

Comments on “All together now: Do  
international factors explain relative price  
co-movement?”

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## 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

	Data	World	Country-spec.	Category-spec.
<b>THIS PAPER</b>	<b>Disagg.</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>
Ciccarelli and Mojon (2010)	Agg.	Y		
Mumtaz and Surico (2008)	Agg.	Y	Y	
Monacelli and Sala (2009)	Disagg.	Y		

## Findings of paper

- This paper uses 406 price series (28 goods $\times$ 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  $\simeq$  “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 countries.
    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

Average percentage of variance explained by factors (from Table D)

	Country	Category	World	Sum of three
Countries other than US	12	19	2	34
US	8	10	1	19

- 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?

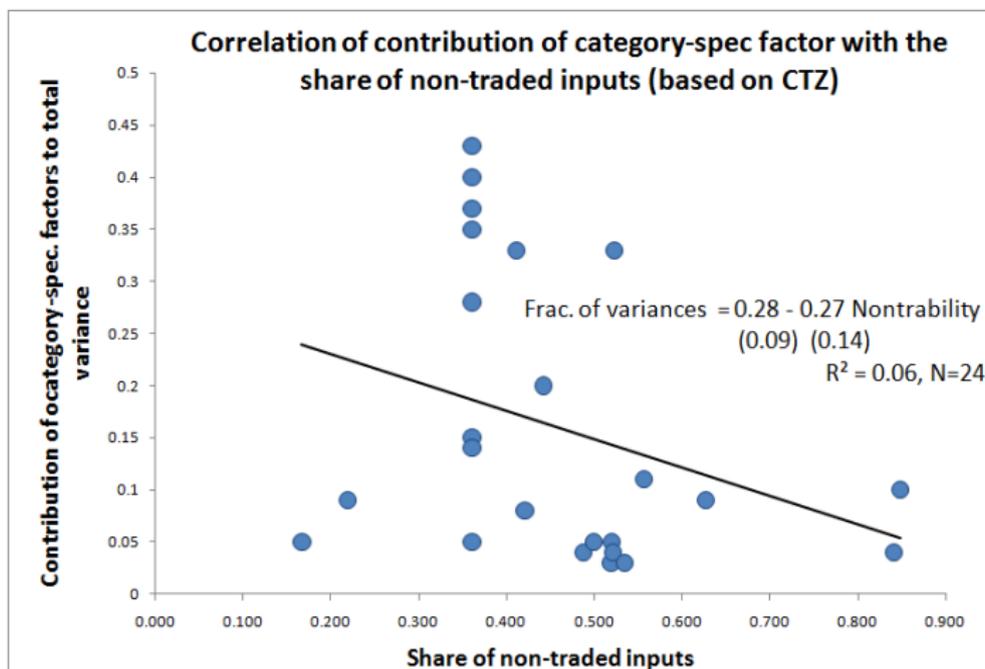
## Comment 3: Relationship btwn the importance of category spec factors with tradeability measures

- 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,  $\frac{(\beta_i^g)^2 \text{Var}(F_{i,t}^g)}{\text{Var}(\pi_{ijt})}$ , 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 (cont'd)

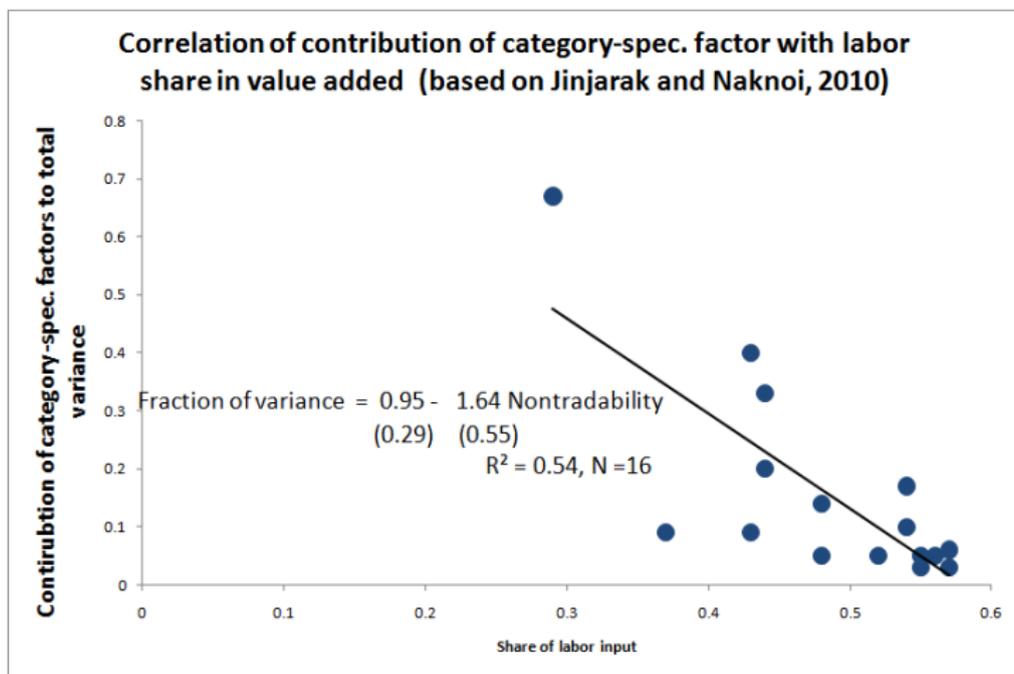
- Question: Is the fraction of variance  $\frac{(\beta_i^g)^2 \text{Var}(F_{i,t}^g)}{\text{Var}(\pi_{ijt})}$  positively correlated with tradeability measures"?
- Three simple and naive exercises to see correlation
  1. Share of non-traded inputs to produce goods (Crucini, Telmer, Zachariadis, 2005) → nontradeability 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



