Research Department
Federal Reserve
Bank of
San Francisco

January 29, 1982

FRBSF Weekly Letter

Apples, Oranges and Money: II

The task of defining money has become much more complex than in the past, because several key distinctions upon which earlier definitions were based are crumbling in the face of rapid financial innovation. The once-tidy distinction between bank and nonbank firms no longer seems to apply. In the not-so-distant past, we could argue that only banks, through their deposit-taking and lending activities, created deposits. Today, with savings-and-loan associations and mutual savings banks offering NOW accounts, and with securities brokers and dealers offering money-market mutual funds, the functional distinctions among banks and other institutions have become increasingly fuzzy.

The unique role of banks has disappeared in other ways as well. Once engaged primarily in credit intermediation and interest-rate maturity transformation—accepting shorter-term deposits to fund longer-term loans and investments—banks have now been forced by downward-sloping yield curves and heightened interest-rate volatility to match the maturities of their assets and liabilities. Some large banks, for example, have become reluctant to fund even a short-term loan unless a funding source of equal maturity is available. In some cases, institutions are even selling loans directly to investors, refusing to accept any of the credit risk or interest-rate risk involved in carrying loans on the books to maturity. As a result, banks now look less and less like credit intermediaries and more like finance companies and securities brokers.

Another once-tidy but now unravelling distinction is the one between readily spendable assets and other financial assets held by the public. Demand deposits, which paid no explicit interest, were once considered the only transaction instrument other than cash. Now, a variety of instruments pay interest and yet permit the depositor/investor to use funds placed in them to purchase goods and services with minimal transaction costs. These instruments include ATS and NOW accounts, money-market mutual funds, repurchase agreements and Eurodollar deposits.

It may seem a simple matter to include ATS and NOW accounts in the definition of money, since these accounts are so similar to demand deposits. But since such accounts pay interest at the same rate as passbook savings, depositors will hold some unknown proportion of the funds in this form in lieu of other "non-money" assets. By broadening the definition of money to include ATS and NOW accounts, then, the narrow concept of money loses some of its distinctiveness.

Money-market mutual funds pose an even thornier problem for those who would divide financial assets into money and non-money baskets. After all, money-market fund balances can be drawn down by check, which implies that at least a portion of these balances may be held for transaction motives. Yet with their relatively high minimum-investment requirements, money funds' high yields primarily appear to be attractive investment options. And what about repurchase agreements (RPs) and Eurodollar deposits? RPs and Eurodollars offered on a one-day or continuing contract basis are certainly used by corporations to earn an overnight return on funds that will be used the next day.

Why the confusion?

The current confusion about which types of institutions are engaged in "banking" functions and which financial assets are "money" stems from the public's response to the high interest rates and high inflation rates of the past decade. Galloping inflation and attendant high interest rates have sharply increased the opportunity cost of holding idle, noninterest-earning balances. Households and businesses alike, therefore, have reduced their holdings of idle balances by anticipating better needs for cash in the short-run, and by managing their receipts and disbursements to

Research Department
Federal Reserve
Bank of
San Francisco

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.

maximize the funds available for investing in short-term instruments.

Banks and other financial institutions, for their part, have helped their customers to reduce the level of idle balances by offering cash-management services and attractive short-term instruments for the investment of temporarily idle funds. During the early 1970's—especially during the 1973-74 period of high interest rates—banks began to offer comprehensive packages of cash-management services to large corporate customers. Using automation techniques, banks were thus able to speed the collection of a corporation's receivables, pool any idle funds in any of the corporation's bank accounts throughout the country, and invest those pooled funds in overnight repurchase agreements and other short-term instruments. Given the transaction costs associated with then-available technology, this kind of cash-management service was only economical for very large corporations with sizable excess balances. Nonetheless, overnight RPs grew from $2.0 billion in 1970 to $13.6 billion in 1976. At the same time, money-market mutual funds came into being, providing even households and smaller firms with a means of earning market returns on their balances. Money-fund balances grew rapidly to $3.4 billion between 1974 and 1976. Of course, much of the growth in RPs and money-market funds may have reflected other factors than the investment of idle transaction balances. Still, that growth undoubtedly helps to explain the slower-than-anticipated growth of the money supply (narrowly defined) during the same period.

Recent innovations

The level of interest rates by now has far surpassed the level that prevailed in 1973-74, making cash management an even more financially rewarding activity for all sizes of firms as well as households. Thus, we have seen a vast expansion in the use of short-term instruments as substitutes for noninterest-earning transaction instruments. Overnight RPs and Eurodollars, for example, reached $36.4 billion in September 1981. Since their introduction in the late 1970s, overnight Eurodollars, which are dollar-denominated deposits issued by Caribbean branches of U.S. banks, have come to be used in much the same way as RPs—as a vehicle for the investment of temporarily idle balances.

The general rise in interest rates and the growing opportunity cost of idle balances thus stimulated the use of such services. In addition, technological advances made frequent transfers of funds among financial instruments economically feasible for firms and households with even relatively small balances. These lower transfer costs, combined with the growing financial sophistication of small firms and households, have led a number of financial institutions and data-processing firms to develop cash-management services for this market. Money-market funds are the most obvious example, but securities dealers' cash-management accounts, deposit-sweeping arrangements, and retail repurchase agreements have also gained wide popularity.

