

Regulating the Eurocurrency Market: What Are the Prospects?

*By Nicholas Carlozzi**

During the 1970s, the rising costs of complying with national banking regulations spurred many U.S. and foreign financial institutions to extend their international banking operations beyond their home countries. By channelling international borrowing and lending through foreign offices, they found that they could avoid national banking regulations and increase their profitability sharply. These offshore banking operations, denominated in currencies other than those of the nations in which the transactions take place, make up the so-called eurocurrency market. Participation in this unregulated market grew far faster than national banking operations, and eurobanking now plays an important role in international finance.

Bank regulators have responded to the rapid growth of the eurocurrency market by

attempting to extend certain forms of regulation to it. Their position is that the existence of unregulated financial markets alongside the regulated ones makes it more difficult for national authorities to control the growth of the money supply and their own economic destiny. They argue also that banks ought to be required to behave as prudently in their international operations as in their domestic ones in order to preserve the soundness of the national and international financial systems.

Governments have considered a variety of measures for increasing their control over the eurocurrency market, including the imposition of reserve requirements and the extension of supervisory authority. Little progress has been made with reserve requirements because nations disagree over the desirability of eurocurrency reserve requirements and the means of applying them. Some progress has been made, however, in the supervisory area, and more can be expected even in the short term.

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THE EUROCURRENCY MARKET DEVELOPS

For over twenty years, commercial banks have been accepting dollar deposits and making dollar-denominated loans through offices outside the United States—the euro-dollar market.¹ Dollar deposits on the books of any banking office located outside the United States are counted as euro-dollar deposits, and dollar-denominated loans are counted as euro-dollar loans. In addition to the head offices of foreign banks, branches and subsidiaries of U.S. and foreign banks are active participants in this market.

The dollar is the most widely used currency in the offshore banking network, but the Deutsche mark and Swiss franc also are traded actively there. Transactions in the U.S. dollar, the Deutsche mark, the Swiss franc, and the other currencies with offshore banking facilities together make up the euro-

¹The nonbank customers of these institutions include both residents and nonresidents of the United States. Nonresidents make dollar deposits and take out dollar loans because of the dollar's importance in financing world trade.

currency market (see THE EUROCURRENCY NETWORK).

Although domestic banking activity in the U.S. remains far larger than euro-dollar activity, the growth of the eurocurrency market exceeded that of the domestic banking system in the 1970s. Total eurocurrency assets (loans to customers and deposits at other banks) of reporting banks in the European market center grew at a compound annual growth rate of 27 percent from the end of 1969 to the end of 1979 (see . . . RAPID GROWTH).² Total assets of large commercial banks in the U.S. grew at a compound annual growth rate of only about 8 percent over the same period.³

²The European market center includes reporting banks in Austria, Belgium-Luxembourg, Denmark, France, the Federal Republic of Germany, Ireland, Italy, the Netherlands, Sweden, Switzerland, and the United Kingdom. The total eurocurrency assets of banks in this region were \$58.17 billion in December 1969 and \$639.9 billion in December 1979. Bank for International Settlements, 48th Annual Report, p. 98 and 50th Annual Report, p. 122.

³The total assets of large, weekly reporting commercial banks were \$316.4 billion at the end of 1969 and \$874.0 billion at the end of 1979. Federal Reserve Board,

THE EUROCURRENCY NETWORK

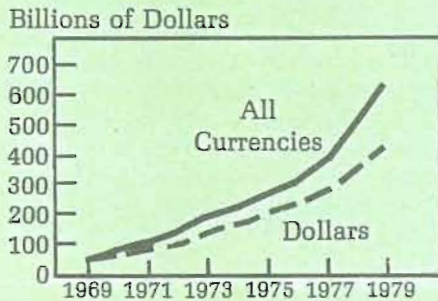
The eurobanking network provides the world with a truly international financial market. Although eurocurrency banking originated in Europe (hence the prefix), today there are market centers scattered around the globe. These centers are linked by high speed communications lines so that there are very few hours during which eurobanking business is not being transacted. Active market centers include London, Paris, the Caribbean, Singapore, and Bahrain.

