Escaping low inflation?

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Petersberger Sommerdialog, 3 July 2021
Global inflation rising with marked cross-country differences

OECD: Consumer price inflation
(year-on-year percentage change)

Harmonised consumer price inflation
(year-on-year percentage change)

Source: OECD.
Latest observation: May 2021.
Large swings in commodity prices causing base effects in energy price inflation

**OECD energy price inflation and oil price**
(year-on-year percentage changes)

- OECD energy price inflation
- Brent crude oil (rhs)

Sources: OECD, Bloomberg and ECB calculations.
Note: Brent crude oil in USD.
Latest observation: May 2021 (OECD energy inflation), June 2021 (oil price).

**Euro area energy price inflation**
(year-on-year and 2-year percentage change)

- y-o-y change
- 2-year change

Source: Eurostat.
Latest observation: June 2021.
Unusual rise in global underlying inflation amid abundant slack

Consumer price inflation excl. food and energy
(year-on-year percentage changes)

Output gap
(in % of potential output)

Sources: OECD and CEPR.
Note: Shaded areas indicate CEPR recession periods for the euro area.
Latest observation: May 2021.

Sources: OECD (May 2021 Economic Outlook) and CEPR.
Note: Euro area refers to the 17 OECD member countries. Shaded areas indicate CEPR recession periods for the euro area. Figures for 2021 and 2022 are projections.
Re-opening dynamics creating base effects in services prices

Inflation: restaurants and hotels
(year-on-year percentage changes)

Source: OECD.
Latest observation: May 2021.

Capacity utilisation in the euro area services sector

Source: European Commission.
Latest observation: 2021Q1.
Strong expansion in manufacturing sector causing supply shortages

Manufacturing PMI
(diffusion index)

Change in selected commodities prices
(percent)

Sources: Markit.
Latest observation: June 2021.

Note: Semiconductors refers to DDR4 8Gb 1Gx8 2133/2400 MHz chips.
Latest observation: 29/6/2021 (semiconductors, oil, gold, silver, platinum); 25/6/2021 (others).
Rising input prices and delivery times putting upward pressure on consumer prices

**Euro area manufacturing PMI**
(balances)

- **Input prices**
- **Supplier delivery times**

**HICP non-energy industrial goods inflation**
(year-on-year percentage changes)

- **Non-energy industrial goods inflation**
- **Average 2015-2019**

**Sources:**
- Markit.
- Eurostat

**Latest observations:**
- June 2021.
Underlying inflation projected to rise only gradually as slack diminishes

HICP inflation: actual and projected
(annual percentage change)

HICP inflation excluding energy and food
(annual percentage change)

Sources: Eurostat, Bundesbank, June 2021 BMPE and ECB staff calculations.
Notes: Forecasts are performed with the thick modelling Phillips-curve tool presented in the ECB bulletin article “Drivers of underlying inflation in the euro area over time: a Phillips curve perspective” 4/2019 conditional on variables projected in the June 2021 Eurosystem staff projections. The light blue line shows an average of forecasts from specifications with different measures of economic activity (output gap, unemployment gap, real GDP growth and unemployment rate), different measures of survey inflation expectations and import prices. Forecasts are based on seasonally adjusted data. As the Phillips Curve models do not account for changes in indirect taxes, the starting point for the Phillips Curve forecasts (2021 Q1) has been adjusted for the impact of indirect taxes and changes in seasonality due to changes in HICP weights in 2021.
Investors increasingly hedging against inflation risk

**Probability of average inflation over the next 5 years**
(percentages)

Sources: Bloomberg, Refinitiv and ECB calculations.
Notes: Headline probabilities are risk-neutral and smoothed over five business days.
Latest observation: 30 June 2021.

**Inflation risk premium and inflation-linked bond fund flows**
(lhs: percentage; rhs: cumulative change in USD thousands)

Sources: EPFR, Refinitiv, and ECB calculations.
Notes: Inflation-linked bond (ILBs) fund flows (denominated in USD) include funds investing in European and US-based inflation-protected bonds. The Inflation risk premium is an average estimate based on two affine term structure models following Joslin, Singleton and Zhu (2011) applied to ILS rates adjusted for the indexation lag as in Camba-Mendez and Werner (2017).
Latest observation: 30 June 2021.
### Survey of monetary analysts: risks surrounding the euro area inflation outlook (percentage of respondents)

<table>
<thead>
<tr>
<th>Date</th>
<th>Downside</th>
<th>Balanced</th>
<th>Upside</th>
</tr>
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<tbody>
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<td>14.8</td>
<td>40.7</td>
<td>44.4</td>
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<tr>
<td>2023</td>
<td>13.0</td>
<td>69.6</td>
<td>17.4</td>
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Source: Survey of Monetary Analysts (SMA) June 2021.
Note: Percentage of respondents. Percentages may not add up to 100 due to rounding. Note that the number of respondents is the maximum number of respondents for a given date, which is not necessarily the same for each date. Number of respondents: 27.

