

The New Bank Deposit Markets: Goodbye To Regulation Q

*Paul Calem**

The centerpiece of financial market deregulation in recent years has been the dismantling of Regulation Q interest rate ceilings and minimum balance requirements on bank deposit accounts. Not surprisingly, it has resulted in increased interest earnings for small savers and lower minimum balance requirements on small saver's certificates of deposit. Deregulation has also enabled banks to hold their ground against nonbank competitors. In addition, the gradual removal of Regulation Q has had some con-

sequences that were somewhat more indirect. The lifting of Regulation Q ceilings on savings accounts prompted more efficient, cost-related pricing of checking and other account services. And it has led to banks offering more varieties of accounts, which in turn has increased the complexity of customer decisionmaking.

As the process of dismantling Regulation Q comes to completion early in 1986, we can survey in some detail how deregulation has affected and will affect the activities of banks and their deposit customers. What are the features of the deregulated deposit markets, and how did they evolve? Can we infer what new features lie ahead? How are bank customers to make the choices that best suit their needs?

*Paul Calem is an Economist in the Banking Section of the Research Department of the Federal Reserve Bank of Philadelphia.

HISTORY AND DEVELOPMENT OF REGULATION Q

Federal regulation of commercial bank deposit accounts dates back to the 1930s. The Banking Act of 1933 prohibited the payment of interest on demand deposits at Federal Reserve member banks, and authorized the Federal Reserve to establish interest rate ceilings on savings and time deposits at member banks, which the Fed did in its Regulation Q. Likewise, in the Banking Act of 1935, these restrictions were extended to insured nonmember banks, under the authority of the Federal Deposit Insurance Corporation. Rate regulation was instituted with the aim of restraining interest rate competition for deposits, which was thought to increase banks' costs and thus lead them to invest in high-yielding, risky assets. This practice was viewed as a threat to stability in the financial sector; indeed, bank losses and failures subsequent to the stock market crash of 1929 were thought to be due in large part to commercial banks holding risky assets.

For most of the time between 1933 and 1966, rate ceilings were above market rates and thus were not binding.¹ After 1966, during a period of rising interest rates, these ceilings became (and for the most part remained) binding constraints. In fact, due to the ceiling on deposit rates, many depositors withdrew their funds from banks and thrifts and lent directly to borrowers, a phenomenon known as "disintermediation."² The loss of deposits by thrifts and commercial banks limited the availability of

credit to home buyers and to small and medium-sized businesses, who did not have direct access to capital markets.

Recognizing these problems, and also concluding that interest rate ceilings were essentially like a tax on small savers, the "Hunt Commission" in 1972 recommended to Congress that the ceilings on time and savings deposits be gradually abolished.³ As the political environment became increasingly favorable toward deregulation, some initial steps toward eliminating rate ceilings were taken. In 1973, the Federal Reserve abolished rate ceilings on large certificates of deposit (over \$100,000) and on smaller certificates over four years' maturity. In 1974, as an "experiment" in deregulating demand deposits, Congress authorized depository institutions in Massachusetts and New Hampshire to offer NOW (Negotiable Order of Withdrawal) Accounts—interest-earning personal checking accounts.⁴ In 1978, in a gesture to small savers, the federal regulatory agencies authorized "Money Market Certificates," and in December, 1979, "Small Saver Certificates" were authorized. Money Market Certificates were 26 week certificates, with a minimum denomination of \$10,000, and an interest ceiling indexed to the 26 week Treasury bill. Small Saver Certificates had a 30-48 month maturity, no (regulatory) minimum denomination, and an interest ceiling indexed to the 30 month Treasury bill.⁵

Staff Economic Study #99, Board of Governors of the Federal Reserve System, (1978).

³See, "The Report of the President's Commission on Financial Structure and Regulation (Dec. 1972)," Committee on Banking, Housing, and Urban Affairs, U.S. Senate, August 1973.

⁴The "NOW experiment" was extended to all of New England in 1976, and to New York in 1978, and is also available to institutions that are not-for-profit and operated primarily for religious, philanthropic, educational, or similar purposes.

