real rates highly accommodative despite decline in equilibrium rate

## Long-term real interest rate gap in the euro area
(percentage points)

- range based on different r* estimates
- range based on extrapolated r* estimates of 2019
- median based on different r* estimates
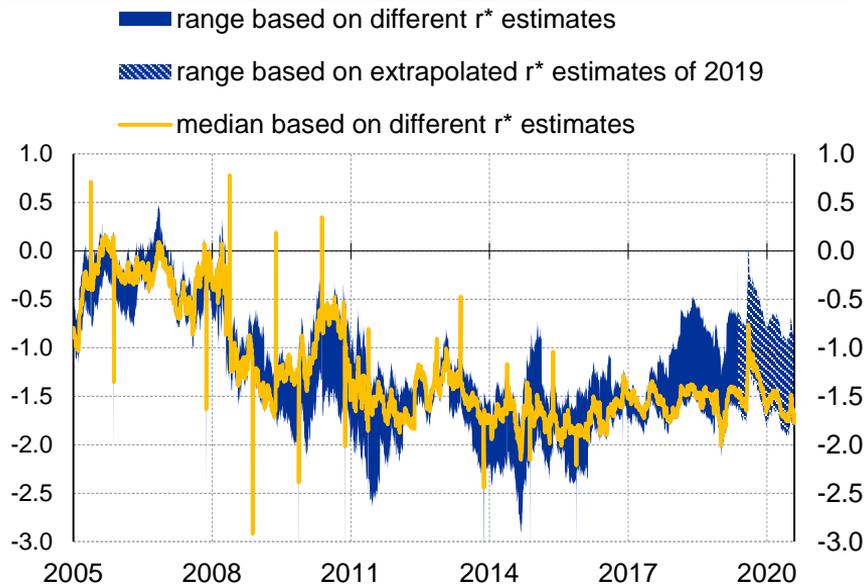


Source: ECB.
Notes: The euro area long-term natural real rate gap is calculated as the 10y real OIS rate minus a measure of the natural long-term real rate. The real OIS rate is given by the difference of the nominal OIS and ILS rates. The long-term natural real rate measure is provided by the sum of an r* estimate and the long-term average of the real term structure slope (10y-2y real OIS). The range and median result from different r* estimates based on a suite of models (Brand, Goy, Lemke, 2020; Geiger, Schupp, 2018; Mertens, 2021). The white-blue shaded area marks a simple extrapolation of the latest available r* estimates from Q3 2019.
Latest observation: 18 March 2021.

## Estimates of euro area short-term equilibrium rate
(percentages per annum)

- Range of all natural rate estimates
- Range of smoother estimates
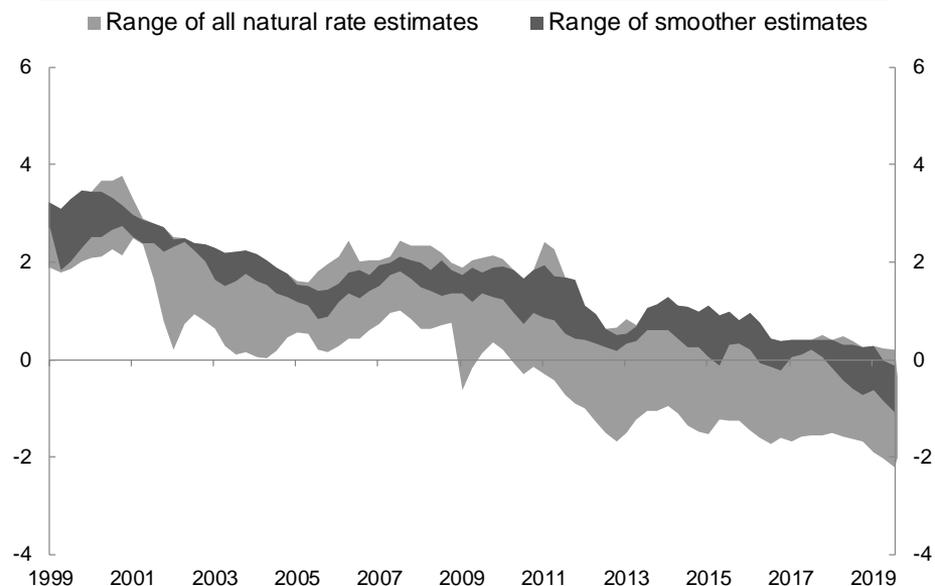


