Discussion of:
Incomplete pass-through in import markets and permanent vs. transitory exchange rate shock
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Motivation and main goal of the paper

- Motivation: pass-through depends on whether the exchange rate changes are regarded as permanent or temporary

→ Build(adopt) a theoretical model and an empirical measure of temporary exchange rate changes and estimate to 5 countries (US, Japan, Germany, France, Italy)
Steps

- Static model of Dornbusch (1987 AER)
- Extend it to the case of intertemporal profit maximization (based on Kasa 1992 JIE) and arrive to a single equation specification
- Estimate it as benchmark (Engle-Granger)
- Perform a simulation exercise studying the effect of neglected temporary e.r. movements
- Adopt a measure of temporary exchange rate movements (based on Lee-Chinn 2002 IMF WP)
- In the cointegrating equation replace the actual RER with the permanent component and add the temporary component to the ECM-equation
Outline of the Discussion

- Theoretical part: more questions than comments (1 slide)
- Simulation: praise (1 slide)
- Empirical part: more comments than questions (5+1 slides)
- A check using the simple Hodrick-Prescott filter for permanent/temporary decomposition (4 slides)
Theory

- How was the results derived?
- What is the contribution of the paper?
- Why weak exogeneity of the exchange rate?
- My reading: the theoretical part is needed just to arrive to

\[ DL(\text{PM/PCPI}) = -\alpha(L(\text{PM/CPI})-\beta L(\text{RER})) + D(\text{something}) \]
Simulation

→ Assume a true data generating process (only the permanent change matters for pricing)
→ Assume the processes of permanent/temporary ER
→ Simulate the model
→ Estimate the equation with the simulated total ER to study the bias of the estimator due to omitted temporary changes

• Very useful
• Could be extended especially to the final equation of the paper, i.e. to the problem of measurement error in the permanent/transitory component
Empirics 1. - Data issues

- The very basic issue: data
- The dependent variable, $\log(P(M)) - \log(CPI)$, is interpreted as the difference between the import price & domestic competitors’ prices
  - Huge compositions differences
  - Product/industry specific data would be desirable
- Alternatively, simply view the equation, $L(PM/CPI) = \beta L(RER)$, as Import prices = $\beta$*foreign costs in domestic currency, and both sides normalized by the domestic price level?
  - E.g. Goldberg-Knetter (1997 JEL) in survey paper point pout that marginal cost should appear and available candidates are bad proxies
US Data

Trends? Unit roots?
Empirics 2. - General issues

- Broken deterministic trends? Unit roots? Dummies?
- No attempts to estimate the deep theoretical parameters
- Estimation method (Engle-Granger)
- Errors in variables
Empirics 3. - The BQ-decomposition

- Bivariate Blanchard-Quah-type decomposition of the real exchange rate and the current account
- Results: “corner solutions” → Almost all ER movements are either transitory (US) or permanent (other 4 countries). Explanation?
- The real exchange rate of the world is 1 (for actual, permanent, and transitory as well) → US, Japan, and 3 EU countries constitute a large part of the world
- Some of the VARs are very long: e.g. US → 9 lags, Japan → 10 lags
- Theory behind?
Empirics 4. - The BQ/SVAR critiques

- Faust-Leeper (1997 JBES)
  - Shock aggregation → too few identified shocks might be mixtures of the underlying ones
  - Long-run restrictions → from finite samples
  - Time aggregation → higher-frequency feedback

- Suggestions: sign restriction (e.g. Canova-De Nicoló 2002 JME, Peersman 2003 forthcoming in J.of Econometrics)
  → Notice that there are infinite number of possible decompositions, select those that have impulse response in line with theoretically expected signs
Empirics 5. - Extended ECM-equations

- Generated data/errors in variables
  → Bias? Covariance?

- In any case, most of the included temporary ER movements are not significant according to standard distributional assumptions
A quick check

• How does the HP-filter?

- US data, 1975Q1-2002Q4 (from IFS)
- Real exchange rate: CPI based

*Long-run:*

\[
\text{LPM}\_\text{CPI} = 0.31\times \text{LRER} + 0.15\times \text{LPOIL} + \text{trend}
\]

\[
\text{LPM}\_\text{CPI} = 0.34\times \text{LRER}_\text{HP} + 0.16\times \text{LPOIL} + \text{trend}
\]

*Short-run:*

\[
\text{DLPM}\_\text{CPI} = -0.13\times \text{ECM}(-1) + 0.33\times \text{LAG} + 0.23\times \text{DLRER} + 0.07\times \text{DLPOIL}
\]

\[
\text{DLPM}\_\text{CPI} = -0.14\times \text{ECM}(-1) + 0.27\times \text{LAG} + 0.23\times \text{DLRER} + 0.06\times \text{DLPOIL} + 0.04\times S + 0.08\times S(-1)
\]
A quick check 2.

• How does the HP-filter?
  ➢ US data, 1975Q1-2002Q4 (from IFS)

Real exchange rate: ULC based

**Long-run:**

LPM\_CPI = 0.25*LRER + 0.15*LPOIL + trend
LPM\_CPI = 0.43*LRER\_HP + 0.17*LPOIL + trend

**Short-run:**

DLPM\_CPI = -0.15*ECM(-1) + 0.30*LAG + 0.16*DLRER + 0.06*DLPOIL
DLPM\_CPI = -0.16*ECM(-1) + 0.24*LAG + 0.18*DLRER + 0.06*DLPOIL + 0.002*S + 0.09*S(-1)
A quick check 3.

• How does the HP-filter?

- GERMAN data, 1975Q1-2002Q4 (from IFS)

Real exchange rate: CPI based

*Long-run:*

\[ \text{LPM	extunderscore CPI} = 0.89 \times \text{LRER} + 0.11 \times \text{LPOIL} + \text{trend} \]
\[ \text{LPM	extunderscore CPI} = 1.06 \times \text{LRER	extunderscore HP} + 0.12 \times \text{LPOIL} + \text{trend} \]

*Short-run:*

\[ \text{DLPM	extunderscore CPI} = -0.14 \times \text{ECM(-1)} + 0.32 \times \text{LAG} + 0.54 \times \text{DLRER} + 0.05 \times \text{DLPOIL} \]
\[ \text{DLPM	extunderscore CPI} = -0.16 \times \text{ECM(-1)} + 0.34 \times \text{LAG} + 0.49 \times \text{DLRER} + 0.05 \times \text{DLPOIL} + 0.03 \times S \]
A quick check 4.

- How does the HP-filter?
  - GERMAN data, 1975Q1-2002Q4 (from IFS)
  
  Real exchange rate: ULC based

  **Long-run:**
  
  \[
  \text{LPM\_CPI} = 0.24\times LRER + 0.12\times LPOIL + \text{trend}
  \]
  
  \[
  \text{LPM\_CPI} = 0.32\times LRER_{HP} + 0.11\times LPOIL + \text{trend}
  \]

  **Short-run:**
  
  \[
  \text{DLPM\_CPI} = -0.11\times ECM(-1) + 0.37\times LAG + 0.04\times DLRER + 0.06\times DLPOIL
  \]
  
  \[
  \text{DLPM\_CPI} = -0.14\times ECM(-1) + 0.38\times LAG + 0.01\times DLRER + 0.06\times DLPOIL + 0.02\times S
  \]
The End