FEDERAL RESERVE BANK
OF DALLAS

TONY J. SALVAGGIO
FIRST VICE PRESIDENT

DALLAS, TEXAS
75265-5906

December 3, 1993

Notice 93-121

TO: The Chief Operating Officer of each financial institution in the Eleventh Federal Reserve District

SUBJECT

Volume-based Pricing for Noncash Collection Services and for Selected Check Products Offered by the Federal Reserve Banks of Richmond and Minneapolis

DETAILS

The Federal Reserve Board announced approval of volume-based pricing for the noncash collection services and for selected check products offered by the Federal Reserve Banks of Richmond and Minneapolis, effective January 3, 1994.

The volume-based pricing will:

- set volume-based cash letter and coupon envelope fees for the noncash collection services, and
- permit the Minneapolis Reserve office and the Richmond Federal Reserve District to set volume-based fees for selected check products.

The specific noncash collection and check fees appear in the 1994 priced services' fee schedules, which are available from the Reserve Banks.

ATTACHMENT

A copy of the Board's notice (Federal Reserve System Docket No. R-0814) is attached.

MORE INFORMATION

For more information regarding noncash collection services, please contact Michael Bermudez, Financial Services Analyst, at (202) 452-2216. For more information regarding check services, please contact Edith Collis, Finan-

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cial Services Analyst, at (202) 452-3638. For the hearing impaired only, please contact Dorothea Thompson at (202) 452-3544.

For additional copies of this Bank's notice, please contact the Public Affairs Department at (214) 922-5254.

Sincerely,

Tony J. Salvaggio

FEDERAL RESERVE SYSTEM
(Docket No. R-0814)
Federal Reserve Bank Services

AGENCY: Board of Governors of the Federal Reserve System.

ACTION: Notice.

SUMMARY: The Board has approved the use of volume-based cash letter and coupon envelope fees for the Reserve Banks' noncash collection service; option pricing for the following check products offered by the Federal Reserve Bank of Minneapolis -- weekday and weekend Other Fed deposits, City Fine Sort deposits, and payor bank truncation products; and option pricing for two payor bank products offered by all offices in the Richmond Federal Reserve District -- Account Total and Account Total Plus products. The specific noncash collection and check fees appear in the 1994 priced services' fee schedules, which are available from the Reserve Banks.

DATES: January 3, 1994.

FOR FURTHER INFORMATION CONTACT: Florence M. Young, Assistant Director, Division of Reserve Bank Operations and Payment Systems (202/452-2745). For questions regarding noncash collection services: Michael Bermudez, Financial Services Analyst, Fiscal Agency & Definitive Securities (202/452-2216); for questions regarding check services: Edith Collis, Financial Services Analyst, Check Payments (202/452-3638). For the hearing impaired only: Telecommunications Device for the Deaf, Dorothea Thompson (202/452-3544).

SUPPLEMENTARY INFORMATION:

INTRODUCTION

The Monetary Control Act (MCA) requires the Federal Reserve to set fees for its payment services based on all direct and indirect costs actually incurred in providing the services plus imputed costs that would be incurred by a private-sector service provider, such as interest on debt, taxes, and return on capital. These imputed costs are called the private sector adjustment factor (PSAF). While the MCA also indicates that due regard should be given to competitive factors and the provision of an adequate level of service nationwide, it does not indicate how the Reserve Banks should accomplish these goals.

In setting fees to recover the total costs of payment services, the Reserve Banks have tended to use cost-based pricing methodologies. Because the technologies for providing payment services generally require fairly large capital expenditures and there can be increasing returns to scale associated with the provision of such services, the Reserve Banks have developed fee schedules for most services that consist of a combination of fixed and variable fees. This approach provides a means to set variable fees near the incremental costs of providing the service and to recover total costs, including the PSAF. Using such combinations of fees contributes to efficient use of services.

