

# Monetary Policy Without Regulation Q

The financial system in the United States has changed dramatically over the last two decades. New financial instruments have been introduced, financial institutions generally have assumed broader roles in servicing customers, and geographic barriers to customer base have eroded. Several factors have worked together in bringing about these changes, but one of the most important factors contributing to innovation in financial instruments has been Regulation Q interest rate ceilings. Over the last twenty years, these ceilings have constrained deposit interest rates well below market rates during several periods, in each case providing an environment in which new financial instruments have flourished. The Depository Institutions Deregulation and Monetary Control Act of 1980 (MCA) requires that Regulation Q interest rate ceilings on deposits be phased out by April 1986. How will this deregulation affect the characteristics of deposits at banks and other depository institutions? Will it call a halt to the recent trend toward increased financial innovation? In this article, it is argued that the variety of financial instruments, in fact, should *increase* and a substantial shift of funds into the new instruments will occur. As interest rate ceilings are phased out, more deposit liabilities will pay close-to-market rates of interest. As a result, growth of deposits will become less sensitive to changes in market rates. And these changes will limit the Federal Reserve's ability to influence the growth of the monetary aggregates using traditional policy instruments.

The analysis starts with a review of the economic effects of interest rate ceilings. It then focuses on the changes in depository liabilities and economic behavior that may occur as Regulation Q ceilings are

phased out. Finally, the implications for Federal Reserve policy are discussed.

## Effects of interest rate ceilings

In a competitive world without regulations, one would expect that the types of assets that banks hold, the types of liabilities banks issue, and the rates at which they are issued would depend upon (1) the financing needs of borrowers, (2) the investment preferences of depositors, and (3) the risk that banks are willing to assume in their roles as intermediaries. Regulation Q-type interest rate ceilings on transactions accounts, passbook savings accounts, and small time deposits prevent banks from paying a competitive rate of interest when market rates exceed the ceiling rates. When this occurs, the behavior of banks, depositors, and borrowers changes. First, banks who can earn a market return on the funds in such deposits will try to attract deposits by offering nonmonetary compensation to their depositors to offset the restrictions on paying explicit interest. Services such as monthly checking account statements and the return of canceled checks, conveniences such as extensive bank branch networks, fancy lobbies, and premiums such as toasters and radios are examples of this type of compensation. However, banks' ability to adjust the level of such nonmonetary compensation is limited, and the costs involved in changing this form of remuneration render it relatively insensitive to changes in market rates of interest.

If depositors do not feel fully compensated, they will seek to lend directly to borrowers. The development of the commercial paper market in this country is an example of this sort of phenomenon. Depositors

will choose to lend directly to borrowers when market rates of interest exceed the overall return on deposits by more than the added cost they face in lending directly to borrowers. This added cost includes the costs of finding and assessing the credit risk of potential borrowers, the credit risk itself, and possibly legal fees. Given the economies of scale associated with these costs, the small investor may not find cost-effective investment alternatives to deposits. Further, many borrowers find it least costly to issue only relatively large-denomination debt instruments. For both of these reasons, the small investor may have no choice but to hold deposits even when deposit rates are well below market rates.

Finally, when the opportunity cost of holding regulated deposits gets sufficiently high and depositors seek unregulated investment alternatives, the incentive to create such alternatives increases. Nonbank intermediaries, not subject to interest rate regulations, spring up. Money market mutual funds are a case in point. (Because money market funds offer "shares" in a portfolio of assets, not "deposits", they are not banks subject to rate ceilings.) Further, depository institutions will try to create new liability instruments not subject to interest rate restrictions. The introduction of Eurodollar certificates of deposit (CDs) and retail repurchase agreements (RPs) fits this characterization.

In summary, when market rates of interest surpass regulated deposit rates, banks will offer depositors non-monetary forms of compensation or new investment instruments not subject to interest rate ceilings. Nevertheless, some depositors may choose to lend directly to borrowers or to nonbank intermediaries.

