

Discussion of
International Dimensions of Inflation

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Natalie Chen

University of Warwick and CEPR

This Session

Investigates the role of international factors in affecting import prices or consumer prices and, therefore, domestic inflation

- **Peersman (2019)**: international food commodity prices on euro area consumer prices (macro)
- **Carluccio et al. (2018)**: import openness from low-wage countries on French consumer price inflation (micro)
- **Kim et al. (2019)**: exchange rate appreciations/depreciations on US import price inflation (micro)

Peersman (2019)

Peersman (2019)

Food commodities are a crucial input for the food-processing sector, and food accounts for more than 27% of the euro area HICP

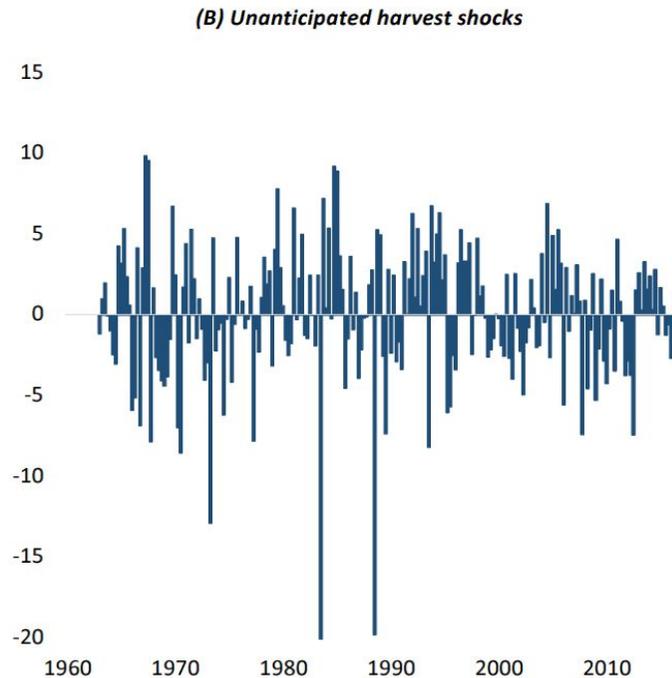
Causal effects of international food commodity prices (corn, wheat, rice, soybeans) on euro area inflation using a SVAR-IV (unanticipated harvest shocks)

- Quantitatively important: exogenous food commodity price shocks explain 25–30% of consumer inflation volatility
- Qualitatively important: they help explain the twin puzzle of missing disinflation in 2009–2012 and of missing inflation in 2014–2015
- Transmission mechanism of international food commodity price shocks
 - Direct effect on food retail prices through the food production chain
 - Indirect effects via rising inflation expectations and a euro depreciation

Comments

- EU harvest shocks are excluded: lower bound estimates? Include EU shocks as a robustness check
- Many checks with additional variables in the SVAR. Also try excluding the oil price (endogenous to the business cycle)?
- Exclusion restriction: unanticipated harvest shocks should affect consumer prices only through food commodity prices. Other variables?
- Food commodities traded in USD, HICP is in euros. Food prices in euros?
- Deflate food commodity prices using US CPI. Is this appropriate?
- In addition to estimating the system for the euro area as a whole, estimate separately by country/major country. Heterogeneity?

Instrument



Unanticipated harvest shocks: residuals from regressing a global food production index (four items, excl. the EU) on weather indicators and other controls

- What explains the large negative spikes in the 1970s and especially 1980s?
- Could they explain the less significant results for the post-1990 period?

Carluccio et al. (2018)

Carluccio, Gautier, Guilloux-Nefussi (2018)

Impact of imports from low-wage countries (LWCs) on CPI inflation in France between 1994 and 2014 using firm-level import data

The share of imports from LWCs in consumption increased from 2% to 7%, and reduced CPI inflation by **0.17pp per year** on average (China: 0.10pp)

This effect decomposes into three channels

- A *substitution channel* (domestic goods by LWC goods): -0.05pp
- An *imported inflation channel* (rise in the share of LWC imports): -0.06pp
- A *competition channel* (reduced domestic markups): -0.06pp

