CONFIDENTIAL -- (F.R.)

TO: Mr. Rouse

FROM: Peter D. Sternlight

SUBJECT: Possible Mechanisms for Temporary Absorption of Reserves

Recent experience suggests that the management of System open market operations would have been facilitated on a number of occasions if there were some means available for temporarily withdrawing reserves from the money market. In essence, what is sought is something that would have the effect of a repurchase agreement in reverse -- removing reserves flexibly, at very short notice, and at the initiative of the System. The need for such an instrument or mechanism has become particularly evident in the recent period of adverse international payments, as special pains have had to be taken to avoid even brief stretches of unduly easy money market conditions and needlessly low short-term interest rates.

While outright open market sales can be used to mop up redundant reserves in fairly short order, this is sometimes cumbersome if it must be done in very large amounts and on immediate notice; the System's holdings of suitable securities may not mesh as perfectly as one might wish with the market's appetites of the moment. Moreover, if the unwanted ease lasts for just a few days the System will have to follow large-scale outright selling with heavy outright buying. Ordinarily, the market can take these quick reversals and large volumes of System transactions in stride. But given the sensitivity of the international payments situation, particularly in conjunction with the need to maintain domestic credit ease, it is not sufficient to rely on "ordinary" reactions. It could also happen that the subsequent heavy purchases of short-term issues, pushed on the market

within a short time and in a period when conditions have verged on the easy side, would depress rates to undesirably low levels; at the same time, nowhere near the appropriate volume could be achieved through operating in longer term issues, without the risk of having even more upsetting consequences in those segments of the market. A flexible mechanism to soak up temporarily redundant reserves could also be highly useful in periods of Treasury refinancing, when direct market sales might have undesirable effects.

A review of some recent events in the money market illustrates more forcefully than could any hypothetical situation the potential usefulness of some kind of temporary reserve sponge, which could operate as the logical counterpart of the repurchase agreement. Thus, in the middle of last August a rather firm money market through the statement week ended August 16 gave way quite suddenly and unexpectedly to greater-than-desired ease. In turn, this easing reflected the combination of an unexpectedly large bulge of aggregate reserves and a lesser degree of concentration of existing reserves at country banks. As this situation did not become fully evident until Monday, August 21, with more than half the statement week already passed, it was decided to sell a large volume of securities for immediate delivery in order to have a maximum reserve impact over the balance of the statement period. While these sales largely accomplished their intended purpose (excessive downward pressure on bill rates was avoided for the time being, although the Federal funds rate did drop sharply) the operation entailed certain difficulties and risks. First, it was somewhat cumbersome. To avoid undue depletion of the System's bill holdings, an effort was made to sell as much as possible in short-term coupon issues -- but to do this on a same-day delivery basis imposed considerable strain on the Bank's

(please go on to next page)

accounting and securities-handling facilities. A second difficulty with the large cash sales of August 21 was that, as anticipated, they had to be followed very shortly by large ~~volume~~ purchases to meet reserve needs in late August and early September. Thus after selling $235 million of short-term issues on August 21, the System Account was in the market again on August 23 and 24 to buy more than $250 million of Treasury bills. Soon afterwards, on Monday, August 28, the downward pressure on Treasury bill rates was such that the System Account stepped in to the market and sold $125 million bills, even though it was realized that large-scale purchases would soon have to be resumed to offset month-end and Labor Day reserve drains from market factors. Thus on August 30 and 31 a total of $577 million Treasury securities was purchased, of which $380 million was Treasury bills bought in the market (the balance being about evenly divided between bills purchased from foreign accounts and coupon issues available in the market). While the specific effect of these operations on bill rates cannot be pinpointed conclusively, there did seem to be a connection between the System's purchases and the fact that three-month bill rates fell from /~~around~~ about 2 1/2 per cent in mid-August to around 2 1/4-2 3/8 in early September, at which level they remained until turning up again in ~~the first half of~~ November.

/~~While~~ Thus, although the market ~~then~~ absorbed these particular transactions fairly smoothly, the operations did appear to have some lasting effect on rates. Moreover, they courted the risk of having much sharper rate effects--or, if not carried out, of perhaps failing to meet the System's objectives as to reserve availability. It would have been preferable, in coping with the late-August easiness, if some

means had been available for withdrawing a sizable bloc of reserves for a short time with as little fanfare as possible, to be replaced in an equally unobtrusive manner as the need for reserves re-emerged. This would add another useful weapon to the arsenal of instruments already at the command of the Account Management.