Sources: WGEM Report "The natural rate of interest: estimates, drivers, and challenges to monetary policy", OP, No 217; Ajevskis (2018); Brand, Goy, Lemke (2020); Brand, Mazelis (2019); Fiorentini, Galesi, Pérez-Quirós, Sentana (2018); Geiger and Schupp (2018); Holston, Laubach, Williams (2017); Jarocinski (2017); Johannsen and Mertens (2021). Notes: Ranges span point estimates across models to reflect model uncertainty and no other source of r* uncertainty. The dark shaded area highlights smoother r* estimates that are statistically less affected by cyclical movements in the real rate of interest than the other estimates depicted in the chart.

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# Rising real term premia could make financing conditions less favourable

## Cumulative changes of 10-year real OIS rates
(percentage points, re-based to zero at the beginning of the period)



Sources: Refinitiv, Bloomberg and ECB calculations.
Notes: Left, centre and right panels are rebased at 1 May 2013, 2 March 2020 and 1 Jan 2021, respectively. Real rates are calculated as the difference between the nominal OIS rates and the inflation-linked swap rates.
Latest observation: 28 June 2013 (lhs), 30 April 2020 (centre), 22 March 2021 (rhs).

# High public debt issuance putting pressure on the real term premium

## Net issuance of EA government debt securities
(billion euros)
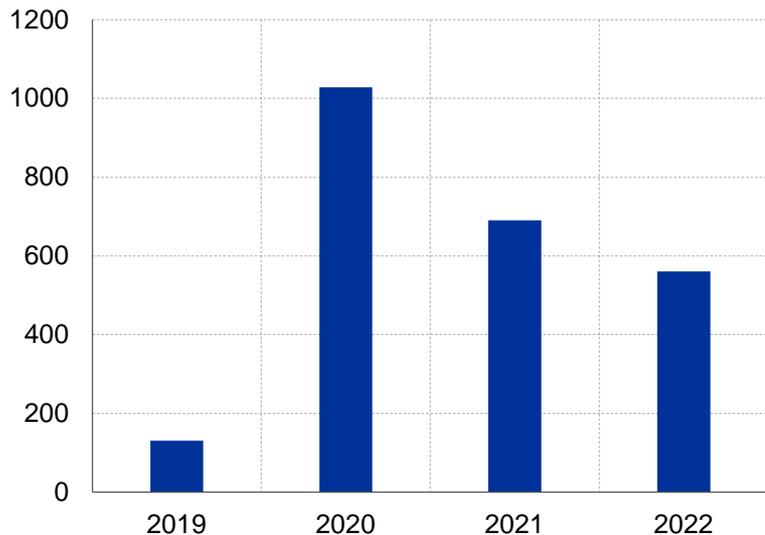


Source: Estimates based on Eurosystem, CSDB and AMECO data.

## Estimated impact of the COVID-19-induced debt-to-GDP revisions on EA sovereign yields (basis points)
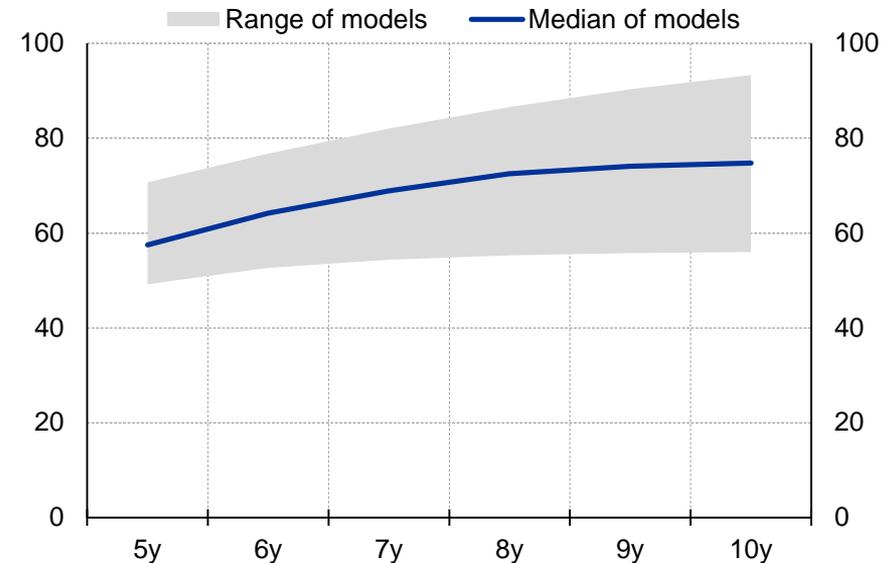


