The usefulness of inflation indicators
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*The views expressed are those of the speaker and not necessarily those of the BIS.
Inflation forecasts for 2022 and 2023

Inflation rates, forecasts and targets

In per cent

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1 Cleveland Fed’s CPI nowcast for August 2022.  
2 Consensus Forecast for India corresponds to the fiscal year beginning April.  
3 June for ZA; Q2 for AU; July for rest.  
4 Average annual changes, year-end changes for RU, Latin American countries.  
5 CN, EA, and US do not officially describe their monetary policy framework as inflation targeting.

Sources: Knotek and Zaman (2014); Federal Reserve Bank of Cleveland; Consensus Economics; Datastream; national data; BIS calculations.
Inflation forecast have underestimated inflation since 2021

Source: Boissay, De Fiore and Kharroubi (2022)
Inflation forecasts for 2023 increased yet still sharp/fast disinflation wrt 2022

Changes in forecasts for 2023

Quarterly forecasts (yoy changes)
Some evidence that inflation dynamics is changing

Sectoral price changes become increasingly similar...²

...and sectoral price spillovers are increasing³

Sensitivity of wages to past inflation mildly higher...⁴

... while that of prices to past wage growth is stable⁴

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Share of variance, %

Coefficient

Coefficient

Source: De Fiore, Lombardi and Rees (2022)
# The forecasting inflation challenge

## A taxonomy of inflation indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Timeliness</th>
<th>Informativeness on drivers (diagnosis)</th>
<th>Forecasting ability (prognosis)</th>
<th>Robustness to regime shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Current inflation, including narrower measures</td>
<td>High</td>
<td>None</td>
<td>Often hard-to-beat benchmarks</td>
<td>May reflect an ongoing regime shift</td>
</tr>
<tr>
<td>2. Granular measures (eg price similarity, spillovers)</td>
<td>Generally high</td>
<td>Mostly suggestive</td>
<td>Unknown</td>
<td>Greater commonality may help detect turning points or regime changes</td>
</tr>
<tr>
<td>3a. Expectations: markets-based</td>
<td>Very high</td>
<td>None</td>
<td>Good but can also incorporate shifts in risk appetite</td>
<td>Changes in the distribution may help predict a regime shift</td>
</tr>
<tr>
<td>3b. Expectations: survey-based</td>
<td>Generally low</td>
<td>Relevant, esp. under unanchored expectations</td>
<td>Good but might come with biases</td>
<td>Looking at the full distribution may reveal signs of a shift</td>
</tr>
<tr>
<td>4a. Models: Time series</td>
<td>Very high</td>
<td>Limited</td>
<td>Typically good</td>
<td>May be unstable around regime shifts</td>
</tr>
<tr>
<td>4b. Models: (semi)-structural</td>
<td>Low</td>
<td>High</td>
<td>Varies</td>
<td>Low</td>
</tr>
</tbody>
</table>
Inflation: Always and every where a monetary phenomenon?
Money and inflation in low- and high-inflation regimes

Money is closely linked to inflation...

![Graph showing the relationship between average annual excess money growth and average annual headline inflation. The equation for the relationship is y = -1.74 + 0.939x, where R² = 0.989.]

...but only in high-inflation regimes

![Graph showing the comparison between countries with inflation below 4% and countries with inflation above 4%. The coefficient for countries with inflation above 4% is 0.939 with a 95% confidence interval of ±0.5.]

Note: Excess money growth is defined as the difference between broad money growth and real GDP growth.
Money helps predict the post-pandemic inflation surge

\[ y = 1.37 + 0.291x \]

where \( R^2 = 0.328 \)
Inflation: global or local?
US inflation spillovers to other countries’ inflation

Variances share from 15 years rolling regressions for 23 countries.
Sources: IMF; OECD; World Bank; Refinitiv Datastream; national data; BIS.
Conclusions

- Forecasting inflation is challenging

- Clear breaks in the dynamics of inflation post-Covid
  - Unusual shocks, including global ones
  - Evidence of change in «slope parameters»: eg faster pass-through

- Mixed evidence from various indicators and models
  - So far limited evidence of unanchoring of inflation expectations (and forecasts)
  - The quantity theory of money strikes back when inflation is high
  - Some evidence that international inflation spillovers resume