A variety of possible techniques might be used to effect these temporary withdrawals of reserves. These are discussed in turn, starting with the methods that seem less promising, and concluding with the reverse repurchase agreement, which seems to offer the best prospect for meeting the problems involved here.

a) Adjust reserve requirements. One obvious means to soak up redundant reserves for brief periods would be through small temporary increases in reserve requirements--applicable to all banks or perhaps to just the central reserve and reserve city institutions. The method is neat, easy to understand, and would even not require any "open market operations" by the Trading Desk. For example, in the situation described above, the central reserve and reserve city banks could simply have been notified that in the statement week of August 23 the reserve requirement against net demand demand deposits would be 16 3/4 per cent instead of 16 1/2 per cent--thereby absorbing about $250 million of reserves in that statement period. The following week, requirements would revert to their previous level, automatically releasing an equivalent volume of reserves.

While there is much to be said in favor of making more frequent and flexible use of reserve requirement changes than has been done in the past, it is doubtful that this would be a good instrument to meet the need described here. Even when applied in small doses,

the instrument is much too cumbersome relative to the problem at hand, which is one of altering reserve availability for just a few days at a time. Notwithstanding the appealing theoretical simplicity of eliminating excess reserves with a stroke of the pen, this simplicity must be set off against the need for notifying each affected bank of the change, and complicating the reserve calculations for that brief period for each of those banks. (There are now about 230 central reserve and reserve city banks.) Furthermore, the public announcement of such a change--even assuming that the banking community and financial markets were conditioned to more frequent changes in reserve requirements, would be likely to magnify the importance of the operation out of all reasonable proportion. And finally, whereas a temporary increase in required reserve ratios would affect a fairly broad group of banks, the short-term need envisioned here is more one of mopping up/~~a redundancy~~ an excess of funds in the money centers. Taking the funds out on a broader basis might have the same eventual effect on the money market, but by the time the adjustment had worked through the market the need for reducing ease may have passed.

The more appropriate role for greater flexibility in adjusting reserve requirement ratios, at least as a starting point, would seem to be in meeting reserve needs, or mopping up reserve excesses, that are expected to persist for perhaps a few months, or at least for a week or two, and not merely for a matter of days.

b) Adjust Treasury balance at Federal Reserve Banks. By building up, or leaving intact, larger-than-usual Treasury balances at the Federal Reserve Banks, member bank reserves could be absorbed on a rather flexible day-to-day basis. Presumably these temporary build-ups would be at the expense of the "C" banks, and in this regard

The technique is an improvement over the above suggestion for frequent alteration of reserve requirement ratios, because the "C" banks are more in the nature of "money market institutions" than are the central reserve and reserve city banks as a group. (Of course, there is considerable overlapping between these groups.) In fact, within rather restricted limits some use is already made of this instrument. Given the range of uncertainty that typically surrounds day-to-day projections of Treasury balances with the Federal Reserve Banks, there is a natural tendency--while generally aiming to keep these balances reasonably close to the normal $500 million level--to resolve doubts about the projections on the side that would help achieve reserve objectives and desired money market conditions.

Basically, however, it would appear to be unsound in principle to ask that the Treasury bear any substantial portion of the burden of open market operations. And clearly there are practical limits beyond which it may not be prudent to push. On one side it is obviously risky to augment reserves by allowing the balance to run too low. The possibility of overdrawing the Treasury's account at the Federal Reserve (which would presumably be covered under the special authority for limited Treasury borrowing from the System) comes too close for comfort to abridging Treasury-System independence--if used in any but rather unusual and highly infrequent circumstances. Large deviations on the upwide in Treasury balances at the Federal Reserve are also of questionable desirability. For one thing, this would probably be regarded unfavorably at the Treasury, where the desire is to keep the working balances as low as reasonably possible, and to leave as much as possible on deposit in the commercial banks as recompense for the services performed by these banks for the Treasury. More important is the uneven and possibly disruptive effect on the small group of banks that bears the brunt of daily adjustments in the

Treasury's balance. These banks would come to feel, perhaps with some justification, that they were being used unfairly to bring about monetary effects on the banking system as a whole. Indeed, the Treasury feels a duty to keep the calls equalized as nearly as possible between the "B" and "C" banks as this was the understanding under which the "C" banks agreed to the arrangement for special calls.

