Comments on

*Persistence in Law-of-One-Price Deviations* by Crucini and Shintani

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Important, Trendy Area of Work

• Current dispute about persistence and dis-aggregated price data
  o Imbs et. al. vs. Chen-Engel

• Here: half-lives of LOOP deviations claimed to be short
  o Small-sample and (especially) aggregation biases explain long aggregate half-lives for PPP
Good

• Use of price (not index) data, including many non-tradables
  o Data not intended for this purpose (legitimacy)
  o Data set used before by Parsley-Wei, Rogers, others

• Comparing international to intra-national price movements
  o Natural benchmark

• Careful estimation
  o Compelling sensitivity analysis (e.g., measurement error)
First Doubt

• Reconciliation with other literature?
  
  o Why is there such a strong consensus view? Note 1 lists ten older studies with dis-aggregated data
  
  o Anderson-van Wincoop (2004): trade costs are large (170% ad valorem tax equivalent), vary by location, good
  
  o Bradford-Lawrence (2004): huge price dispersion in 8 OECD countries, using 3,000 dis-aggregated prices in ‘90s
Same Data, Different Take

• LOOP works terribly!
  
  o Figure 1 has *huge* dispersion of LOOP deviations across goods/locations (s = 60% internationally; 25% for US)
  
  o True that US is more integrated than international market
  
  o Also accurate to conclude little evidence of integration
  
  o Ditto Figure 2 (aggregated across goods)
    
    ▪ Dispersion falls internationally, but not much
What do Authors Mean by LOOP?

• Equation 3.1: If each location has its own intercept (steady state real exchange rate), is this convergence to LOOP?

• More Generally: If LOOP works so badly at long intervals, should we fixate on convergence?
  o Why do/should we care about rapid/slow convergence to big deviations from LOOP?
Are Results Inconsistent with Literature?

• Table 5: LOOP has highly persistent deviations without location-specific term
  
  o Seems eminently consistent with literature (especially US vs. international)
Even in Context of Conditional Convergence

• Authors may have Mendel’s problem (excessively positive findings)
  
  o Non-tradables: should convergence exist?
    ▪ Let alone at roughly comparable speeds?
    ▪ Table 6: effect of small-sample bias big; big enough?
Smaller Suggestions

• Remove “original version” date

• Describe what’s traded/non-traded

• How carefully have the data been checked?

• Any issues with explosive roots?

• How important is the assumption of AR(1) model?

• Investigate more deeply which goods are highly persistent (thus contribute to high aggregate persistence)
Bigger: Reconcile Inter- and Intra-national Evidence

• Figure 3: LOOP works better for US non-tradables than tradables (!)

• Unit-root in LOOP deviations rejected more often internationally than for US (!)

• Would like to see column in Table 6 for US: compare non-tradables to tradables (as in previous tables, especially given Figure 3)
Large

• Parameterize (destroy) intercepts by including variables for countries, currencies, trade barriers, etc.

  o Close to Parsley-Wei strategy in “Limiting Currency Volatility …”
My Bottom Line

• Surprising that relative prices converge quickly (but not to LOOP!): Agree

• Most variation of relative prices is across locations, and is steady-state (not stochastic): Agree, though not surprised
• **Disagree** that “LOOP do not convey substantial price inertia suggested by existing PPP literature” (p 13)

  o No puzzle since *most* relative price variation is highly persistent

    ▪ Rapid convergence to large deviations
    ▪ No need to investigate small-sample or aggregation bias