

FUNDAMENTAL REAPPRAISAL OF THE DISCOUNT MECHANISM

**DISCOUNT POLICY AND
OPEN MARKET OPERATIONS**

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The following paper is one of a series prepared by the research staffs of the Board of Governors of the Federal Reserve System and of the Federal Reserve Banks and by academic economists in connection with the Fundamental Reappraisal of the Discount Mechanism.

The analyses and conclusions set forth are those of the author and do not necessarily indicate concurrence by other members of the research staffs, by the Board of Governors, or by the Federal Reserve Banks.

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by

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Open Market Operations and Treasury Issues Function
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2 INTRODUCTION

The basic responsibility of any central bank is monetary management--managing the liquidity and credit conditions of the entire economy, primarily through its influence on the commercial banking sector. In the United States, open market operations are the principal instrument for exercising the Federal Reserve System's initiative in affecting the full range of credit and monetary conditions. As the ultimate source of liquidity to the economy, the System cannot control total bank reserves precisely in the very short run because the monetary system of a modern economy must be able to respond flexibly to wide week-to-week changes in the demand for currency, bank deposits and credit that are imperfectly predictable as to timing and amount. But the System can and does exert a strong influence over the growth path of total bank reserves, deposits and credit by varying over time the division between reserves provided without strings through open market operations and those provided with strings through the discount window. Within the framework provided by Regulation A, governing individual bank access to reserves borrowed from the Reserve Banks, the Federal Open Market Committee (FOMC) acts in this way to influence bank behavior in the interest of national economic objectives.

This paper sketches the process whereby the decisions of the FOMC are brought to bear through open market operations and the discount window on the liquidity of commercial banks. It describes broadly how

the Manager of the System Open Market Account, a Vice President of the Federal Reserve Bank of New York, relies on patterns of bank behavior and the Federal funds market to aid in the day-to-day decisions that carry out the FOMC's instructions. The paper also ventures some observations on the implications for discount policy of the necessity of integrating open market and discount policies, and on the constraints that these implications impose on changes in the administration of the discount window.

SUMMARY OF FINDINGS

The nationwide level of member bank borrowing from the Federal Reserve Banks is an important element in the money market conditions that the Federal Open Market Committee instructs the Manager of the System Open Market Account to achieve, particularly in periods of monetary restraint. In specifying the money market conditions to be achieved, the FOMC, in effect, determines that such member bank borrowing will stay within a certain range--i.e.; that member banks somewhere in the banking system will be forced to borrow at the discount window in an aggregate that corresponds on average to the Committee's desires regarding money market conditions. The Committee increases monetary restraint and affects commercial bank behavior by having the Manager, through the Trading Desk of the Federal Reserve Bank of New York, reduce the provision of reserves by open market operations in relation to the demand for them so that member banks come into the window in larger numbers and/or more frequently. Banks appear individually at the discount window and are exposed to its discipline, but it is the FOMC that regulates the discipline imposed on the banking system as a whole.

From the Trading Desk's standpoint the daily average level of member bank borrowing at the discount window over the seven days of the statement week is an important and workable operational guide--one that interrelates with a number of other money market indicators. Armed with statistical forecasts of member bank reserves and a knowledge of bank patterns of reserve management, the Desk can make reasonably good judgments of the level of unsatisfied demand for reserves that is likely to appear at the discount window after the operation of the Federal funds market. The Manager can ordinarily detect when actual reserve availability is appreciably larger or smaller than expected--without knowing at the moment the cause of the deviation--and he can adjust his actions accordingly.

The FOMC is not concerned with member bank borrowing or any other money market indicator for its own sake, but as an operational means of both providing flexibly for the economy's short-run cash needs and influencing the growth of bank credit and the behavior of interest rates over the long run. Member bank borrowing provides only a first, and imperfect, approximation to the money market conditions that are consistent with achieving the Committee's longer-run financial objectives. The relation between the Federal funds rate and the discount rate at a given level of such borrowing is probably a somewhat better short-run indicator than borrowing alone of the effectiveness of open market operations in influencing the banking system in the desired direction. The behavior of such monetary aggregates as bank credit and the money supply--in conjunction with interest rates--provides even better evidence on this point, although the monetary aggregates are not themselves targets which the Manager can hit directly in the short run.