⁵The ceiling on Money Market Certificates was adjusted weekly; the ceiling on Small Saver Certificates was adjusted monthly.

¹The ceilings on savings and time deposits were originally set at 3 percent in 1933; by the end of 1965, they had been increased to 4 percent on savings deposits and 5-1/2 percent on time deposits.

²Disintermediation was accompanied by the growth of the market for commercial paper during the late 1960s and early 1970s. Commercial paper allows savers to lend directly to firms without the intermediation of banks. For an examination of the extent to which rate ceilings induced disintermediation in the late 1960s and early 1970s, see Edward F. McKelvey, "Interest Rate Ceilings and Disintermediation,"

Despite these actions, the remaining ceilings (and minimum balance regulation) on time and savings accounts created inequities, because more savings options paying market rates were available to large savers than to small savers.⁶ The remaining ceilings also discouraged customers from saving, since they limited the total number of savings options paying market rates. Moreover, between 1979 and 1981, the rapid proliferation of money market mutual funds managed by nonbank financial firms engendered a new funding problem for banks. In increasing numbers, depositors placed their money in these funds, which offer check-writing privileges and are not subject to an interest rate ceiling.⁷ Congressional concern with this state of affairs resulted in comprehensive legislative action establishing a commitment to dismantle Regulation Q.

Congress passed two separate pieces of regulatory reform. First, the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) authorized banks nationwide to offer NOW Accounts, and established the Depository Institutions Deregulation Committee (DIDC) to preside over the phaseout and ultimate elimination, by 1986, of Regulation Q ceilings and minimum balance requirements on time and savings deposits. Second, the Garn-St.

Germain Act of 1982 permitted depository institutions to offer an account that is "equivalent to and competitive with money market mutual funds." The DIDC was empowered to set regulatory requirements on such an account. This made it possible for banks to introduce Money Market Deposit Accounts (MMDAs) in mid-December 1982. These savings-type accounts pay market interest rates and allow limited check-writing privileges. The DIDC subsequently authorized Super-NOWs, which are noncommercial checking accounts, paying market interest rates.

The DIDC has completed most of its assigned task. Interest rate ceilings and minimum balance requirements on most time deposits have been removed. The minimum balance requirements that the DIDC initially imposed on MMDAs and Super-NOWs have since been reduced. All that remains on the DIDC's agenda is to remove the remaining minimum balance requirements on MMDAs, Super-NOWs, and 7-31 day time (by January 1, 1986), and to remove the interest rate ceilings on passbook savings accounts and NOW accounts (by March 31, 1986).

Some legal restrictions on bank deposit accounts will remain even after the DIDC's work is completed. For one thing, banks will still be unable to pay interest on the demand deposits (regular checking) of their customers and only noncommercial customers will be eligible for NOW and Super-NOW accounts. Second, the federal regulatory authorities may continue to require minimum withdrawal penalties on time deposits. Third, barring action by the Fed Board of Governors, Regulation Q will continue to place a \$150,000 limit on non-personal savings deposits. Fourth, the Federal Reserve's Regulation D will continue to affect the shape of bank deposit markets. Regulation D requires all depository institutions to maintain reserves, in vault cash or at Federal Reserve banks, equal to a percentage of total transaction account and non-personal time and savings account deposits. A transaction account is defined to be an account from which more than three pre-authorized or

⁶Individuals with less than \$10,000 to save could not, (since the minimum denomination was raised in 1970), purchase Treasury bills; neither could they purchase Small Saver Certificates. Savers with less than \$100,000 available could not purchase market-rate certificates of deposit.

⁷Money market funds are savings vehicles that pool the resources of small savers and invest in money market instruments, such as Treasury bills, commercial paper, and large CDs. The number of money market mutual funds more than doubled, from 76 to 159, between 1979 and 1981. The total assets of these funds more than quadrupled, from \$45 to \$182 billion. (See G.G. Munn and F.L. Garcia, *Encyclopedia of Banking and Finance*, Banker's Publishing Co., Boston, 1983, p. 609.) Much of this money found its way back into the banking system via large certificates of deposit; however, having to raise funds in this indirect way was costly to banks.

automatic transfers are allowed per month.⁸ (An exception is made for MMDAs, which are not considered transaction accounts, so long as no more than six such transfers, three by check, are allowed per month). Reserve requirements will reduce the value of checking account balances to a bank, and they correspondingly will reduce the rate of interest that a bank will be willing to pay on a deregulated checking account.

