Research Department
Federal Reserve
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July 31, 1981

FRBSF Weekly Letter

Pricing Fed Services

On August 1, the Federal Reserve begins charging users for clearing and collecting checks, and for transferring funds electronically via automated clearinghouses (ACHs). Pricing of these Reserve Bank services will significantly affect the nation's payments mechanism, because Reserve Banks process nearly half of all paper checks, and also operate most of the country's automated clearinghouses. The Federal Reserve System ultimately will price a number of correspondent-banking services under the terms of the Depository Institutions Deregulation and Monetary Control Act of 1980 (MCA). Check processing is the System's major banking service, however, so that charging for check and ACH services—which are close substitutes—represents a major step in the implementation of the Act's pricing and access provisions.

Check-clearing services
Reserve Banks clear and collect checks in order to facilitate the paper transfer of funds. Last year, for example, the Fed handled 15.7 billion checks at its 48 check-processing offices. Operation of this network of check facilities cost the System almost $280 million in 1980, or nearly two-thirds of the entire cost of all the correspondent-type banking services it provides.

The swift and reliable transfer of funds via a bank-checking account (or thrift-institution NOW or share draft) entails a number of processing stages. The process involves encoding transaction information on each check, microfilming for records purposes, sorting by check type and destination, transporting the checks, sorting by institution for payment and settlement—and finally, crediting or debiting institutions' or clearinghouse members' accounts. Private banks (correspondents) also sell check-processing services to other financial institutions (respondents). Unlike such correspondents, however, Reserve Banks do not provide encoding or microfilming services. Also, they typically require all but the smallest institutions to presort checks by predetermined processing categories.

Automated clearinghouses
ACHs are the computer-age equivalents of—as well as direct competitors with—the check clearinghouses operated by the Federal Reserve and by the private sector. Last year, 38 Reserve Bank facilities handled 227 million ACH transfers, although at a much smaller cost ($18 million) than the cost of its check-handling facilities. Ever since ACHs began operating a decade ago, the Federal Reserve has supported the development of a national ACH network, as a means of utilizing computer technology to reduce the nation's reliance on paper checks for the transfer of funds.

The Fed's ACH services provide financial institutions with the ability to transfer debits and credits automatically between institutions and account holders. A central ACH computer accepts and executes electronic messages necessary to complete a "paperless" transfer of funds. (Governments and financial institutions provide most of these inputs, primarily in the form of magnetic tapes.) The ACH takes the inputs, processes them, sorts debits and credits to the appropriate accounts, and then clears and settles the clearinghouse members' accounts.

Pricing services . . .
Under the MCA, Reserve Banks must set service fees to reflect the "full cost" of producing these services at a mature volume of output. Full-cost prices should include all of the costs that a private competitor would have to cover in the long-run in order to remain in operation. In compliance with the Act, Reserve Banks now add production costs to allocated overhead expenses for each service from available Federal Reserve accounting data, and then add a 16-percent

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markup to cover imputed taxes and returns to capital. The Fed includes this private-sector markup to offset the fact that Reserve Banks, unlike private suppliers, are neither taxed nor required to earn a market return on capital.

. . . for checks

Reserve Bank check services and fees may vary by type of check and by region. Each check type—generally determined by the type of processing it requires, and the location of the paying and depositing institution—will be priced separately. This reflects actual differences in the costs of processing cash letters (bundles of similar checks). While all districts will offer a similar package of services, in some cases Reserve Bank charges will vary because of inter-office differences in services and/or costs. Thus, fees will differ between districts, and in some cases, even between Reserve Bank facilities (although not in the San Francisco District).

Reserve Bank fees for check services (see table) compare favorably with previously reported prices charged by large correspondent banks for similar services. For example, the average charge per encoded check in the San Francisco (Twelfth) Federal Reserve District in 1979 was 2.1 cents, with a range from 1.4 to 3.0 cents for individual banks—according to the Account Analysis Survey of Charges for Selected Correspondent Banking Services conducted by Robert Knight Associates. These prices of course do not include any increase in costs that correspondents may face because of Reserve Bank pricing, which may boost correspondent prices after the August 1 shift by the Fed.

Pricing and open access to Reserve Bank check services, as called for under the MCA, will directly affect the correspondent banks selling check services in competition with Reserve Bank services. First, correspondents will no longer be able to rely on "free" Federal Reserve check services to lower their cost of producing services for resale to respondents. Thus, pricing should increase the cost of privately supplied check-processing services, as well as the price correspondents charge respondent institutions purchasing services. Second, the elimination of free check services will allow correspondents to compete with the Fed both on price and service quality, instead of simply on service quality alone. Finally, open access should mean increased competition in the sale of check services to nonmember banks and thrifts—institutions which previously had only limited access to Reserve Bank check services.

