

Currency Unions

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Definition

Currency unions (also known as monetary unions) are groups of countries that share a single money. Currency unions are unusual, since most countries have their own currency. For instance, the United States, Japan, and the United Kingdom all have their own monies. But a reasonable number of countries participate in currency unions, and their importance is growing. In May 2005, 52 of the 184 IMF members participated in currency unions.

Currency Unions Present and Past

Currency unions commonly occur when a small and/or poor country unilaterally adopts the money of a larger, richer “anchor” country. For instance, a number of countries currently use the American dollar, including Panama, El Salvador, Ecuador, and a number of smaller countries and dependencies in the Caribbean and Pacific. Swaziland, Lesotho and Namibia all use the South African Rand. Both the Australian and New Zealand dollars are used by a number of countries in the Pacific; Liechtenstein uses the Swiss franc, and so forth. In the past, a number of countries have used the currency of their colonizer; over fifty countries and dependencies have used the British pound sterling at one time or another. Cases like this are known as official dollarization (unofficial dollarization occurs when the currency of a foreign country circulates widely but is not formally the national currency). In such cases, the small country essentially relinquishes its right to sovereign monetary policy. It loses its ability to independently influence its exchange and interest rates; these are determined by the anchor country, typically on the basis of the interests of the anchor.

There are also a number of multilateral currency unions between countries of more or less equal size and wealth. For instance, the East Caribbean dollar circulates in: Anguilla; Antigua and Barbuda; Dominica; Grenada; Montserrat; Saint Kitts and Nevis; Saint Lucia; and Saint Vincent and the Grenadines. The Central Bank of the West African States circulates the CFA franc in: Benin; Burkina Faso; Cote d’Ivoire; Guinea-Bissau; Mali; Niger; Senegal; and Togo. The Bank of the Central African States circulates a slightly different CFA franc in: Cameroon; the Central African Republic; Chad; Republic of Congo; Equatorial Guinea; and Gabon.

The largest and most important currency union is the Economic and Monetary Union of the European Union, typically referred to as EMU. EMU technically began on January 1 1999, although the euro was only physically introduced three years later. Twelve countries are formally members of EMU: Austria; Belgium; Finland; France; Germany; Greece; Ireland; Italy; Luxembourg; the Netherlands; Portugal; and Spain. (A number of smaller European territories and French dependencies also use the Euro.) These countries jointly determine monetary policy for EMU through the international European Central Bank. The number of members in EMU is

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expected to grow with time, especially as countries that acceded to the European Union in 2004 become eligible for EMU entry. However, both Sweden and Denmark have rejected membership in referenda, and the euro remains unpopular in the UK.

While a number of currency unions currently exist, many have not survived. The Latin Monetary Union began in 1865 when France, Belgium, Italy and Switzerland (later joined by Greece, Romania, and others) adopted common regulations for currency to encourage its free flow across borders. This essentially amounted to a commitment to mint silver and gold coins to uniform specifications, but without other restrictions on monetary policy. The union effectively ended with the onset of the First World War. The war also ended the Scandinavian Monetary Union which Denmark, Norway, and Sweden began in 1873. The economic union between Belgium and Luxembourg that began in 1921 has been absorbed into EMU. Multilateral currency unions in East Africa, Central Africa, West Africa, South Asia, South-East Asia, and the Caribbean have also disappeared.

Theory: Why Should Countries enter Currency Union?

Historically, most countries have had their own moneys. There seems to be a tight connection between national identity and national money; a country's money is a potent symbol of sovereignty. Still, some countries have entered into currency union. Why? Economists have theorized about the potential economic benefits of currency union which can, in certain circumstances, overwhelm the perceived political costs.

