The drivers of post-pandemic inflation

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ECB Forum on Central Banking
July 2, 2024

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Four questions and their answers

1. Similar inflation in the US and the EA?
   - Yes, nearly identical

2. What caused it?
   - Unexpectedly strong demand

3. What if the ECB had kept inflation closer to 2 percent?
   - Substantial output loss

4. What should we expect going forward in the EA?
   - Smooth path back to inflation target
   - No loss of credibility
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US vs EA since 2020: Stylized facts

Real activity

Worse recession and slower recovery in the EA
US vs EA since 2020: Stylized facts

Energy prices

Broadly similar in the US and EA
US vs EA since 2020: Stylized facts

- CPI / HICP
- CPI / HICP ex energy
- CPI / HICP goods
- CPI / HICP services

Nearly identical in the US and EA
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The drivers of post-pandemic inflation: **Demand** or **Supply**?

Adverse supply conditions have constrained economic activity. Inflation largely driven by demand factors.
The drivers of post-pandemic inflation: **Demand** or **Supply**?

![Graph showing the relationship between inflation and GDP deviations from deterministic trend.](image-url)
The drivers of post-pandemic inflation: Demand or Supply?

![Graph showing inflation vs. GDP deviations from deterministic trend.]

EA in 2022:Q4
EA in 2019:Q4
The drivers of post-pandemic inflation: **Demand** or **Supply**?

**Diagram:**
- **EA in 2022:Q4**
- **EA in 2019:Q4**
- **Inflation entirely demand driven**

**Axis:**
- **GDP (deviations from deterministic trend)**
- **Inflation**
The drivers of post-pandemic inflation: Demand or Supply?
The drivers of post-pandemic inflation: **Demand** or **Supply**?

![Graph showing inflation and GDP deviations from deterministic trend, with points labeled EA in 2019:Q4 and EA in 2022:Q4. The graph illustrates that inflation is entirely supply driven.](image-url)
The drivers of post-pandemic inflation: **Demand** or **Supply**?

![Graph showing the relationship between inflation and GDP deviations from deterministic trend between 2019:Q4 and 2022:Q4.](image)

EA in 2019:Q4

EA in 2022:Q4
The drivers of post-pandemic inflation: Demand or Supply?

![Graph showing the drivers of inflation](image)

- **EA in 2022:Q4**
- **EA in 2019:Q4**

**Legend:**
- **Supply-driven inflation**

*Figure shows the relationship between GDP (deviations from deterministic trend) and inflation, with two lines representing different periods: one for 2019:Q4 and another for 2022:Q4. The graph highlights the impact of supply-driven inflation.*
The drivers of post-pandemic inflation: Demand or Supply?

The figure shows the relationship between GDP deviations from deterministic trend and inflation, comparing EA in 2019:Q4 and 2022:Q4. The graph illustrates the distinction between demand-driven and supply-driven inflation.
A model with energy prices and energy-supply shocks

Adverse energy-supply shocks have constrained economic activity

Inflation largely driven by demand factors

Energy inflation largely driven by demand factors
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Counterfactual ECB policies

Model with interest rates to study 3 counterfactual scenarios:

1. **Tighten earlier**

2. **Lean against demand**
   - neutralize all the effects of demand shocks on inflation

3. **Strict inflation targeting**
   - neutralize the effects of all shocks on inflation, to keep it near 2 percent
Counterfactual ECB policies: **Tighten earlier**

**EA GDP**

100 x log deviation from 2019:Q4

**EA HICP**

100 x log change relative to year ago

**EA interest rate**

percentage points

- **Actual**
- **Pre-pandemic policy**
- **Model forecast as of 2019:Q4**
Counterfactual ECB policies: **Lean against demand**

**EA GDP**

**EA HICP**

**EA interest rate**

- **Actual**
- **Lean-against-demand policy**
- **Model forecast as of 2019:Q4**
Counterfactual ECB policies: **Strict inflation targeting**

**EA GDP**

![Graph showing EA GDP with lines for Actual, Inflation targeting, and Model forecast as of 2019:Q4.]

**EA HICP**

![Graph showing EA HICP with lines for Actual, Inflation targeting, and Model forecast as of 2019:Q4.]

**EA interest rate**

![Graph showing EA interest rate with lines for Actual, Inflation targeting, and Model forecast as of 2019:Q4.]

- Actual
- Inflation targeting
- Model forecast as of 2019:Q4
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The road ahead: Model and SPF projections

- Model predicts smooth path back to inflation target and moderate growth
  - Gradual interest rate decline

- SPF projections similar to model projections, including interest rates
  - The public believes that monetary policy has already returned to its pre-covid standards
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