

# The Endogeneity of the Optimum Currency Area Criteria

Jeffrey A. Frankel and Andrew K. Rose

## Press Release

European Monetary Union is about to happen. Should it? Most economists argue “No.” In this article we show that they’re mis-interpreting the data.

On the basis of the evidence, most economists conclude that EMU is a bad idea. Business cycles are poorly synchronised in Europe, so that countries give up an important policy when they merge their currencies. If a country like Finland is hit by a bad shock (say because of events in Russia after EMU), it won’t be able to devalue and lower its interest rates. Losing the markka means that Finland loses a national tool of stabilisation by acquiring European monetary policy.

This argument is a reasonable reading of the historical evidence. But history may not be relevant. By eliminating different currencies, EMU will lead to large expansion of trade. The growth in trade will in turn lead to more synchronised business cycles. As Finland experiences fewer Finnish shocks, European monetary policy will be more appropriate. Countries joining EMU will have given up an irrelevant tool; but they will still reap the benefits of increased trade.

Succinctly, EMU may look like a bad idea before it occurs. But by integrating markets, EMU will result in more synchronised business cycles. EMU will work *after it takes place and because it takes place* even if it looks like a bad idea in advance.

EMU is usually discussed by asking “Is Europe an ‘Optimum Currency Area’?” Two countries should share a single currency if they trade intensely with each other and

have synchronised business cycles. (There are other criteria which we ignore.) But both trade intensity and business cycles will change because of EMU. From a theoretical viewpoint, the effect of increased trade integration on the cross-country correlation of business cycle activity is ambiguous. Reduced trade barriers can result in increased industrial specialisation by country and therefore more asynchronous business cycles. On the other hand, increased integration may result in more highly correlated business cycles because of demand shocks or intra-industry trade. Happily, this ambiguity is theoretical rather than empirical.

We present econometric evidence suggesting strongly that as trade links between countries strengthen, their national incomes become more highly correlated (not less correlated, as some have claimed). Using a panel of thirty years of data from twenty industrialised countries, we find a strong positive relationship between the degree of bilateral trade intensity and the cross-country bilateral correlation of business cycle activity. That is, greater integration historically has resulted in more highly synchronised cycles.

This has important implications for the OCA criterion. It means that a naïve examination of historical data gives a biased picture of the effects of EMU entry on a country. Some countries may appear, on the basis of historical data, to be poor candidates for EMU entry. But EMU entry *per se*, for whatever reason, may provide a substantial impetus for trade expansion; this in turn may result in more highly correlated business cycles. That is, a country is more likely to satisfy the criteria for entry into a currency union *ex post* than *ex ante*.