In an effort to improve the responsiveness of open market operations to changing external circumstances, the FOMC introduced in 1966 a new form of the directive that has provided for varying its short-run operational targets in accordance with the unfolding behavior of bank credit. Thus far, this approach seems a promising one for improving the implementation of the System's monetary policies.

Changes to be made in the operation of the discount mechanism should maintain the responsiveness of the banking system to the policy moves of the Federal Open Market Committee. Discount policy will necessarily remain a principal cutting edge of a policy of monetary restraint, imposing on a succession of individual banks, beginning with the larger money market banks, the need to adjust assets and/or liabilities within a reasonably short time period in order to repay borrowing from the Federal Reserve. Such a requirement need not interfere with liberalizing the access of smaller banks to the discount window for seasonal liquidity needs. Under any set of rules of discount administration, however, the FOMC will need to be able to direct open market operations to increase or reduce the pressure on a major segment of member banks--certainly the larger ones. Discount policy will need to provide incentives for banks to pay off their borrowing at the discount window in fairly short order. For operational purposes, changes in the discount rules should probably be timed to coincide with a period of monetary ease, thereby enabling both the System and the financial community to grow accustomed gradually to the new framework within which open market policy would be conducted.

A VIEW OF THE POLICY PROCESS

As noted, any central bank has primary responsibility for managing liquidity and credit conditions in the economy through its influence on

the banking sector with a view to promoting national economic objectives. To exert this influence, a central bank develops policy instruments that enable it to initiate policy changes and to give centralized direction to the implementation of its policy.

Central banking in the United States has developed, and come to rely increasingly on, open market operations as the most efficient means for influencing national liquidity and credit conditions. This development flows naturally from the growth of the specialized and interdependent financial markets and institutions that serve a highly developed economy. The System bases its policy judgments on its reading of the full range of financial flows and interest rates in relation to economic developments and objectives, rather than narrowly on the behavior of the banking system alone. Moreover, the Federal Reserve is the ultimate source of liquidity to the entire financial system and thereby to the economy. It must make its operational decisions about liquidity needs on the basis of centralized information about the banking sector and the evidence provided by the financial markets themselves about those needs. From a policy standpoint, open market operations provide a logical and natural point of contact between the Federal Reserve and the financial system.

In managing the reserves of the banking system, the monetary authorities have two interlocking responsibilities. Routinely, they enable the banking system to provide in the short run for the highly variable needs of the economy for cash--both currency and bank deposits. Over the longer run, they seek to influence the liquidity of the economy, financial flows, and interest rates with a view to fostering national

economic objectives. A central problem of monetary management is to keep short-run flexibility from impairing long-run policy objectives.

The Federal Reserve System depends on an integration of open market policy and discount policy to carry out these dual responsibilities. In the very short run, open market operations provide reserves flexibly in accordance with the overall economy's shifting cash needs. Discount policy, on the other hand, provides a limited adjustment mechanism for both the individual bank and the banking system when reserves fall short of reserve requirements--assuring short-run accommodation at the discount rate. Over the longer run, however, individual banks cannot rely on continuous borrowing from the Federal Reserve, and therefore such borrowing generates a need for adjustment of assets or liabilities that is missing as long as reserves are being provided without stint by open market operations.

Open market operations and the discount window, as operated under the current Regulation A, enable the banking system to meet the economy's short-run cash needs without undue strain. These needs fluctuate widely from day to day and week to week in relation to the increase in money supply that takes place over the course of a full year. Member banks as a group will have to borrow from their Reserve Banks to cover their reserve deficiencies in a given week to the extent that open market operations in that week fail to compensate for changes in currency outstanding, bank deposits, other factors affecting reserves, or in reserves that accumulate unused within the banking system. Such borrowing will be necessary whatever the reason for the deficiency--whether it is deliberate System policy, an unexpectedly large bulge in deposits at tax payment time, or a much sharper decline in float than had been

anticipated. The geographic pattern of such borrowing depends, of course, importantly on the movement of deposits and reserves, including the very important redistribution of reserves among individual banks effected through the Federal funds market and the correspondent banking system. As a consequence of providing "an elastic currency" and of acting as lender of last resort, the Federal Reserve System must give up precise control over total deposits and currency outstanding in the very short run.