### **The effects of phasing out Regulation Q rate ceilings**

**Checkable accounts** At present, depository institutions offer checkable deposits on which the interest rate is limited: demand deposits pay no interest and negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts can pay up to 5¼ percent. As discussed, banks offer noninterest forms of compensation to attract checkable deposits. And most of these services and conveniences serve to enhance these deposits as a medium of exchange. The degree to which such compensation is perceived by the depositor to be adequate when measured against market rates of interest depends upon several factors, such as the volume of transactions effected through the account, the level of prevailing market rates, and the rate at which the depositor's marginal income is taxed. (Because checking services and conveniences are not taxed, such forms of compensation should be compared with the aftertax yield on alternative deposits in assessing relative yields across deposits.) Regardless

of what the perceived relative return on checkable deposits may be, households hold them because they provide a safe, generally accepted medium of exchange.

In contrast, money market mutual funds have grown in popularity because they offer the combined features of a medium of exchange *and* a highly liquid investment asset paying a market rate of interest. (The major restriction on the use of money market fund redemption checks as a medium of exchange is the minimum denomination—most often \$500—for which checks may be written.) Some depository institutions have introduced alternatives to money market funds to their retail customers. But, given current regulations, such alternatives tend to be rather complex arrangements and thus far have had only limited acceptance.<sup>1</sup>

When Regulation Q interest rate ceilings are eliminated, depository institutions will be free to offer deposits which are competitive with current nondeposit alternatives.<sup>2</sup> As a result, the variety of checkable deposits is likely to increase and may range in nature from accounts which pay little or no explicit interest and provide full checking services to accounts which provide very limited checkability but pay a market-related rate of interest. At the same time, some accounts may provide liberal checking privileges *and* pay a market-related rate of interest but charge explicit fees for services rendered. Current deposit "sweeping" arrangements—*i.e.*, the automatic transfer of demand deposit funds above some minimum level into interest-bearing investments like money market funds—suggest another possibility. That is, depository institutions may offer a market rate of return only on balances in excess of some required minimum level. These excess balances may be left in the transactions account or swept into another account, perhaps a savings deposit or retail RP.<sup>3</sup>

<sup>1</sup> Examples of such arrangements include RPs and money market certificates (MMCs) that secure a line of credit accessible by draft and deposit "sweeping" arrangements.

<sup>2</sup> The prohibition of interest payments on demand deposits is set forth in the Federal Reserve Act and is not altered by the 1980 banking legislation. Nevertheless, other transactions accounts (NOW and ATS accounts) and all savings and time deposits will no longer have rate ceilings.

<sup>3</sup> When the MCA regulatory changes are fully phased in, transactions accounts in institutions with more than some minimum level of transactions accounts (at present, \$26 million) will have a 12 percent reserve requirement while personal savings accounts will have a zero reserve requirement. (For reserve purposes transactions accounts are defined to be deposits on which more than three withdrawals by negotiable or transferable instruments, payment orders of withdrawal or telephone and preauthorized transfers to third parties are allowed per month.) Consequently, banks will be able to offer a higher rate of interest on savings accounts than on transactions accounts, all other factors being equal.

There are many possible combinations of checking services, minimum balance requirements, account fees, and explicit interest which might be offered in the future, and the specific permutations that will dominate in the end will be determined by bank costs and depositor preferences. Nevertheless, it is clear that the checkable deposits of the future will be more varied than at present. And, while some of these deposits will serve only as a medium of exchange, those paying a market-related rate of interest will serve as short-term investment assets as well.

*Small time deposits and savings accounts.* If, as stated above, banks in the future offer transactions accounts with limited checking services paying a close-to-market interest rate, one might conclude that the demand for passbook savings accounts would fall, perhaps to zero. However, passbook savings accounts theoretically will be able to pay a higher interest rate than transactions accounts because they will have lower reserve requirements than transactions accounts.<sup>4</sup> Further, with no checking privileges, passbook accounts should be less costly for banks to supply than transactions accounts, thus allowing them to offer a higher rate on savings accounts than on transactions accounts. Therefore, it is not clear that the distinction between transactions and savings accounts will fade.

Time deposits are not likely to fall by the wayside either. Banks who hold fixed-rate assets may want to match fund a portion or all of these assets. In addition, to the extent that competitive investment alternatives continue to trade in large minimum denominations, the small investor will continue to hold time deposits. In fact, as rate ceilings are phased out, one would expect that depository institutions would offer a fuller schedule of time deposit maturities.<sup>5</sup>

At the same time, the structure of savings and time deposit interest rates and the process by which this structure is determined is likely to change. Savings and small time deposits will be priced in the same way other managed liabilities are today. That is, the supply of these liabilities that banks will offer at any given interest rate will become less than perfectly elastic and will depend on banks' expectations about the future course of interest rates and the perceived interest rate risk involved in mismatching asset and lia-

bility maturities. As a result, the relative volumes of different types of savings and time deposits, and the rate paid on each, will be determined by the interaction of borrower financing decisions, bank funding strategies, and depositor investment preferences.