In some cases, the Reserve Banks have modified the cost-based methodology to reflect premium service levels and demand considerations. It is not clear, however, that the approaches that have been used by the Reserve Banks to set fees address competitive factors effectively nor result in the most economically efficient prices. The depository institutions that comprise the customer base for Federal Reserve priced services range from large money-center banks with affiliates nationwide to small credit unions and one-office rural community banks. Such widely divergent institutions have vastly different business needs. While significant attention has been given to increasing the sophistication of cost-based pricing methodologies, the Reserve Banks have generally attempted to address demand considerations through product design. For example, the mixed check deposit product was designed for smaller depository institutions for whom any amount of sorting would be burdensome. These institutions deposit a single cash letter that contains both local items and items payable in other Federal Reserve territories. The per-item fees for this product are high, relative to other check products, because the Reserve office performs all check sorting. On the other hand, check deposit products called "group sorts" have been designed to appeal to larger institutions that typically have the technological capability and capacity to perform a substantial amount of check sorting. Depositors are charged lower per-item fees or are offered later deposit deadlines for these products because Reserve offices perform less sorting and can use their check sorting equipment more efficiently.

It is difficult, however, to satisfy the needs of both high-volume and low-volume institutions solely through differing product offerings. High-volume users typically have the ability to select among a number of sources to obtain payment services, including acquiring expensive equipment to perform functions in-house or purchasing the services from a variety of suppliers. Fewer options are available to low-volume users because the costs associated with many of the alternatives are relatively high. In part, it appears that some of the differences in the alternatives available to smaller institutions reflect the higher costs associated with providing service to large numbers of institutions depositing small transaction volumes. Fee structures that do not reflect such cost differences result in competition among service providers for the low-cost customers, but not for the high-cost customers. Similar situations exist in other industries. For example, in the telecommunication area, AT&T charged that MCI eschewed high-cost, low-return services for more profitable services. AT&T also alleged that Comsat syphoned off low-cost customers.[1]

Providing services that meet the needs of low-volume customers, in particular, may require a pricing methodology that addresses the demands of both high- and low-volume users. Specifically, without high-volume customers, all of the fixed costs associated with the provision of services would have to be borne by the low-volume customers. Thus, low-volume customers

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[1] Jean-Jacques Laffont and Jean Tirole, "Optimal Bypass and Cream Skimming," American Economic Review, vol. 80 (December 1990), pp. 1042-1061.

would face either higher prices or lower quality services. This conclusion reflects the level of fixed costs required to provide payment services and the fact that, at low-volume levels, scale economies could not be achieved.

The distributors of natural gas face similar pricing concerns. The 1978 Natural Gas Policy Act created the possibility for industrial plants to bypass local distribution utilities by building direct connections to pipelines, gas producers, or intermediaries.[2] Without big industrial customers, however, all of the fixed costs associated with local gas distribution would be borne by the smaller industrial plants and consumers. The loss of the high-volume customers would raise the rates of low-volume commercial and residential users or would reduce the quality of their service because economies of scale could not be attained without both user groups. Thus, social costs would be higher because scale economies would not be achieved and, most likely, some pipeline capacity would remain idle. On the other hand, a volume-based pricing strategy could be used to retain high-volume customers and achieve scale economies.

Several automated clearing house (ACH) service providers that have a customer base of both low- to high-volume users offer volume-based pricing strategies. Visa U.S.A., a national service provider, offers a transaction discount of 10 percent to institutions with transactions volumes greater than

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[2] Ibid., p. 1042.

500,000 transactions per month. Deluxe ACH Services, a regional service provider, charges lower transaction fees for transaction volumes over 5 million items per month, and still lower fees for transactions in excess of 10 million items.[3] In each case the price structure is designed to meet different customers' needs for essentially the same product.