. . . and ACHs

The Federal Reserve has adopted uniform pricing for ACH services—except for New York. Those services are provided on a standardized basis nationwide (except for New York, where Fed-provided ACH services are limited to settlement of clearing balances among institutions). Also, the cost of computer-processing facilities, the major ACH category, essentially is determined in the national market. In addition, advances in ACH technology are likely to lead to a national ACH market linked by on-line computer-communications facilities, which would reduce the locational importance of both clearinghouses and ACH users. Thus,

Prices of Selected Check Services—San Francisco (12th) District

	Cents per item
Machine readable items deposited locally	
City checks	1.54
Regional Check Processing Center (RCPC)	1.71
Package sort (presorted by paying institution)	0.58
Mixed items (unsorted items)	1.71
Other Fed (items payable at other Reserve Bank facilities)	4.12
Non-machine readable items deposited locally	7.99

the Federal Reserve has set prices for intra-ACH transfers at 1.0 cents per item, except in New York where the charge will be 0.3 cents per item—while transfers between clearinghouses will cost 1.5 cents per item, except in New York where the fee will be 1.2 cents per item.

Rapid expansion of ACH volume and the evidence of scale economies in such operations complicate the task of pricing ACH transfers. Both factors indicate that ACH facilities have yet to reach a mature volume of services as called for under the MCA's pricing provisions. ACH volume, for example, has not leveled off—rather, it has more than doubled in the last three years—and it can be expected to continue growing even with the advent of pricing. In addition, Federal Reserve cost and output data indicate the existence of sizable economies of scale in ACH processing. Thus, the continued expansion of ACH facilities should lead to further reductions in "full cost" as output rises. Therefore, the Federal Reserve has set fees for ACH transfers based on an estimate of "full cost" at an estimated mature volume that takes both potential growth and scale economies into consideration.

Advertised ACH fees are below the price of comparable paper-check transfers. Because of possible substitutability, setting the ACH price too high relative to checks could dampen the growth of the developing market for ACH transfers and increase the burden on the nation's check-payments system. Setting fees too low would also create problems, even while promoting faster ACH growth to take advantage of scale economies and alleviate pressure on the check-clearing system. Low fees could act as a barrier to competition from the private sector and result in a long-run ACH subsidy that would run counter to the Monetary Control Act's pricing and access provisions. Indeed, Congress intended just the reverse—to improve the efficiency of the payments mechanism by eliminating Reserve Bank subsidies and barriers to competition.

In sum, August 1 represents the dawn of a new era in correspondent banking. Reserve Bank implementation of explicit charges for check and ACH services will strongly affect the future markets for these two services. Pricing will increase the cost to institutions using check and ACH services, but it will also increase the efficiency of Reserve Bank production and distribution. Under the MCA, Reserve Bank check-clearing facilities should be able to compete, both on price and service quality, with the private sector. At the same time, the ACH fee schedule should leave ACH-transfer prices competitive with check fees, while encouraging the continued development and use of ACH facilities.

Gary C. Zimmerman

Publication—Monetary Policy Objectives

Copies are now available of the publication, *Monetary Policy Objectives for 1981—Midyear Review*. This is a summary of the report made by Federal Reserve Chairman Volcker to Congress on July 21, 1981.

Free copies of this publication 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.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT
(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 7/15/81	Change from 7/8/81	Change from year ago Dollar	Change from year ago Percent
Loans (gross, adjusted) and investments*	150,188	– 239	12,522	9.1
Loans (gross, adjusted) — total#	129,084	23	13,120	11.3
Commercial and industrial	38,643	– 254	5,309	15.9
Real estate	53,130	201	6,132	13.0
Loans to individuals	22,939	– 15	– 915	– 3.8
Securities loans	1,579	145	593	60.1
U.S. Treasury securities*	6,190	8	– 108	– 1.7
Other securities*	14,914	– 270	– 486	– 3.2
Demand deposits — total#	43,196	1,099	– 1,262	– 2.8
Demand deposits — adjusted	29,875	– 363	– 2,328	– 7.2
Savings deposits — total	30,327	– 346	1,440	5.0
Time deposits — total#	82,813	906	20,912	33.8
Individuals, part. & corp.	74,575	1,375	20,985	39.2
(Large negotiable CD's)	33,825	1,070	11,701	52.9

Weekly Averages of Daily Figures	Week ended 7/15/81	Week ended 7/8/81	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (–)	n.a.	n.a.	– 65
Borrowings	72	39	47
Net free reserves (+)/Net borrowed(–)	n.a.	n.a.	–112

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

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