Research Department
Federal Reserve
Bank of
San Francisco
December 7, 1973

Towards a New System

The nation is moving, slowly but surely, towards the adoption of a new system of handling financial transactions—away from a system of check payments and towards one of electronic payments. Late last month, the Federal Reserve proposed several changes in its Regulation J which should help along the process. Reg J currently governs the use of Federal Reserve facilities to collect checks, but the proposed changes relate to the Fed's inter-regional network for transferring funds electronically.

Interested parties have been given four months' time to comment, not simply on the regulatory changes themselves, which are primarily technical in nature, but also on the broader issues arising from electronic funds transfers. Such issues would include the ownership and operation, conditions of access, and payment of the costs of the new system.

Substituting electronics

This proposal and other recent steps are an outgrowth of a 1971 policy statement, in which the Board of Governors assigned high priority to the modernization of the payments mechanism, including the development of an electronic substitute for making payments by check. The check is an extremely useful instrument, to bankers, businessmen and individual consumers. However, its very success now threatens to engulf the payments system.

Last year, individuals and institutions wrote more than 25 billion checks, against 94 million accounts with balances aggregating $192 billion. More importantly, with volume increasing by 7 percent annually, the total could double within a decade—and in dollar terms, the total is projected to rise one and one-half times in just a half-decade.

Volume should increase because of both the growth of the national economy and the growth in the number of check users. At the same time, the complexity of this system should increase because of the labor-intensive nature of check handling, involving a substantial amount of expensive processing and physical transfers of paper. The paper glut will result in higher user and purveyor costs, reductions in productivity in making financial transactions, and numerous other problems associated with an overloaded system of paper-conveyed payments.

Improving checks

Some major steps have been taken to improve the efficiency of the check-handling process. The most recent has been the development of a nationwide network of facilities for the overnight processing and settlement of checks—the regional check-processing centers (RCPC's). The Federal Reserve System may soon have close to 50 such centers in operation, mostly at existing Fed facilities (12 head offices and 24

(continued on page 2)

Research Department
Federal Reserve
Bank of
San Francisco

branches) but also at some newly developed sites. The objective is to ensure that most of the 62 million checks written every day be cleared and paid by the opening of business the day following the deposit of those checks.

Nonetheless, an improved check-payments system should be regarded only as a transitional step in the move towards the adoption of an electronic payments system. Federal Reserve guidelines thus specify that each RCPC should be provided with an automated clearing and telecommunications ability, to provide a basis for a system of electronic transfers.

Yet the RCPC system does bring about an earlier receipt of funds due to individuals and businesses, as well as an earlier payment of funds that they are transferring to others. To promote this development, the Federal Reserve revised Regulation J in November 1972, requiring all banks to pay in immediately available funds on the day when checks are presented. Previously, banks located outside cities containing Federal Reserve offices (and other designated areas) had paid the Fed for checks presented in funds collectable one or more days after presentation.

Revising J

Now, under the current proposal, the existing regulation would become the first section of an expanded Regulation J. Two new sections, dealing with electronic transfers of funds, would govern the procedures under which Reserve Banks could accept and deliver both credit and debit transfers of funds by wire, over the Federal Reserve's national communications network. The first of these new sections would codify current practices for sending funds from one point to another, whereby a member bank authorizes the Fed to deduct a certain amount from its reserve account and to credit that amount to another commercial bank.

The other new section, in contrast, would create a new payments procedure. This would permit member banks and their customers to use Federal Reserve facilities to **collect** funds electronically from another commercial bank, just as they now use other Fed facilities for the collection of funds moved by check. The proposed electronic process would accomplish, generally within a single business day, what it takes a check several days to accomplish.

By inviting comments on broader issues as well as these procedural details, the Federal Reserve recognizes that there will be many actors besides itself operating under the developing electronics system. The key questions center around who will own and operate—and for that matter, who will have access to—the new system. The answers concern commercial banks, automated clearing houses, credit-card companies, savings-and-loan associations, and other private as well as public institutions.

