**Comparing Prices** 

Institutional type and size and the degree of market competition are three of many factors that could affect the pricing terms of deposit accounts. Banks and thrift institutions face different regulatory constraints and hold different compositions of assets and liabilities. Likewise, the size of institutions is often associated with their portfolio choices and cost structures. Institutions also draw their deposits from different market areas with varying degrees of competition.

Thrift institutions paid significantly higher rates than banks on all accounts examined (see table 2). For example, thrifts paid an 8.51 percent average annual rate for MMDAs, compared with banks' 8.28 percent average annual rate. On Super-NOWs and CDs, thrifts paid rates between 11 basis points and 67 basis points higher than banks. In addition, thrifts imposed lower minimum-balance requirements on corporate MMDAs, cent of the deposits and those operand notably fewer thrifts had service charges on Super-NOW accounts than did banks. While thrifts as a group paid higher rates, some individual banks paid higher rates than some thrifts.

Our survey results supported the view that larger institutions are generally more aggressive than smaller ones in a deregulated environment (see table 3). We found

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that institutions with deposits over \$1 billion paid higher rates and required lower deposit balances on several types of accounts than did institutions with less than \$100 million in deposits. Although small institutions paid higher rates on Super-NOWs and required lower minimum balances for business MMDAs, the largest institutions had better pricing terms on time deposits. The largest institutions paid higher rates on one-year and four-year CDs and imposed lower balance requirements for CDs with ninety-oneday to one-year maturities.

Theory suggests that institutions operating in market areas with a higher degree of deposits held by a few depository organizations would have less competitive pricing terms.<sup>7</sup> The sample of institutions was divided arbitrarily into two groups—those operating in markets where the four largest institutions held less than 50 perating in markets where the four largest institutions held more than 75 percent of the deposits. Average rates paid on one-year and two-and-one-half year CDs were lower in the more concentrated markets (see table 4). Although other rate differences were not statistically significant, institutions competing in more concentrated markets tended to pay lower rates on these

7. For purposes of this study, rural markets are approximated by counties and urban markets by SMSAs.

accounts. Minimum-balance requirements, however, did not vary significantly or uniformly by the market concentration grouping.

## Conclusion

Interest-rate deregulation has enabled banks and thrifts to offer new opportunities to customers and to compete with each other and with nondepository institutions. Increased competition in the Fourth District has led to higher deposit rates, lower minimumbalance requirements, and more diversified pricing.

We found a variety of deposit rates and balance requirements among institutions and accounts in the Fourth Federal Reserve District. As a rule, higher rates and lower minimum balances were associated with less liquid accounts. Deposit rates on one-year and twoand-one-half year CDs were lower in more concentrated markets. Thrift institutions paid higher rates than banks on all of the accounts examined. The largest depository institutions had more favorable pricing terms on CDs, while smaller institutions paid higher rates on Super-NOWs. Differences in prices could be attributed to differences in institutional preferences and in complementary services offered to depositors.

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Federal Reserve Bank of Cleveland

## April 23, 1984 economic commentary

## Deregulation and **Deposit Pricing**

by Paul R. Watro

The deregulation of interest rates on federally insured deposits has snowballed over the past several years. The deregulation process is almost completed, and banks and thrifts can now determine the rates that they pay on all deposits except some types of transaction accounts, passbook savings, and very short-term time deposits. Even these latter restrictions will be eliminated in the near future because of deregulatory legislation.<sup>1</sup>

Banking regulators have increasingly relied on the market to price deposit accounts. The six-month money market certificate, for example, originated in 1978 when regulators permitted depository institutions to pay rates of interest indexed to the average yield on six-month Treasury bills. The largest steps toward rate deregulation in banking were taken late in 1982 and early in 1983 with the introduction of money market deposit accounts (MMDAs) and Super-NOW accounts. These accounts enabled banks and thrifts to compete with each other and with money market mutual funds on the basis of rates.