Eurobanking offices accept deposits and make loans much like domestic banks, but there are a few differences. Deposits are received for anywhere from 1 day to 5 years or more, but all deposits have a fixed maturity and all deposits earn interest. Loans in the euromarket have maturities from a few days to over 5 years, and interest rates on these loans are reset twice or four times a year to reflect changes in credit market conditions. Public-sector and private-sector corporations, governments, and central banks make up the bulk of the eurobanking system's customers. Few individuals participate because of the complexity of the market and the size—\$1 million or more—of transactions.

Banks that participate in the market use the funds they receive in the form of deposits to make loans to nonbank customers and to make interbank placements—deposits of one bank at another bank. Flows of funds among banks channel funds from market centers that are net sources of funds (more depositors than borrowers) to centers that are net users (more borrowers than depositors).

THE EUROCURRENCY MARKET HAS SEEN A DECADE OF RAPID GROWTH

Gross External Assets of Banks in the European Reporting Area



SOURCE: Bank for International Settlements.

By June 1980, the net size of the eurocurrency market was approximately \$190 billion or one-tenth the magnitude of the monetary aggregate labeled M3—a measure of the financial services offered by domestic financial institutions.⁴ This measure of the eurocurrency market includes the deposit liabilities of reporting eurobanks to nonbanks but excludes the liabilities of reporting eurobanks to other commercial and central

⁴“Banking and Monetary Statistics: 1941-1970,” p. 278 and Federal Reserve *Bulletin*, March 1980, p. A21.

⁴M3 consists of demand deposits, negotiable orders of withdrawal and automatic transfer service accounts at banks and thrift institutions, credit union shares, deposits at mutual savings banks, savings and time deposits, overnight and term repurchase agreements, overnight eurodollars held by United States residents, money market mutual fund shares, and currency in the hands of the public. Data taken from Federal Reserve *Bulletin*, November 1980, p. A13.

banks in the reporting area.⁵

Why has the eurocurrency market grown so rapidly? Primarily because few nations regulate foreign-currency banking activities that occur within their boundaries. Reserve requirements, which specify the percentages of deposits that must be held as readily available reserves, are not applied to eurocurrency deposits in most nations. Interest rate ceilings which limit the rates of interest payable on deposits at U.S. banks are not applied to eurocurrency deposits either. And in some nations, bank examiners who scrutinize the assets and liabilities of domestic banking offices do not review the portfolios of eurobanking branches. This absence of regulation reduces the cost of doing business in the eurocurrency market. And in the competitive world of international banking, a portion of this cost advantage is used to attract customers to the eurocurrency market through lower interest rates on loans and higher interest rates on deposits.

The growth of the eurocurrency market, though clearly a benefit in many respects, has been thought by some to make it more difficult for the Federal Reserve to achieve its monetary objectives and for banking supervisors to insure the soundness of the international banking system. Current proposals for regulating the eurocurrency market address these concerns.

RESERVE REQUIREMENTS FOR THE EUROMARKET?

The U.S. central bank—the Federal Re-

⁵The reporting eurobanks are located in Europe and Canada and include the branches of U.S. banks in the Bahamas, Cayman Islands, Panama, Hong Kong, Singapore, and Bahrain. All types of customers outside the reporting area are included in the net measure of the size of the market. Eurocurrency liabilities of banks in the European area to nonbanks totaled \$128 billion. Banks in Canada accounted for \$26 billion in eurocurrency liabilities to nonbanks, and U.S. branches in the remaining market centers booked approximately \$36 billion in eurocurrency liabilities to nonbanks.

serve—requires commercial banks (and, with the passage of the Monetary Control Act of 1980, other depository institutions as well) to hold money in reserve against their commitments to depositors. At present, reserve requirement management is one of the Fed's tools for influencing the growth of the domestic money supply. Thus the extension of reserve requirements to the euromarket has appeared to some to be a reasonable move. But the reaction from foreign central banks has been less than overwhelmingly receptive.

