The Pricing of Consumer Deposit Products— The Non-rate Dimensions

The process of deregulating interest rate ceilings on consumer deposits with transactions features began in late 1982 and early 1983. By the end of March 1986, all restrictions had been removed except the zero rate limitation on demand deposits. Deregulation has ushered in a new era of explicit pricing of the services provided by consumer accounts offering transactions features. Before deregulation, banks tended to compete for these accounts by offering account services free or below cost. Since the rate ceilings have been eliminated, banks have been free to compete by offering more attractive interest rates while charging explicitly for account services when and as needed to make the overall cost of funds from these accounts competitive with alternative bank funding sources.

The way in which banks have adjusted interest rates on the various types of consumer deposit accounts under deregulation in response to changes in market rates was explored in an earlier issue of this *Review*.[1] In this article we present the results of a recent survey of the non-interest-rate features of pricing by commercial banks on four types of accounts: money market deposit accounts, which provide limited transactions services, consumer demand deposits, "regular" NOW, and Super NOW accounts.[2] Until January 1, 1986, regular NOW accounts were subject to a 5¼ percent interest rate ceiling while Super NOW accounts were free to pay a market-related rate. This regulatory distinction, in effect at the late 1985 date covered by our survey, no longer exists. Nevertheless, many institutions continued to offer NOW accounts whose rates change only infrequently alongside other NOW accounts whose rates are, at least in principle, more frequently adjusted in line with market conditions.

The problem faced by banks in determining appropriate pricing policies for consumer deposit accounts with transactions features is extremely complex. These accounts involve certain fixed costs associated with setting up and maintaining the account as well as variable costs related to the account's activity level. On the revenue side, the account has value to the bank as a source of funds that can be re-lent at a profit and, in many cases, it is also a source of fee income. As noted elsewhere in this issue,[3] it may be very difficult for banks to place an overall value on the funds gathered in these accounts. Bankers tend to view transactions accounts as an important focus of a complex "customer relationship." Thus the holder of a transactions deposit account may tend to borrow and to purchase other

[1]See John Wenninger, "Responsiveness of Interest Rate Spreads and Deposit Flows To Changes In Market Rates," this *Quarterly Review* (Autumn 1986), pages 1-10. See also Michael C. Keeley and Gary C. Zimmerman, "Deposit Rate Deregulation and The Demand For Transactions Media," *Economic Review*, Federal Reserve Bank of San Francisco (Summer 1986).

[2]The survey data were obtained from the Trans Data Corporation, 530 Riverside Drive, Salisbury, Maryland, 21801. Trans Data developed figures as of year-end 1985 covering a range of pricing

Footnote 2 continued
characteristics for traditional demand deposits owned by consumers and for the various interest-bearing accounts having transactions features that have become available over the last several years. The data were obtained from a survey of 195 respondent banks across the nation conducted early in 1986. Nearly all the survey respondents had at least $500 million in total deposits and were major participants in their respective markets. The total deposits of the surveyed commercial banks amounted to approximately $600 billion in the aggregate, and they held close to 30 percent of the nation's total domestic deposits.

[3]See "Bankers on Pricing Consumer Deposits" this *Quarterly Review*, pages 6-13.

banking services at the same institution Indeed, the pricing of the various banking services, including transactions accounts, may be designed to give customers an incentive to do *all* their banking business with the institution where they maintain a transactions account. This relationship value of the transactions account is difficult to measure and greatly complicates the problem banks face in pricing such accounts appropriately. And of course the competitive situation any particular bank (or any branch of that bank) faces is a further major complicating factor in determining appropriate pricing policy.

The result, at least in the larger and more competitive banking markets, is a rather bewildering array of available combinations of interest rates, fee structures, balance requirements, and interconnections with other banking services. The survey results reported here cannot begin to capture all this complexity. Nevertheless, a few generalizations about the products being offered depositors can be gleaned from the survey that have almost certainly retained their validity.

