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A Pacific Economic Bloc: Is There Such an Animal?

In the last few years, efforts at forging regional economic agreements to strengthen trade and financial links among neighboring countries have proliferated; two of the most familiar are the EC (European Community) and NAFTA (North American Free Trade Agreement). By contrast, in East Asia, now the fastest growing region in the world, overt preferential trading arrangements or other political moves to promote regional economic integration are generally lacking. Still, there is some speculation that East Asian countries have responded to trade blocs in North America and Europe by forming a de facto yen bloc. That is, by some accounts, East Asian economies are increasingly pegging their exchange rates to the yen (at the expense of the dollar) and building a regional trading "bloc" that is centered on Japan.

This *Weekly Letter* uses statistical techniques to examine whether such a yen bloc is forming. The results provide little evidence either that the yen is replacing the dollar as the dominant currency in East Asian trade or that a de facto intra-Asian trade bloc is emerging with Japan at its center.

Exchange rate targeting

Officially, only a few East Asian currencies are pegged solely to the dollar; none is pegged officially to the yen. But, officially or de facto, many link their currencies to a basket of major currencies. Typically, they do not announce the weights they assign to various currencies or even the currency composition of their baskets; but the U.S. dollar and Japanese yen are clearly on the list of candidates.

In spite of the secrecy, it is possible to infer their policies by observing the actual behavior. That is, if a yen bloc in East Asia were forming, one manifestation of it would be that the yen received increasing weight in these countries' baskets. To estimate the currency weights econometrically, we ran regressions of the changes in the value of the domestic currency against changes in the values of foreign currencies including the U.S. dollar and the yen for nine countries—Korea, Taiwan, Singapore, Hong Kong, Malaysia, Indonesia, Thailand, the Philippines, and China. This analysis used weekly data (Friday close of the London market) from the beginning of 1979 to the second week of May 1992.

There were four main findings. (1) All nine currencies appear to assign a heavy weight to the U.S. dollar. (2) Only one currency, the Singapore dollar, has assigned significant weight to the yen in addition to the dollar throughout the period. (3) Certain currencies gave a bit of increased weight to the yen during particular subperiods: in 1981–1984 when the dollar was strongly appreciating (the Singapore dollar); in 1985–1986 as the dollar hit its peak and began to depreciate (the Hong Kong dollar, Indonesian rupiah, Thai baht); and in 1987–1988, after the dollar had completed most of its depreciation (the New Taiwan dollar). (4) The only currencies to place a significant weight on the yen in the most recent subperiod (1991–1992), besides the Singapore dollar, are the Malaysian ringgit and the Thai baht.

These findings indicate that the U.S. dollar remains the dominant currency in the exchange rate policies of all East Asian economies. There is no clear evidence that the yen is moving towards replacing the U.S. dollar in the region.

The use of the dollar and yen in invoicing

Why have East Asian governments not sought to link their currencies with the yen more strongly? Although there is some evidence that the yen is being used more widely as the invoicing currency for trade and related lending in Asia, the share of the yen in the denomination of trade and finance has not increased anywhere nearly as rapidly as Japan's share of trade among the East Asian countries. Developing and developed countries alike have tended to invoice much of their trade in U.S. dollars, rather than in their own or their trading partners' currencies.

Why should the dollar rather than the yen be the preferred invoicing currency in the Pacific region? One possibility is that Japan itself resists the internationalization of the yen in order to avoid large fluctuations of its reserves or to avoid destabilizing effects on its domestic price level. Another possibility is that some of Japan's strategic trading partners (for example, oil-producing countries) prefer to receive dollars from Japan since they rely more on imports from the U.S. This in turn may induce Japan to require the dollar as the invoicing currency even when trading with East Asian countries. A third possibility is a failure of international coordination. In other words, the world might work equally (or even more) efficiently if all countries were to replace the dollar by the yen as an invoicing currency, but no individual country would want to do this on its own if other countries did not. Whatever the reason, as long as the dollar remains the dominant invoicing currency in international trade and lending, it makes sense for the East Asian economies to continue to assign a heavy weight to the dollar.

Are there de facto trade blocs in the Pacific?
Even if there are few overt preferential trading arrangements or other political moves to promote regional economic integration in East Asia, there are still concerns that de facto trade blocs are emerging in this region. And some have hypothesized that Japan is *indirectly* forming an economic bloc through its flow of aid, foreign direct investment, and other forms of finance, to influence its trade with its neighbors.