Like all other monetary regimes, currency unions are fully compatible with Mundell's (1968) celebrated "Trilemma" or "Incompatible Trinity." A country would like its monetary regime to deliver three desirable goals that turn out to be mutually exclusive: Domestic Monetary Sovereignty, Capital Mobility, and Exchange Rate Stability. Currently, large rich countries like the United States, Japan and the UK achieve the first two goals (domestic monetary sovereignty and open capital markets) but have floating exchange rates. By way of contrast, members of a currency union essentially relinquish the first objective (monetary independence), in exchange for the latter benefits (capital mobility and stable exchange rates). Indeed, some economists think of currency unions as simply extreme forms of fixed exchange rates, with all the associated pros and cons. Countries inside currency union receive more microeconomic benefits than they would from a fixed exchange rate, since sharing a single money leads to deeper integration of real and financial markets. On the other hand, a country can devalue or float the exchange rate more easily than it can leave a currency union. Still, this is an unsatisfying theoretical way to approach the issue of currency unions. It does not address the vital question "What is the optimal size of a currency union?" If the right size for a currency union is not necessarily the country, how should we tackle the problem?

The theoretical analysis of currency unions began with a seminal paper by Robert Mundell (1961). Mundell's analysis answered the question: "What is the appropriate domain for a currency?" Mundell briefly argued there are advantages to regions that use a common money. In particular, currency union facilitates international trade; a single medium of exchange reduces transactions costs, as does a common unit of account. However a common currency can also cause problems in the dual presence of asymmetric shocks and nominal rigidities (in prices and wages). Suppose demand shifts from Eastern to Western goods. The increase in demand for

Western output result in inflationary pressures there, while East goes into recession. Mundell argued that if unemployed labor could move freely from East to relieve inflationary pressures in the West, both problems could be resolved simultaneously. However, in the absence of labor mobility, the asymmetric shock could be better handled by allowing the Western currency to appreciate. But in order for this to happen, both East and West must have their own monies! Mundell concluded that the optimal currency area was the area within which labor is mobile; regions of labor mobility should have their own currencies.

Two other classic contributions to the theory of optimal currency areas are worthy of note. McKinnon (1963) examined the effects of size on currency unions; he concluded that smaller countries tend to be more open and have fewer nominal rigidities, making them better candidates for currency union. Kenen (1969) considered the effects of the economy's degree of diversification, and argued that more diversification resulted in fewer asymmetric shocks, and accordingly fewer benefits from national monetary policy.

The key focus of Mundell's theoretical Optimum Currency Area framework – the adjustment to asymmetric shocks – has stood the test of time well. The ability of a region to respond to such shocks is viewed as a critical part of a sustainable and desirable currency union. Still, hardly anyone now takes the narrow specifics of Mundell's original article seriously. In particular, Mundell's conclusion that the optimum currency area is a region of labor mobility is no longer widely believed. The problem of asymmetric business cycles that Mundell described is intrinsically a problem of ... business cycles. The costs of shifting labor are high almost everywhere in the world, which is why labor moves only slowly, even within countries with relatively flexible labor markets like the United States. Accordingly, most economists are uncomfortable thinking that labor could or should shift in response to the shocks and propagation mechanisms that cause business cycles. After all, the nominal rigidities that are responsible for business cycles do not last forever. Thus, Mundell's idea of labor mobility is no longer viewed as a viable adjustment mechanism.²

Still, there are other ways to share the risks of, or adjust to, asymmetric shocks, and much of the relevant work has incorporated these other mechanisms. Mundell originally ignored capital mobility. But private capital markets can, in principle, spread shocks internationally if investors diversify across regions or sectors. More attention has been paid to the public sector though, since a federal system of taxes and transfers may be an efficient way to spread risks across regions. To continue with the example, a progressive Federal tax structure reduces inflationary Western pressures, and allows benefits to be paid to the unemployed in the East. Both regions suffer less macroeconomic volatility with such automatic stabilizers in place. The most controversial adjustment mechanism is counter-cyclic fiscal policy. In response to an asymmetric shock, regions that are free and capable of deploying discretionary fiscal policy can use changes in taxes and government spending to respond to asymmetric shocks, even within the monetary confines of a currency union. More generally, mechanisms to handle asymmetric shocks are still an integral part of the theory of currency unions.