Pro-Competitive Effects vs Intermediate Inputs

- *Fourth channel*: imports of cheaper intermediate inputs from LWCs
- Based on the regression that estimates the competition channel

$$\pi_{i,t}^D = \Psi \Delta S_{i,t}^{LWC} + \kappa \Delta labcost_{i,t} + \underbrace{\eta \Delta inputcost_{i,t}} + \lambda_t + \nu_i + \epsilon_{i,t}, \quad (6)$$

this channel could be investigated by letting $\Delta inputcost_{i,t}$ depend on $\Delta S_{i,t}^{LWC}$ (the share of imports from LWCs in the consumption of good i)

- This would also allow to better interpret Ψ as an effect on “markups”
- How are $\Delta inputcost_{i,t}$ measured? Identify firm-level imported inputs using the BEC classification and aggregate at the level of good i ?

Substitution Channel

- Consumers substitute domestically produced goods with cheaper imports
- Are the imported goods cheaper
 - Because they are produced at a lower cost for the same quality?
 - Or because they are simply of lower quality?
- Well-known example of quality issues with cheaper Chinese toys
 - *“The EU has a rapid alert system for dangerous products – 48% of alerts involve products made in China, of which 25% are toys”*
 - *“Almost one in three toys in China contains heavy metals, with one in ten containing excessive levels of lead”*
- Control for the degree of product differentiation (using unit values or other estimated proxies for quality, Khandelwal, 2010): quality-adjusted prices?

Other Comments

- Share of imports into consumption: imports are measured CIF, while consumption further includes VAT and distribution margins
 - In the paper, scale imports with a uniform 20% distribution margin across all sectors and apply VAT
 - As a robustness check, use available estimates of distribution costs (Campa and Goldberg, 2005; Eurostat)
- Imports and consumer prices are in euros. According to Gopinath (2016), 74% of French imports in 2015 were invoiced in euros, 21% in USD, 5% in other currencies. Role for exchange rate changes?

Kim et al. (2019)

Kim, Lewis, Vigfusson (2019)

- Is exchange rate pass-through into monthly product-level US bilateral import prices between 1994 and 2014 symmetric to appreciations and depreciations?
- Foreign appreciations pass through faster and more completely than depreciations. Result is driven by consumer goods and arms-length transactions
- No evidence for non-linearities in pass-through
- Model with menu costs, strategic complementarities and, crucially, convex adjustment costs to rationalize these facts

Pricing-to-Market

- The pricing-to-market strategies of foreign exporters to the US may generate asymmetric pass-through
 - The US mostly imports and exports in USD (Gopinath, 2016)
 - Foreign appreciation: exporters receive less in domestic currency for each unit they export in USD. Raise export prices to restore markups
 - Foreign depreciation: exporters receive more in domestic currency for each unit they export in USD. Less likely to change prices
 - Note: effects may be dampened if foreign exporters “hedge” against exchange rate risk by for instance importing and exporting in USD
- But foreign export prices are not observed

Pricing-to-Market

- Use the **US export prices** available in the BLS data to investigate whether *pricing-to-market* is asymmetric to appreciations and depreciations
 - US export prices in the latest version of the paper!
 - Markups: export prices at reporter-product-country-time level on reporter-product(-year) fixed effects (actual prices rather than unit values)
 - Also, export prices in USD rather than local currency
- No implications for US inflation (import prices are relevant for domestic inflation), but looking at export prices can help to identify the mechanisms
- Evidence suggests that markups are indeed highly variable (Amiti et al., 2014; Berman et al., 2012; De Loecker et al., 2016; Simonovska, 2015)

Other Comments

- The asymmetry in pass-through is explored across sectors and transaction types (stronger for consumer goods and arms-length transactions)
- Also investigate the asymmetry
 - Across types of firms (firm size, transaction size, productivity, etc)
 - Across origin countries (developing versus developed, etc)
 - For the sample of transactions priced in non-USD (COI available)
 - At quarterly and annual frequency

Conclusions

- The papers in this session emphasize the **global nature** of inflation
- They show that domestic inflation is significantly affected by
 - The prices of international food commodities (Peersman, 2019)
 - Openness to imports from LWCs (Carluccio et al., 2018)
 - Asymmetric exchange rate fluctuations (Kim et al., 2019)
- Other factors have also been recently emphasized in the literature (currency of invoicing choices for imported goods, for instance)
- Accounting for all these factors simultaneously in order to explain or forecast future inflation can be a challenge