Comments on Hangyu Lee

The Great Trade Collapse and Contraction of Exports in Korea during the Global Crisis

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Outline

- Review
- Relevance
- The Key Hypothesis
- Robustness and third variables
- Other explanations
- Policy implications
Review

• The recent crisis
• Observation that durables share of exports and extent of decrease correlated
• Deviation of Korea due to exchange rate
• Alternative explanations: trade credit and vertical specialization
Relevance

• Economic Relevance
  - Leads to understanding nature of modern international trade

• Policy relevance
  - Propagation mechanism
  - Welfare implications
  - Where should policy intervene?

Eichengreen and O’Rourke, VoxEU, 2 Mar 10;
The Korean Downturn and Rebound

Figure 1. Recent Trends of Growth Rate of GDP and Trade

- Real GDP
- Real Exports
- Real Imports

(Year-on-Year, %)

2007 I II III IV 2008 I II III IV 2009 I II III IV 2010 I II
Economic Hypotheses

• Trade credit
• Vertical specialization
• *Compositional effect*

• The last leads to a natural test:
  $H_0$: No relation between composition, downturn
  $H_A$: Negative relationship
Testing the Composition Hypothesis

Figure 3. Share of Durable Goods Exports and Drops of Exports: 2008 Q4-2009 Q1
## Multiple Regression

Table 1. Regression of Total Export Growth Rate on Share of Durable Goods Exports and Real Exchange Rate Depreciation Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.86</td>
<td>3.85</td>
<td>-0.22</td>
<td>0.83</td>
</tr>
<tr>
<td>Share of durable goods</td>
<td>-0.26</td>
<td>0.08</td>
<td>-3.27</td>
<td>0.00</td>
</tr>
<tr>
<td>Real Depreciation Rate</td>
<td>0.33</td>
<td>0.11</td>
<td>3.07</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = 0.52$

**Question:** Why is the real exchange rate relative to USD?
Robustness

• Significance of durables share drops to $p_{-val}=0.03$ using White correction
• Significance drops if only emerging markets ($p_{-val}=0.11$)
• Depreciation doesn’t matter for advanced countries
• Oddly, effective exchange rate changes predict less well
• Residuals from reg. on durables; durables+dollar, durables+effective exch. rate
Testing in an Integrated Framework

• Mystery of the *dollar* depreciation‘s importance (invoicing issue?)
• What about partner growth?
• And what kind of trade partners (degree of vertical specialization varies across partners).
• Composition effects could be driven by financial conditions (Iacovone, Zavacka, 2009; Haddad, Harrison, Hausman, 2010).
• Suggests use of financial conditions indicators. (IMF FSI for e.g.)
Trade Credit & Vertical Specialization

• The trade credit argument is unconvincing for Korea
• Not certain applies to other countries, as observed spreads incorporate intervention.
• Vertical specialization argument based on constancy of number of varieties. But if production chains involve long-term relations, then impact on intensive margin (Altomontene and Ottaviano, 2009).
Policy Implications

• If it’s not trade credit, then no need to provide additional trade credit financing.
• If it’s composition *only*, then this is the sharp drop in trade is optimal.
• If it’s composition driven by credit constraints, it might be optimal to relieve those constraints.
Concluding Remarks

• Interesting start to analyzing the question of why Korean exports fell.
• But empirics can be augmented, even within the simple cross-section approach.
• Additional variables not just for the sake of additions, but to test alternative hypotheses.
• This would lead to greater understanding of causes and policy implications.