THE SHAPE OF DEREGULATED BANK DEPOSIT MARKETS

Bank deposit markets have been affected by deregulation in several ways. Some of these are obvious; for example banks can now pay higher rates on deposits, which has stemmed the flow of funds out of the banking system.⁹ Some other consequences of deregulation require more explanation; for example, banking markets are now much more differentiated, and banks now impose higher service charges. The economic reasons that underlie these responses also point to the direction in which bank deposit markets will be moving when deregulation is completed.

Prior to deregulation, the features that distinguished one type of deposit account from another were determined primarily by regulation. With the dismantling of Regulation Q, the distinguishing features of the various types of accounts are now determined largely by the banks themselves. For instance, interest rates, minimum balance requirements (in excess of \$1000), and service charges on MMDA and Super-NOW accounts are freely determined by the market. In addition, MMDAs are distin-

guished from Super-NOWs by virtue of the Federal Reserve's Regulation D, which exempts personal MMDAs from reserve requirements, so long as a depositor is allowed to make no more than six pre-authorized or automatic transfers from the MMDA. Figure 1 summarizes the remaining regulatory requirements, and the variables controlled by banks, for each type of deposit account, as well as the changes in requirements after 1986.

As reported in Figure 1, banks generally provide three types of personal checking accounts. "Regular checking" accounts pay no interest; "NOW" accounts pay a regulatory maximum rate of 5-1/4 percent; and "Super-NOWs" are not subject to a rate ceiling. The three types of accounts are also distinguished by the minimum balances required to earn interest and the minimum balances required to avoid service charges. Super-NOWs require higher minimum balances to avoid charges or earn interest than NOWs, which require higher minimum balances than regular checking accounts.

Savings accounts can also be divided into three categories: MMDAs, passbook savings, and time deposits. Time deposits pay market rates and, unlike MMDAs and passbook savings, are for set terms (for example, six months, or one year) and carry early withdrawal penalties. Passbook savings accounts pay a regulatory maximum rate of 5-1/2 percent. MMDAs are distinguished from passbook accounts in that MMDAs pay market rates and are subject to higher minimum balance requirements.

The greater an individual bank's ability to determine the features that, in the customer's eyes, distinguish one type of account from another, the greater its ability to differentiate its deposit products from those of other banks. In fact, the dismantling of Regulation Q has fostered product variety among banks. The pricing and characteristics of accounts and services are far from identical among banks in any given market.

For example, Figure 2 (p. 24) summarizes the pricing of NOWs, Super-NOWs, and MMDAs

⁸Pre-authorized or automatic transfers include transactions such as checks, telephone transfers, and automatic bill payments or loan payments. Automatic loan payments at the same institution are not included, nor are withdrawals in person or by ATM.

⁹For a discussion of how deposits returned to the banking system, see Gillian Garcia and Annie McMahon, "Regulatory Innovation: The New Bank Accounts," *Economic Perspectives*, Federal Reserve Bank of Chicago, (March/April 1984), pp. 12-23.

FIGURE 1
THE END OF REG Q:
Changes in Regulated and Bank-Controlled Features of Accounts