It can be argued on the other side that the extra tapping of Treasury balances at the money market banks is not such an onerous burden because it would generally be done only to offset a situation of excessive ease. Hence if supplementary Treasury calls pulled away reserves, these should be fairly readily regained in the Federal funds market, although at some cost (presumably small) to the banks affected. But while this may hold for the money market banks as a group, it may not be so easily absorbed by each individual bank. For even though the institutional machinery of the money market has developed to a fine point, in which net demands and supplies usually can be brought together fairly quickly, there still can be day-to-day frictions and knots in the adjustment process. Rather it would be preferable to employ a more selective mechanism--where instead of reaching out somewhat arbitrarily to mop up ease, the System could maneuver its sponge into just those pockets of liquidity where the easiness was making itself most obvious and potentially doing the most harm.

A further objection to the manipulation of Treasury balances (and this would also apply to day-to-day changes in reserve requirement ratios) is that it would probably not be feasible to consider taking action more than once a day with this instrument. In the case

of special calls or redeposits with the "C" banks there is a standard time of day--around mid-morning--that such notices go out. Yet the rapidity of developments in the market makes it desirable that the System have a more flexible instrument at its disposal, as the effects on a single day may often spell the difference between acceptable and undesirable degrees of ease. Just as the Account often waits until midday or later to make repurchase agreements, it may also be desirable to observe the market through a particular morning, and see how Federal funds and bill rates "open up" before deciding to withdraw funds temporarily. Calls on the "C" banks late in the day, especially on Wednesdays, would probably be entirely unacceptable to the banks involved.

c) System operations in Federal funds. One obvious means to affect short-term reserve availability on a highly flexible basis would be for the Federal Reserve System itself to deal in Federal funds. Indeed, this is what the System does, in effect, when it lends to member banks at the discount window. To meet the problem of mopping up unwanted ease, however, it is sometimes suggested that the System not "sell" funds at the discount rate, which it does in a sense when member banks borrow, but rather "purchase" these funds at the going market price. In other words, member bank reserve balances would be temporarily extinguished--for a price paid to the owners of those balances--and the market tone would be accordingly tightened.

While this method is attractive from the standpoint of being able to reach just those pockets of ease that are most in need in mopping up, it is questionable whether the System has the legal power to make such transactions. Furthermore there are certain practical drawbacks. First of all,

it would give unprecedented official recognition to the Federal market, which is perhaps not necessarily bad but is a point to be considered. Second, and more serious from a practical standpoint, it would either expose the System to a charge of unfair discrimination against smaller banks, or would open the door to an enormously--and perhaps impossibly--complex operation. Presumably, to keep the scale of operations within manageable limits, the System would want to deal only in large lots--as is now the common practice in the Federal funds market. But while the private market can draw a distinction of this kind, it may be difficult for the Federal Reserve System to do so. One can imagine the outcry from certain Congressional quarters, for example, if the System "bought" several million dollars of Federal funds from the Chase Manhattan Bank at 1 per cent, but refused to deal in the thousand dollar amounts that might be offered by a small country bank in Texas which is ordinarily content to sit with idle excess reserves. On the other hand, the attempt to deal with these small amounts on any equitable basis ("equitable", that is, in the eyes of potential System critics) could hopelessly hamstring the System's efforts to have a neat, efficient instrument at its disposal.

Much the same sort of objections could be raised to System dealings in Federal funds if the System were <u>selling</u> instead of <u>buying</u> these funds--with the additional complication that such sales, if at rates below the discount rate, would no doubt strike those banks that are forced to the discount window as highly unfair. (The System might be unwilling to provide Federal funds to those banks because of the small amounts involved.) And yet if the System were to enter the

Federal funds market at all, even if only as an occasional buyer, this might lead to demands that it also operate sometimes as a seller--particularly on the part of banks, with whom the System does not make repurchase agreements.

d) Reverse repurchase agreements. The most promising technique for temporarily extracting reserves from the market would seem to be an arrangement for making reverse repurchase agreements against Government securities. Under ordinary repurchase agreements the System is able to inject reserves temporarily by purchasing securities and then reselling them at the conclusion of the agreed period, or before / at the same price plus the agreed "interest rate". Theoretically, the arrangement may be terminated by either party, although in practice the Federal Reserve generally does not recall its funds in advance of the initially arranged maturity; dealers, on the other hand, frequently terminate the arrangement in advance of its maturity when they are able to secure financing more cheaply or when they are able to make a permanent sale of the securities temporarily held by the Federal Reserve under a repurchase contract. Repurchase agreements are made at the initiative of the Federal Reserve, to suit its purposes from the standpoint of providing reserves and relieving related market tensions, although it is also true that the contracts generally cannot be made unless there is a simultaneous "dealer need" for financing. Usually, at those very times when the banking system needs a temporary reserve injection, the dealers also have a financing need, so that the System's aims can be fulfilled. Since those dealers in Government securities which are the dealer departments of commercial banks have their own bank to draw on for financing (which in turn can meet a temporary reserve need at the Federal Reserve dis-

count window), repurchase agreements are made only with the nonbank dealers. The agreements are made for a maximum of 15 days, are written against Treasury issues maturing within 24 months, and may not be made at rates below whichever is the lower of the New York discount rate or the latest average issuing rate on three-month Treasury bills. (In practice, the rate is never above the discount rate although the directives do not set any upper limit.)

