

**Comments on *Optimal Currency Areas***

**by Alesina, Barro, and Tenreyro**

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## **An Interesting Paper**

- Asks: Which Currency (Union) should aspiring members join?
- Use a variety of metrics indicated by Alesina-Barro theory
  - Patterns of International Trade (trade benefit)
  - Inflationary history (commitment benefit)
  - Co-movements of prices and output (stabilization cost)

## **The Terms of the “Bi-Polar” Debate are Shifting**

- Argentina’s currency board is now “mid-way approach”
- At least debatable that currency union enhances trade

## Empirical Results (the value-added)

- Find well-defined \$ and € zones, but no clear ¥ zone.
  - Results mostly seem plausible and reasonable
    - Asians had accurate expectations about Japanese monetary policy
- Some progress on endogeneity issues

## What's the Question of Interest?

- Usually the issue is not *who* to join but *whether* to join.
  - Examples: Denmark, Sweden, UK, in €-land
  - Argentina, Canada, Mexico in \$-zone

## Is a Large Country Necessary?

- A number of multilateral currency unions exist (ECCA, CFA) without any clear center country (though both are “moored” externally).
- Why not handle OCAs that do not involve any of the G-3?
  - Kenichi Ohmae’s “Triad Power” or Thurow’s “Head to Head” competition?

## **Excluding the G-3 is an Important Issue in Practice**

- Benefits of regional currency unions likely to be at least as high in trade integration, price and output co-movements
- Would monetary commitment be lower for multilateral CUs (as opposed to unilateral CUs which exclude the G-3)?
  - In practice, inflation for ECCA and CFA averages 6.7% (1960-1996), while inflation for unilateral CU joiners is significantly higher (8.9%).

## **Other Potentially Important (Deliberate) Omissions**

- Financial Integration (Argentina and dollarization)
  - Over half the papers in the 2001 *JMCB* symposium
- Monetary Sovereignty as Fiscal Policy of last resort
  - Goodhart and “C-form” money



## The Empirics

- Mostly believable, though could be more accessible
  - Some key equations and descriptions currently missing
    - Is IV correlated with CU?
  - Data set?
  - Why stop endogeneity after one round?

## Some Data Issues

- 138 seems like a lot of countries, but is not for this literature
  - CUs tend to be small and/or poor, so the action is in the bottom tail (I use up to 217)
- Selection Bias: a number of CUs are so tightly integrated that no data is available (Luxembourg, San Marino, Monaco, ...)

## Using the Ratio of Trade to GDP

- “Solves” problem though using trade level trade in numerator
  - But imposes unity on GDP product on gravity (rejected)
  - Can test for appropriateness with Box-Cox transformation of  $(y^\lambda - 1)/\lambda$ , which nests linear, natural log, and inverse
    - Find  $\lambda \approx 0$  (.09), so log transform looks good
    - Both log and Box-Cox optimum deliver big positive CU effects

## Estimation: Some Issues

- Coefficient on real GDP imposed to be unity (usually rejected)
- No explicit panel aspect (e.g., fixed or random effects, though year effects included and clustered standard errors)
- No real GDP per capita term (usually very significant)

Room for sensitivity analysis

## Sensitivity Analysis: Effect of Currency Union on Trade

	$\gamma$ (se)
<b>Default</b>	.046 (.057)
<b>Fixed Effects</b>	.030 (.011)
<b>Box-Cox Transform</b>	.29 (.10)
<b>Unrestricted Gravity</b>	.063 (.057)

## The Instrumental Variable

- Requires “... bilateral trade between countries  $i$  and  $j$  depends on bilateral gravity variables for  $i$  and  $j$  but not on gravity variables involving third countries ...”
- Is *Remoteness* an Issue?
  - Remoteness as (inverse of) distance-weighted GDP
    - E.g., Head (“Gravity for Beginners” 2000)

## Political Incorrectness

- Greece is a “member state participating in the Euro since Jan 1 2001”
- Guinea-Bissau is part of the CFA (joined May 1, 1997)

## Minutiae

- The CIA currently shows 160 currencies
- The CFA is not in currency union with France/€; they're just pegged (at 655.957) and devalued in the 1990s (from 50 to 100 per F (except for Comoros)).
- The ECCA is not in currency union with the US; they're just pegged at 2.7 (4.8 per pound before 1976).