Survey results

First, most respondents require that interest-bearing accounts with transactions features maintain some minimum balance if any interest is to be earned. This is the case for the overwhelming number of MMDA and Super NOW accounts and is true for a majority of NOW accounts (Table 1). Demand deposit accounts of course pay no interest, but *all* the institutions surveyed required that some minimum balance level be maintained, generally around $500, if a monthly account fee is to be avoided. For the two types of accounts paying "market-related" rates, MMDA and Super NOW accounts, the minimum balances required to earn interest tend to cluster either at $1000 or at $2500. Not surprisingly, the minimum balance levels required to earn interest for regular NOWs are almost always smaller amounts, usually under $1000 [4]

For most accounts, balance levels determine not only whether interest will be paid (in the case of interest-bearing accounts) but also whether a per-account monthly fee will be charged. Virtually all NOW account holders were charged a monthly fee if their balances fell below levels required to earn interest, both for the NOWs and Super NOWs, while two-thirds of MMDA account holders were assessed a fee when balances fell below the minimum required to earn interest (Table 2). The size of these monthly fees, where charged, varied over a wide range. Generally speaking, however, they tended to be less than $8 per month, although a sizeable minority of MMDA and Super NOW fees were as much as $10 or more. Demand deposit account holders whose balances fell below levels needed to avoid fees tended to be charged the lowest monthly fees, less than $4 in a majority of cases

A slim majority of institutions charge a monthly fee on NOW accounts even where balances are *above*

Table 1

Minimum Balances Required to Earn Interest at Commercial Banks

December 31, 1985
Percent of respondents

Balance Requirements	MMDA	NOW	Super NOW	Demand Deposit*
$0	4 6%	44 4%	3 8%	
1-999	2 1	43 2	1 6	100%
1-500		18 5		
501-999		24 7		
1,000	51 3		31 3	
1,001-2,499	1 0	10 1	4 4	
2,500	40 5		46 7	
2,500 and greater	0.5	2 2	12 1	
Number of respondents	195	178	182	111

*Minimum to avoid a monthly fee at commercial banks that waived the monthly fee if a minimum balance was maintained
Source Trans Data Corporation

Table 2

Monthly Fees on Commercial Bank Accounts with Balances Below the Minimum Required to Earn Interest

December 31, 1985
Percent of respondents

Charge a Fee?	MMDA	NOW	Super NOW	Demand Deposit*
Yes	67 7%	96 0%	95 5%	100 0%
No	32 3	4 0	4 5	0 0
Number of respondents	186	99	156	177
Size of Fee Where Charged				
Less than $4 00	15 0	15 8	8 1	54 3
$4 00 to $5 99	38 6	35 8	27 5	33 3
$6 00 to $7 99	15.0	28 4	21 5	7 9
$8 00 to $9 99	6 3	9 5	9 4	
$10 00 and above	24 4	10 5	32 2	4 5
Number of respondents†	127	95	149	177

*Refers to minimum balance required to avoid a monthly fee
†Includes a few banks that did not reply to all questions
Source Trans Data Corporation

[4] A majority of institutions defined the required minimum balance in terms of the lowest balance on any given day during the accounting period Further, a majority of institutions compounded and credited interest monthly

minimum levels required to earn interest, as is also the case for a sizeable minority of Super NOW accounts (Table 3). A very small minority of MMDA accounts were charged fees even where balances were above those required to earn interest. For *all* types of accounts where fees are charged at balance levels above the minima required to earn interest, these fees are nevertheless waived in most cases if some still higher balance requirement level is met (Table 4). In the case of Super NOWs, to be sure, a sizeable minority of accounts had to pay a monthly fee regardless of the level of balances.

In the case of demand deposit accounts, about two-thirds of respondents waive the monthly fee if balances are above some minimum (clustering, as noted earlier, around $500) while roughly one-third of the holders of such accounts have to pay fees regardless of balance levels.

The logic of setting minimum balance levels in order to earn interest, and/or to avoid fees, seems fairly straight-forward. The deposits gathered by the bank in these accounts are a source of profit because they can be reinvested at an interest rate spread. But if the volume of deposits in a given account falls below a certain level, the net interest revenues generated will not even cover the fixed cost of maintaining the account. Therefore, minimum balance requirements to earn interest and/or avoid fees are needed to weed out unprofitable accounts, or to make them profitable through the collection of fee income. On the depositor's side, the burden, if any, of these minimum balance requirements will depend on how the balances are computed, on the depositor's normal balance needs and on the alternative investment options. It is important to note that a sizeable minority of institutions allow customer balances in other accounts to help fulfill the minimum balance levels needed to earn interest and/or avoid fees on regular NOW and consumer demand deposit accounts (Table 4). Such an approach is of course in line with the "relationship" pricing of consumer banking products and greatly reduces or eliminates any burden of balance requirements for depositors who hold other accounts in banks where they maintain a transactions account.

