Comments on “All together now: Do international factors explain relative price co-movement?”
by Ö. Karagedikli, H. Mumtaz and M. Tanaka

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Sep. 2010, CIPR conference
Outline of my comments

- Quick summary of the findings of the paper
- Comment 1: Questions on factors
- Comment 2: US inflation and factors
- Comment 3: Correlation with tradeability measure?
- Comment 4: Tradeability and persistence?
- Minor comments (if time permits)
Quick summary of the paper

- **Background:** Increased comovement of inflation after 80s
  - What causes internationalization of national inflation?
  - If similar monetary policy across countries causes international comovement, category-spec. international comovement should not be observed
  - If global market integration drives comovement, category-spec international comovement should be observed
  - So, this paper estimates contributions of world, country-, and category-spec. (int’l) factors to disaggregated inflation

<table>
<thead>
<tr>
<th></th>
<th>Data</th>
<th>World</th>
<th>Country-spec.</th>
<th>Category-spec.</th>
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<tbody>
<tr>
<td><strong>THIS PAPER</strong></td>
<td>Disagg.</td>
<td>Y</td>
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<td>Monaccelli and Sala (2009)</td>
<td>Disagg.</td>
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Findings of paper

- This paper uses 406 price series (28 goods × 14 countries + 14 headline CPI) from 1998:Q1-2008:Q2
- Main findings
  1. Category-spec. international factor matter especially for primary commodities (e.g., foods and vehicle fuel)
  2. World and category-spec. factors become more important in the last half sample than the first half sample
  3. Sharp increase in inflation during 2007-2008 appears to be due to world factor

I like the paper and I learned a lot from the paper

I make comments and questions on estimated factors and the importance of category-spec. factors
Comment 1: Questions on estimated factors

- The authors selected 10 Euro area countries and US, UK, Norway and Canada
  - The estimated world factor $\approx$ “Euro area factor”?

- Question: Does country choice affect the estimation of world factor?
  - Possibly, interesting robustness check would be
    1. Separating countries into euro area and non-euro area counties.
    2. Comparing the two “world” factors
Comment 2: US disaggregated inflation

- A finding that is interesting but not very much mentioned in this paper is:
- US is a country in which inflation rates are driven by common factor $F^c$, $F^g$, and $F^w$ to the least extent

<table>
<thead>
<tr>
<th>Country</th>
<th>Category</th>
<th>World</th>
<th>Sum of three</th>
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<tbody>
<tr>
<td>Countries other than US</td>
<td>12</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>US</td>
<td>8</td>
<td>10</td>
<td>1</td>
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</tbody>
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- While US is the largest importer of goods in the world, the prices do not appear to be affected by international common factors
- How should we interpret this?
The authors find that the internationally common but category-spec. factors explain a greater proportion of variances for those goods that are more traded than the others.

- The contribution of category-spec. factor to total variance, 
  \[ \left( \beta_i^g \right)^2 \frac{\text{Var}(F_{i,t})}{\text{Var}(\pi_{ijt})} \], seems large in many tradable goods

- It seems interesting to see correlation of this fraction of variance with some “tradeability measures”? 

Comment 3: Relationship btwn the importance of category spec factors with tradeability measures
Comment 3: Relationship btw the importance of category spec factors with tradeability measures (cont’d)

- Question: Is the fraction of variance \( \frac{(\beta_{gi})^2 \text{Var}(F_{gi,t})}{\text{Var}(\pi_{ijt})} \) positively correlated with tradeability measures”?

- Three simple and naive exercises to see correlation

  1. Share of non-traded inputs to produce goods (Crucini, Telmer, Zachariadis, 2005) → non-tradeability measure → Negative correlation
  2. Labor cost share in value-added (Jinjarak and Naknoi, 2010) → Negative correlation
  3. Frequency of price changes (e.g., Klenow and Kryvtsov, 2008) → Positive correlation

  - Why freq. of price changes?
  - It’s an indirect measure. State-dependent pricing model suggests that lower trade costs imply higher competition within the industry, leading to more frequent price change (Midrigan, 2007)
Comment 3: Example using CTZ measure

Y-axis = contribution of category-spec factors. CTZ’s measure is based on 1975 - 1990, different from the sample in this paper.
Comment 3: Example using Jinjarak and Naknoi’s (2010) measure

Significantly negative, but I could map only 16 out of 28 good categories
Comment 3: Example using Klenow and Kryvtsov (2008)

![Graph showing correlation between contribution of category-specific factor and frequency of price changes]

Fraction of variance = 0.05 + 0.39 Freq. of P changes
(0.03) (0.16)

$R^2 = 0.31, N = 28$

Significantly positive, but the frequency is only indirect measure
Summary of Comment 3:

- Checking correlation with tradeability measure may be an interesting way to give structural interpretations.
  - Alternatively, “trade intensity” would be also interesting, as in Monacelli and Sala (2009).
- My exercise is naive: Picks up only medians of contribution of category-specific factors across countries from Table C.
- About 400 samples are available for regressions.
Comment 4: What factor makes inflation persistence?

- Inflation persistence has been one of the most important issues for policy makers

- A simple question is "what factor makes inflation persistent?"
  - Boivin, Ginnoni and Mihov (2009) find disaggregated inflation respond persistently to aggregate shocks but not sector-spec. shock
  - In this paper, does category-specific factor matters for persistene of inflation rates?
Recent episode in the headline inflation

Are the recent drop and increase in the headline inflation due to the world factor or other factors?
• What happened to Norway in 2001?
  • A large drop in country-specific factor and commodity prices whereas the headline inflation shows neither large drop nor increase in this period