Research Department Federal Reserve Bank of San Francisco

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Eurodollars and Eurocurrencies

Financial analysts have become intensely interested in the Eurodollar and other Eurocurrency markets in recent years, at least partly because of the massive size of these markets, which on a gross basis may reach as high as \$800 billion. Some analysts question whether the existence of these markets has contributed to worldwide inflation. And from a more parochial point-of-view, others question whether some Eurodollar deposits should be included by the Federal Reserve in its measures of the U.S. money supply.

What are Eurocurrencies?

Eurodollars are simply dollar-denominated deposits at banking institutions outside the United States. U.S. banks are active participants in the Eurodollar market when they accept dollar-denominated deposits at their branches outside this country.

Similar Euro-currency markets — for Euro-sterling, Euro-Deutschemarks, Euro-Swiss francs, Euro-French francs, and Euro-yen — exist when banking offices located outside a certain country accept deposits denominated in that country's currency. For example, if an office of a British bank in Paris accepts deposits in DM, it is engaging in Euro-DM activities. Yet despite the growing importance of these markets in non-dollar currencies, Eurodollar deposits probably constitute about three-fourths of the total of all Eurocurrency deposits.

Eurocurrency deposits are not denominated in the currencies of the countries where the deposit-accepting banking offices are located, and they are not subject to the reserve requirements and interest-rate limits applied to local currency deposits. The absence of required reserves is a major reason why some observers are concerned about the inflationary impact of these markets.

Why these markets evolved

The Eurocurrency markets evolved in the first place because some depositors wanted to hold deposits denominated in a certain currency at banking offices outside the country issuing that currency, and because banks were willing to bid for such deposits. One of the earliest depositors in the 1950's was the Soviet-controlled Banque Commerciale Pour L'Europe, whose code name Eurobank provided the inspiration for the name of the market. That bank desired to hold dollar deposits because of the dollar's role in international transactions, but for political reasons preferred not to hold such deposits in the United States because of fear of seizure.

In recent years, banking regulations and restrictions on capital flows (or fear of such restrictions) have strongly stimulated the growth of the Euromarkets. A number of rules affecting U.S. banking operations — prohibitions on interest payments on all deposits of less than thirty days maturity, restrictions on interest rates payable on some longer-term deposits, and rules requiring non-interest bearing reserves on all deposits — have all reduced the attractiveness of placing deposits at banking offices located in the United States. By contrast, Eurodollar deposits tend to be free of these restraints.

For example, a banking office outside this country is not required to incur the costs of holding non-interest bearing reserves on large Eurodollar time deposits, and thus can offer depositors a slightly higher rate of return on dollar deposits while also enjoying a slightly lower net cost of funds to itself. In essence, the bank and the depositors share the savings from not holding required reserves — a cost they would have incurred had the deposits been booked at a banking office in the United States.

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Contribute to worldwide inflation?

Despite widespread debate on the subject, there is no simple answer to the question of whether the Euromarkets contribute to worldwide inflation. Several important institutional facts must be remembered in any analysis of the issue.

First, a large proportion of Eurocurrency deposits are interbank transactions. (According to recent testimony of Federal Reserve Governor Wallich, only a fraction - perhaps \$150-175 billion — of total Eurocurrency deposits represents liabilities to nonbanks, and perhaps one-third of that amount is already included in some country's monétary aggregates.) Transactions among banks are an efficient way of reallocating funds from capital-surplus to capital-deficit areas, but these transactions do not of themselves directly increase the supply of money or credit. In the United States, interbank deposits are netted from total deposits in computing the monetary aggregates to avoid double-counting.

Secondly, a very large proportion of Eurocurrency deposits held by nonbank institutions have size and maturity characteristics which make them more similar to

domestic CDs than to the types of transactions balances included in the narrow M₁ and M₂ monetary aggregates. (Bank of England data suggest that the average maturity of Eurocurrency deposits in the London market is in the range of 1-2 months.) Such Eurocurrency deposits thus should be analyzed in relation to the broadest monetary aggregates, such as M₄ and M₅ (which include CDs), rather than in relation to the more narrowly-defined monetary aggregates.

Thirdly, there is reason to question the allegation that Eurocurrency multipliers are very high and unstable because of the absence of any required reserves. (The argument states that any inflow of funds into the market will result in excess multipledeposit creation, since banks will not be restrained in their ability to relend the funds.) In a closed domestic-banking system, the proceeds of any loan are automatically redeposited in the commercial banks, which can relend the funds except for those funds required to be kept as reserves. In the Eurodollar and other Eurocurrency markets, however, the proceeds of loans are not automatically redeposited in the system. Most of the proceeds of Eurodollar loans are converted into foreign currencies for purchases or investments abroad, or transferred into transactions balances in the United States for purchases or investments in this country. Since most of the proceeds are not redeposited in the Eurodollar market, any deposit multiplier involved would tend to be quite small. Thus, the Eurocurrency system may be thought of as analogous to the U.S. system of nonbank financial institutions, which receive as redeposits only a small percentage of the proceeds of the loans they make.

The simple multiplier approach to credit creation appears generally inapplicable.

In addition, recent innovations in portfolio-balance theory suggest that inflows into the Euromarkets will tend to depress Euromarket interest rates relative to interest rates in national markets, which in turn will induce an offsetting outflow of funds from the Euromarkets back to national financial markets. These theoretical considerations strengthen the view that the credit-creating potential of the Euromarkets is limited.

Finally, despite the Euromarkets' limited ability for multiple-deposit creation, they may be able (as noted above) to reallocate credit and possibly create liquidity. According to a study by the Federal Reserve Bank of Boston, the maturity of Eurodollar deposit liabilities in recent years has tended to be shorter than the maturity profile of Eurodollar loans. This tendency towards maturity transformation, where depositors obtain a liquid asset and borrowers a longer-term loan, suggests that the Euromarkets may in fact be creating liquidity. Although Eurodollars are not transaction-type balances, the existence of such liquid assets in investors' portfolios may allow them to economize somewhat on transactions balances. Thus, this might increase the velocity by which existing deposits can be utilized.

Included in U.S. money supply?

The question of whether Eurodollar deposits should be included in the U.S. money supply is a complicated issue, similar to the question of whether repurchase agreements should be considered as money or close substitutes for money. The Advisory Committee on Monetary Statistics (Bach Committee) concluded in its 1977 report that Eurodollar deposits held by U.S. residents should not be included in the narrow U.S. monetary aggregates, because they mostly represent large time deposits which are analogous to CDs. The best available

estimates suggest that nonbank U.S. residents hold about \$30-35 billion in Eurodollar deposits, which amounts to about 3½ percent of M4 and 2 percent of M5 (the two measures which include CDs). Thus Eurodollar deposits remain only a small fraction of the total deposit holdings of U.S. residents. However, in view of the size and growth of the Euromarkets, the Bach Committee advised the Federal Reserve to improve its monitoring of these deposits.

Certain Eurodollar deposits — namely. dollar-denominated deposits held by U.S. residents at branches of U.S. banks in such offshore banking centers as Nassau and the Cayman Islands — have grown rapidly in recent months. In view of the lack of statistics on the characteristics and maturity of these deposits, the Federal Reserve has instituted a special one-time survey to determine whether they are readily transferable into immediately-available funds in the United States. If this one type of Eurodollar deposit is indeed readily transferable into transaction-type balances, then consideration will need to be given to including such deposits in the U.S. monetary aggregates.

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