

Discussion of
"The 'Collpase in Quality' Hypothesis"
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Why Might We Expect a "Collapse in Quality"?

1. Nothing to do with international trade per se.

Non-homotheticities over the business cycle prominent in:

- ▶ Macro and Int'l macro (e.g. Hodrick and Prescott, 1997; Burstein, Eichenbaum, Rebelo, 2005)
- ▶ Asset pricing (e.g. Yogo, 2006)
- ▶ Marketing literature, etc.

2. Stories specific to international trade

- ▶ Differential changes in tariffs by quality?
- ▶ Differential change in price of trade finance by quality?
- ▶ Differential transit times/costs/inventory practices by quality?

I assume the authors have in mind #1.

Why Would a "Collapse in Quality" be Interesting?

1. Even if had nothing to do with trade per se: Interesting to use trade data to measure non-homotheticities over the cycle.
2. If traded goods are higher quality (Alchian-Allen): Might explain collapse in trade/GDP during 2008-2009.
3. Implies exporters (firms and countries) are riskier. Interesting implications for asset pricing and international macro.

Findings

$$\% \Delta trade_{hts10 \times cty} = \beta * quality_{hts10 \times cty} + hts10 + cty + \epsilon$$

- ▶ No economically significant relationship between (proxy for) quality and trade collapse, controlling for average HS10 and country effects.
- ▶ Robust to:
 - ▶ Khandelwal (2009) quality estimation procedure
 - ▶ Interactions, such as Broda-Weinstein elasticity estimate
 - ▶ Alessandria and Kaboski (2009) classifications

Simple Suggestions

- ▶ Censoring at -100%
- ▶ Weighting
- ▶ Broda-Weinstein quantiles
- ▶ Report by end-use. Most important is to separate:
 - ▶ Manufacturing final goods
 - ▶ Manufacturing intermediates and capital goods
- ▶ Check for different markup reduction
 - ▶ Compare decline in volumes and decline in values
 - ▶ Passthrough comparisons (data difficult to get)

These would be nice to see, but I believe their results.

Evidence is Consistent with EKNR (2010) (1/2)

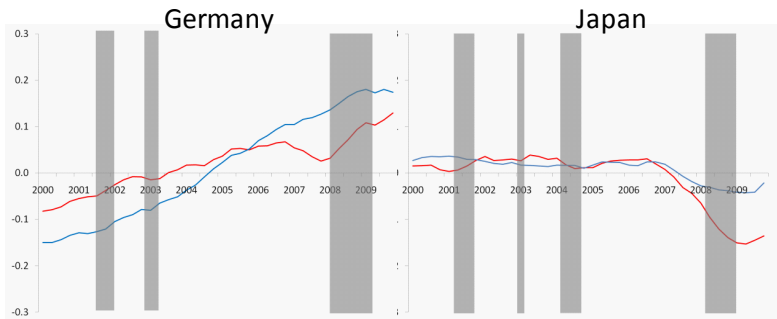
- ▶ In work with Eaton, Kortum, and Romalis, we look at object called Head-Ries Index:

$$\Theta = \left(\frac{X_{AB}}{X_{AA}} \right) \left(\frac{X_{BA}}{X_{BB}} \right).$$

- ▶ Basic idea is compare trade flows (numerator) to "home sales" (denominator) and attribute differences to trade frictions
- ▶ If (trade higher quality) + non-homothetic, then we might see cycle in plots of Θ ...

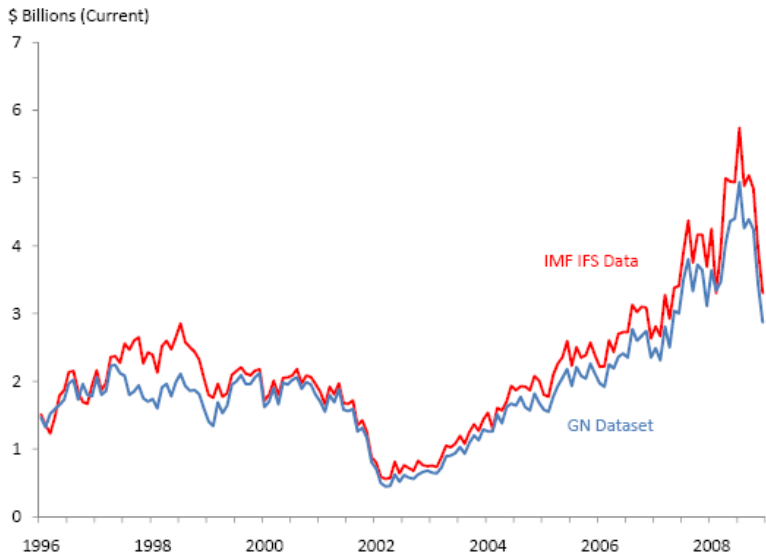
Evidence is Consistent with EKNR (2010) (2/2)

- ▶ But, we don't see cycle in this measure when separate durables (red) and non-durables (blue)



- ▶ Did this for several countries, very low correlations with change in log GDP

Similar Tests in Argentine Micro Data (1/2)



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Levchenko, Lewis, and Tesar:

$$\% \Delta \text{imports}_{hts10 \times cty} = \beta * \text{quality}_{hts10 \times cty} + \text{hts10} + \text{cty} + \text{init_val} + \epsilon$$

$$\beta = -0.0365^{***}$$

Here, run on Argentine data:

$$\% \Delta \text{imports}_{firm \times hts10} = \beta * \text{quality}_{hts10} + \text{firm} + \text{hts10} + \text{init_val} + \epsilon$$

- ▶ Late 2007 vs. late 2008: $\beta = -0.0343$

Similar Tests in Argentine Micro Data (1/2)

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- ▶ Late 2007 vs. late 2008: $\beta = -0.0343$
- ▶ Late 2001 vs. late 2002: $\beta = -0.1099^{***}$

What Might Cause Differences?

- ▶ Different expectations about persistence of shock?
- ▶ Difference in prevalence of intrafirm trade?
- ▶ Interesting project would be to do this for various business cycles across time and space to try to answer this
- ▶ Seems particularly important to understand lack of effect given rise of work in trade and macro dealing with non-homotheticities
 - ▶ Broda and Weinstein (2008)
 - ▶ Fielser (2009)
 - ▶ Fajgelbaum, Grossman, and Helpman (2010)
 - ▶ etc.

Conclusions

- ▶ Levchenko, Lewis, and Tesar have done a great job in quickly putting out papers documenting important moments of the Great Trade Collapse
 - ▶ "Smoking Gun" paper
 - ▶ "Financial Factors" paper
 - ▶ "Collapse in Quality" paper
- ▶ At least in appendix, authors should spell out more details and consider robustness to some of things raised above.
- ▶ But in end, I believe the results. Ongoing debate on how important myriad other factors were in the collapse in trade. The debate on role of quality, for U.S. imports, can perhaps be relatively short...