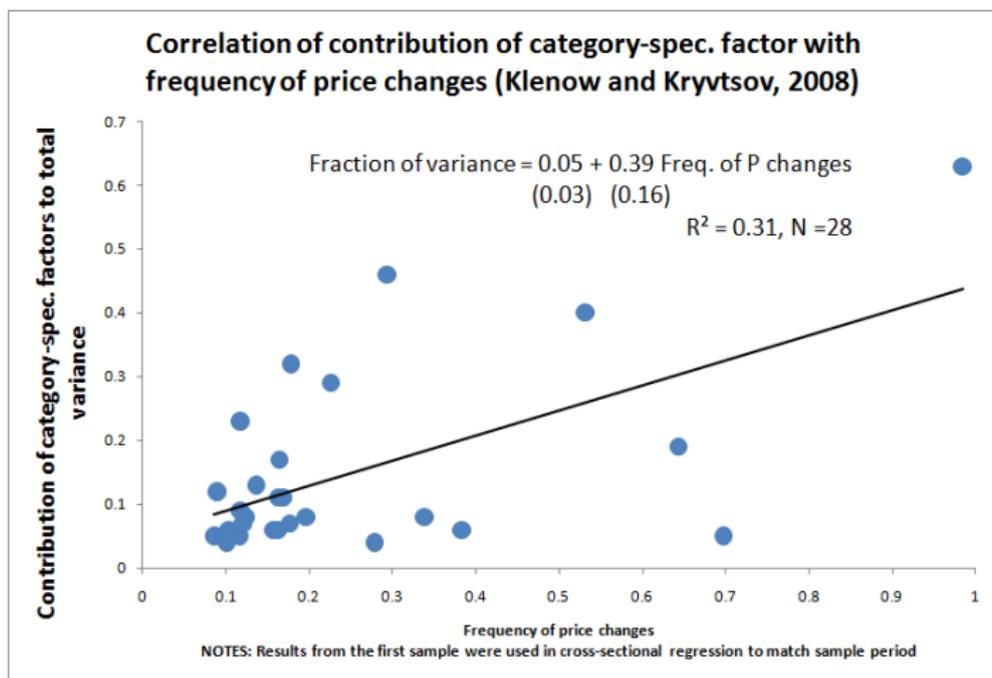
Y-axis = contribution of category-spec factors. CTZ's measure is based on 1975 - 1990, different from the sample in this paper

## 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)



Significantly positive, but the frequency is only indirect measure

## Summary of Comment 3:

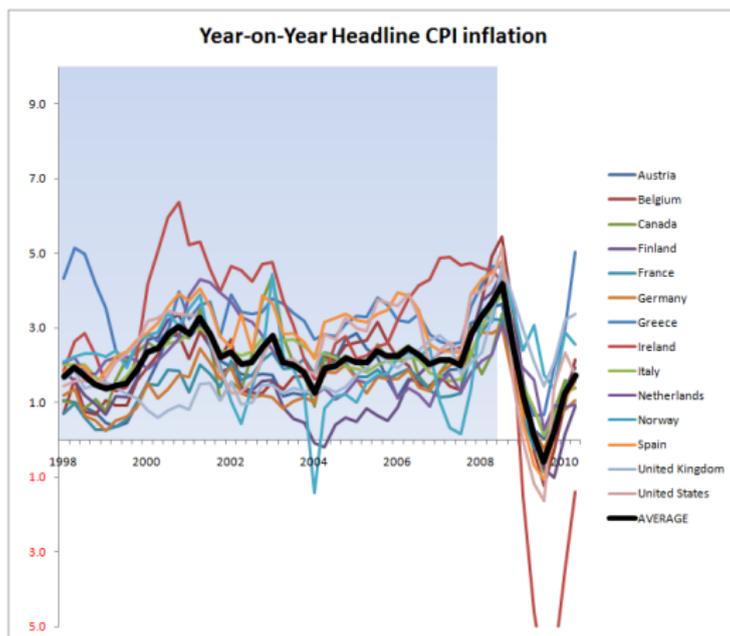
- Checking correlation with tradeability measure may be an interesting way to give structural interpretations
  - Alternatively, “trade intensity” would be also interesting, as in Monacelli and Sala (2009)
- My exercise is naive: Picks up *only medians* of contribution of category-specific factors across 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 persistence of inflation rates?

## Minor comments 1 (NOT for this paper)

- Recent episode in the headline inflation



Are the recent drop and increase in the headline inflation due to the world factor or other factors?

## Minor comments 2

- 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