Source: ECB.
Notes: It is assumed that COVID-19 causes an increase of 20pp in the 5-year-ahead euro area debt/GDP ratio. Estimates based on 3 approaches: Laubach (2009), a VAR model and a term structure model in the spirit of Dewachter et al. (2015). For the Laubach and VAR approaches, the impacts on spot yields are indirectly derived from the impacts on forward yields by fitting a polynomial through the forward impact curve and inferring the impact on spot yields from the polynomial

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# Changes in euro area yields driven by inflation risk premia

## Decomposition of the change in the 10-year OIS rate into inflation and real rate
(percentage points and basis points)



Legend:
- Inflation component
- Real rate component
- 10-year nominal OIS rate

Change Dec. to Mar. GovC
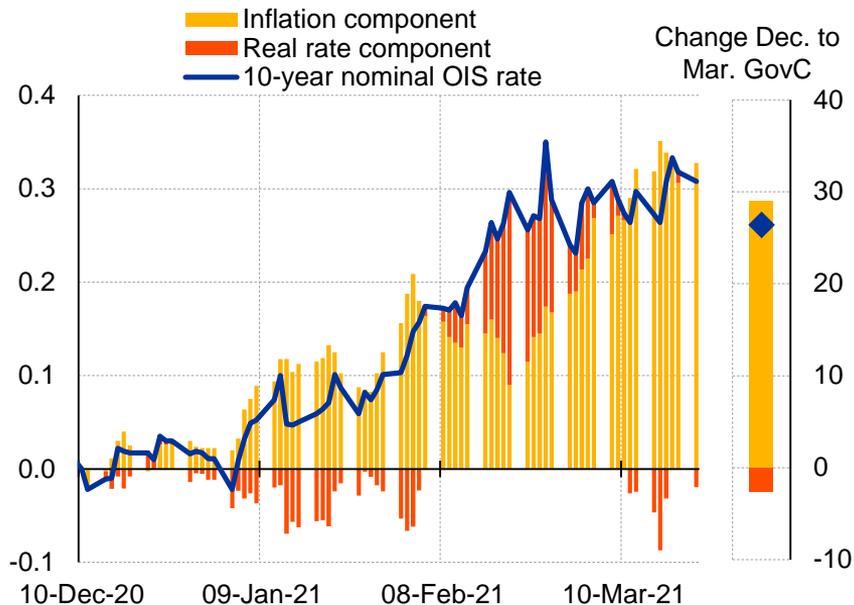
Sources: Refinitiv, Bloomberg, ECB calculations.
Notes: The real rate is calculated by subtracting the ILS rate from the nominal OIS rate.
The change bar shows changes between the Dec. (10 Dec. 2020) and the Mar. (11 Mar 2021) GovC meeting. Latest observation: 22 March 2021.