Individuals and businesses with more than a few thousand dollars to invest can obtain a cash management-type account from securities firms. Merrill Lynch, the first to introduce such an account, requires an initial investment of $20,000 in cash and/or securities, in return for a package of services including a securities margin account, a money-market fund and a checking account. This approach has gained many adherents among other securities firms and insurance companies. Minimum investment requirements and specific services vary from firm to firm, but the most common feature of these accounts is a link whereby excess balances in a checking account are periodically "swept" into a higher-yielding money fund.

Lacking a competitive deposit instrument and faced with the loss of deposits to money-market funds and cash-management accounts, a number of banks have begun to offer their own deposit-sweeping services. Although they lose some deposits by sweeping balances in excess of the required mini-

mum into money-market funds, banks prefer this type of arrangement to losing the customer relationship entirely. (Alternatively, a few banks have sought to provide this kind of service through their own trust departments, but with limited success.) Minimum balance requirements are generally high—$2,500 or more. Once the deposit-sweeping arrangement is in place, the account holder can write checks against the bank account just as he would with a normal checking or NOW account. Should the balance in the bank account fall below the required minimum, however, the bank automatically draws down the money-market fund. Because his idle balances are used for the automatic purchase of money-fund shares, the customer thus can earn a market rate of return on transaction balances.

Retail RPs

Commercial banks and savings-and-loan associations also have begun to use retail RPs as a means of retaining deposits that would otherwise end up in money-market funds or cash-management accounts. These repurchase agreements—which involve the sale of U.S. government securities or Federal agency securities to consumers, along with an agreement to buy them back in the future—are issued in denominations of less than $100,000 with maturities of 89 days or less. Although RPs technically are sales of securities with simultaneous agreements to repurchase at a later date, investors and issuing institutions generally treat them as highly liquid, secured borrowings. Banks and thrifts have limited their maximum maturity to 89 days, to comply with recent rulings imposing interest-rate ceilings on longer maturities. Retail RPs are not deposit instruments insured by the FDIC or the FSLIC, nor are they subject to deposit interest-rate ceilings.

Technically, retail RPs are not redeemable upon demand in the same manner as transaction accounts or even money-market funds. However, by keeping the contractual maturities of these instruments short or by imposing no early withdrawal penalties, a growing number of depository institutions have created retail RP programs that are nearly indistinguishable from money-market funds. In terms of minimum investment requirements and interest rates, retail RPs are generally competitive with money-market funds. And by requiring an investor to open a checking or NOW account when a retail RP is purchased, the depository institution can permit telephone-ordered transfers between the two accounts—a feature money-market funds cannot offer.

Policy problems

Given all the new short-term instruments and cash-management services that have appeared recently in response to high interest rates, the pre-1980 definition of money clearly was not sufficient to divide financial assets into the proper money or nonmoney baskets. In fact, all of the new instruments discussed above almost certainly fit into both baskets to one degree or another. After all, investors' reasons for placing funds in overnight RPs, money funds and retail RPs encompass both investment and transaction motives.

For the Federal Reserve System, these definitional problems are more than semantic. The Fed's task of controlling money-supply growth clearly becomes more difficult because of the fact that transaction balances cannot easily be distinguished from balances held for other purposes. M-1B's slow growth (relative to spending) in 1981 was due, to some undetermined extent, to the public's increasing sophistication in managing its idle transaction balances. Funds that in the past would have contributed to M-1 growth are now being placed in instruments that pay market rates of return. However, we cannot easily identify the proportion of the growth in these new instruments that is associated with transaction balances. The Fed, then, must decide whether the slow growth of the traditional measure of transaction-balances reflects tight monetary policy or simply an explosion in the growth of substitutes for transaction instruments. Obviously, the policy responses are different, depending on the assessment of the source of weakness.

Barbara Bennett and Joseph Bisignano

FIRST CLASS

Research Department
Federal Reserve
Bank of
San Francisco

Alaska • Arizona • California • Hawaii
Idaho • Nevada • Oregon • Utah • Washington

FIRST CLASS MAIL
U.S. POSTAGE
PAID
PERMIT NO. 752
San Francisco, Calif.

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 1/13/82	Change from 1/6/82	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	156,331	36	9,142	6.2
Loans (gross, adjusted) — total#	135,289	– 11	10,643	8.5
Commercial and industrial	41,689	– 47	4,284	11.5
Real estate	55,888	123	5,303	10.5
Loans to individuals	23,760	– 76	– 118	– 0.5
Securities loans	2,078	106	775	59.5
U.S. Treasury securities*	5,837	54	– 933	– 13.8
Other securities*	15,205	– 7	– 547	– 3.5
Demand deposits — total#	42,011	–4,213	– 2,148	– 4.9
Demand deposits — adjusted	29,985	– 680	– 1,939	– 6.1
Savings deposits — total	31,034	– 145	1,683	5.7
Time deposits — total#	89,549	157	15,248	20.5
Individuals, part. & corp.	80,576	87	15,940	24.7
(Large negotiable CD's)	35,735	– 168	7,007	24.4

Weekly Averages of Daily Figures	Week ended 1/13/82	Week ended 1/6/82	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (–)	56	64	23
Borrowings	131	34	7
Net free reserves (+)/Net borrowed(–)	– 75	30	15

* Excludes trading account securities.
\# Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author .... Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.