The System, nonetheless exerts leverage on the credit creation process through open market policy applied against the fulcrum provided by the discount policy embodied in Regulation A. The essence of Regulation A has been that an individual member bank's borrowing from its Reserve Bank is to be temporary. The discount window is not to provide a continuing supplement to a bank's resources. Hence, member banks have been expected to adjust their assets or liabilities over a period of weeks so that borrowing from their Reserve Bank will no longer be necessary. Given this fulcrum, the FOMC can consciously direct open market operations to change the amount of borrowing member banks in the aggregate must undertake and thereby influence directly bank lending and investment decisions. In this context, it can be seen that the discount rate has little effect on the aggregate level of member bank borrowing. (The influence of the discount rate--by its relation to other interest rates--instead comes through its effect on the calculus of commercial bank policies and actions, and thereby on the rate of bank credit growth.)

The interaction of open market policy and discount policy over the cycle is familiar. If the economy requires stimulation, the System

uses open market operations to flood the banks with reserves that can be employed in loans and investments. The discount rate is also lowered, although member bank borrowing will naturally fall to a frictional minimum as open market operations supply reserves in abundance. As the economy expands and less stimulation is required, the System typically supplies reserves through open market operations somewhat less freely in relation to expanding credit demands. This policy change forces member banks to come to the discount window in increasing numbers and/or with increasing frequency. As the FOMC steps up the degree of restraint, open market operations insure that more and more banks are gradually affected by the necessity of not abusing their privilege of borrowing at the discount window, but of reserving it for the increasingly frequent occasions on which they have exhausted alternative means of balancing out their reserve positions.

2. DIRECTION OF OPEN MARKET POLICY

The System has used open market policy as its primary continuing instrument, both for providing liquidity to the economy in the short run and for influencing liquidity, credit conditions, and spending over the longer run. In making policy, the Federal Open Market Committee must embody its policy prescription in instructions to the Manager of the System Open Market Account that are operationally feasible. Essentially, the Committee does this by: (1) specifying the terms on which the reserve needs of the banking system are to be accommodated by the Manager on a week-to-week basis, and (2) varying the terms from time to time to influence bank liquidity and the financial variables in the direction desired. In recent years, the FOMC has specified the terms of accommodation--i.e. money market conditions--in terms of a number of

indicators. These indicators include free reserves, member bank borrowing from the Reserve Banks, the Federal funds rate in relation to the discount rate, and Treasury bill rates.¹ The FOMC has sometimes given particular weight to one of these. For example, shoring up Treasury bill rates for balance-of-payments reasons was an active concern in the early stages of the economic expansion that began in 1961. In the main, however, the Committee has come to rely less than in the 1950's on any single measure, such as free reserves. It tries instead with the aid of its staff to specify for a constellation of variables the ranges of short-term variation that are believed to be consistent with a projected rate of growth in total bank deposits over the next month or so.

As noted earlier, the System wants to exert a degree of influence on the lending and investment decisions of banks--and an important means of exerting this influence is by governing aggregate recourse to the discount window. It is the essence of a short-run accommodative posture, when policy is not changing, for open market operations to seek to maintain daily average member bank borrowing reasonably stable on a week-to-week basis. Then, the pressure exerted by discount officers on borrowing banks to adjust their assets and repay the Reserve Banks will be reasonably steady. Discrete changes in the levels of average member bank borrowing, and the pressures exerted by the System on bank management, flow from the FOMC's decisions rather than emerge haphazardly as a by-product of other factors affecting reserves.

1. Free reserves is defined as the excess reserves of member banks less their borrowings from the Federal Reserve Banks. This formulation is equivalent to the difference between the nonborrowed reserves and required reserves of member banks.

A problem remains. The Manager may successfully maintain member bank borrowing from the Reserve Banks and the other elements of money market conditions within the prescribed ranges, but bank credit and a variety of interest rates may behave differently than the FOMC expected. Such discrepancies are likely to be particularly large--and significant--when the economy's demand curve for credit is shifting rapidly in either direction. The FOMC may then find that interest rates and the rate of bank credit growth turn out to be higher than it intended at times when credit demands are burgeoning, and lower than it intended at times when credit demands are falling sharply. The reasonably short interval of three to four weeks between FOMC meetings provides considerable assurance that large shifts in credit demands will be detected fairly promptly. The Committee has sought in recent years, however, to increase the rapidity of its response to changing conditions.