While monthly per-account fees can compensate the bank for the fixed costs of account maintenance, where balances would not otherwise be large enough to make the account profitable, banks also incur per-check costs that may or may not be covered by the value of balances and per-account fees. Thus many banks impose per-check charges under certain conditions. In the case of regular and Super NOW accounts and demand accounts, about a third of the institutions in the survey assessed per-check charges regardless of the levels of balances in the accounts (Table 5). In addition, about 20 percent of NOW and Super NOW accounts and about half of demand accounts are assessed per-check

Table 3

Monthly Fees on Commercial Bank Accounts with Balances Above the Minimum Required to Earn Interest

December 31, 1985

Percent of respondents

Charge a Fee?	MMDA	NOW	Super NOW	Demand Deposit
Yes	9.2%	51.7%	38.0%	37.5%
No	90.8	47.8	62.0	62.5*
Number of respondents†	195	178	163	177
Size of Fee Where Charged				
Less than $4.00	22.2%	9.8%	12.9%	90.5%
$4.00 to $5.99	27.8	46.7	32.3	8.0
$6.00 to $7.99	5.6	27.2	29.0	0.10
$8.00 to $9.99		9.8	8.1	0.4
$10.00 and above	44.4	6.5	16.1	0.0
Number of respondents†	18	92	62	66

*Indicates percentage of banks that waived monthly fee if minimum balance was maintained.

†Includes a few banks that did not reply to all questions.

Source: Trans Data Corporation.

Table 4

Balances Required to Waive Monthly Fee Where Balances Were Above the Minimum Required to Earn Interest

December 31, 1985

	In percent of respondents*			
Is Fee Waived Above A Specified Amount?	MMDA	NOW	Super NOW	Demand Deposit*
Yes	83.3%	97.8%	61.3%	62.5%
No	16.7	2.2	38.7	37.5
Number of respondents	18	92	62	177
	In dollars			
Average Balance Required To Waive Fee	$3,299	$1,410	$5,487	$500†
Are Fees Waived Based on Balances In Other Accounts?	In percent of respondents			
Yes	n.a.	35.6%	n.a.	46.1%
Number of respondents		90		177

*Refers to respondents that charged fees on accounts with balances above minimum required to earn interest except that in the case of demand deposits, the figures shown are for the entire sample.

†Estimated.

Source: Trans Data Corporation.

charges whenever balances are below the minimum levels required to earn interest and/or avoid per-account fees. Roughly 50 percent of institutions, however, charge *no* per-check fees on NOW and Super NOW accounts *regardless* of balance levels, while about 20 percent assess no per-check fees on demand deposit customers regardless of balance. Average per-check charges vary according to type of account (Table 6). Here too, these charges are waived in many cases if balances are maintained at or above specific levels (Table 7).

The status of per-check charges on MMDA accounts is a little complicated. These accounts were designed to have only a limited transactions account capability. Federal Reserve Regulation D requires that all institutions offering MMDAs have procedures in place to monitor account activity, which cannot exceed a total of six pre-authorized, automatic and telephonic transfers per month, of which no more than three can be by check to third parties. When excessive activity is detected, the regulation requires the offering institution to take follow-up action to prevent further violation of Regulation D. Since MMDAs retain their exemption from reserve requirements only when the regulatory limits are observed, many banks have priced per-check charges to discourage account holders from writing more than three checks. Only a small minority of institutions assess per-check charges for the first three checks written in a given month on these accounts (Table 5). Fully 47.2 percent, however, assess per-check charges beyond the first three, in amounts averaging about $4.75 per check—compared to per-check charges averaging only $0.24 or less on other kinds of accounts (Table 6).

Table 5

Per-Check Charges Versus Balance Requirements at Commercial Banks
December 31, 1985
Percent of respondents

Is There A Per-Check Charge?	MMDA*	NOW	Super NOW	Demand Deposit
Yes, regardless of balance	4.6%	31.5%	29.4%	30.5%
Yes, if balance below minimum†	4.1	18.5	18.4	51.5
No, regardless of balance	83.1	50.0	52.1	17.9
Do not offer checks	8.2			
Number of respondents	195	178	163	177

*In the case of MMDAs, the charge relates only to the first three checks

†Minimum required either to earn interest (MMDAs, NOWs and Super NOWs) or avoid a monthly fee (demand deposits)