Reverse repurchase agreements could presumably be worked out along broadly similar lines. The Federal Reserve could sell securities to the dealer at the start of the contract, thus extinguishing reserves, and repurchase those same securities several days later at a price that would provide for the agreed-upon interest rate. The contracts could be written so that either party could terminate the arrangement in advance of maturity, but presumably the Federal Reserve would not ordinarily plan to take advantage of this option, although it would have to be expected that dealers might come in early for their money if the market was tending to tighten up. In fact, as developed below, it might be necessary in order to obtain maximum usefulness from this instrument, for the Federal Reserve to relinquish its option to terminate the agreement in advance of regular maturity. In this case, it might be preferable to fix the maturity for both parties and not permit the dealers to withdraw their funds early.

While repurchase agreements currently may be made only with nonbank dealers, it should be possible to make reverse repurchase contracts with either bank or nonbank dealers. Indeed, it is presumably the bank dealers who would ordinarily be in a better position to make these arrangements as they would be the ones with over-ample

Federal funds at their disposal. Nonbank dealers might also be in a position to make these arrangements--in effect, acting as finders of funds for the System among banks or others who may have an excess of reserve funds at their disposal. In the past half year, in fact, several of the dealers--both bank and nonbank--have proposed arrangements of this sort to the Trading Desk.

It should be recognized that if the System were to make reverse repurchase agreements with dealer banks it might come under considerable pressure to make regular repurchase agreements with these banks, too, as some of them have long felt discriminated against on this score. However, if the System adheres firmly to the position that these arrangements--in either direction--are something it initiates to serve the general purposes of monetary policy, and not some sort of balm to be applied to the Government securities market, it should be possible to resist these pressures. The rationale for the distinction would be that dealer banks, as well as other member banks, can have recourse to the Federal Reserve discount window to cover temporary shortages, while there is no corresponding outlet for disposing of redundant reserve funds, so that the Federal funds price can be driven down practically to zero when funds are in substantial excess.

A particular problem attaching to the use of reverse repurchase agreements with nonbank dealers is that such dealers would probably make a similar arrangement with their own customers rather than hold the securities temporarily sold by the Federal Reserve in their positions. Hence they might be unwilling to make any agreement where the System could terminate the contract on short notice,

lest the dealer suddenly be required to sell back the securities which he may have lodged temporarily with his customer. Of course, this could be provided for in some cases by the dealer making a similar arrangement with the customer. On the other hand, the dealer might want to reserve his own right to terminate, if he so chose. These points should not be too difficult to work out, however, and if the original maturity of the contracts is short, the System would sacrifice little in relinquishing its right to terminate contracts in advance of maturity.

The contracts used for these agreements could probably be identical with those used for straight repurchase agreements. As regards the maximum time period of the agreements and maximum maturity of the securities involved, the 15-day and 24-month limits now in effect for ordinary repurchase agreements could also be applied to the reverse repurchase arrangements, although there would seem to be less need--from the standpoint of protecting the System from adverse price movements--for specifying a maximum maturity on the issues involved. (We would hardly expect the dealers to refuse to sell the issues back to us merely because they had risen in price.) As for the interest rate, the best procedure might be to specify merely that the rate be no higher than the discount rate. Presumably the rate would usually be below that rate, but to attempt to specify an upper limit in terms of a "going rate" on Federal funds, or something of this nature, may leave the Account Management too little flexibility to achieve the desired ends. In practice, the Trading Desk would want to determine the rates in a competitive fashion. One method might be to ask the dealers at what rates and amounts they might do reverse (Please go on to the next page.)

repurchase agreements of specified maturity--giving the dealers some reasonable time to find the pockets of funds to be mopped up, as they probably would not all have excess funds themselves. On the basis of the market's response, the currently projected reserve outlook, and other indicators of market tone, the Account Management could ~~then~~ determine what volume of agreements to arrange, and then select those offered at the lowest rate to make up the appropriate volume. Another technique might be to suggest a rate ~~in the go-around~~--for example, asking dealers what volume of agreements they might like to make for two-day maturity at, say, 1 1/2 per cent; again, the amount to be done could be determined on the basis of the market response, the reserve picture, and other factors relevant to the condition of the market. The latter technique would seem preferable as it tends to keep the initiative more in the hands of the System and would prevent the dealers from setting unreasonably high rates.