To this end the FOMC began experimenting in 1966 with a new form of its directive governing the conduct of open market operations. It included a proviso clause that instructed the Manager to change conditions in the money market in a prescribed direction if the rate of bank credit growth differed significantly from what was expected. (Other conditioning elements--the timing of Treasury financing, pressures on liquidity, etc.--continued to be employed as well.) For example, the operational paragraph of the directive adopted by the FOMC on September 13, 1966, was as follows:

"To implement this policy, System open market operations until the next meeting of the Committee shall be conducted with a view to maintaining firm but orderly conditions in the money market; provided,

however, that operations shall be modified in the light of unusual liquidity pressures or of any apparently significant deviation of bank credit from current expectations."¹

In the process of implementing this and succeeding directives, the Manager of the System Open Market Account gradually leaned toward a little less firmness in the money market as bank credit persistently fell somewhat short of projected levels.² By the time the Committee voted on November 22, 1966, to promote "somewhat easier conditions in the money market", the proviso clause had already led to a clearly discernible shift in money market conditions away from the degree of restraint prevailing in August and September.

The inclusion of the bank credit proviso clause in the Committee's directive did not represent any downgrading of member bank borrowing from the Reserve Banks as an important policy variable. The new directive merely provided a procedure for increasing or reducing the degree of restraint--and the level of such borrowing--under specified conditions in the interval between meetings of the FOMC. The direction of open market operations in periods of monetary restraint necessarily must include some implicit specification of the range of member bank borrowing from the Reserve Banks that the Manager is to foster in the banking system as a whole.

THE IMPLEMENTATION OF THE FOMC'S POLICY

The Manager of the System Open Market Account and his colleagues at the Trading Desk operate in, and operate on, a financial environment

1. Board of Governors of the Federal Reserve System, Annual Report, 1966 (Washington: 1967), p. 179.

2. Ibid., pp. 248-256.

whose dominant short-run characteristic is variability.¹ To be sure, such factors affecting reserves as Federal Reserve float, currency in circulation, and member bank deposits (through their effect on required reserves) behave in roughly similar patterns at corresponding times from year to year. But the day-to-day behavior of these factors in a particular year differs, almost routinely, from an average of the behavior of past periods. Changes in the timing of Treasury financings and tax collections have been especially noteworthy in the past few years. The distribution of reserves among different groups of banks and the marginal use made of reserves by these banks change frequently also. Interest rates, too, can vary considerably over the interval between FOMC meetings in response to a multiplicity of real and expectational forces. The conduct of open market operations involves a continuing strategy of successive approximation to the FOMC's specification of money market conditions.

Operationally, the Manager focuses in the first instance on the behavior of bank reserves during the statement week and money market clues to that behavior. Affecting his strategy for each week is the knowledge that the excess reserves held by the banking system change from week to week as a result of changing conditions of reserve distribution and use. Country banks, for example, usually build up excess reserves in the first week of their reserve settlement period and then run them down by \$150-200 million in the second week of their period. Unusual churning in the money or Government securities

1. See Paul Meek and Jack W. Cox, "The Banking System--its Behavior in the Short Run," Monthly Review of the Federal Reserve Bank of New York, April 1966, pp. 84-91.

markets--as on a quarterly corporate tax date--will increase the volume of reserves that are likely to pile up unused somewhere in the banking system. The Manager can maintain the steady degree of pressure on the banks desired by the FOMC--keep member bank borrowing from the Reserve Banks reasonably stable--only by allowing the daily average of free reserves to vary from statement week to statement week with the distribution and utilization of reserves.

The Manager depends importantly in his daily judgments on the close connection between member bank borrowing from the Reserve Banks and other indicators of money market conditions--particularly the information on reserve availability and/or use provided by the Federal funds market. Each morning the Manager receives information on borrowing from the Reserve Banks by all member banks on the previous day and estimates of total and required reserves for major groups of banks for the previous day. (Estimates of total reserves are usually accurate within \$50 million, although occasionally errors exceed \$100 million.) The Manager also receives reports on the previous day's activity of 46 major reserve city banks in trading Federal funds and in lending to Government securities dealers. The Manager has estimates of daily levels of free reserves stretching three to four weeks ahead--projections that rely on the patterns of factors affecting reserves observed in similar periods of past years. On the basis of this information, experience with the shifting strategies that banks pursue in managing their reserve positions, and knowledge of any large special strains, such as occur at times of a Treasury financing, the Manager and his associates will formulate their expectations of how the Federal funds market should behave that day.

