COMMENT

Equilibrium exchange rates: Are they suited for policy purposes?

Bernd Schnatz

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Main motivation/results of the paper

• Real appreciation not only of the CPI-based real exchange rate but also the PPI-based real exchange rate.
  • Balassa-Samuelson effect is only part of the story
• At least part of this appreciation may be an equilibrium phenomenon (→ current account behaviour).
• Comprehensive country-by-country analysis and panel data analysis to identify fundamentals driving the RER.
  • Finding cointegration is difficult task.
  • Specifications for long-term relationships vary quite a bit.
• Equilibrium exchange rates.
  • Strong overvaluation of most AC currencies.
  • Consistent with the existing literature.
Which approach is best suited? Methodological issues

Country-by-country analysis

Problems:
- Biased estimates
- Short sample
- Data properties

Cross section analysis

“In-sample” approach

Includes acceding countries (plus other countries)
→ biased intercept

Panel data analysis

“Out-of-sample” approach

Includes only other countries (excludes acceding countries)

Applies relationships to acceding countries
→ no intercept estimated for AC
Problem I: Initial undervaluation

Stylised presentation:

- Typical exchange rate pattern for AC → red line
- Steady equilibrium real appreciation owing to BS effects
  \[ rer = \alpha + \beta \text{prod} \]
- Assumption of zero average misalignment
- Estimates for constant (and coefficient) are biased
  → draw wrong conclusions regarding “fair” valuation.
- Moreover:
  - Non-stationary data
  - Short sample range (N=32)
Problem II: Exchange rate regime

\[ \text{rer} = \alpha + \beta \text{prod} + u ; \quad \beta = 1 \]

- Coefficient biased;
- No co-integration between RER and fundamental;
- Assumption of average zero misalignment critical!
Potential pitfalls in panel approach

- Cross-sectional contemporaneous correlation:
  - Take deviations from cross-sectional means.
  - Estimate time dummies (more demanding, more robust).

  → Inconsistent estimates

- “Poolability”, i.e. homogenous long-run parameters:
  - Pooled estimators are consistent and efficient
    IF it is possible to pool.
  - If long-run parameters are heterogeneous:

  → Inconsistent estimates
Data issues and the EQER

Data issues
- All variables relative to Germany/euro area?
- Does it make sense to include real interest rate differential?
- Where is the PPI-based real exchange rate gone?
- Is all data indeed available at quarterly frequency?
  → Provide a more elaborate discussion of the data

Equilibrium exchange rates
- choose a “base year … during which the exchange rate was in equilibrium.”
  → set early transition period (1992-94)
  → is this key for magnitude of misalignment?
    → sceptical with regard to the results
EQER: Are they suited for policy purposes?

- Is there an alternative?
- Major methodological issues need to be addressed
  - Country-by-country analysis
  - “In sample” panel analysis
    → very cautious interpretation of the results
  - Cross section analysis
    → simple but might give some initial insights
  - “Out-of-sample” panel analysis
    → promising avenue,
    but: extensive robustness checks necessary.

→ beware of the econometric pitfalls
Background information

Monte Carlo bias of intercept estimated from data adjusting from initial disequilibrium

-6 -5 -4 -3 -2 -1 0 1

40 60 80 100 120 140 160 180 200 220 240 260 280 300

Bias of intercept  Estimated disequilibrium

Source: Author's calculations

Calculated using 10000 Monte Carlo replications, alpha = -0.01

European Central Bank