ACCOUNT	REGULATORY REQUIREMENTS	FEATURES CONTROLLED BY BANK
Regular checking	<ul style="list-style-type: none"> • Interest rate: 0% 	<ul style="list-style-type: none"> • Service charges and minimum balance to avoid service charges
NOW	<ul style="list-style-type: none"> • Interest rate: 5¼% • Non-commercial only 	<ul style="list-style-type: none"> • No limit after Jan. 1, 1986 • Service charges and minimum balance to avoid services charges • Minimum balance to earn interest or avoid penalty
Super-NOW	<ul style="list-style-type: none"> • Minimum balance: \$1000 • Non-commercial only 	<ul style="list-style-type: none"> • No limit after Jan. 1, 1986 • Service charges and minimum balance to avoid service charges • Minimum balance to earn interest or avoid penalty • Interest rate
Passbook Savings	<ul style="list-style-type: none"> • Interest rate: 5½% • Maximum of 3 pre-authorized transfers per month 	<ul style="list-style-type: none"> • No limit after March 31, 1986 • Service charges and minimum balance to avoid service charges • Minimum balance to earn interest or avoid penalty
MMDA	<ul style="list-style-type: none"> • Minimum balance: \$1000 • Maximum of 6 pre-authorized transfers per month 	<ul style="list-style-type: none"> • No limit after Jan. 1, 1986 • Minimum balance required to earn interest or avoid penalty • Maximum withdrawals per month • Interest rate
Time Deposits		
7-31 Day	<ul style="list-style-type: none"> • Minimum balance: \$1000 • Minimum early withdrawal penalty: the greater of (1) all interest that could have been earned during a period equal to one-half the maturity (2) all interest earned on the amount withdrawn during the current term of the deposit * 	<ul style="list-style-type: none"> • No limit after Jan. 1, 1986 • Minimum balance to earn interest or avoid penalty • Additional early withdrawal penalty • Interest rate
32 Day-1 Year	<ul style="list-style-type: none"> • Minimum early withdrawal penalty: 1 month's simple interest * 	<ul style="list-style-type: none"> • Minimum balance to earn interest or avoid penalty • Additional early withdrawal penalty • Interest rate
Greater than 1 Year	<ul style="list-style-type: none"> • Minimum early withdrawal penalty: 3 month's simple interest* 	<ul style="list-style-type: none"> • Minimum balance to earn interest or avoid penalty • Additional early withdrawal penalty • Interest rate

*Regulators may or may not decide to continue these requirements.

FIGURE 2

Bank	Number of ATMs Phila./Phila. MSA	Service Charges		Minimum Balance to Avoid Service Charges		Minimum Balance to Earn Interest		Additional Restrictions on MMDA
		NOW	Super-NOW	NOW	Super-NOW	Super-NOW	MMDA	
I.	112/302	\$5.00/mo \$.25/ck	N/O	\$1500	N/O	N/O	\$1000 (0)	none
II.	28/32	N/O	\$5.00/mo. \$.15/ck.	N/O	\$1000	\$1000 (0)	\$1000 (5¼)	no more than 3 automatic or pre-authorized transfers, including checks
III.	80/280	\$3.00/mo \$.25/ck. \$.25/ATM transaction	\$3.00/mo \$.25/ck. \$.25/ATM transaction	\$1000	\$2500	\$1000 (5¼)	\$1000 (5¼)	no more than 6 auto- matic, pre- authorized, or ATM withdrawals or transfers per month
IV.	80/280	\$5.00/mo. \$.15/ck. \$.10/ATM transaction	\$1.00/mo. \$.15/with- drawal	\$1000	\$15,000	\$2500 (5¼)	\$2500 (5¼)	no more than 6 with- drawals/mo.
V.	80/280	\$3.00/mo. \$.25/ck. \$.10/ATM transaction	N/O	\$1200	N/O	N/O	\$1000 (5¼)	\$.50 per withdrawal over 6/mo.
VI.	32/60	\$1.50/mo. \$.25/ck. \$.20/ATM transaction	\$3.00/mo. \$.25/ck. \$.20/ATM transaction	\$1200	\$5000 (AB)	\$2500 (5¼)	\$1000 (5¼)	no more than 6 transfers/ mo. to checking account
VII.	80/280	\$7.00/mo.	\$7.00/mo.	\$1000	\$2500	\$2500 (5¼)	\$1000 (5¼)	\$.50 per trans- action over 10/ mo.
VIII.	26/44	\$6.00/mo. \$.10/ck.	\$4.00/mo. \$.25/ck.	\$1200	\$3500 (AB)	\$1000 (5¼)	\$1000 (5¼)	no checks

Notes: N/O means such an account is not offered by the bank.

(AB) denotes average balance requirement.