As a market technique, the reverse repurchase agreement would seem to have all the main advantages and none of the major disadvantages of the other methods described above. As with direct dealings in Federal funds, it would mean that the particular pockets of ease that were potentially most troublesome could be mopped up; one would not risk causing some inadvertant tightness here and there because of the arbitrary way that higher reserve requirements or larger Treasury deposits at the Reserve Banks might hit ~~some~~ particular banks in the short run. At the same time it would avoid a major ~~the~~ disadvantage of direct dealing in Federal funds--namely, that thousands of small banks might seek to have the System pay them something for their excess reserves if this were done occasionally for large banks.

For in the case of reverse repurchase agreements, the operation would be only with or through the regular dealers in Government securities. There could still be complaints from some banks who might claim that this is just a subterfuge for permitting some big banks to receive additional income on idle excess reserves, but it should be possible to show that, as with current repurchase agreements, the technique is employed only as it suits the broad policy purposes of the System, and not merely to fill any needs or desires of the dealer community.

An additional technical point of some importance is that it would be quite cumbersome from an accounting standpoint -- and perhaps even infeasible -- to make reverse repurchase agreements through the System Open Market Account, as it is now set up.[1/] Just as it has been found much smoother to handle regular repurchase agreements as a special operation of the Federal Reserve Bank of New York, it would also be preferable to establish a special New York account which could hold the securities that could be used in reverse repurchase contracts. A special New York account, as described in a separate memorandum, would also facilitate System trading for immediate delivery.

1/ The System Open Market Account is a pool in which each Reserve Bank has a participation, constituting an undivided interest in the Account as a whole. Thus, while a particular Reserve Bank pledges only a part of its total participation in securities in the Account, the pledge represents, in effect, a partial lien on all securities held in the Account as a whole, without regard to issues or amounts held. Furthermore, all securities in the Account are held in joint custody by the Federal Reserve Bank of New York and the Federal Reserve Agent at New York who represents the interest of all the Reserve Banks in the pledge of their participation to secure note liabilities. The agent could not be expected to permit the release of any securities in the Account except for outright purchase or sale. Thus, there is a real question whether any part of the securities held in the System Account as presently constituted could be made available for reverse repurchase agreements.

The payment of interest on reverse repurchase agreements by the Federal Reserve Bank of New York would, of course, reduce its earnings in relation to other Reserve Banks. On the other hand New York's earnings are larger by reason of its repurchase agreements, so that the two could be considered offsetting.

Finally, there is a legal question whether the System is authorized by law to make reverse repurchase agreements. The pertinent statutes contain no specific reference to this kind of transaction. Speaking in general terms, the making of repurchase agreements has been rationalized on the ground that they constitute purchases of securities and thus are authorized as part of System open market operations. It would, therefore, be reasonable to assume that reverse repurchase agreements constitute sales of securities which would also be authorized as part of open market operations. If reverse repurchase agreements are not to be considered sales of securities, other questions will arise such as whether the System has authority to borrow money and to pay interest. Regardless of the rationale for reverse repurchase agreements, if such contracts are to be in form similar to the repurchase agreements we now make, the payments made to dealers will be in the form of interest -- as are the payments by dealers on the present repurchase agreements.

e) Loans against securities. A possible variant of the reverse repurchase agreement would be an arrangement for dealers to make short-term loans to the Federal Reserve, collateralled by Government securities. In market effect, maturity terms, and interest rates, these arrangements would be identical with the reverse repurchase

agreements described above. From the Federal Reserve's viewpoint they would be equally as effective as reverse repurchase agreements in extinguishing reserves for brief periods, and in some cases dealers might prefer these arrangements to ones in which they actually purchase the securities for subsequent resale. Conceivably, however, a lending arrangement of this kind would be more open to criticism -- on the grounds of conferring some advantage on certain banks that is not open to all -- than would repurchase arrangements, which are traditionally carried out only with the dealer community and which would be in the form of sales and purchases of securities. Arrangements for loans to the System against Treasury issues would also be greatly facilitated by having a separate New York account, in which transactions could be made without having to be immediately participated throughout the System.