## Decomposition of the change in the 10-year OIS rate into expectations and term premia
(percentage points and basis points)



Legend:
- Expectations
- Term premia
- Fitted 10-year OIS yield

Change Dec. to Mar. GovC
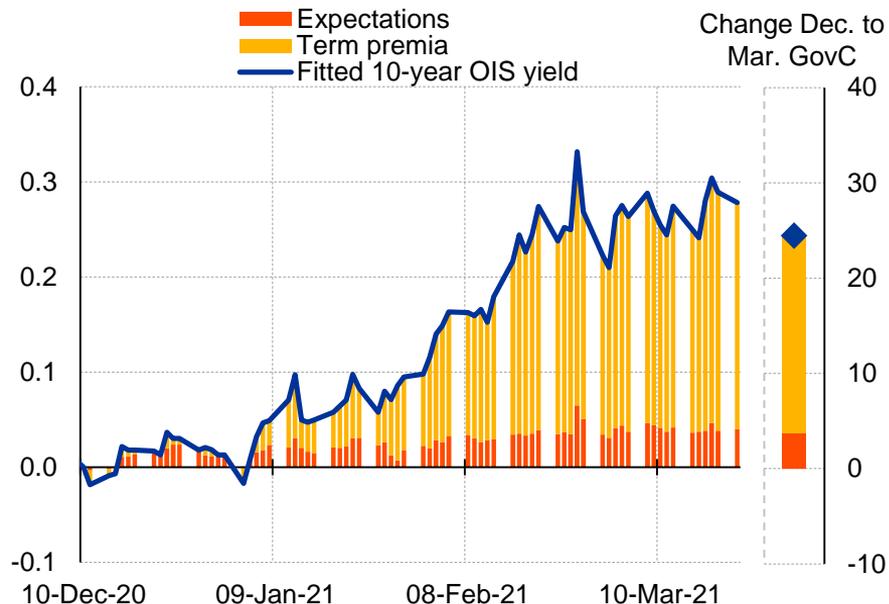
Sources: Refinitiv, Fed, and ECB calculations.
Notes: The euro area decomposition is based on an affine term structure model fitted to the OIS curve.
The change bar shows changes between the Dec. (10 Dec. 2020) and the Mar. (11 Mar 2021) GovC meeting. Latest observation: 22 March 2021.

# Excess savings and pipeline pressures increasing inflation uncertainty

## Excess accumulated savings in the euro area
(stock of excess savings accumulated since 2019Q4 in EUR bn)

Legend: DE FR IT ES NL Other EA
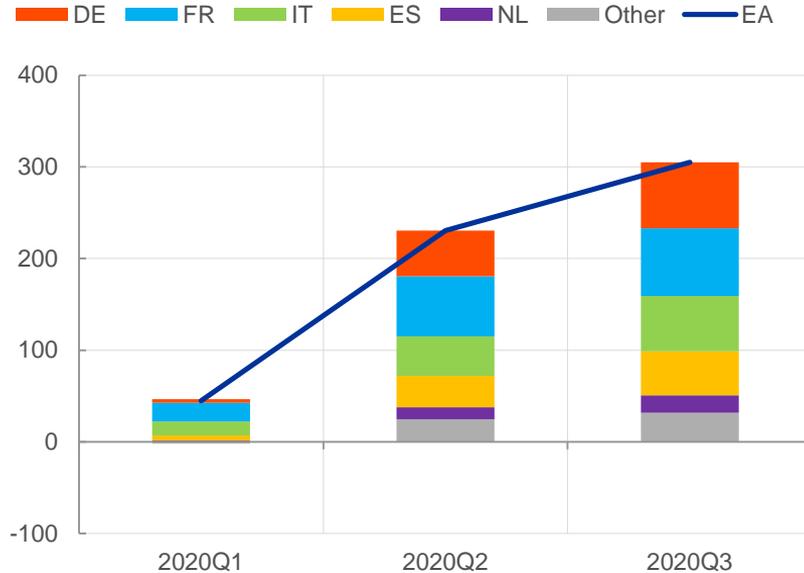


Source: Eurostat, national statistical sources and ECB internal estimates.
Note: Excess accumulated savings are defined as the cumulated difference between realised savings and estimated savings based on a pre-pandemic counterfactual path.

