
FRBSF WEEKLY LETTER

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ECU, Who?

What's an ecu? It's not an Australian bird, or a Greek coin. Rather, the ecu stands for European Currency Unit, a synthetic composite currency consisting of fixed amounts of ten European currencies. Since its introduction in March 1979, the ecu has been used by the governments of countries participating in the European Monetary System (EMS). It has also played a rapidly growing role in private financial markets in many countries, including interbank markets, short-term deposit markets, the Euro-bond market, and most recently, the futures and options markets.

As a composite currency, the ecu has no single country of origin or the backing of any particular central bank, yet its growing use is unprecedented. Never before has a composite currency developed such wide markets and taken on many of the roles of an actual currency. This *Letter* will discuss how the value of the ecu and its component currencies are determined, the reasons for the ecu's success, and its prospects.

Determining value

The ecu was originally designed as an official instrument for payments and debt settlements among the central banks of countries participating in the European Monetary System (EMS), whose purpose is to limit the movements of member currencies against one another. The ecu was also intended to serve as a unit of account for the countries in the European Economic Community (EEC). Of the 12 members of the EEC, eight participate in the EMS. They are West Germany, France, Italy, the Netherlands, Belgium, Denmark, Ireland, and Luxembourg. The currencies of the other four — the United Kingdom, Greece, Portugal, and Spain, float independently of their EEC partners.

The ecu consists of a fixed quantity of each of the EMS currencies plus those of the United Kingdom and Greece (included in anticipation of their future participation in the EMS). The quantity of each currency in the ecu is related to its country's relative economic strength. Currently, one ecu consists of .719 German marks, 1.31 French francs, .256 Dutch guilders, 3.71

Belgian francs, .14 Luxembourg francs, .219 Danish kroner, 140 Italian liras, .00871 Irish pounds, .0878 British pounds, and 1.15 Greek drachmas.

The value of the ecu in terms of the dollar is the sum of the products from multiplying the quantity of each currency in the ecu by the dollar price of that currency. While the quantity of each component currency in the ecu remains fixed, the weight of its contribution to the value of the ecu varies with changes in the currency's exchange rate with the dollar. Therefore, a currency whose dollar price rises more than the other currencies would take on a greater weight in the ecu when the ecu is expressed in dollar terms, whereas a currency with a falling dollar value would take on a smaller weight.

While, in general, the EMS allows its members' currencies to float freely against the dollar, it limits their movements against the ecu and one another. The EMS uses two indicators to regulate the extent to which one of its members' currencies can fluctuate: the "parity grid" indicator, which defines limits to bilateral exchange rates between the currencies in the ecu; and the ecu divergence indicator, which defines limits to movements against the ecu itself.

The fixed quantity of each currency in the ecu defines a so-called central exchange rate between that currency and the ecu. The central exchange rates between individual currencies and the ecu imply bilateral exchange rates between each currency and any one of the others. Thus, for example, the current central ecu rate for the German mark of .719 dm/ecu and for the French franc of 1.31 f/ecu imply a cross-rate between the two currencies of .942 dm/f.

The resulting cross-rates for all of the different bilateral combinations of currencies form what has been dubbed a parity grid. Within this parity grid, the EMS permits a currency to deviate plus or minus 2¼ percent from its cross-rates with other currencies (with the exception of the Italian lira, which is allowed 6 percent). Movements outside these limits generally require

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foreign exchange intervention and/or fiscal or monetary policy corrections by the countries involved to bring the rate back within limits.

The ecu divergence indicator is meant to serve as an early warning system for bilateral misalignments. It limits the movements of individual currencies against the ecu itself, and thus against the weighted average of all the component currencies, by an amount roughly defined as three-quarters of the movement permitted bilaterally against individual currencies in the parity grid. In practice, the divergence indicator has not played as large a role as intended since the EMS does not obligate countries to intervene in response to its signals.

At times, individual countries with currencies at the limits of the parity grid have requested changes in their central rates rather than make the necessary intervention or change in their economic policies. To prevent overly frequent realignments, an adjustment in the central rate requires the approval of all participating countries. Nevertheless, since its establishment in 1979, there have been nine instances of currency realignments.

Use in private markets

The ecus used by the EMS monetary authorities in their foreign exchange market activities against one another's currencies are known as official ecus. However, no ecu bills or coins exist. Nowhere is the ecu legal tender, and no central bank issues it or stands ready to redeem it. The ecu therefore lacks some of the characteristics associated with a national currency.

Nevertheless, the ecu can easily be created from or converted into its component currencies. In fact, the so-called "private ecu" exists because commercial banks guarantee its officially determined value by their commitment to convert ecus into national currencies at official rates. Thus, in private financial and other markets, the ecu has found increasing use as a unit of account, a store of value, and a medium of exchange — the traditional functions of money.

An increasing number of banks accept ecu deposits and make ecu loans. The Bank of International Settlements (BIS) reported that the share of ecus in total nondollar eurocurrency banking assets rose from less than two percent at the end

of 1982 to over nine percent at the end of the first quarter of 1986. With reported holdings equivalent to \$61 billion in March of this year, the ecu was the fifth most widely used unit for international bank lending behind the U.S. dollar (\$1290 billion), German mark (\$228 billion), Swiss franc (\$138 billion), and yen (\$84 billion); the English pound and French franc trailed behind.

Private and institutional investors are also becoming more interested in the ecu. The placing of ecu-denominated issues, initially concentrated in the Benelux countries and France, has now spread to Germany, Switzerland, and the United Kingdom, and is developing in the United States and Japan. With total issues worth more than \$7 billion in 1985, it is now the fourth most widely used unit in the international bond market after the U.S. dollar (\$95 billion), Swiss franc (\$15 billion), and German mark (\$11 billion). Ecu-denominated instruments are available with floating rates and with currency options entitling the holder to either buy or sell their notes at a fixed exchange rate against the dollar. Ecu loans have been raised by multinational corporations, EEC governments, East European banks, and even by a Japanese supermarket chain. A secondary market in ecu bonds has also developed.