The Trading Desk matches these expectations against the developing situation revealed by its continuing contact with the Federal funds brokers, the money desks of the major New York City banks, and the closely related efforts of the nonbank dealers in Government securities to finance their positions. The Federal funds market reflects with considerable accuracy the marginal availability of bank reserves and the demand for them on each day. If the Federal funds market is much tighter than the reserve data suggest should be the case, the Trading Desk will not usually know whether it is because Federal Reserve float is \$300 million lower than expected, or country banks are holding on to more excess reserves than usual. But the Desk will get a fairly clear indication that member bank borrowing from the Reserve Banks is likely to bulge unless reserves are provided through open market operations. Consequently, in such circumstances, the Desk is likely to supply reserves in a volume intended to moderate the mounting tightness. Its intervention may itself tend to affect the willingness of a few banks to wait another day or two before resorting to the discount window. Conversely, the Desk may respond to easier-than-expected conditions in the Federal funds market by deferring action to supply reserves or by actually mopping up reserve excesses.

A major strength of the System's conduct of open market operations in recent years has been the extent to which this day-to-day decision-making meshes with the FOMC's policy objectives of maintaining a fairly even degree of restraint on the banks in the short run. As described above, the Manager is essentially making daily judgments about the marginal demand for reserves that will go unsatisfied in the Federal funds market and will be likely to appear at the discount window. The Manager

is able to detect changes in the degree of pressure on bank reserve positions and to cast the System's weight on the other side of the scales. He cannot control member bank borrowing at the Reserve Banks with much precision on a daily basis, but he can adapt his weekly strategy to resist large deviations in average borrowing from the range embodied in the money market conditions specified by the Committee. Such borrowing and the degree of firmness in the Federal funds market are opposite sides of the same coin. The Committee's objective of influencing bank behavior has a practical day-to-day focus.

Member bank borrowing from the Reserve Banks is really only an approximation to the degree of monetary pressure or ease that the Manager is instructed to foster in order to further the System's longer-term goals. The Federal funds rate itself, in relation to the Federal Reserve discount rate, has become increasingly a sort of fine tuning device in daily reserve management. The FOMC's increased attention to this rate as a supplemental indicator of the interaction between bank policies and the credit demands falling on the banks reflects expanded member bank activity in the Federal funds market.¹ The Federal funds rate has proved increasingly sensitive as an indicator of the banking system's need for reserves, trading at rates above the discount rate as well as at rates below.

1. Treasury bill rates were useful as such an indicator at one stage. In the 1960's, however, Treasury bill rates have become much less meaningful because alternative means of bank reserve adjustment have multiplied and bank holdings of Treasury bills have declined in relation to the total volume of bills outstanding. The Committee's concern with Treasury bill rates in the 1960's was more the product of balance-of-payments, than of domestic, considerations.

Use of the Federal funds rate as a conditioning element in the Committee's instructions to the Desk has been clearly evident in periods of monetary ease. At such times open market operations provide reserves in such volume that member bank borrowing at the discount window falls to a frictional minimum. In seeking to promote rapid growth in bank credit, the System not only lowers the discount rate but keeps the cost of reserves in the Federal funds market below the discount rate. It thereby seeks to insure that open market operations are supplying reserves more rapidly than the banks are using them to expand loans and investments-- in effect, maintaining pressure on the banks to expand credit.

The appearance of Federal funds trading at a rate well above the discount rate in 1966 brought a new dimension to bank behavior and probably to monetary policy as well. The increase in the size of the premium from $1/8$ percentage point in early March to $1\ 1/2$ - $1\ 3/4$ percentage points in early September 1966 was associated with a marked increase in the degree of effective restraint on bank lending and investment. The increase in restraint was probably considerably greater than in earlier years would have been associated with the rise of average member bank borrowing from the Reserve Banks from \$551 million in March 1966 to \$776 million in September 1966. The behavior of bank credit, the money supply and interest rates in 1966 was consistent with such an interpretation. By October 1966 a number of Committee members were specifying an upper range of the premium on Federal funds to 1 to $1\ 1/2$ percentage points among the money market conditions to be achieved--presumably, with a view to easing the pressure on the banking system.