Major participants

The major credit-card organizations almost certainly will be interested. Already individuals account for at least half of all checks written, and this proportion could increase as more households make more purchases out of higher incomes. The obvious solution to this burgeoning check usage is to provide for accounting and payments for purchases through the use of electronic point-of-sale terminals. The credit card, or a similar means of activating electronic transfers, should play a major role in this development, and thereby provide a means for participation by credit-card firms in an electronic system.

Automated clearing houses are also likely participants. In California, the banks and clearing-house associations in San Francisco and Los Angeles, with Federal Reserve support, have developed a system of electronic transfers called the California Automated Clearing House Association (CACHA). This system permits an individual bank's customers to authorize employers to deposit their paychecks automatically into checking accounts every payday. In addition, individuals are encouraged to authorize payments by banks of their recurring predictable bills—mortgage and other loan payments, utility bills and insurance premiums.

Thrift institutions are anxious to play a role in the developing system; in fact, a number of California S&L's have applied for full membership in CACHA. Already, they can receive paper paychecks and execute preauthorized drafts on commercial-bank demand deposits to effect transfers of funds. Presumably, access to CACHA would enable the S&L's to credit and debit the savings accounts of their customers, in much the same way that banks credit and debit their customers' checking accounts.

According to Federal Reserve Governor Mitchell, public acceptance of a system of electronic credits and debits depends upon a marketing effort directed at those individuals who have not yet experienced the superior convenience, safety and certainty of this method of money transfer. The greatest sales appeal may turn out to be an account in a bank or thrift institution which pays interest and permits transfers, such as the NOW account advertised by thrift institutions in Massachusetts and New Hampshire. Thrift institutions do not yet have the operating and technological experience which commercial banks boast in the field of money transfers, but they have millions of customers who constitute a ready market for such services, and their rising interest in this area could stimulate the banks to move ahead more aggressively with electronic-transfer plans.

William Burke

Research Department
Federal Reserve
Bank of
San Francisco
Alaska • Arizona • California • Hawaii
Idaho • Nevada • Oregon • Utah • Washington

BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 11/21/73	Change from 11/14/73	Change from year ago Dollar	Change from year ago Percent
Loans adjusted and investments*	75,884	+ 245	+10,022	+ 15.22
Loans adjusted—total*	57,741	− 152	+ 9,148	+ 18.83
Securities loans	1,271	− 93	− 70	− 5.22
Commercial and industrial	19,977	+ 66	+ 2,723	+ 15.78
Real estate	18,012	+ 95	+ 3,189	+ 21.51
Consumer instalment	8,873	− 5	+ 1,333	+ 17.68
U.S. Treasury securities	6,091	+ 435	+ 59	+ 0.98
Other securities	12,052	− 38	+ 815	+ 7.25
Deposits (less cash items)—total*	71,835	− 568	+ 6,893	+ 10.61
Demand deposits adjusted	21,770	− 511	+ 1,201	+ 5.84
U.S. Government deposits	525	+ 161	− 357	− 40.48
Time deposits—total*	48,324	− 252	+ 5,993	+ 14.16
Savings	17,521	+ 36	− 770	− 4.21
Other time I.P.C.	22,167	− 116	+ 5,280	+ 31.27
State and political subdivisions	5,532	− 143	+ 572	+ 11.53
(Large negotiable CD's)	10,658	− 98	+ 4,095	+ 62.40

Weekly Averages of Daily Figures	Week ended 11/21/73	Week ended 11/14/73	Comparable year-ago period
Member Bank Reserve Position			
Excess reserves	89	− 23	− 6
Borrowings	88	140	18
Net free (+) / Net borrowed (—)	+ 1	−163	− 24
Federal Funds—Seven Large Banks			
Interbank Federal funds transactions			
Net purchases (+) / Net sales (—)	+686	+ 66	−581
Transactions: U.S. securities dealers			
Net loans (+) / Net borrowings (—)	−219	+ 76	+180

*Includes items not shown separately.

Information on this and other publications can be obtained by calling or writing the Administrative Services Department. Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco, California 94120. Phone (415) 397-1137.