How Reserves Affect Money Growth. The Fed controls the quantity of transactions balances (currency and demand deposits) available in the domestic economy by adjusting the supply of reserves available to banks. Under this system, domestic banks must hold a fraction of their deposits as readily available, noninterest-bearing reserves (cash in their vaults or deposits at a Federal Reserve bank). Even if there were no reserve requirements, banks still would choose to hold a fraction of their deposits as reserves, but this fraction undoubtedly would be smaller than that required by national regulations.

The presence of banks in the eurodollar market complicates monetary policy for the

Fed. Both domestic banks and branches operating in the eurodollar market accept dollars for deposit and hold dollar reserves, but branches active in the eurodollar market are unconstrained by domestic reserve requirements and interest rate ceilings.

When the Fed reduces the supply of reserves, interest rates rise in both the domestic and eurocurrency financial markets. But because of interest ceilings in the U.S., rates on many types of domestic bank deposits do not rise. If deposit rates in the eurodollar market rise while those in the domestic market are constrained by ceilings, deposits shift from domestic to eurodollar accounts. When interest rates fall, the incentive to shift funds into the eurodollar market is reduced and the flow of funds abates (see **INTEREST RATES IN THE EUROCURRENCY MARKET**).

Variations in this flow caused by changes in the general level of interest rates make the Fed's job harder. Unanticipated flows of funds from one type of account to the other can partially offset the thrust of Federal Reserve policy because the fraction of deposits held as reserves in the domestic banking system generally exceeds that of the

INTEREST RATES IN THE EUROCURRENCY MARKET

Interest rates in the eurocurrency and corresponding national financial markets tend to move together in the absence of official controls to limit international capital flows. Many borrowers and lenders feel that the financial services offered in the eurocurrency market are close substitutes for those offered in national financial markets. They observe interest rates in these markets and are prepared to shift their activities from one market to another when interest rate differentials change. If government action causes interest rates in the United States to rise in relation to those in the eurodollar market, then the cost of borrowing funds in the eurodollar market would fall in relation to that in the national market. Borrowers would move from the national to the eurodollar market, bidding up eurodollar rates. Likewise, depositors would move funds from the eurodollar to the national market, increasing the supply of loanable funds and bidding down interest rates in the national market.

This flow of funds would cease only when the interest rate differential equaled the cost differential of operating in the regulated national market versus the unregulated eurodollar market. This cost differential is determined primarily by the reserve requirements imposed by the Federal Reserve. Fees for the provision of deposit insurance and constraints on the investment of funds also increase the cost of banking in the U.S. relative to the eurocurrency market.

eurodollar system. The impacts of fund flows on bank demand for dollar reserves make it more difficult for the Fed to calculate the effects of its operations on the monetary aggregates. If the Fed fails to anticipate the effects of its policies on deposit flows, then its forecasts of the growth of the domestic economy will be either too high or too low. When the fluctuations in deposit flows become apparent, the Fed must compensate by buying or selling securities in the open market.

Since a monetary policy based upon reserve management is more effective the more predictable the effects of open market intervention, many have argued for the extension of reserve requirements to include deposits in the eurodollar market.⁶

Unilateral Reserve Requirements Would Fail. One reform would be to impose reserve requirements on eurocurrency deposits, although not necessarily in the same magnitude as on domestic deposits. But then shifts of funds by depositors from domestic to eurodollar accounts would affect total required reserves. Thus under this approach the Fed would have to anticipate the effects of its open market operations on the structure of bank liabilities and adjust its intervention to produce the desired effect on transactions balances.

As long as domestic and eurodollar de-

posits are close substitutes, a preferred plan would be to impose the same reserve requirements on both kinds of deposits. In this case deposit shifts would not affect total required reserves. The effect of an open market transaction to reduce the supply of reserves then would not be complicated by deposit shifts.

