Inflation: 
Peeling the Onion

Kristin Forbes
MIT-Sloan School of Management, NBER & CEPR

NY Fed Advisory Board
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Notes: Percent of variance of quarterly inflation explained by the first principal component. Calculated as 5-year rolling averages for 24 advanced economies with OECD data. CPI is CPI or HPIC inflation. Core is CPI inflation excluding food and energy. Wage inflation is based on hourly earnings in manufacturing. All inflation data from OECD. Updated version of analysis in Forbes (2020), "Inflation Dynamics: Dead, Dormant or Determined Abroad?". Brookings Papers on Economics Activity, Fall.
Inflation Correlations by Country
with World Inflation, Oil Prices & World Export Prices (2000-14)

Headline Inflation

Core Inflation

Headline Inflation, other variables lagged 2 years

Hitting Inflation Targets

Divergence and Difficulty

Share of Countries with Inflation at Different Thresholds

"Too hot"  
\(\pi > 2.5\%

"Just right"  
1.5\% - 2.5\%

"Too cool"  
\(\pi < 1.5\%

Notes: Percent of countries in sample with annual CPI inflation that is “too hot” (>2.5%); “just right” (1.5%-2.5%) or “too cool” (<1.5%). Sample is 24 advanced economies in the OECD and underlying data from IMF, *World Economic Outlook*, April 2022.
Drivers of Inflation

One Framework

Open-economy Phillips curve/accounting:

**Domestic factors:**

\[ \pi_{it} = \beta_1 \pi_{it}^e + \beta_2 \pi_{it}^L + \beta_3 SLACK_{it}^D + \alpha_i + \epsilon_{it} \]

**Mix domestic/global:**

\[ + \delta_1 ER_{it} \]

**Global factors**

\[ + \gamma_1 Oil_{it}^W + \gamma_2 Comm_{it}^W + \gamma_3 SLACK_t^W + \gamma_4 GVC_t^W \]
**Different Drivers across Countries**

Decompositions of headline inflation rates

*(Contributions to annual consumer price inflation)*

![Graph showing decompositions of headline inflation rates for UK (CPI), US (PCE), and EA (HICP) across different months from 2017 to 2022.]

**Source:** Speech by David Ramsden, “Shocks, Inflation and the Policy Response”, Bank of England, given 10/07/22
Yet Similar Role of Inflation Expectations on Wages?

DRIVERS OF WAGE INFLATION

Source: Oscar Jorda and Fernanda Nechio (2022), “Inflation and Wage Growth since the Pandemic”
Does High Inflation Abroad Matter?

Evidence from the UK

\[
\pi_t = \beta_0 + \beta_1 \pi_{t+1} + \beta_2 \pi_{t-1} + \beta_3 \text{OutputGap}_t + \beta_4 \Delta ER_t + \beta_5 \Delta Oil_t + \beta_6 \Delta WorldExpPrices_t + \beta_7 \Delta FrancePrices_t
\]

\(\pi_{t+1}, \pi_{t-1}\): expected and lagged inflation
\(\text{OutputGap}_t\): the output gap

Supply shocks:
- \(\Delta ER_t\): the exchange rate
- \(\Delta Oil_t\): oil price
- \(\Delta WorldExpPrices_t\): other world export prices excluding oil
- \(\Delta FrancePrices_t\): inflation in France

**add partner country prices for each of 47 partner-countries**
Country Betas

*Using UK and Foreign CPI Inflation*

Country Betas
*Using UK and Foreign Core Inflation*

# Explaining the Betas

## Linking UK to Country CPI Inflation

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<td>% OF HOUSEHOLDS WITH ACCESS TO</td>
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Drivers of Inflation in the Onion

Summary

\[ SLACK_{it}^{D}, \pi_{it}^{e}, \pi_{it}^{L}, ER_{it}, Oil_{it}^{W}, Comm_{it}^{W}, SLACK_{t}^{W}, GVC_{t}^{W}, \pi_{t}^{Foreign} \]