*Financial institutions.* The phasing-out of Regulation Q rate ceilings is occurring within the context of a world in which many factors are working to stimulate financial innovations. These factors include improved computer technology, improved communications, growing financial sophistication of depositors and borrowers, increased integration of international and domestic markets, and in recent years an increase in interest rate volatility. The evolution in financial institutions and financial instruments over the course of the next few years will depend in part on such technological and economic factors as well as on other regulatory changes that may take place.

As Regulation Q is phased out, it is clear that depository institutions will be able to offer a greater selection of deposit liabilities paying explicit competitive rates of interest. This, in turn, will improve their competitive position in attracting funds *vis-à-vis* other financial intermediaries which were never subject to the regulation. At the same time, however, bank profits may be squeezed as "cheap" sources of funds disappear. How this change will affect the final outcome—the types of financial institutions that will win in the end—will depend on the many other forces working to change the nature of the United States financial system.

#### **Implications for the definitions of money**

In the future, the variety of checkable deposits will increase. Under current definitions, M-1 includes all checkable *deposits* (except those, like the so-called "loophole" MMCs, for which writing a check is a form of borrowing money from the bank).<sup>6</sup> If M-1 is defined the same way in the future, its value as a measure of balances used for transactions purposes will decline. This will occur, in large part, because of the investment aspect of interest-bearing checkable deposits to be included in M-1. That is, the demand for such deposits will reflect investor demand for short-term liquid assets as well as consumer demand for transactions balances.

The usefulness of M-1 may be further marred if deposit sweeping arrangements become popular. The fixed minimum balances (if any) associated with such arrangements cannot be viewed as funds available for effecting transactions since the depositor is re-

<sup>4</sup> If banks can raise reserve-free money at, say, 10 percent, they would be willing to pay only 8.8 percent on funds subject to a 12 percent reserve requirement, all other factors being the same.

<sup>5</sup> The Federal Reserve Act prohibits the payment of interest on deposits with maturities of less than fourteen days. However, retail RPs are not deposits and, therefore, can fill out the maturity spectrum.

<sup>6</sup> In January 1982, M-1B was renamed M-1.

quired to keep these balances on deposit. It is only the funds in excess of such balances that can be used for transactions purposes, and it is these funds which are transferred automatically into investments not included in M-1.

In the future, the savings and time deposit components of M-2 are likely to be more varied and their relative interest rates will change in response to changes in borrower preferences and in bank funding strategies. To the extent that some time deposits pay market-related rates, these deposits will be better investment substitutes for such instruments as Government securities or mutual bond funds with comparable maturities. At the same time, however, fixed-rate bank deposits will remain distinct from market instruments because the principal invested does not vary with market rates (even if withdrawn before maturity) as in the case of marketable assets. Consequently, the distinction between bank liabilities, which at one time were viewed as "near money" (and therefore part of M-2), and market instruments will fade but not disappear altogether.

In short, the spectrum of financial assets will be much fuller than at present. Traditional distinctions between transactions balances and investment balances, between near money provided by banks and market instruments, will become even more blurred than at present, and in the case of M-1 an "appropriate" definition will be difficult, if not impossible, to determine.

#### **The implications for monetary policy**

The major objective of Federal Reserve policy today is to control the growth of the monetary aggregates, and thereby to reduce the rate of inflation over the next several years. This policy is predicated on the presumption of a predictable relationship between the monetary aggregates and gross national product (GNP). The analysis above suggests that the relationship between the monetary aggregates and GNP is likely to change—at least during the next few years as Regulation Q ceilings are phased out and possibly even after the phaseout is completed. If current definitions are retained and deposit sweeping arrangements do not increase in popularity, M-1 will include a substantial investment component and should increase relative to GNP. Growth of M-1 relative to GNP will reflect investment choices as well as the need for transactions balances. Further, if money market funds are excluded from M-1, factors affecting one but not the other (for example, changes in regulations) will continue to cause secular shifts in the M-1/GNP relationship. (At the same time, to the extent that money market funds are short-term investments, inclusion of

these funds in M-1 will also alter the M-1/GNP relationship.)