But attempts by the Fed to impose reserve requirements unilaterally by forcing the branches of U.S. banks to hold reserves against their eurocurrency deposits would have little chance of success. These requirements would make U.S. banks uncompetitive in the market and they would be driven out by unregulated foreign banks. The ease with which the eurocurrency market can sidestep unilateral efforts at regulation has led policymakers to seek international cooperation on reserve requirements. But even these efforts promise little near-term success.

The International Way. Two internationalist approaches to eurocurrency market reserve requirements have been tried. Under the first, all nations would agree to impose reserve requirements on the eurobanking offices operating within their boundaries. These reserves would be held on deposit with the host country's central bank, and, for simplicity, the reserve requirements of each nation on a given currency would be identical. Banks operating in London and Paris would have to hold the same dollar reserves for equal quantities of eurodollar deposits.

The difficulty with this proposal is that it would have to be accepted by all nations to be effective. If one nation failed to participate, the reserve requirements could be avoided simply by transferring all eurocurrency operations to the branches in that nation.

Under the second plan, each participating monetary authority would impose reserve requirements on all eurobanking offices, wherever located, of banks having head offices within its boundaries. These reserve requirements on the head office would cover the eurocurrency operations of all branches and subsidiaries. London as well as Caribbean

⁶Although the monetary policy tools of the Fed remain effective, the question of equity has been raised. Are banks with eurocurrency market branches better able to serve their customers during times of monetary tightness than banks without? Some suggest that banks with eurobranches can continue to provide loans to their customers during periods of tight credit in the U.S. by encouraging them to shift to the eurodollar market. Banks without branches cannot provide credit directly to their customers from this source. But there is a limit to the quantity of funds that can be raised in the eurocurrency market by participating banks for loan to their clients without bidding interest rates up to their levels in the domestic financial markets. Depending upon how quickly rates adjust in the euromarket to equalize borrowing costs, banks with eurobranches may have very little competitive advantage.

branches of United States banks, for example, would be required by the Federal Reserve to hold specified fractions of their eurocurrency liabilities as reserves.⁷ Once adopted by the major banking nations, this plan would make it much more difficult for banks to avoid reserve requirements, because the location of branch banking offices would be irrelevant. Wide coverage could be achieved through the agreement of a relatively small number of countries.

But banks headquartered in nonparticipating nations could upset the apple cart. Although they might be a small part of the market at first, their eurobanking operations would be very profitable compared to those of the participating nations and they would grow at the expense of the banks in participating nations. Over the longer term, their operations would make eurocurrency regulations less and less effective.

These reserve requirement proposals have received mixed reviews from central bankers around the world. Differences in financial institutions and practices among nations work against their adoption. Many nations do not rely on reserve requirements to regulate domestic banking activity and feel uncomfortable with plans to impose them in the eurocurrency market. And they fear that their banks would find it difficult to compete in a world in which reserve requirements applied to both domestic and eurocurrency

market operations. Many current market centers would lose their importance as differences in regulation from nation to nation diminished. Thus reserve requirements remain only a long-term hope for the eurocurrency market. Supervision is more likely to become a reality in the short run.

MORE SUPERVISION COULD STRENGTHEN THE SYSTEM

The risks faced in international banking are pretty much the same whether a loan is made at a domestic branch or through the eurocurrency market, but bank examiners in many countries do not have access to the records of offshore branches. Thus it's difficult for them to tell whether banks are maintaining adequate capital reserves to finance their occasional losses. Those favoring the supervision of eurobanking argue that these institutions must deal with many different types of risk and that management of these risks certainly is a matter of concern to society.⁸

International Bankers Must Manage Risk. One of the most elementary risks faced by financial intermediaries arises from the practice of borrowing short maturity funds in order to finance longer maturity loans—interest rate risk.⁹ The degree of risk varies according to how closely asset maturities are