### Share of consumers expecting prices to increase more rapidly over next 12 months (compared to previous 12 months; percentage balance)

Source: European Commission.
Latest observation: June 2021.
Stronger-than-expected outcomes causing revisions to short-term inflation outlook

**Euro area HICP: actual and projected**

(% per annum)

Source: ECB Broad Macroeconomic Projection Exercise.

**Continuous Consensus: evolution of 2021 consumer price inflation forecasts**

(annual percentage change)

Source: Consensus Economics.
Sustained period of upside surprises for euro area activity and earnings

Citigroup Economic Surprise Indices
(index points)

Earnings surprises
((percentages)

Sources: Bloomberg, Refinitiv and ECB calculations.
Latest observation: 30 June 2021.

Notes: Share of positive and negative earnings surprises as compared to forecasts.
Latest observation: Q1 2021 (quarterly data).
Price level normalisation and faster pass-through creating upside potential

HICP transport service inflation
(year-on-year percentage changes)

Impact of PPI non-food consumer goods on NEIG inflation
(cumulated % impact after 1% change in the shock variable with 95% confidence bands)

Source: Eurostat
Latest observation: May 2021

Source: ECB estimation based on Eurostat data.
Notes: The dotted lines indicate 95% confidence bands. The horizontal axis refers to quarters after the impact. The reduced form equation is estimated using local projections method following Jordà, Ò., "Estimation and Inference of Impulse Responses by Local Projections", American Economic Review, Vol. 95, No 1, 2005, pp. 161-182. This method allows for obtaining time-profile for the impact of the variable of interest. Regression equation includes NEIG (an autoregressive term), PPI non-food consumer goods and the output gap. Estimation sample is 1999 to 2019Q4, all variables seasonally adjusted with one lag; output gap in levels, all others in log-differences.
Historically large share of firms raising selling prices as input costs soar

**PMI prices charged and EC selling price expectations three months ahead**
(lhs: compared to no change; rhs: balanced percentages)

**Sensitivity of PMI Output Costs to Input Costs**
(coefficients)


Source: IHS Markit, European Commission.
Latest observation: June 2021.
Consumer confidence improving but “forced” savings may not be spent

Consumer confidence and unemployment expectations in the euro area

(%)  

Source: European Commission.  
Latest observations: June 2021.

Consumer survey: euro area household savings by income quartile

(balance of positive minus negative replies, Feb 2020=100)  

Source: European Commission consumer survey.  
Latest observation: June 2021.
“Green” fiscal stimulus may be more effective and sustain demand for commodities.

Projections for HICP inflation
(annual % change)

Cumulated multipliers associated with renewable and non-renewable energy investment spending
(multipliers)

Source: Eurosystem staff projections.

Notes: The sensitivity analysis for different oil price paths is based on the average of the results from a number of staff macroeconomic models. Impacts on HICP inflation are calculated with rounding at the first decimal.

One-off price level effects may depress real incomes if not matched by wage increases.

**Price index for hairdressing**
(index)

- **Hairdressing salons and personal grooming establishments**
- **Pre-pandemic trend**

![Graph of Price index for hairdressing](image)

*Source: Eurostat and ECB calculation*
*Notes: Pre-pandemic trend is computed by projecting the series over the post-pandemic sample (2020M04:2021M05) using the pre-pandemic average m-o-m rate.*
*Latest observation: May 2021*

**Headline and frequent out-of-pocket inflation**
(annual percentage changes)

- **HICP**
- **HICP-FROOP**

![Graph of Headline and frequent out-of-pocket inflation](image)

*Source: Eurostat and ECB calculation*
*Latest observation: June 2021.*
Labour market slack weighing on wages

Measures of labour underutilisation
(percentages)

- Share of Job Retention Schemes (% labour force)
- Unemployment rate
- Broader unemployment rate (U6 rate)

Sources: Eurostat, BMPE questionnaire and ECB calculations.
Notes: The U7 rate is the sum of the blue (unemployment) and red (job retention schemes) bar. The U6 rate is defined as the sum of (a) unemployment, (b) underemployment, (c) discouraged and (d) marginally attached workers as a percent of the extended (by c. and d.) labour force. Latest observations: 2021 Q1.

Negotiated wages in the euro area
(annual percentage changes)

Sources: Eurostat and ECB staff calculations.
Latest observation: 2021 Q1.
Thank you for your attention