The volume of funds flowing into these new accounts has been tremendous; by year-end 1983, more than \$380 billion was accumulated in these accounts with most of the funds concentrated in MMDAs.<sup>2</sup> A large percentage of these funds flowed from other deposit accounts, drastically changing the composition of deposits in U.S. depository institutions. Rate differences were probably associated directly with these massive deposit shifts, which also affected the volume of required reserves and the composition of the monetary aggregates.

MMDAs and Super-NOWs have minimum-balance requirements of \$2,500, a dollar amount that prohibits some individuals from taking advantage of these new deposit instruments. However, depositors who hold lower balances can still earn market rates at depository institutions. In October 1983, rate ceilings and minimum-balance requirements were removed from 32-day to 2½-year CDs.3

## Deposit Pricing in the Fourth District

For a one-week period in mid-November 1983, we surveyed the availability and pricing terms of MMDAs, Super-NOWs, and CDs at a sampling of depository institutions throughout the Fourth Federal Reserve District.<sup>4</sup> We compared rates paid and minimum balances required on these accounts, according to institutional type and size and concentration of deposits in the market.

Our survey sample consisted of 112 depository institutions. including the Fourth District's 17 largest commercial banks. 22 largest thrifts, plus 44 banks and 29 thrifts selected randomly by size groups. Seventy-eight of the institutions surveyed were in Ohio, 19 in Pennsylvania, 12 in Kentucky, and 3 in West Virginia. The majority of firms were headquartered in standard metropolitan statistical areas (SMSAs). There were 16 in the Cleveland SMSA, 13 in the Pittsburgh SMSA, 9 in the Cincinnati SMSA, and 7 in the Columbus SMSA. There was one surveyed institution in almost all other Fourth District SMSAs and one in more than 25 percent of all Fourth District counties. The deposits held by the institutions surveyed ranged from \$17 million to \$9 billion; the average deposit amount was \$658 million.

Most of the surveyed institutions offered MMDAs, Super-NOWs, and a variety of CDs (see table 1). About eight out of every ten depositories had Super-NOWs and CDs with maturities of ninety-one days, one year, and two and one-half years. Every institution provided six-month CDs, but substantially fewer institutions wrote four-vear CDs.

Economist Paul R. Watro researches issues in banking for the Federal Reserve Bank of Cleveland. David Gaebler provided valuable research assistance for this project.

The views stated herein are those of the author and not necessarily those of the Federal Reserve Bank of Cleveland or of the Board of Governors of the Federal Reserve System

- 1. The Depository Institutions Deregulation and Monetary Control Act of 1980 calls for the removal of rate ceilings on all deposits, except demand deposits, by March 1986.
- 2. This is an estimated amount, derived from data collected by the Federal Home Loan Bank Board and the Board of Governors of the Federal Reserve System.
- 3. Rate ceilings and minimum-balance requirements for longer-term CDs (over 2½ years) were lifted in earlier years.
- 4. The Fourth Federal Reserve District includes all of Ohio, northern and eastern Kentucky, western Pennsylvania, and the panhandle of West Virginia

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Table 1 Deposit Account Pricing As of November 1983 Availability and terms **MMDA**<sup>a</sup> MMDA<sup>b</sup> Super-NOW 91-day CD 6-month CD 1-year CD 2½-year CD 4-year CD Institutions that offer account. % 97 94 85 88 78 79 54 With flat rate interest<sup>c</sup> 94 96 96 93 93 91 91 92 9 9 With tiered rate interest<sup>c</sup> 8 Flat rate paid, % 8.38 8.30 8.73 9.16 9.61 10.35 Average 7.19 10.15 6.80-9.25 8.25-9.25 8.75-9.70 7.10-9.25 6.00-8.83 8.95-10.50 7.25-10.80 7.00-11.24 Range Minimum balance required, \$ 2,545 2,952 2,921 1,754 1.874 748 711 714 Average 2,500-5,000 2,500-15,000 2,500-20,000 1-10,000 1-10,000 1-2,500 1-5,000 1-5.000 Range Institutions that charge 14 service fee, % 10 Monthly 2 Per check or transaction 11 a. A money market deposit account for individuals.

