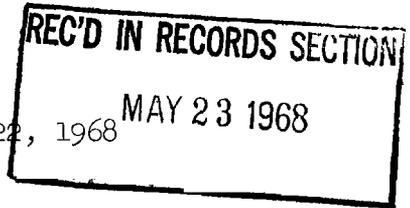


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To Members of Federal Open Market  
Committee and Presidents of  
the Federal Reserve Banks not  
presently on the Committee

From Alan R. Holmes

Subject: An Examination of  
Competitive Repurchase  
Agreements

During the discussion of flexible rates for repurchase agreements at the last meeting of the Federal Open Market Committee on April 30, 1968, Governor Robertson suggested the possibility of a competitive system for making such agreements and it was generally agreed that the suggestion merited further study. It was proposed that a matched purchase-sale arrangement might be utilized to supply reserves temporarily, much the same as the Desk now undertakes matched sale-purchase contracts to absorb reserves for short periods. This paper examines the technical and operational feasibility of two alternative systems of competitive repurchase agreements and comments on the practical effects of such agreements.

#### Matched Purchase-Sale Agreements

The use of a system of matched outright transactions as an alternative to repurchase agreements runs into a number of difficult technical and operational problems that would make such an arrangement inadvisable. Operationally there is little symmetry between matched sale-purchase agreements and purchase-sale agreements. A review of the procedures for undertaking matched sale-purchase agreements will demonstrate the problems that would arise in attempting to use this system for matched purchase-sale arrangements.

Under current procedures temporary reserve absorptions are undertaken through the technique of matched sale-purchase agreements. Given the ample size of System holdings of individual Treasury bill issues, a single issue of short-term Treasury bills is offered for sale by the Desk for immediate delivery at a fixed rate of discount (at or about the current bid side of the quoted market). Dealers are then asked to set an amount and state the price at which they will sell back the same issue for delivery one or more days in the future. By using only one issue of Treasury bills the Desk can readily compare the offerings presented by the dealers and--within a desirably short time span--accept those proposals which provide the highest reoffering rate of discount (equivalent to the lowest price when the System buys back the securities).

In matched purchase-sale agreements, on the other hand, the Desk would be confronted by offers of both Treasury bills and coupon securities of widely disparate maturities, depending on the particular issues that dealers chanced to have in their portfolios. The problem of reducing the difference between buying and selling prices of a large number of different issues to a common denominator would be an impossible task for both the dealers and the Trading Desk, at least within the time limit that is desirable for the conduct of System operations. A more detailed explanation of the pricing problems involved in matched transactions may clarify the problems involved.

The net interest cost or gain on matched transactions can be roughly calculated by determining the dollar value of each basis point change in the

price (rate of discount) of the security. When a single issue of Treasury bills maturing in about two weeks is used, a one basis point change in the rate of discount will produce a change in interest cost of about  $1/8$  percentage point for one day, providing ample leeway for competition on an interest cost basis. However, on a one-year Treasury bill a one basis point change in price would raise or lower the interest cost per day by  $3\ 5/8$  per cent and on a coupon security  $1/32$  change in price would produce a change of about 9 per cent in the interest cost on a one-day transaction. Hence, quotations on a normal market basis do not allow room for competition.

Thus the matched transaction procedure is only feasible for use with a small number of very short-term issues. Since, as noted, dealers' financing needs encompass a wide variety of both Treasury bills and coupon issues of various maturities, it would be virtually impossible to refine pricing of individual transactions to arrive at competitive interest costs. Therefore matched purchase-sale agreements could not be considered as a satisfactory operational substitute for the present method of making repurchase agreements.

#### Competitive Repurchase Agreements

Consideration was also given to undertaking repurchase agreements by direct competitive auction of funds on an interest rate basis. This procedure would retain the present form of the repurchase agreement and the pricing of the underlying collateral, but the interest rate on each repurchase contract would be the result of a competitive bid by the dealers. If, for example, the System wished to make \$200 million repurchase agreements on a given day, dealers would be asked to bid competitively for the amount of funds they wished to obtain, and the amounts bid for at the highest rates would be accepted until the \$200 million amount were covered. Bidding could be limited to graduations of  $1/8$  per cent or permitted to be refined to as little as one basis point.