The Clearing House Interbank Payment System (CHIPS), operated by the New York Clearing House Association, allocates its total costs for operations among the participants according to usage, that is, the number of messages sent and received during the previous month. There is a minimum charge of $1,500 per month. High-volume users with over 80,000 messages a month are charged $0.13 to send a message and $0.13 to receive a message. Senders of fewer than 80,000 messages per month are charged $0.18 to $0.40, depending upon whether their messages are coded with the receiver's identification.[4]

In approving the use of volume-based pricing for the noncash collection service and for selected check products at the Federal Reserve Banks of Richmond and Minneapolis, which is discussed below, the Board requested the staff to recommend principles that would be used in the future to determine when and how volume-based pricing might be used in setting fees for Federal Reserve priced services. Following review by the Board,

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3 Woolworth/Dudley Associates, "Comparative Analysis of ACH Service Providers," April 1991.

4 New York Clearing House Association.

public comment will be requested on the proposed principles.

DISCUSSION

Noncash Collection Service -- Noncash collection volume levels began to decline rapidly after 1983, when the issuance of bearer securities was discontinued following the enactment of the Tax Equity and Fiscal Responsibility Act of 1982. Since that time, many bearer municipal securities have been "immobilized," or converted to book-entry form. Moreover, recent low interest rates have prompted many municipalities to call outstanding bonds and reissue securities in either registered or book-entry form. Largely due to the significant reduction in volume, the Reserve Banks incurred an operating loss in 1992 and project an operating loss in 1993.

To address the difficulties associated with recovering the Reserve Banks' costs in a declining market, the Reserve Banks (1) have reduced the number of noncash operating sites to four offices (Cleveland, Jacksonville, New York, and Chicago) and plan to reduce the number of offices to three by year-end 1994, and to two by year-end 1995 and (2) are adopting a modified fee structure that more effectively reflects the composition of the Reserve Banks' costs and the demand of both low- and high- volume users.

Currently, the Reserve Banks assess a variable fee for each envelope containing matured coupons that is deposited. Higher fees are generally assessed for interregional deposits than for local deposits and some Reserve offices apply separate postage and insurance charges. As is the case for other services, there are fixed and variable costs associated with processing coupon deposits. An analysis of the costs incurred in processing coupon deposits indicated that approximately 35 percent of the costs is associated with cash letter processing. Because these costs do not vary significantly across the volume of coupon envelopes received, the costs incurred in providing coupon collection services cannot be recovered effectively solely by charging variable fees. As a result, the Board approved a fee structure under which both cash letter and coupon envelope fees will be assessed. In addition, shipping expenses will be recovered through the coupon envelope fees.

Further, a wide variety of depository institutions use the noncash collection service. Implementing cash letter fees will raise the cost of using this service for institutions that deposit relatively few coupon envelopes and should reduce the cost for institutions that deposit relatively higher volumes. To address the potential cost increase for low-volume depositors and the price sensitivity of high-volume depositors, the Board approved cash letter and coupon envelope fees that vary based on the number of coupon envelopes included in a deposit. For example, for local deposits containing five or fewer coupon envelopes, the cash letter fee would be $7.50 and coupon envelope fees would be $4.25 or $4.50. For local deposits containing more than five coupon envelopes, the cash letter fee would be $15.00 with coupon envelope fees of $2.50 or $3.00. Higher coupon envelope fees would be assessed for interregional deposits. (The 1994 fee schedules with the specific fees to be assessed by each of the four offices providing noncash collection services are available from the Reserve Banks.)

The noncash collection service faces significant uncertainty due to declining volumes, a dwindling number of other service providers, and the adjustment to a more consolidated operating environment. The Board believes that implementing a combination of cash letter and coupon envelope fees, which vary based on the size of the deposit, will improve the Reserve Banks' ability to recover the costs of providing noncash collection service over the longer run.

Check Service

The Board approved the use of option pricing for the following deposit products and payor bank services -- the Minneapolis office's weekday and weekend Other Fed deposits, its City Fine Sort deposits, and its payor bank truncation products and the Richmond District's Account Total and Account Total Plus payor bank services.