(0) or (5¼) denotes rate earned when MMDA or Super-NOW balance falls below minimum.

Data as of Jan. 1, 1985

by eight Philadelphia area banks. As this survey indicates, banks differentiate their deposit products in a number of ways. First, some banks provide more account-related services (for example, more ATMs, or automated teller machines) but require a higher minimum balance to avoid fees. Second, some banks provide MMDAs with stricter withdrawal limitations or higher minimum required balances but with higher rates. Third, some banks charge relatively high fees per transaction, but impose relatively low monthly fees on checking accounts. Fourth, a number of banks charge per-transaction fees for ATM and check transactions, while others charge only for checks. Finally, some banks charge relatively low fees on a Super-NOW account but require a relatively high minimum balance to avoid the fees.

THE BANKER'S PERSPECTIVE

The trend towards providing deposit customers with more specialized products, and towards cost-related pricing of deposit products, will be carried to completion as deregulation enters its final stage. Why have banks responded to deregulation in this way?

Product Differentiation. Banks recognize that individual customers differ in how they would respond to a given trade-off: for example, a trade-off between monthly fees and per-transaction fees. Suppose that "First Bank" charges \$3.00 per month plus .25 per check for a personal checking account, while its rival, "Second Bank," charges \$4.50 per month plus .05 per check. Clearly, customers who average only a few check transactions per month would prefer First Bank, while those who write a lot of checks would prefer Second Bank. Another such trade-off is between account restrictions and interest rates. For instance, suppose that First Bank provides an MMDA that is subject only to the regulatory limitation of six pre-authorized or automatic transfers per month, while Second Bank provides an MMDA with a slightly higher rate but stricter withdrawal limitations. Then those customers who require easier access to their

funds will choose First Bank, while those who are willing to accept more limitations are rewarded by a higher rate at Second Bank.

By choosing a particular fee schedule or set of requirements, a bank can choose the type of customer it will serve. Moreover, banks often find it worthwhile to specialize in this way. It may be more cost-efficient for a bank to specialize; for instance, administrative and accounting costs may prevent a bank from offering its customers a choice of fee schedules for a given type of account. Or, for technological reasons, the bank may have no choice but to specialize. For instance, a bank cannot simultaneously serve customers who prefer a large number of ATMs along with customers who prefer fewer ATMs and lower service charges. Returning to our example, since First Bank's pricing structure favors a customer who writes few checks, it becomes worthwhile for Second Bank to seek to attract a customer who writes a lot of checks. For instance, suppose Joe writes four checks per month, and Bill writes twelve checks per month, and suppose that handling Joe's checking account costs a bank \$4.00 per month, while handling Bill's account costs \$5.00 per month. First Bank's fee schedule of \$3.00 per month plus .25 per check is clearly more favorable to Joe, in the sense that Joe would be charged precisely his cost to the bank, while Bill would have to pay fees in excess (by \$1.00) of his cost to the bank. If Second Bank were to compete directly with First Bank by matching its pricing structure, prices would be driven down, resulting in a common fee structure of, say, \$2.50 per month plus .25 per check. In this case, both banks would break even, but customers like Bill would be subsidizing customers like Joe.¹⁰

¹⁰We are assuming that each bank has an equal number of customers of each type. A customer like Joe would be charged $\$2.50 + 1.00 = \3.50 , while a customer like Bill would be charged $\$2.50 + \$3.00 = \$5.50$. The total received from both would be \$9.00, which equals the total cost of both. However, since it costs the bank \$5.00 to service Bill, who actually pays \$5.50, whereas Joe pays \$3.50 for bank services that cost \$4.00, Bill is subsidizing Joe.

Second Bank is better off differentiating its product, charging a fee schedule of \$4.50 per month plus .05 per check. This attracts customers like Bill and leads to a *segmented* market, with customers like Joe remaining with First Bank. Note also that this outcome is more efficient; each customer pays fees approximately equal to his cost, and no customer pays less than his cost; that is, no customer subsidizes another. This example illustrates a general principle: product differentiation leads to a more efficient treatment of bank customers.