**Terms and Returns** 

The accounts. None of the accounts surveyed had an interest-rate ceiling. MMDAs and Super-NOWs, however, required an initial minimum deposit of \$2,500 and an aver- to type of account. 5 Some instituage monthly balance of \$2,500 in accordance with current regulations. MMDAs and Super-NOWs are according to deposit size.<sup>6</sup> In genhighly liquid accounts, used for savings and for transactions. Regulations limit MMDA holders to making no more than six preauthorized transfers per month, only three of which can be checks. Although the MMDA is available to individuals and businesses, reserve requirements are imposed only on business accounts.

b. A money market deposit account for businesses.

c. Percentage based on those that offered the account.

Super-NOW accounts offer unlimited check-writing capacity and impose transaction account reserve requirements. These accounts are available to individuals, proprietorships, and nonprofit organizations, but not to corporations.

CDs are less liquid than either MMDAs or Super-NOWs and are purchased by individuals and businesses. This savings instrument pays back the principal plus interest upon maturity. Depositors may

withdraw their money before the CD matures but are penalized by

doing so.

Interest rates. Interest rates varied among institutions and according tions paid a flat rate on all funds in a given account; others tiered rates eral, longer-term funds paid higher rates; four-year CDs paid the highest average annual flat rate-10.35 percent as of November 1983. The flat-rate difference between institutions for the same kind of account ranged from 90 basis points for 6-month CDs to 424 basis points for four-year CDs. Rate-sensitive customers thus can benefit from shopping around.

Several institutions provided financial incentives to hold deposit balances at higher than minimum required levels. While no firm paid higher rates for larger deposits in all of these accounts, about one out of seven tiered rates for at least one account. CDs and MMDAs were tiered more often than Super-NOWs and were typically tiered in two or three levels. Tiering institutions

commonly paid higher rates on CDs with balances over \$2,500 and \$10,000 and on MMDA balances over \$5,000 and \$10,000. Rate differentials ranged from 5 basis points to 125 basis points.

Some institutions paid lower interest rates and required larger deposit balances for MMDAs held by corporations. One out of every six institutions paid businesses a lower rate, ranging from 5 basis points to 100 basis points. The average annual rate for businesses in November 1983 was 8.30 percent, compared with 8.38 percent for individuals. This difference probably results from the cost of holding required reserves on corporate accounts. Prices and reserve requirements for CDs were the same for all holders.

Minimum requirements. Balance requirements varied according to the type of account and, to a lesser degree, from institution to institution. As a rule, balance requirements were inversely related to the length of time that deposits were required to remain in an account. For example, institutions imposed

5. Interest rates discussed in this article are simple annual rates; the method of compounding interest rates can alter the effective annual yield.

Table 2 Rates and Balance Requirements—Banks and Thrifts As of November 1983

Account	Average rate, percent	Minimum requirement, dollars
MMDA,		-
for individuals		
Thrifts	8.51	2,602
Banks	8.28	2,500
Difference	0.23 <sup>b</sup>	102
MMDA,		
for businesses		
Thrifts	8.49	2,602
Banks	8.15	3,259
Difference	0.34 <sup>b</sup>	-657ª
Super-NOW		
Thrifts	7.39	2,938
Banks	7.05	2,909
Difference	0.34 <sup>b</sup>	29
91-day CD		
Thrifts	8.80	1,759
Banks	8.69	1,750
Difference	0.11 <sup>b</sup>	9
6-month CD	V.22	
Thrifts	9.24	1,933
Banks	9.10	1,824
Difference	0.14 <sup>b</sup>	1,024
	0.14	103
1-year CD Thrifts	0.70	700
Banks	9.78 9.44	733
Difference	9.44 0.36 <sup>b</sup>	761
	0.30	-28
2½-year CD		
Thrifts	10.35	751
Banks	9.97	677
Difference	0.38 <sup>b</sup>	74
4-year CD		
Thrifts	10.68	736
Banks	10.01	695
Difference	0.67 <sup>b</sup>	41

a. Statistically significant at 10 percent level. b. Statistically significant at 1 percent level.

much lower balance requirements on longer-term CDs than on more liquid accounts. The minimumbalance requirement for CDs written for one year or more was, on average, less than \$750, and the majority of the institutions offering the one-year, two-and-one-half-year, and four-year CDs required a balance of only \$500. In contrast, balance requirements for MMDAs and Super-NOWs were typically the current regulatory minimum of \$2.500. A few institutions required as much as \$5,000 to open an MMDA and \$20,000 for a Super-NOW account.