Traditionally, the Reserve Banks have charged the same price for a given check product, regardless of the number of items processed for an individual depository institution. As noted above, some products have been designed to appeal either to high-volume or low-volume institutions. Nevertheless, a single fee is assessed for each Federal Reserve product without regard to the number of items that are processed. Private-sector service providers frequently set prices that take into account the efficiencies that can be realized in handling high transaction volumes. Option pricing will allow the Reserve Banks to recognize these economies in the fees charged for check services.

Option pricing for deposit products and payor bank services will be structured similarly. Each depository institution will be presented with the same set of pricing options. One option will combine a relatively low cash letter fee (for deposit products) or daily minimum fee (for payor bank services) with a relatively high per-item fee. The other option will combine a relatively high cash letter or minimum fee with a relatively low per-item fee. It is expected that low-volume institutions would find the first alternative more attractive, while high-volume institutions would prefer the second option. Both options, however, will be presented to every institution, and the user will decide which option is more appropriate for the institution's business needs.

The following table demonstrates how option pricing would affect a depository institution's costs over a range of transaction volumes. In this example, Option I would consist of a $1.50 fixed fee and a $0.05 per-item fee. Option II would combine a $7.50 fixed fee with a per-item fee of $0.044. At volumes under 1,000 items, a user would face lower costs by selecting Option I. At volumes above 1,000 items, a user would incur lower charges by selecting Option II.

Number of Items	Option I Total Cost	Option I Unit Cost	Option II Total Cost	Option II Unit Cost
100	$ 6.50	$0.065	$ 11.90	$0.119
500	$ 26.50	$0.053	$ 29.50	$0.059
1,000	$ 51.50	$0.052	$ 51.50	$0.052
2,000	$101.50	$0.051	$ 95.50	$0.048
10,000	$501.50	$0.050	$447.50	$0.045

The application of option pricing would be most beneficial for check products that are used by institutions of varying sizes, such as the city, RCPC, country, and Other Fed deposit options and most payor bank services. It would provide little benefit for products that were designed specifically to appeal to a single user class, such as mixed deposits.

The Board believes that option pricing is an efficient pricing methodology and that it should ultimately benefit both high- and low-volume users.

COMPETITIVE IMPACT ANALYSIS

In assessing the competitive impact of implementing a volume-based pricing alternative, the staff considered whether there would be a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services and, if so, whether the effects are due to legal differences or to a dominant market position deriving from such differences. The Board believes that use of volume-based pricing in the noncash collection service and for selected check products at the Richmond and Minneapolis Reserve Banks should not adversely affect the ability of private-sector providers to compete with the Federal Reserve in providing similar services. A number of private-sector service providers use comparable pricing methodologies.

Noncash Collection Service -- The Federal Reserve does not have a dominant market position in the noncash collection business although the number of service providers is diminishing. The System's efforts to reduce operating costs by consolidating processing sites and to set fees that are attractive to both high- and low-volume users is intended to provide a stabilizing presence in the market. Because there are very few competing service providers, the use of volume-based pricing should be viewed positively by institutions collecting municipal coupons.

Check Service -- Although the Federal Reserve is currently a dominant provider of interterritory check collection services, the implementation of the same-day settlement regulation provides private-sector banks the right to present checks directly to payor banks and should enhance the ability of private-sector banks to compete with Federal Reserve check collection services. The Board believes that the use of volume-based pricing for selected check products by the Richmond and Minneapolis Reserve Banks will not have a direct and material adverse effect on the ability of other service providers to compete with the Federal Reserve. Permitting the Reserve Banks to implement volume-based fees should stimulate competition and lead to more efficient use of check services.

By order of the Board of Governors of the Federal Reserve System, November 10, 1993.

(signed) William W. Wiles

William W. Wiles
Secretary of the Board