⁷Although reserves would be held in the same currency as the deposits, the location of the reserve accounts is an issue still to be resolved. More information on this proposal is available in "A Discussion Paper Concerning Reserve Requirements on Eurocurrency Deposits," April 1979, prepared by the staff of the Federal Reserve Board. Further discussion of the issues associated with the reserve requirement proposal appears in Dale W. Henderson and Douglas G. Waldo, "Reserve Requirements on Eurocurrency Deposits: Implications for Eurodeposit Multipliers, Control of a Monetary Aggregate, and Avoidance of Redenomination Incentives," International Finance Discussion Paper No. 164, July 1980, Board of Governors of the Federal Reserve System, Washington, D.C.

⁸A more detailed discussion of the risks faced by eurobanks is provided by Edward J. Frydl, "The Debate Over Regulating the Eurocurrency Market," *Quarterly Review*, Federal Reserve Bank of New York, Winter 1979-80, pp. 11-20.

⁹The practice of maturity mismatch in the eurocurrency market developed between 1973 and 1977. While data for 1973 show little maturity mismatch, the data for 1977 indicate a level comparable to that attained by commercial banks in the United States. During November 1977, 78 percent of eurobank deposits in the U.K. had less than three months to maturity, while 59 percent of eurobank assets had less than one year to maturity. Jane Sneddon Little, "Liquidity Creation by Euro-banks: 1973-1978," *New England Economic Review*, Federal Reserve Bank of Boston, January/February 1979, pp. 62-72.

matched to liability maturities.

When a bank extends a loan for three months at a fixed rate of interest, for example, it must decide whether to fund that loan piecemeal through a series of short-term deposits or to seek a three-month deposit and fund it all at once. If the three-month fixed-rate loan is financed by a three-month fixed-rate deposit, then maturity mismatch is avoided and interest rate risk is obviated: the profitability of the loan is unaffected by interest rate fluctuations during its term. But if a two-month deposit is used to fund the loan initially, then, after two months, financing must be arranged for the remaining one-month term of the loan. The interest rate on the one-month deposit necessary to complete the financing is not known until two months hence, and unanticipated increases in the interest rate paid to depositors during this time could lead to a loss on the loan. Banking regulators are concerned that prudential limits on the mismatch of banks' domestic portfolios might be circumvented by increasing the mismatch of their eurobanking portfolios.

Also, just as in the domestic banking system, there is always the chance of loan default in the euromarket. But since the nationality of the borrower often differs from that of the lender in this market, the chance of default is affected not only by economic conditions at home, but also by economic and political developments abroad. Thus eurobanks must monitor events far from home.¹⁰ In principle, the risks associated with international lending can be accommodated as long as the interest rates charged on loans to other countries are high enough to

¹⁰The existence of country risk on the liability side of the eurobanking balance sheet has also been suggested. The claim is that deposits by OPEC nations could be used as a weapon against the nations involved in eurobanking, and particularly the United States. In the short run this weapon could be used to disrupt the normal operations of the eurocurrency market, but in

allow banks to accumulate adequate loss reserves. But some participants in the market argue that loan rates have not been high enough. They claim that government subsidies enable many banks to bid the eurodollar loan rate below the level necessary to provide adequate reserves.

Another risk associated with international banking involves the possibility of unexpected movements in exchange rates. Consider a eurobank with a portfolio of \$35 million in eurodollar deposits, \$30 million in eurodollar loans, DM 10 million in eurodeutsche mark deposits, and DM 20 million in eurodeutsche mark loans. At an initial exchange rate (DM/\$) of DM 2.0, this portfolio is long in Deutsche marks (DM assets exceed DM liabilities) and short in dollars. The bank is purposefully exposing itself to exchange rate risk in anticipation of an appreciation of the Deutsche mark (a reduction in the DM/\$ exchange rate). If this appreciation occurred, the dollar value of assets would rise faster than the dollar value of liabilities, and the bank would earn a profit. If, however, the Deutsche mark unexpectedly depreciated so that the DM/\$ exchange rate rose to DM 2.5, then the bank would suffer a \$1-million loss. A bank with \$30 million in eurodollar deposits and loans and DM 20 million in eurodeutsche mark deposits and loans has no exposure to exchange rate risk. Neither appreciation nor depreciation of the Deutsche mark changes the bank's net worth.¹¹ Exchange rate risk was a factor in the failure of one major

the long run it would be ineffective. Funds withdrawn from eurobanks with United States parents and redeposited elsewhere would flow through the interbank placement market. The only loss to U.S. eurobanks would be the extra cost of securing interbank funds over direct deposits.

