Research Department
Federal Reserve
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M_1's Institutional Factors

One of the most frequently discussed financial phenomena these days is the atypical behavior of M_1—the narrowly defined money supply which consists of commercial-bank demand deposits and currency in circulation. Economists and policy makers alike frankly admit bafflement over the recent performance of this key monetary measure in relation to the levels of GNP and interest rates. As Federal Reserve Chairman Arthur Burns stated in his recent testimony before the House Banking Committee, the money-demand equations used in econometric models have persistently and increasingly overpredicted the amount of money demanded by the public since the third quarter of 1974.

The problem lies mainly with demand deposits, which account for three-fourths of the narrowly defined money supply. Researchers differ widely in their attempts to explain the failure of demand deposits to maintain previously observed relationships to GNP and income. However, they generally agree about the institutional factors which are now tending to reduce the level of demand balances. These factors relate to changing patterns of depositor behavior with respect to transaction balances and with respect to bank policies on compensating balances. They also include recent technological innovations, which have far-reaching implications for future deposit relationships.

Corporate economizing

First, there are changes affecting corporate demand for transaction balances. In recent years, corporations have become increasingly sophisticated in the management of their cash balances. The record high level of interest rates in 1974 lent impetus to this trend. Intermediate and small-sized firms, as well as large national corporations, instituted improved techniques to reduce their demand balances to the smallest possible amount in excess of whatever compensating balances were required against credit extensions. This phenomenon showed up at regional banks as well as at money-center banks.

Apparently, corporate managements decided that unsophisticated cash management carried too high a premium in lost opportunity costs for them to tolerate during a period of record high interest rates. Although rates retreated last year from 1974 peak levels, the severity of the recession drastically reduced corporate profits and encouraged managements to continue this rigid control of cash positions.

At the same time, national firms have tended to concentrate their funds in a few banks, rather than disperse them in smaller amounts among a number of institutions. This policy also has served to economize the overall total of demand balances held for transaction purposes.

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Compensating balances

That portion of corporate deposits required as compensating balances against loan extensions or services also has tended to decline. While these required balances are a small portion of total demand balances, their expansion or contraction may serve as significant supportive or negative elements in the growth of M_1.

The recent decline in compensating balances reflects banks' growing tendency to offer corporate customers "over-all packages." Some of these arrangements have emphasized fees in lieu of compensating balances, particularly for non-credit sevices supplied by banks. With businesses requiring ever larger operating funds (partly due to inflation), their banking relationships have shifted more and more to such package arrangements. This was especially evident in 1973 and 1974, when successive record increases of $27 billion in business loans made it difficult for banks to enforce their usual compensating-balance requirements.

In 1975, banks firmed up their policies regarding compensating balances, as they placed greater emphasis on cost analysis and pricing in an effort to improve operating margins. This led to a higher ratio of compensating balances to loans than in the 1974 period. However, this higher ratio was more than offset by the sharply reduced *absolute* level of compensating balances that resulted from last year's $5-billion reduction in business loans. The improvement in business borrowing in the latter part of the year did little to rebuild the level of compensating balances, since the increased volume was largely due to bankers acceptances, a business-loan category which does not carry compensating-balance requirements.

Shift to time deposits

The most dramatic example of changing corporate behavior occurred late last year, following the regulatory change which permitted partnerships and corporations to hold passbook-savings accounts up to a maximum of $150,000. This new feature has appealed particularly to business firms too small to utilize some of the more sophisticated forms of cash management, such as large-denomination time certificates (CD's).

A special Federal Reserve survey indicates that about $2 billion was deposited in these new accounts within two months of their initial authorization. Most of these funds appeared to be transfers from demand balances, which would help account for the slow growth of M_1 in late 1975. Furthermore, weekly large-bank data indicate that these business passbook savings have continued to increase unabated so far in 1976. This, this shift of funds into passbook form could contribute to further downward pressures on M_1 growth.

Consumers and governments
In the consumer area, increased usage of credit cards and overdraft credit lines has tended to reduce the level of demand balances held by individuals. However, this factor has had a less dramatic impact than those operating in the corporate area. Meanwhile, the Federal Government and its agencies have been considering the implementation of their own new cash-management techniques. These efforts, when implemented, could have far-reaching effects on the flow of funds to the private sector, including private demand balances.

Many of the technological innovations now influencing the banking system have not yet significantly influenced demand balances, but the impact should increase over time. Progress toward automated debits will tend to reduce the amount of demand balances needed by individuals and corporations. Many banks now offer telephonic transfers between savings and demand accounts, and some banks also offer third-party transfers, although such transfers often are limited to payments for regularly recurring charges such as insurance, mortgage or utility payments. As this practice expands, it too will permit greater economizing on demand balances. As the electronic revolution proceeds, it will have far-reaching implications for the growth of demand balances and thus of M_1.

Ruth Wilson

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 2/18/76	Change from 2/11/76	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	87,424	– 101	+ 2,653	+ 3.13
Loans (gross, adjusted)—total	64,821	– 38	– 1,369	– 2.07
Security loans	842	+ 38	– 407	– 32.59
Commercial and industrial	23,256	– 49	– 1,033	– 4.25
Real estate	19,609	– 1	– 372	– 1.86
Consumer instalment	10,365	+ 5	+ 449	+ 4.53
U.S. Treasury securities	9,931	– 132	+ 4,088	+ 69.96
Other securities	12,672	+ 69	– 66	– 0.52
Deposits (less cash items)—total*	86,739	– 460	+ 3,840	+ 4.63
Demand deposits (adjusted)	23,278	– 522	+ 1,227	+ 5.56
U.S. Government deposits	632	+ 309	+ 288	+ 83.72
Time deposits—total*	61,167	– 596	+ 2,091	+ 3.54
States and political subdivisions	6,776	– 168	– 296	– 4.19
Savings deposits	24,462	+ 91	+ 5,748	+ 30.71
Other time deposits‡	27,412	– 361	– 2,788	– 9.23
Large negotiable CD's	12,301	– 561	– 4,013	– 24.60

Weekly Averages of Daily Figures	Week ended 2/18/76	Week ended 2/11/76	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves	48	54	5
Borrowings	8	14	2
Net free(+)/Net borrowed (–)	+ 40	+ 39	+ 3
Federal Funds—Seven Large Banks			
Interbank Federal fund transactions			
Net purchases (+)/Net sales (–)	+ 1,989	+ 1,645	+ 1,039
Transactions of U.S. security dealers			
Net loans (+)/Net borrowings (–)	+ 175	+ 60	+ 619

*Includes items not shown separately. ‡Individuals, partnerships and corporations.

Editorial comments may be addressed to the editor (William Burke) or to the author. . . .Information on this and other 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.