Another type of product differentiation, not between banks but within a bank, arises in connection with MMDAs and Super-NOWs. The reason most banks offer both MMDAs and Super-NOWs, with a sizable rate differential between the two types of accounts, is not immediately obvious.¹¹ The rate differential is

¹¹A survey by the Federal Reserve Bank of Atlanta found, on average, a one percentage point (one hundred basis points) spread between rates for MMDAs and Super-NOWs. See David Whitehead, "MMDAs and Super-NOWs: The Record So Far," *Economic Review*, Federal Reserve Bank of Atlanta, (June 1983), pp. 15-23.

largely due to differential reserve requirements. A dollar in an MMDA deposit is worth more to a bank than a dollar in a Super-NOW deposit, since the bank must hold reserves on the latter. If banks offered only MMDAs, customers could complement an MMDA with a regular checking account, and transfer funds between accounts when necessary. Such an arrangement would serve the same purposes as a Super-NOW and would not be of great inconvenience. One would think, therefore, that banks would offer MMDAs without offering Super-NOWs, on which they always have to hold reserves.

However, banks find it worthwhile to offer both Super-NOWs and MMDAs, as a form of product differentiation. When faced with a choice between an MMDA, which must be complemented with a checking account, and a Super-NOW, which pays a lower rate, customers who maintain relatively small average balances or who face a fairly unpredictable expenditure pattern will prefer the Super-NOW while others will prefer the MMDA. [See DEPOSITOR CHARACTERISTICS AND THE CHOICE BETWEEN AN MMDA AND SUPER-NOW.] Customers who maintain larger, less volatile

DEPOSITOR CHARACTERISTICS AND THE CHOICE BETWEEN AN MMDA AND A SUPER-NOW

Consider a customer, Frank, who is choosing between an MMDA/regular checking combination and a Super-NOW. The advantage to Frank of the MMDA/regular checking combination, (that is, two accounts) is that the interest rate on the MMDA will be higher than the interest rate on the Super-NOW. The disadvantage is that, because the MMDA allows only limited check-writing or withdrawal privileges, Frank may need to transfer funds from the MMDA into his regular checking account to cover some check payments. This can be somewhat inconvenient or costly.

All other things equal, the larger is Frank's average balance in the MMDA, the more he would benefit from earning the higher MMDA rate. On the other hand, the more uneven or irregular Frank's pattern of expenditures, the more he would be inconvenienced by the withdrawal restrictions on the MMDA. That is, if Frank has an orderly pattern of expenditures, he can regularly transfer funds from an MMDA into a regular checking account to cover his payments, at minimal inconvenience. However, if Frank's expenditures are unplanned and irregular, transferring money between accounts to cover payments can require more frequent and inconvenient trips to the bank or teller machine. (Telephone transfers are ruled out—see footnote 8.) If Frank's bank imposes limitations on total withdrawals, then Frank also faces an increased risk of exhausting his allotted number of withdrawals. Thus, whether or not a customer like Frank will choose an MMDA/regular checking combination or a Super-NOW, depends upon the size of his average balance and the volatility of his expenditures.

balances are more valuable to a bank, since, all other things equal, a bank prefers a more stable deposit base. By offering both MMDAs and Super-NOWs, banks can sort out the less valuable customers, who prefer Super-NOWs, from the more valuable customers, who prefer MMDAs, and thus will be willing to pay higher rates on MMDAs than they would otherwise. Competition compels individual banks to maintain the distinction between MMDAs and Super-NOWs and provide their more valuable customers with higher interest payments. The result is product differentiation; in this case, differentiation occurs within a given bank's customer base.

Increasing Service Charges. Another development is the increase in service charges on personal checking accounts that accompanied the deregulation of savings deposits. Prior to deregulation, banks charged very little or nothing for services on personal checking accounts, and it was originally believed that the interest rate ceiling on personal checking accounts was the reason why.¹² Since banks could not compete for deposits on the basis of interest paid, they would compete by paying "implicit interest." However, while the interest rate ceiling on NOW accounts remained in effect, the deregulation of time and savings deposits and the introduction of money market accounts was accompanied by substantial increases in service charges on personal checking accounts. This suggests another reason for the payment of implicit interest prior to deregulation. Banks realized that the typical retail deposit customer requires from a bank not only some interest-bearing account as a savings vehicle, but also some checking services. Competition for customers prior to deregulation took the form of providing checking services free, or below costs. In other words, the payment of implicit interest on checking was related to the fact that banks

provide savings and checking services to customers as part of a single package.