¹¹For a discussion of exchange risk and eurocurrency banking see Marcia Stigum, *The Money Market: Myth, Reality, and Practice* (Homewood, Ill.: Dow Jones-Irwin, 1978), pp. 134-136.

international bank in 1974—the Herstatt Bank—and it continues to be of vital concern to banking regulators.

Those favoring the supervision of the eurocurrency market point to these risks and argue that a bank's management of these risks in offshore markets should be supervised just as in the domestic market. Not all the sources of risk are of equal concern, but some of them unquestionably require careful, constant management.

Cooperating in Supervision. Most nations agree that eurobanking operations should be more carefully supervised. But just as in the case of reserve regulations, unilateral action to supervise eurocurrency banking more strictly would have little effect. Increasing the extent of banking supervision in one nation could limit the ability of the banks of that nation to compete in the marketplace but have little overall effect on eurocurrency banking.

Thus the banking supervisors of many developed nations have engaged in negotiations to coordinate a supervisory approach to eurobanking. Following their April 1980 meeting, for example, the central bank governors of the Group of Ten countries and Switzerland called for

“the supervision of banks' international business on a consolidated basis, improved assessment of country risk exposure, and the development of more comprehensive and consistent data for monitoring the extent of banks' maturity transformation.”¹²

They resolved to monitor the eurocurrency market more closely in the future by establishing a special committee to review the international banking statistics published by the Bank for International Settlements.

¹²Press communique issued by the central bank governors of the Group of Ten countries and Switzerland, April 15, 1980, and reprinted in the *International Currency Review* 12 (September 1980), p. 17.

The Federal Reserve currently collects balance sheet data from domestic banks and *their offshore branches* and consolidates this information to produce an overall picture of each bank's financial health, but some European central bankers are uncomfortable with consolidation in spite of their reliance on balance sheet data for the supervision of domestic operations. Progress is being made, however, and the extension of bank supervision to the eurocurrency market has come a long way.

Thus while euromarket reserve requirements have made little headway, a consensus on the need for international supervision of offshore banking markets appears to have been reached. And this is the area in which the greatest short-term gains can be expected.

CONCLUSION

The rapid growth of the eurocurrency market over the past decade has raised concerns about two issues: the effectiveness of monetary policy and the soundness of the banking system. Extending reserve requirements to the eurocurrency market would strengthen the link of reserves to deposit balances in this growing offshore market, but progress in international negotiations to adopt a reserve proposal has been slow. Nations conduct their monetary policies in many different ways, and some are not prepared to accept an international agreement that would limit the attractiveness of the eurocurrency market and drive business away from existing eurobanking centers.

The consolidation of balance sheets has been proposed to help fill the information gap created by the movement of international banking off shore. This supervision would help to insure that bankers are as prudent in managing their exposure to the risks of international banking as they are in managing domestic risks. Here, despite international differences, there has been some movement, with several major banking nations agreeing to consolidate.

The birth of the eurocurrency market was an important innovation in finance, and over the past two decades this market has become a vital part of the international financial system. As it has matured, national authorities have become interested in bringing its operations into line with their present systems of bank regulations. So far, this exercise

has pointed out the vast differences among the regulatory policies of nations, and nations have been unable to agree on a single approach to the regulation of the eurocurrency market. Success in the future will depend upon the adoption of more uniform systems to deal with the policy tasks of controlling money growth and insuring bank soundness.

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