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Why have currency unions dissolved? A test of optimum currency area theory

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Since World War II, economies have exited currency unions at an average rate of one per year. Yet the evidence confounds established theory: economists are unable to predict which economies are likely to leave currency unions.

The euro's success has piqued the world's interest in currency unions. The Gulf Cooperation Council is planning to establish one by 2010, the South African Development Community by 2018 and plans for an Asian currency union have circulated for years. Peter Kenen and Ellen Meade have a new book that surveys the prospects for regional monetary integration around the globe.[1]

All this is about joining. What about quitting? Barry Eichengreen recently argued on Vox that euro adoption is irreversible since trying to quit would trigger 'the mother of all financial crises' in the leaver. But the Euro area is not the only currency union in the world. Since the end of the Second World War, 69 countries, territories, or other entities have left currency unions; 61 have remained continuously within currency unions. Does history have any lessons regarding potential departures from currency unions?

What do currency-union leavers have in common?

Currency unions are mysterious phenomena. The theory is old; the mainstay remains Mundell's (1961) classic. Yet the practice is increasingly young; Malta and Cyprus just joined the European Monetary Union (EMU). It has long been known that the theory does not provide accurate predictions about which countries should join currency unions. Kosovo uses the Euro as its official currency while other countries, such as the UK, Denmark and Sweden, are reluctant to join in. Italy has even considered leaving the EMU for macroeconomic reasons.

One might think that there is a typical scenario for a country leaving a currency union: it acquires its own money concurrently with its own flag, national anthem, and other trappings of political sovereignty. That is, one might assume that monetary independence is

intimately associated with political independence. And it is indeed true that 24 currency union members are dependencies, such as Aruba, the Channel Islands, and Greenland; understanding their enduring currency unions is not particularly difficult. However, 37 independent countries have remained continuously in currency unions, including Cameroon, Luxembourg, and Panama. Why? In any case, the link between political and monetary independence is not straightforward; of the 69 countries that have left currency unions, the median delay was seven years after independence. Further, over a tenth left their currency unions before independence and over twenty waited at least a decade after independence before exiting. The tie between political and monetary independence is weak.

Why might a country leave a currency union, if not as a demonstration of political sovereignty? That is, which macroeconomic characteristics should one examine around the time of currency union dissolutions?

Potential reasons for currency union exit

Mundell's (1961) optimum currency area theory points to the difficulties of handling asymmetric cyclic shocks that affect one member of a currency union but not another. Since such business-cycle shocks can potentially be handled within a currency union by fiscal policy, it is natural to examine the scope of government spending in the economy. As more open economies benefit more from currency unions which lower the transactions costs associated with trade, it is also natural to look at the importance of trade in the economy. Therefore, one might expect closed countries with small governments to have or acquire their own moneys.

There are other potential determinants too. As Alesina and Barro (2002) point out, richer and larger countries can more easily handle the expense associated with creating and operating a monetary institution. Thus the size and income of a country are of relevance. Since countries that leave currency unions have to establish a new monetary framework, their money growth and inflation rates also deserve attention. And perhaps most obviously of all, one might expect countries to leave currency unions following large shocks.

Statistical analysis

With a data set that covers 130 countries from 1946 through 2005, I examine the effect of these key variables on the probability of being inside or outside a currency union, using probit estimation.

When I examine macroeconomic determinants individually in bivariate probits, I find that countries are likely to leave currency unions if they are independent or large. Their government sectors are also larger and trade is less important. Inflation and money growth are also higher for those that exit. However, when one considers all the variables

simultaneously, most determinants lose any sizable effect.

The size and income of the country are both strongly positively associated with monetary independence, consistent with Alesina and Barro (2002). More democratic countries and those with larger government sectors may find it easier to adjust to asymmetric macroeconomic shocks, but are in fact less likely to remain in currency unions. This is inconsistent with standard optimum currency area theory, as is the absence of any strong tie between the importance of trade and currency union membership.

Inflation is higher for exiting countries but the causality is not clear. High-inflation countries may find it more difficult to remain in currency unions, as they cannot regain competitiveness through a nominal devaluation; but countries with their own money may simply have systematically less disciplined monetary institutions and accordingly higher inflation.

Perhaps the most striking feature of the data is the absence of volatility around the time of currency union dissolutions. Countries simply do not seem to exit monetary unions around the times of large shocks.

Conclusion

What drives countries out of currency unions from a historical perspective? First, what shapes currency unions around the world is not what the received theory predicts. Economists need to think harder about this one. Second, the most striking facts are that aggregate macroeconomic features of the economy do a poor job in predicting currency union exits and that there is only a weak linkage between monetary and political independence. Whether it will be a better guide of the shape of things to come remains unknown.

References:

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Footnotes

1 *Regional Monetary Integration*, November 2007, Cambridge University Press.

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