## Pipeline price pressures
(index, 2015 =100)

Legend: Non-energy commodity prices, Producer prices (intermediate goods)
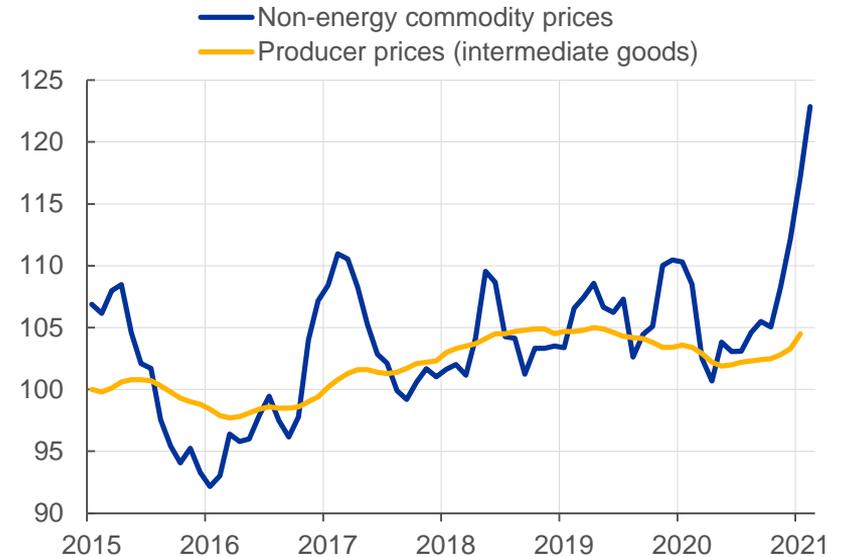


Source: Eurostat and ECB calculations.
Latest observation: February 2021 for non-energy commodity prices and January 2021 for intermediate goods producer prices.

# Real short-term rates historically low but global spillovers at longer tenors

## 2-year real OIS rates
(percentage per annum)



Sources: Refinitiv, ECB calculations.
Notes: Real rates are calculated as the difference between nominal OIS rates and inflation-linked swap rates of the same maturity.
Latest observation: 22 March 2021.

## Drivers of the nominal EA 10-year OIS rate
(cumulative changes since 10 December 2020, percentage points)
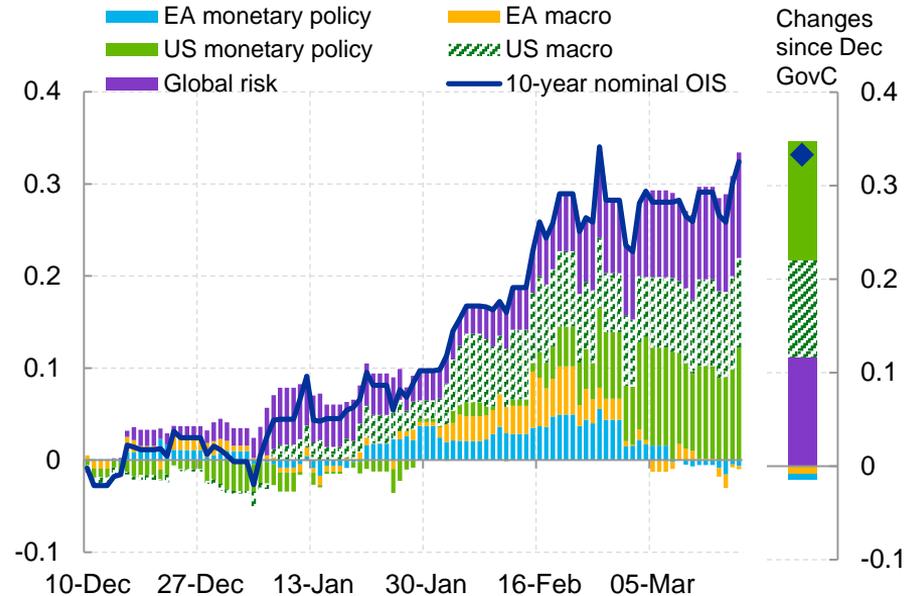


Source: ECB calculations.
Notes: The model is a 2-country BVAR including 10-yr EA OIS rate, EA stock price, USD/EUR, 10-year EA OIS rate-US Treasury spread, and the US stock price. It is restrictions at impact and is estimated using daily data over the period 2005-2020.
Latest observation 18/03/2021

Thank you for your attention!