In January of this year, trading in ecu futures began on both the New York and Chicago Stock Exchanges. The Commodity Futures Trading Commission has approved futures contracts on the ecu created by the Chicago Board of Trade, the Chicago Mercantile Exchange, and the New York Cotton Exchange.

In commercial transactions, private use of the ecu has been expanding quickly as well, as indicated by the increasing number of trade contracts, export credits, and other transactions denominated in ecus. Some companies have chosen to invoice their transactions with foreign affiliates in ecus. Even ecu travelers checks have recently become available.

Why the success?

The ecu is succeeding where other composite currencies — notably the IMF's Special Drawing Right (SDR) — have failed because financial markets have found particular uses for it. For example, the ecu has become an attractive sub-

stitute for holdings of individual European currencies. As a weighted average of the exchange rates of the component currencies, the ecu's value generally moves by less than that of its components. In addition, the stabilization of the bilateral exchange rates of the EMS greatly adds to the stability of the ecu in terms of national currencies.

Even though individual firms or investors may not need the ten component currencies in exactly the same proportions as they appear in the ecu, they find other benefits in the ecu. For one, commercial banks dealing in ecus may face much lower transaction costs than if they were to tailor their own baskets of currencies. In addition, the markets for some individual European currencies are not very liquid, and certain European capital markets are difficult to tap directly for funds because of remaining capital controls. Using the ecu therefore lowers transaction costs, enables indirect access to currencies otherwise not obtainable, and allows wider market diversification.

Yet another reason for the ecu's appeal stems from its use as a hedge against the dollar. Because the ecu currency basket excludes the dollar completely, the value of the ecu in terms of any of its component currencies is generally unaffected by changes in the value of the dollar. In contrast, the SDR has been perceived as an ineffective hedge against the dollar because the dollar constitutes such a large part of its construction that it has fluctuated a great deal in terms of its other component currencies (the German mark, French franc, pound, and yen).

Prospects for the ecu

One should not forget that the ecu market is still small and immature compared with the huge eurodollar market. Nevertheless, the rapid increase in the use of the ecu has raised questions about its long-run prospects as a national and international currency. Undoubtedly, as long as the ecu has official recognition and the

EMS remains committed to stabilizing the ecu, private markets will continue to use the ecu. While no single central bank manages the circulation of private ecus and officially stands ready to serve as a lender-of-last resort in the event of an ecu liquidity crisis, it seems understood that commercial banks involved in the ecu market may count on assistance from their parent domestic central bank.

If, in the distant future, the ecu were to become the common currency of Europe, replacing national currencies as legal tender, then its evolution toward a full-fledged currency would be complete. Such a transformation presumes that countries will allow the ecu's role in their domestic markets to continue to grow. In other words, they must allow transaction deposits in domestic banks to be denominated in ecus, obligations to be settled in ecus, and domestic transactions to be financed in ecus.

This does not appear likely in the near future. Since the ecu has no single national origin, it is generally treated as a foreign currency in each country where it is in use. Consequently, the ecu, like other eurocurrency assets, still faces the same restrictions that countries apply to the holding and use of foreign currency by domestic residents. As long as EMS members still desire some degree of control over their national money supplies, they are unlikely to relax these restrictions.

Nevertheless, the relative stability of the ecu makes it an attractive alternative to dealing in dollars. A new international clearinghouse for private ecus now being organized by commercial banks in conjunction with the BIS should facilitate the greater use of the ecu in international transactions. Thus, in the near future, the ecu's role as an international currency is more likely to grow than its use as a substitute for national currencies in domestic transactions.

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Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding	Change from	Change from 12/18/85	
	12/17/86	12/10/86	Dollar	Percent ⁷
Loans, Leases and Investments ^{1 2}	205,079	927	4,738	2.3
Loans and Leases ^{1 6}	184,853	986	2,949	1.6
Commercial and Industrial	51,823	311	— 401	— 0.7
Real estate	67,460	345	1,260	1.9
Loans to Individuals	40,022	464	1,650	4.3
Leases	5,589	— 6	103	1.8
U.S. Treasury and Agency Securities ²	12,752	6	1,969	18.2
Other Securities ²	7,474	— 65	— 181	— 2.3
Total Deposits	208,898	— 358	5,934	2.9
Demand Deposits	56,419	— 88	5,346	10.4
Demand Deposits Adjusted ³	39,571	373	5,832	17.8
Other Transaction Balances ⁴	18,793	— 29	4,116	28.0
Total Non-Transaction Balances ⁶	133,685	— 242	— 3,528	— 2.5
Money Market Deposit Accounts—Total	46,769	— 61	980	2.1
Time Deposits in Amounts of \$100,000 or more	31,840	— 181	— 6,015	— 15.8
Other Liabilities for Borrowed Money ⁵	27,186	2,054	273	1.0
Two Week Averages of Daily Figures	Period ended 12/15/86	Period ended 12/1/86		
Reserve Position, All Reporting Banks				
Excess Reserves (+)/Deficiency (—)	10,054	93		
Borrowings	4	23		
Net free reserves (+)/Net borrowed(—)	10,050	70		

¹ Includes loss reserves, unearned income, excludes interbank loans

² Excludes trading account securities

³ Excludes U.S. government and depository institution deposits and cash items

⁴ ATS, NOW, Super NOW and savings accounts with telephone transfers

⁵ Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

⁶ Includes items not shown separately

⁷ Annualized percent change