This method of operation is technically and operationally feasible--although the legal underpinnings of such a method require advice of counsel--as an alternative either to the former practice of maintaining the repurchase rate at the discount rate or to moving to a more flexible repurchase rate that would be set by the System in relation to market rates. This competitive procedure would relieve the System of having to set a rate, which might be regarded as a significant advantage, but the technique raises a number of potential problems and might well produce undesirable market effects.

#### Disadvantages of Competitive Bidding

The chief problem of competitive repurchase agreements is that it removes the System's influence over the rates charged on dealer financing. This would likely result in much sharper rate fluctuations than the System might feel appropriate under any proposed alternative system of establishing the rate for repurchase agreements. In periods of very tight monetary conditions, the rate on repurchase agreements would probably escalate quite rapidly, and uncontrollably. Such a development would tend to reinforce rate development patterns that the System has found undesirable in past periods and to make it very difficult to keep markets reasonably orderly as they adjust to monetary restraint. When funds are in very scarce supply, the rate dealers would be willing to pay to finance their inventories might very well shoot up to a level  $1/2$  to 1 per cent above the prevailing Federal funds rate--a rate which itself tends to escalate rather rapidly

in such circumstances. As the Committee will recall, rates charged by the New York City banks on loans to dealers reached levels close to 7 per cent both in the fall of 1966 and again in recent weeks. Under such conditions dealers would be likely to bid for funds at rates that would be only slightly below the rates posted for New York City banks, which are regarded as lenders of last resort to the dealer community. Thus, a ratchetting repurchase rate could become a source of market instability at a time when the market's function of shifting assets among holders would be very important.

The use of a competitive repurchase agreement would also pose problems with respect to the allocation of financing among individual dealers. Under current procedures the System distributes repurchase agreements among nonbank dealers in direct relationship to each dealer's financing needs, with maximum limits which are determined in relation to each firm's capital position. It is not inconceivable under the competitive arrangement that a small number of dealers, or even a single dealer, might on occasion bid the highest rate and take up the entire amount of funds that were being offered on that day. This might mean that the dealer or dealers which are least efficient in financing their positions--and hence willing to pay the highest rates--could be the determining factors in setting the rate on System repurchase agreements. Although such rates would not be available for publication, the word would get around rather quickly since other dealers, having bid what they regarded as high rates which were not accepted, would have some insight as to the actual rate that was paid.

The use of a competitive basis for System repurchase agreements would also deprive the Committee of the ability to use the repurchase agreement as a policy instrument under particular market circumstances, such as those described in my memorandum of April 25, 1968. In all likelihood the rates set by the market on repurchase agreements would run counter to the Committee's objectives with respect to Treasury bill rates at any given point in time. For when Treasury bill rates were under downward pressure, dealer financing needs would likely be light and bidding for repurchase agreements would be less aggressive. Similarly, when Treasury bill rates were under upward pressure, financing needs might be large and the escalation in the rate for repurchase agreements could well contribute to upward pressure on rates for Treasury bills when this was not consistent with the Committee's objectives.

One final point--it would not appear advisable to shift back and forth between a competitive purchase arrangement and one in which the rate was set by the System, although such alternative might seem useful as a way of letting the market set the rate except in times of particular money market pressure. The very fact of shifting, however, would be viewed in the market as having special and perhaps exaggerated policy implications, and the Desk would not really be free to change back and forth. This might well mean that the System would be inhibited in its use of repurchase agreements because of the potential side effects at times when these instruments are most useful as a means of keeping reserve provisions on a short string.

Conclusion

It is possible to establish a system of competitive repurchase agreements, based on dealer bidding at a rate of interest. The only clear advantage of this arrangement over the flexible rate appears to be the elimination of the problem of rate setting. The disadvantages include the loss of control over rates, the likelihood of undesirable rate escalation, problems of dealer allocation, and the loss of what might well be a useful policy instrument. In our view these considerations argue strongly against moving to a competitive repurchase arrangement.