

What effects is EMU having on the euro area and its member countries?
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[Presentation slides]



EUROPEAN CENTRAL BANK

Comments on Richard Baldwin's “The Euro's Trade Effects”

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European Central Bank, 16 June, 2005

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Survey of evidence on how currency
unions, and € in particular,
affect trade volume

- excellent
- comprehensive and detailed
- prose is clear and very lively
- does not hesitate to let us know his evaluation of each contribution.

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Correctly places Andrew Rose's 2000 paper, "One Money, One Market..." at the center

- Perhaps the most influential international economics paper of the last ten years.
- Rose's "original contribution" was to add a common currency dummy to the list [of variables in the gravity model of bilateral trade] – hard to imagine that no one had thought of it before 2000."

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Why did nobody think of it before?

- Some of us had earlier added bilateral exchange rate variability to gravity model: Thursby & Thursby (1987), DeGrauwe (1988), Brada & Mendez (1988), and Frankel & Wei (1993, 94, 95, 97).
- With 63x62=3906 observations of bilateral exports/yr. we found evidence that exchange rate variability had a small effect on trade.
- Why we did not add a dummy variable for a currency union:
 - There were few currency unions, if any, in the data set.
- Why then did we not extend the data set to include all the smaller countries and dependencies, as Rose did in 2000, to include enough cases of currency unions?
 - Technical limitations:
200x199 (= 39,800) observations not available and not practical.
 - Not much interest until last 10 years in specific question of currency unions, as distinct from fixed exchange rates more generally.

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Attention-grabber: currency union dummy had far larger and more significant effect, beyond effect of bilateral variability per se
– the famous tripling estimate

- Micro explanation?
- Fragmentation in Baldwin-Taglioni (2004).
- My analogy: boost to trade from full customs union in which trucks no longer have to stop at the border and fill out forms
- Or even closer analogy -- the fundamental reason for the existence of money: more efficient than a barter economy.

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3-effect greeted with skepticism, on four grounds:

1. Cannot infer from cross-section evidence the effect in real time of countries adopting a common currency.
2. Statistical association between currency links and trade links might not be the result of causation running from currencies to trade but might arise instead because
 1. Both links caused by third factor, such as colonial past, remaining political links, complementarity of endowments, or accidents of history,
 2. Other missing variables,
 3. Misspecification of the equation,
 4. Endogeneity of the currency decision.
3. Estimated effect on trade too big to be believable.
4. Rose's evidence came entirely from countries that were either small or very small; estimates can't be extended to larger countries.

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1. Times series dimension

- Glick & Rose (2002), using a 1948–97 sample,
 - find that trade among the members was twice as high in the currency union period as after leaving.
 - It may be that roughly 2/3 of the tripling effect is reached within 3 decades of a change in regime.
- Apparently currency unions, like FTAs, start to have effects on trade patterns even before formally going into effect.
 - Baldwin worries that the estimated Rose effect appears suddenly in 1998, even though EMU did not take effect until Jan. 1999.
 - But June 1997 was the breakpoint in perceptions.
 - On June 15, 1997, implied probabilities of joining Germany in EMU in 1999: 100% for Belgium & France and over 70% for Finland, Spain & Portugal (calculations from JP Morgan based on interest rate swap market spreads).
 - The probability of EMU taking place on Jan. 1, 1999, shot up above 75% after the Stability Pact was agreed in June 1997 (Goldman Sachs)

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2. Omitted variables, misspecification, and endogeneity

- Rose did a thorough job of controlling for common languages, colonial history, and remaining political links
- Possible that there remain other factors (e.g., accidents of history) that influence both currency choices and trade links.
- Many of critiques point out a problem of omitted variables or endogeneity, offer an alleged way to address it, then report that the currency union effect disappears
- Many in effect throw out most of the data in the name of addressing issues of endogeneity
 - Or put in a large number of dummy variables or fixed effects, incl. one for every pair of countries.
 - Since the finding of significance arose only when Rose put together a large enough data set, there is little info gained in reducing the data set sharply and then noticing loss in significance
 - Case studies of break-ups: Ireland-UK (1979) , Czech-Slovak (1993)
- Glick and Rose (2002) works even with the pair-wise fixed effects