With deregulation of time deposit rates and the introduction of money market accounts, banks could compete for customers with the interest rates on savings. Banks no longer need to compete for customers by charging service fees that do not cover costs. Savers who can lock up a part of their funds for a while can receive competitive rates of interest on time deposits. Savers who need to keep a part of their funds accessible, but who can maintain a \$1000 balance requirement can be rewarded through competitive rates of interest on MMDA or Super-NOW deposits. Moreover, many of those customers who choose to use a NOW account (or a passbook savings account) should be maintaining an appreciably smaller balance than the typical Super-NOW customer. These small balance customers might not receive more than the current NOW rate even when the NOW ceiling is lifted.

This analysis has some implications for what will happen when the remaining Regulation Q rate ceilings and minimum balance requirements are removed. On the one hand, there will be little change, if any, in service charges, which now mostly reflect bank costs. On the other hand, it is possible that when these restrictions are lifted, some banks will offer intermediate accounts with rates and minimum balance requirements between those that currently characterize NOWs and Super-NOWs. In fact, there may be a blurring of account definitions, with the distinction between NOWs and Super-NOWs becoming somewhat arbitrary. Similarly, the distinction between MMDAs and passbook savings accounts may become blurred. However, the distinction between MMDAs and Super-NOWs will remain, as this distinction is due ultimately to the Regulation D rules governing reserves.

In sum, deregulation has enabled banks to price their services more efficiently, and to differentiate their products more effectively. Product differentiation, in turn, has enabled the

¹²See, for instance, Herb Taylor, "The Return Banks Have Paid on NOW Accounts," this *Business Review*, (July/August 1984), pp. 13-23.

banking industry to serve the different needs of various types of customers.

THE CUSTOMER'S PERSPECTIVE

Because deregulation has resulted in increased product variety in bank deposit markets, the discriminating customer can find accounts and services that are tailored to his particular needs. As we have seen, a customer's choice of a bank is important because it determines the fee schedules he will pay, the volume of services he will be provided, and so forth. Beyond that, deregulation has expanded the customer's set of options within any given bank. How might customers decide among these additional options? Will the removal of the remaining rate ceilings in 1986 further affect the customer?

The introduction of MMDA and Super-NOW accounts enables customers to earn market rates of interest on their transactions balances, either with a single account, the Super-NOW, or by combining accounts, such as an MMDA plus a regular checking account or a NOW account. For many customers, it may not be worthwhile or feasible to maintain both an MMDA and a Super-NOW account. The relatively high minimum balance required to avoid service charges on a Super-NOW can make it unattractive for use as a checking account in combination with an MMDA. The trade-off these customers face in choosing between an MMDA and a Super-NOW is the familiar one between accessibility and interest earnings. Although Super-NOWs offer lower rates than MMDAs, they also offer unlimited checking and the convenience of dealing with only one account. With MMDAs, customers earn more interest, but face regulatory limits (that will not be removed in 1986) on the number of transactions they can make, in addition to other withdrawal restrictions banks often impose.

Those customers who decide to open an MMDA rather than a Super-NOW face a choice between a regular checking account and a NOW account. In deciding between these two options, a customer wants the account combination that

gives him the lowest *net cost*, that is, *total cost* less the interest he expects to earn. The total cost consists of the cost of maintaining any minimum balances required to earn interest, plus the cost of either paying service charges or maintaining a minimum balance to avoid charges. Maintaining a minimum balance on a transaction account is costly, because the balance could be earning a higher rate in a money market account or a time deposit.