For the Manager, member bank borrowing from the Reserve Banks and the Federal funds rate provide objectives that he can achieve reasonably

well within his operational horizon of the statement weeks between FOMC meetings. Open market operations bear directly on both of them. The Manager's influence over other interest rates--for example, the Treasury bill rate or the yield on long-term Government securities--is much more indirect and uncertain. Changes in the expectations of market participants can easily outweigh any marginal influence the Manager may exert in the course of pursuing the FOMC's marginal reserve objectives. A sustained System effort coordinated with the Treasury's issuance of Treasury bills was necessary to shore up bill rates a few years ago for balance-of-payments reasons.

The implementation of the directive's bank credit proxy involves a shading of money market conditions over the interval between FOMC meetings. In determining its application, the Manager is guided by the relation between the FOMC's desired range of growth for total bank deposits for a month or so ahead and updated projections of those deposits prepared weekly by the staffs of the Board of Governors and the Federal Reserve Bank of New York. Should bank credit appear to be expanding more rapidly than the FOMC indicated was acceptable, the Manager would consider a shift in the direction of greater restraint if other conditioning elements in the Committee's instructions--e.g. Treasury financing--permitted. Such a move would involve promoting a higher level of member bank borrowing from the Reserve Banks, and possibly also a somewhat higher Federal funds rate, than prevailed on average before implementation of the proviso clause. Since the interval between meetings is only three to four weeks, the FOMC itself determines whether such a shading is to be held, carried further, or reversed.

OPEN MARKET OPERATIONS AND CHANGES IN DISCOUNT ADMINISTRATION

As noted earlier, monetary policy is an integration of open market policy and discount policy. The Federal Open Market Committee basically determines the desired aggregate level of member bank borrowing from the Reserve Banks by its specification of the money market conditions the Manager is to achieve. Discount officers encourage the individual borrowing banks to pay off their borrowing after a time--by asset adjustments if necessary. Monetary policy exerts restraint on the banks because the discount window is not continuously open to individual banks. Open market operations are used quite consciously to vary the pressure on the banks to adjust their lending and investment policies.

Monetary management in a modern economy is so closely related to the performance of the money and credit markets that there is no desirable alternative to open market operations as a policy instrument. There is general agreement that discounting cannot provide efficiently a centralized management of reserves that is integrated with national liquidity needs. Fortunately there do not appear to be any major obstacles ahead in the future use and development of open market operations as a policy tool. In the unlikely event that the supply of United States Government and Federal agency securities in the hands of the public should become so limited as to impair open market operations, such operations could be conducted in the debt obligations of other issuers.

A great virtue of the present arrangements is that policy-making is centralized in the Federal Open Market Committee. The Committee exerts its leverage on the monetary process against the fulcrum of a reasonably uniform policy of discount administration. The linkage

between money market conditions and bank credit may change, but the Committee can now be reasonably sure that such changes do not reflect an independent monetary policy being pursued by discount officers. At first glance it might appear desirable to vary discount administration over the cycle to reinforce the effects of the Committee's open market policy--either in the direction of ease or restraint. But changing institutional arrangements repeatedly would shake up unpredictably the banking system's behavior, increase the already considerably difficulty of deciphering its response to open market policy changes, and impair the Committee's growing ability to give instructions to the Manager of the System Account that relate meaningfully to the Committee's own bank credit and interest rate objectives. The Trading Desk would probably find its task complicated considerably if the behavior of the money market and the banking system were being affected by changes in discount administration. There would not appear to be any substitute in monetary management for the centralized policy direction and centralized execution that open market operations make possible.

The discount window will continue to play a key role in enforcing a policy of monetary restraint. It is axiomatic to such a policy that the banking system cannot be permitted to borrow from the central bank without restraint the reserves that are absorbed, or are not supplied, by open market operations. Any revision of the System's approach to discounting must provide a mechanism for limiting the access that the individual banks in the banking system have to reserves on their own initiative. Since borrowing at the window must remain a principal cutting edge of monetary restraint, one cannot allow the total to rise

and fall except as a reflection of monetary policy. To allow banks to borrow without restraint--for example, to meet long-term growth needs or to deal with aggregate intramonthly and seasonal reserve needs--would involve loss of control over the reserve base.