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Omitted variable of greatest concern to the critics comes from Anderson-VanWincoop

- Called “remoteness,” “multilateral resistance term,” or “relative prices matter” term (Baldwin).
- It’s easy enough to control for remoteness
- Aspect of A-vW theory that leads to reduced numerical estimates of the effects of borders and currencies:
 - the property that elimination of borders or currency differences entails substantial diversion of trade from the rest of the world to within the union.
 - But such trade-diversion by currency unions is not in the data

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3. The high magnitude of the estimates

- Important to consider big home-country bias in trade
- Many studies have found that people trade with their fellow citizens far more easily than with those living in other countries
 - Canadian provinces more prone to trade with each other than with U.S. states:
x20 (McCallum, 1995); x10 (Helliwell, 1998) or x3 (Wei, 1996).
 - Nitsch (2000) finds intranational trade within Europe is 7 times as high as trade with EU partners of similar size and distance.
 - Similarly, studies of the ability of arbitrage to narrow price differentials find
 - crossing the U.S.-Canada border discourages trade more than traveling the entire length of Canada (Engel-Rogers, 1996)
 - Barriers even greater for other pairs of countries (Engel-Rogers, 1998; Parsley-Wei, 2001).
- Why?

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The estimated currency union coefficient is in magnitude and explanatory power roughly the same as the FTA variable

- Baldwin takes it as self-evident that FTAs and customs unions have a big effect on trade.
- Cites approvingly the assertion of Berger and Nitsch (2005) that it is implausible, even crazy, to think that the trade effect of the euro could be as large as the trade effect of the EU.
- But this sort of finding is in fact common.
- If he and other critics of the currency union literature were to apply the same tough standards to both customs unions and currency unions, he might find that the estimated magnitudes, significance levels, *and necessary methodological qualifications* are comparable.

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4. Small countries

- Sounds plausible that very small geographical units are highly dependent on international trade
 - due either to inadequate scale of the domestic market or to insufficiently diversified factors of production—
 - so strategies such as currency unions or FTAs would have larger payoff for them than for larger, more self-sufficient, economies.
- But 2 counterarguments.
 - Rose tested whether there are any difference between the currency unit effects among units that are merely small and those that are very small). He found no significant difference.
 - I don't see the evidence that the home-country bias departs from linearity, regardless of the size of the country, as being as overwhelmingly strong as Persson and Baldwin seem to.

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5. Experience with the euro

- We now have 4-6 years of data since the EMU went into effect .
- Econometricians have updated the gravity estimates to see what can be learned from the record so far.
- Micco, Stein, and Ordoñez (2003) find that for pairs of the 12 euro countries, trade has increased significantly. Estimated effect is about 15 % beyond what could be explained by growth and other factors—a range of 6 to 26 %, depending on the use of country and year dummies, with a larger set of 22 industrialized countries.
- The preferred Micco, Stein, and Ordoñez (2002) estimates of “differences in differences” reveal that between 1992 and 2001 the boost to intra-EMU trade was about 18 to 35 %, depending on whether one uses country-pair dummies, or conditions on the standard gravity variables.
- These magnitudes (or Baldwin’s preferred ones) are less than in the Rose studies, but it’s still early.

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Other evidence confirms the finding.

- Bun & Klaassen (2002, p.1) find “the euro has significantly increased trade, with an effect of 4% in the first year” and a long-run effect projected about 40 %.
- Berger & Nitsch (2005) and De Nardis & Vicarelli (2003) report similarly positive results.
- Flam and Nordstrom (2003) is Baldwin’s favorite paper methodologically.
 - He is bothered by the implication of their estimated effects that the “euro must be making it easy, cheaper and/or safer to sell to EuroZone nations.”
 - Why not? Multinationals now find it more convenient to sell into one and all, because they share a common “currency platform.”

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Conclusion

- The trade effects of monetary union are not, after all, limited to small countries.
- Regarding how large effect of € gets, only time will tell.
- Tripling probably is indeed an overestimate, even for the very long run
- But we are already at effects that most international economists did not believe 10 years ago.