Time deposits are accounts that have also been made widely accessible to small depositors, with the lifting of rate ceilings and the lowering of minimum balance requirements. These accounts earn market rates of interest on funds deposited for a fixed length of time. Therefore, another choice facing today's depositor is how much of his funds he should place in a time deposit, and how much he should place in an MMDA or Super-NOW. This decision involves a clear-cut trade-off between accessibility and interest earnings. A time deposit pays a higher rate than either an MMDA or a Super-NOW. However, it is less accessible because there is a penalty if funds are withdrawn before the term of the deposit expires. [See THE CUSTOMER'S SAVINGS DECISION: MMDAs AND TIME DEPOSITS.]

The final phase of deregulation, the removal of the NOW and passbook savings rate ceilings in 1986, will not substantially affect customer choices in bank deposit markets. The customer will be confronted by the same basic trade-offs, and the same considerations will govern a customer's choice of accounts. The final phase of deregulation may result in the availability of money market accounts requiring lower minimum balances to earn interest and Super-NOWs requiring lower minimum balances to earn interest and avoid service charges. (These accounts can be expected to have lower interest rates.) One consequence may be that more customers may find a money market account/Super-NOW account combination a good alternative.

Deregulation, no doubt, has increased the

THE CUSTOMER'S SAVINGS DECISION: MMDAs AND TIME DEPOSITS

For example, suppose that Frank has \$10,000 currently available for savings, although he may need to spend some part of those funds at some later date. Suppose that Frank is choosing how to divide his funds between a one-year time deposit at 9 percent and an MMDA at 7 percent. For each \$1000 Frank places in a time deposit rather than a money market account, he will earn an additional \$20 each year in interest. However, for every \$1000 he places in the time deposit, he will lose accessibility. That is, he would have to pay a penalty if he were to use the \$1000 prior to the maturity date of the deposit. With each additional \$1000 Frank places in the time deposit, the risk that he would have to make an early withdrawal becomes more acute. At some point it will no longer be worthwhile to Frank to add to the deposit. At this point, if he were to add another \$1000, he would, in all likelihood, need to withdraw it prematurely and incur the penalty. Moreover, at this point, his expected loss would be greater than \$20. As he expects to lose more than he would gain by continuing to add to the time deposit, he would leave the remaining amount in a money market account.

complexity of customer decisionmaking. However, the increased complexity serves a useful purpose, allowing customers to make the choices that best suit their needs. As long as customers make informed and deliberate choices, banks will be encouraged in their efforts to segment their markets. Moreover, as long as customers are willing to seek out the deposit products that they find most satisfactory, banks will have the incentive to design and price their products competitively.

CONCLUSION

The dismantling of Regulation Q has had a variety of consequences for banks and their customers. Banks have greater freedom to determine the pricing and characteristics of their deposit products, and product variety in bank deposit markets has increased correspondingly. The resulting product differentiation has enabled more efficient treatment of depositors. A related type of product differentiation that has resulted from deregulation involves the creation of new types of accounts that differ with respect to the kinds of restrictions that apply to them. The foremost examples of such accounts are MMDAs

and Super-NOWs. The distinction between MMDAs and Super-NOWs enables customers who maintain larger, less volatile balances to earn higher interest payments.

The dismantling of Regulation Q ceilings on savings accounts has led to increased fees for checking services. These fees now closely reflect the cost of checking services. In other words, checking services are being priced more efficiently. Remaining disparities, if any, are likely to be eliminated when the dismantling of Regulation Q is finally completed.

Deposit market deregulation is entering its final phase, having already accomplished the elimination of most Regulation Q constraints on interest payments to small savers. Customer decisionmaking has become more complex as a result of deregulation. Product differentiation and the introduction of new accounts present customers with a long series of trade-offs. The demise of Regulation Q will enable banks to respond effectively to the different needs of various types of customers, and to price their services efficiently, so long as customers make informed and deliberate choices.

Charting Mortgages



This newly revised pamphlet gives highlights of many mortgage options but does not provide detailed descriptions. Copies are available without charge by sending a self-addressed envelope to the Department of Consumer Affairs, Federal Reserve Bank of Philadelphia, P.O. Box 66, Philadelphia, PA 19105.

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**Business Review
Federal Reserve Bank of Philadelphia
Ten Independence Mall
Philadelphia, PA 19106**

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