The present system of administrative rationing on the basis of the current Regulation A meets the test of providing an adequate fulcrum for the FOMC's exercise of monetary restraint, but the rules of discount administration could be modified or changed without impairing this function. Under a different set of rules, administrative rationing could permit all banks more frequent or longer access to the window than at present before administrative counseling began. Under such rules it would probably take considerably longer to achieve a given degree of monetary restraint, but the System could undoubtedly achieve its objectives in time.

The lag between a policy move toward restraint and its effect on bank behavior would probably be less under a hybrid system in which "small" banks were allowed to borrow for seasonal needs in amounts specified in advance while larger institutions remained on a short tether as at present. Small banks with marked seasonal patterns could negotiate with the discount officer of their Reserve Bank in advance a credit line for continuous borrowing for the period in question--perhaps as much as two or three months--thereby enabling them to reduce their own provision for seasonal liquidity needs. Such a borrowing facility would recognize the limited time that bankers in such institutions can give to daily liquidity management, and be an added attraction of System membership. Only borrowing above a seasonal amount would be subject to administrative scrutiny for disciplinary purposes. The frequency of such borrowing permitted before administrative counseling was

called into play might also be increased somewhat. Aggregate member bank borrowing at the discount window would presumably be higher under such a "hybrid" system than under the present system for a given degree of monetary restraint. In periods of easy money some "seasonal" borrowing would be added to the frictional borrowing already experienced. As the Committee moved toward restraint, one would expect borrowing to rise to higher levels than at present, without necessarily involving any very sizable swings in total borrowing around the policy-determined level.

Access to reserves borrowed from the Reserve Banks could also be limited through a structure of quantitative limits and discount rates. There has always been a considerable body of academic opinion that has felt that the discount rate should be a penalty rate. The 1966 experience, of course, showed that policy could be quite restrictive with a discount rate well below outstanding market rates. Such a discrepancy, however, does raise some questions of the desirability of providing reserves to the banking system at an unrealistic rate and of equity between borrowing and nonborrowing banks. These questions are of limited significance as long as borrowing at the discount window is a small part of total reserves, but they would become more important if revisions in discount policy increased substantially the proportion of total reserves represented by such borrowing.

A structure of quantitative borrowing limits and discount rates could supplement or substitute for administrative counseling as a means of affecting bank behavior. Such a system might involve, for example, an automatic boost in the effective cost of borrowing from the System once borrowing exceeded a certain proportion of required reserves or a

certain frequency or some combination of the two. Conceivably, it could alleviate some of the problems of equity that emerge between borrowing and nonborrowing banks, although there are manifold problems in designing an equitable system because the sizes of the reserve swings experienced by banks vary so widely. One might also expect that such a system would reflect to some extent the degree of restraint being achieved by the Committee--i.e., borrowing at penalty rates would increase with the degree of restraint.

While a structure of rates or quantitative borrowing limits may be a suitable means of trying to influence the reserve base and credit conditions in countries without well developed money and credit markets, it is hardly an acceptable substitute for open market operations as the primary instrument of general control in this country. One may question whether the complexities of even a supplemental system might not render the conduct of monetary policy and its impact on economic activity even more mysterious and subject to misunderstanding than at present.

Policy and operational considerations suggest a number of considerations to be observed in any process of modifying the present rules of discount administration. The importance of fostering uniform administration is self-evident. A corollary of this is that changes in discount administration should be of the once-over variety. The policy decisions of the Committee and the operations of the Desk could adjust to modified rules without major difficulty provided there were no continuing change of the rules nor any effort to substitute discount policy for open market policy. In making discount rule changes that may seem desirable for purposes of dealing with individual banks, it would also

seem advisable to time the changes to coincide with a period in which monetary policy was expansive, and borrowing by member banks was near a frictional minimum. Then, discount officers, the commercial banks, the Federal Open Market Committee, and the Trading Desk could all adapt gradually over the expansionary period to the effect of the changed regulations on bank behavior and monetary developments.