Since it may not be possible to measure a transactions-related aggregate in any reasonably accurate way, greater reliance on a broader monetary aggregate may be necessary. But, when all deposits pay a market-related rate of interest, not even a broader aggregate will be a viable intermediate target in the sense that the Federal Reserve could control it over some period of time. Under current operating procedures, the Federal Reserve adjusts the level of nonborrowed reserves in a manner consistent with its desired growth rates for M-1 and M-2. When these aggregates are increasing more rapidly than the target rates, the demand by banks for reserves exceeds the level of nonborrowed reserves supplied. This excess demand for reserves exerts upward pressure on the Federal funds rate which in turn puts pressure on other market rates of interest. However, the rates on transactions accounts and other regulated deposits do not rise so that the foregone earnings on funds held in these accounts increase. In response, the public tries to conserve on balances held in such deposits, and the growth of the monetary aggregates is slowed.

In the future, when deposit rates are allowed to move with market rates of interest, the foregone earnings associated with holding bank deposits will not be so affected by rising market rates. The only remaining wedge between deposit rates and other rates of interest will be the cost of the 12 percent reserve requirement on transactions balances. However, to generate a spread between market rates and deposit rates of, say, 5 percentage points, market rates would have to exceed 40 percent! And, because personal savings and time deposits will have a zero reserve requirement, there is no reason for rates on these deposits to be below equivalent market rates. Therefore, in the future, the sensitivity of M-2 growth to changes in the overall level of market rates should be minimal. Efforts to control M-2 growth using traditional operating procedures, which are based on an inverse relationship between interest rates and money growth, may not be valid.

At the same time, traditional methods for controlling the growth of the monetary aggregates will affect credit growth differently in the future. In the past, policy-induced high market rates of interest (coupled with Regulation Q ceilings and usury laws) stimulated the disintermediation of funds and, at times, resulted in "credit crunches". That is, the supply of credit available to a sector of the economy or to a group of borrowers was reduced dramatically. Changes in usury laws and other regulatory changes have reduced the degree of disintermediation during recent periods of relatively high interest rates. The complete

elimination of Regulation Q ceilings should reduce further, or possibly eliminate, the phenomenon of disintermediation.

When banks are allowed (or forced) to compete for money supply deposits, policy-induced high market interest rates will have less effect on the relationship between deposit rates and market rates than at present. As market rates increase, banks will have to increase the rates paid on transactions, savings, and time deposits. The relationship between rates paid on money supply deposits and market instruments will change only to the extent that the cost to banks of supplying deposits (such as the cost of reserve requirements) is directly related to the level of interest rates. Therefore, for a given increase in market interest rates, the shift from deposits into other financial assets should be smaller in the future. And this, in turn, should reduce the possibility of credit crunches.

However, while the *availability* of credit should be less influenced by changes in market rates of interest, the *price* of credit may be more sensitive to future changes. Regulation Q ceilings, in effect, provide banks with an intramarginal stock of "cheap" deposits. As the ceilings are phased out, the volume of such deposits will decline. Therefore, to the extent that loan rates reflect the average (rather than marginal) rate paid on bank liabilities, loan rates will tend to increase

to a greater degree in response to a given rise in market rates as rate ceilings are phased out. In short, growth of bank credit will be affected less by supply considerations (as high market rates will lead to less disintermediation) and perhaps more through interest rate effects on the demand for credit when Regulation Q ceilings are eliminated. Further, with no deposit interest rate ceilings, the small saver will have among his investment options a wide variety of insured deposits paying a competitive rate of return. To the extent that decisions to spend or to save income depend upon the return earned on savings, changes in market rates of interest will have a greater impact on consumption-saving decisions

In the future, policy-induced changes in interest rates may have a greater direct impact on aggregate demand than at present, but the direct effect on money growth will be muted. The influence of monetary policy on the monetary aggregates will depend upon the effects of changing interest rates on the decisions made by borrowers and consumers. And, as these decisions affect the level of economic activity, the demand for money will change also. However, this sequence of causality—in which monetary policy affects money growth through its impact on GNP—raises serious questions regarding the continued usefulness of monetary aggregates as intermediate policy targets

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