To address the question of whether a yen bloc is forming in East Asia, one must presumably ask something more than whether the economies are getting larger, or even whether economic flows among them are increasing. One must ask whether the share of intraregional trade is higher, or increasing more rapidly, *than would be predicted* based on such standard economic factors as GNP or the growth rates of the countries involved.

For example, some who support the idea that a de facto trade bloc exists in East Asia cite the fact that the share of intraregional trade to its total trade increased from 33 percent in 1980 to 37 percent in 1989. But these numbers are deceptive. The Western Hemisphere and the EC also increased intragroup trade in the 1980s. In fact, the EC, not Asia, has had both the highest and the fastest increasing degree of intraregional trade, reaching 59 percent in 1989.

Furthermore, if one allows for the phenomenon that most of the East Asian countries in the 1980s experienced rapid growth in *total* output and trade, then it is possible that there has in fact been no movement toward greater intraregional bias in the evolving pattern of trade. The increase in the intraregional share of trade could be entirely due to the increase in economic size of the countries.

The "gravity model" provides a systematic framework for measuring what amount of bilateral trade is "normal" on the basis of geographical distance between two countries, their economic size, and other factors. If there were nothing to the notion of regional trading blocs, then these basic variables would explain most of the bilateral trade, and there would be nothing left to attribute to a dummy variable representing whether two trading partners are both located in the same region.

Our gravity regressions have produced two main findings (see Frankel 1992, Frankel and Wei 1993a, b). First, there is clear evidence of regional trade bias. The intraregional trade dummies are numerically large and statistically significant for countries in East Asia and elsewhere in the world. If two countries are both located in the Western Hemisphere for example, they will trade with each other by about 50 percent more than they would otherwise, even after taking into account proximity and the other gravity variables.

Second, however, there is no evidence of a trend increase in the intraregional bias of Asian trade during the 1980s. In sharp contrast, the EC and the Western Hemisphere showed rapid intensification of within-bloc trade in the course of the 1980s. Both show an approximate doubling of their estimated intraregional bias coefficients.

We also consider a nested sequence of country groupings as potential candidates for trading blocs in the Pacific: ASEAN (Brunei, Indonesia, Malaysia, the Philippines, Singapore, Thailand), EAEC (proposed by Malaysia to consist of ASEAN plus Hong Kong, Taiwan, Korea, China and Japan), AP (a group we define as EAEC plus Australia and New Zealand), and APEC (AP plus the U.S. and Canada). We investigate whether a particular grouping of countries functions as an independent trade bloc when a larger nesting group is considered at the same time in the regression. APEC appears to be the correct place to draw the boundary: Any bloc smaller than APEC, such as ASEAN or EAEC, is not statistically significant when APEC is included in the same regression. When we test for the broadest definition of a Pacific bloc, including Latin America, it is not significant, and the other coefficients do not change. It is interesting to note that the U.S. and Canada belong to two distinct blocs simultaneously: APEC and the Western Hemisphere bloc.

What about bilateral trade between Asia-Pacific countries and Japan in particular? Our test indicates that there is no residual to be attributed to Japan's development of special trading relations with other countries in its region, after one takes into account distance, income, and level of development. Thus there is no evidence that Japan has established or come to dominate a trading bloc in Asia.

Conclusions

The analysis in this *Weekly Letter* fails to support the notion that East Asian countries have formed a yen bloc or a de facto trading bloc centered on Japan. Instead we find that the U.S. dollar continues to be the dominant international currency in East Asian exchange rate policies. Some currencies did increase their weight on the yen during the mid-1980s. But this may have been motivated by a desire to avoid overvaluation of their currencies in tandem with the dollar, instead of a genuine and steady increase in the role of the yen. Only two or three currencies actually showed a sign of increased yen weight at the end of the sample. Overall, the evidence does not suggest a substantial trend increase in the role of the yen in East Asian exchange rate policies.

Finally, the level of trade in East Asia, like trade within the European Community and within the Western Hemisphere, is biased toward intraregional trade to a greater extent than can be explained by distance, GNPs, and other gravity variables. However, there is no evidence of any trend increase in the intra-Asian trade bias; the intra-Asian trade bias is not centered around Japan, and the strongest "bloc" of any is a trans-Pacific one that includes the U.S. and Canada along with the East Asian countries.

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