Table 3 Rates and Balance Requirements-Large and Small Institutions

Account	Average rate, percent	Minimum requirement, dollars
MMDA,		
for individuals		
Large	8.37	2,500
Small Difference	8.37	2,500 0
MMDA, for businesses		
Large	8.19	3,571
Small	8.31	2,574
Difference	-0.12	997°
Super-NOW		
Large	6.87	3,015
Small Difference	7.31 -0.44 <sup>b</sup>	3,676
	-0.44	-661
91-day CD	8.72	1 220
Large Small	8.72	1,329 1,971
Difference	0.72	-642°
6-month CD		
Large	9.12	1,345
Small	9.17	2,128
Difference	-0.05	-783 <sup>b</sup>
1-year CD		
Large	9.73	571
Small	9.53	942
Difference	0.20°	-371°
2½-year CD	10.00	- m-
Large Small	10.23 10.04	575 812
Difference	0.19	-237
4-year CD		
Large	10.54	603
Small	9.89	1,043
Difference	0.65°	-440

a. Large institutions are those with more than \$1 billion in deposits: small institutions, less than \$100 million in deposits.

b. Statistically significant at the 5 percent level. c. Statistically significant at the 10 percent level.

Charges. While this survey did not address penalties or additional services, it did cover user and maintenance fees for MMDAs and Super-NOWs. We found that monthly service fees and transaction charges were quite uncommon, particularly for MMDAs. Less than 5 percent of the institutions imposed any fees for MMDAs, and only one out of every six institutions charged fees for Super-NOWs. Super-NOW fees ranged from \$1 to \$10 per month and from \$0.05 to \$0.25 per transaction.

Table 4 Rates and Balance Requirements—Market Concentration<sup>a</sup>

As of November 1983 Average Minimum requirement, dollars rate, Account percent MMDA. for individuals Concentration ratio < 50%8.45 2.500 Concentration ratio > 75%8.34 2.500 Difference 0.11 MMDA, for businesses Concentration 8.35 2.821 ratio < 50% Concentration ratio > 75% 8.28 3,026 Difference 0.07 Super-NOW Concentration 7.39 3,026 ratio < 50% Concentration 7.28 ratio > 75% 2,500 0.11 Difference 91-day CD Concentration 8.77 ratio < 50% 1,603 Concentration 8.72 1.906 ratio > 75% Difference 0.05 -3036-month CD Concentration ratio < 50% 9.18 1,746 Concentration 9.18 2.079 ratio > 75% Difference 0.00 -3331-year CD Concentration ratio < 50% 9.71 873 Concentration 9.45 ratio > 75% 917 Difference  $0.26^{b}$ -44 21/2-year CD Concentration ratio < 50% 10.33 829 Concentration ratio > 75%10.09 559 0 24 Difference 270

10.55

9.95

0.60

886

4-vear CD

Concentration

Concentration

ratio < 50%

ratio > 75%

Difference

<sup>6.</sup> Tiered interest rates offered on a given account increase with the size of the deposit. A depository institution that offers tiered rates on its MMDAs, for example, might pay one rate for a \$10,000 deposit, a higher rate for a \$15,000 deposit, and still a higher rate for a \$20,000 deposit.

a. The concentration ratio used here is the percentage of deposits held by the four largest banks and thrifts in the market. A banking market is approximated by a county for a rural institution and an SMSA for an urban institution.

b. Statistically significant at the 5 percent level.