Source: Trans Data Corporation

As the results reported above indicate, fee schedules at most institutions are designed to recover costs in accounts where average balance levels are not high enough, taken by themselves, to make the account profitable. A significant minority of institutions actually offer interest-rate incentives to increase the size of account balances by presenting a "tiered" interest rate structure where higher rates are paid on successively higher threshold levels of balances. Thus some 29 percent of the respondents offered tiered rate structures on MMDAs, and 17 percent offered such rate structures on Super NOW accounts. However, the rate incentives offered in these tiering arrangements were modest. Thus in no case would increasing balances over a given threshold level raise the rate paid by more than 50 basis points, and in most cases the differential between successive tiers ranged between 20 and 35 basis points.

Table 6

Check Charges at Commercial Banks
December 31, 1985

Average charge per check	MMDA		NOW	Super NOW	Demand Deposit
	$1.16*	$4.73†	$0.24	$0.22	$0.18‡
Number of respondents reporting the charge	17	84	54	63	177

*First three checks

†Beyond three checks

‡Partly estimated

Source: Trans Data Corporation

Table 7

Minimum Balance Requirements for Waiver of Per-Check Charges at Commercial Banks
December 31, 1985

	NOW	Super NOW	Demand Deposit
Average Balance To Waive Charges*	$1,356	$4,792	$500†
(1) Total number of respondents that waived check charges	47	24	91†
(2) Line 1 as a percent of respondents that charged a fee*	83.9%	50.0%	51.5%

*For banks that imposed a charge when the balance was above the minimum required to earn interest

†Estimated

Source: Trans Data Corporation

Conclusion

Clearly the process of setting non-interest-rate terms on consumer transactions accounts cannot be reduced to a simple formula. As mentioned earlier, we should expect to see minimum balances to earn interest and/or avoid fees set to permit earnings from low-balance accounts to cover costs. At the same time, we might expect competitive forces to discourage charging fees on high balance accounts that would be profitable without such fees. By and large, the survey results are consistent with these expectations to the extent that most accounts do require minimum balances to earn interest, while fees do tend to be eliminated above this or some other level of balances. Nevertheless, the survey also shows that some institutions pay interest regardless of balance levels and that a few charge no fees. On the other side, some institutions charge fees regardless of balance levels. Neither situation seems consistent with any simple theory of account pricing. Moreover, the wide variety of options offered by different institutions and the significant differences among them in setting specific balance levels and fee schedules suggests that the market for these accounts has yet to settle down to any uniform set of prices and approaches.

There are some obvious reasons for this. They include the fact that the strength of competition and the composition of the depositor base may differ widely from institution to institution, or even between branches of the same institution. Moreover it is difficult to compute the true costs and, especially, the true net revenues of transactions accounts and therefore to compute what balance levels and fee schedules might be appropriate to them. For one thing, it is difficult for banks to know what notional "term-to-maturity" to assign to consumer transactions balances in comparing them to the costs of funding alternatives in a world where the yield curve is rarely flat. Another major imponderable, already noted, is how to value the net revenues earned by banks from these accounts when they represent the lynchpin of a full banking relationship. Given all the imponderables, it is not surprising to find a wide diversity of practices and some instances that seem to contradict what a pure, and rather simplistic, theoretical approach to pricing might imply.

Finally, it needs to be emphasized that the survey from which the data in this article were taken represents practices only as of a single date, late 1985. While it appears that banks review the non-rate dimensions of their consumer pricing policies only relatively infrequently, it is likely that there has been some further evolution since this survey was taken. In particular, there are signs of an increasing move toward relationship pricing, a dimension of the problem not explicity covered in the survey.

Changes in the non-rate dimensions of consumer pricing could have some impact on the levels and growth rates in the monetary aggregates as measured and targeted by the Federal Reserve. For example, the widespread use of minimum balances on transactions accounts and changes in the levels of these minimums are likely to affect the overall levels of these balances because consumers may have an incentive to move funds from other assets to meet the balance requirements. Thus the level of M1 could be affected. It could also be affected by changes in the willingness of banks to allow deposits in other accounts to count towards balance requirements in transactions accounts. Indeed the overall structure of non-rate terms on transactions accounts could have long-run effects on the response of these accounts to changes in consumer income and wealth. But in the short- to medium-term, the movements of interest rates paid on transactions accounts—relative to rates paid on other consumer accounts and relative to market rates generally—are clearly far more important influences on their behavior.

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