



EUROPEAN CENTRAL BANK

# COMMENT

Equilibrium exchange rates:
Are they suited for policy purposes?

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# Main motivation/results of the paper



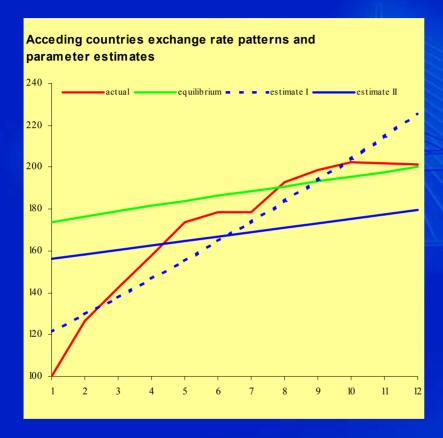
- Real appreciation not only of the CPI-based real exchange rate but also the PPI-based real exchange rate.
  - Balassa-Samuelson effect is only part of the story
- At least part of this appreciation may be an equilibrium phenomenon (→ current account behaviour).
- Comprehensive country-by-country analysis 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-Cross section Panel data country analysis analysis analysis Problems: "In-sample" "Out-of-- Biased estimates sample" approach - Short sample approach - Data properties Includes acceding Includes only other countries (plus other countries (excludes countries) acceding countries) → biased intercept Applies relationships to acceding countries $\rightarrow$ no intercept estimated for AC EUROPEAN CENTRAL BANK

### **Problem I: Initial undervaluation**





#### Stylised presentation:

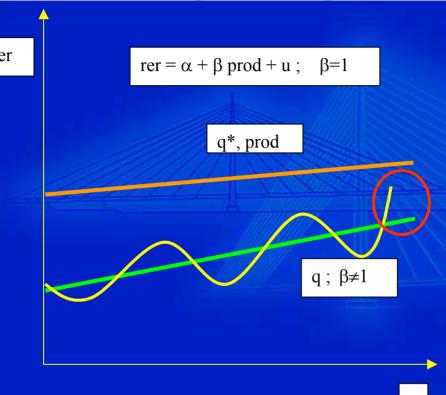
- Typical exchange rate pattern for AC → red line
- Steady equilibrium real appreciation owing to BS effects

$$rer = \alpha + \beta prod$$

- 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**



- 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."
- $\rightarrow$  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?

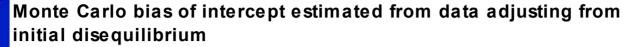


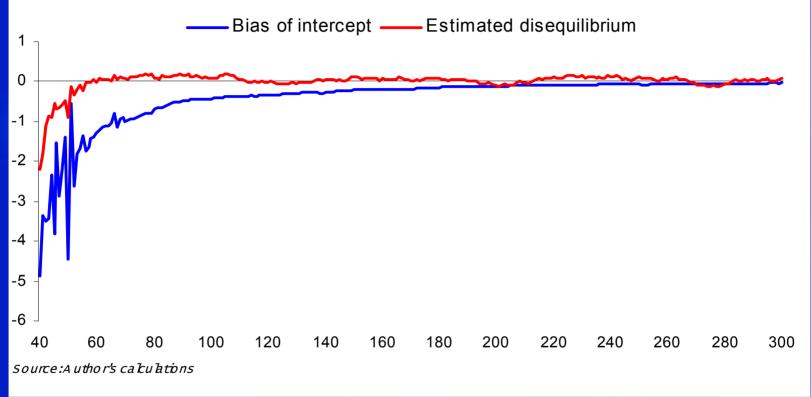
- Is there an alternative?
- Major methodological issues need to be addressed
  - Country-by-country analysis
  - "In sample" panel analysis
  - → very cautious interpretation of the results
  - Cross section analysis
    - → simple but might give some initial insights
  - "Out-of-sample" panel analysis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





### **Background information**





Calculated using 10000 Monte Carlo replications, alpha = -0.01 (€)