Mundell originally thought the great benefit of currency union was the facilitation of trade since money is a convenience that lowers transactions costs. But suppose that countries

² This conclusion is tempered if one believes that real shocks cause business cycles without nominal rigidities.

produce moneys of different qualities? Argentina has gone through five currencies in the last thirty-five years; high Argentine inflation results in a low convenience value for Argentine money. Suppose Argentina decides to give up on a national money altogether, and enter into a currency union with a foreign producer of higher-quality money, (say) the United States. Argentina will surely experience different shocks than the United States, and these shocks have to be handled. Perhaps then Argentina should enter a currency union with a country with more similar shocks? The problem is that the most obvious contender, Brazil, also has a history of monetary incompetence. The larger point is that a low-quality domestic monetary authority increases a country's willingness to enter currency union, as does the availability of high-quality foreign money. Alesina and Barro (2002) provide an elegant model that incorporates such features. In their model, countries enter currency unions with neighbors in order to facilitate trade, so long as the neighbors possess monetary institutions of quality. Lower inflation and reduced transactions costs of trade provide gains, while the inability to respond to idiosyncratic asymmetric shocks generate losses.

Empirics: What do We Know in Practice about Currency Unions?

During the run-up to EMU, a considerable empirical literature developed that quantified different aspects of optimal currency areas. Much attention was paid to estimating the synchronization of business cycles for potential EMU candidates; Bayoumi and Eichengreen (1992) was the first important paper. The tradition has since been generalized to more countries by Alesina, Barro and Tenreyro (2002), who characterized co-movements in prices as well as output. Frankel and Rose (1998) showed that the intensity of trade had a strong positive effect on business cycle synchronization; that is, the optimum currency area criteria are jointly endogenous. If currency union lowers the transactions costs of trade and thus leads to an increase in trade, it may also thereby reduce the asymmetries in business cycles; areas that do not look like currency unions *ex ante* may do so *ex post*. Bayoumi and Eichengreen (1998) successfully link optimum currency area criteria (principally the asymmetry of business cycle shocks) to exchange rate volatility and intervention, and show that a number of features of the optimum currency area theory appear in practice, even for countries not in currency unions.

Somewhat curiously, little work was done to analyze actual currency unions until around 2000. This is probably because the currency unions that preceded EMU consisted mostly of small and/or poor countries, which were viewed as irrelevant for EMU. But this gap in the literature implicitly allowed economists to focus their attention on the costs of currency union, which tend to be macroeconomic in nature (resulting from the absence of national monetary policy as a tool to stabilize business cycles). As Mundell clearly pointed out, there are also benefits from a currency union, mostly microeconomic in nature. Fewer monies mean lower transactions costs for trade, and thus higher welfare. An unsettled issue of importance is the size of the benefits that stem from currency union. There is evidence that currency unions have been associated with increased trade in goods, though its size is much disputed. Using data on pre-EMU currency unions (such as the CFA franc zone), Rose (2000) first estimated the effect of currency union on trade, and found it to result in an implausibly high tripling of trade. This finding and the intrinsic interest of EMU have resulted in a literature which has almost universally found smaller estimates which are still of considerable economic size; Rose and Stanley (2005) provide a quantitative survey that concludes that currency union increases trade

by between 30% and 90%. Engel and Rose (2002) examine other macroeconomic aspects of pre-EMU currency unions, and find that currency union members are more integrated than countries with their own monies, but less integrated than regions within a single country. Edwards and Magendzo (2003) study inflation, output growth and output volatility of currency union countries to others, and find that currency unions have lower inflation and higher output volatility compared to countries with their own countries.

Areas of Ignorance

The impact of currency union on financial markets is not something that is currently well understood. Yet this is an area of great interest, since currency union might result in deeper financial integration ... or it might not. It is clearly of concern to the British government, which has made the financial effects one of its five tests for EMU entry; see HM Treasury (2003).

More generally, Europe's experiment with currency union is still young. It is simply too early to know if EMU has resulted in substantial changes in the real economy, financial or labor markets, or political economy. As the data trickles in, most expect a continuing reassessment of currency unions in theory and especially practice.

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See Also:

- Dollarization
- European Monetary Union
- Exchange Rates
- Mundell
- Monetary Regime