

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM WASHINGTON, D. C. 20551

## STRICTLY CONFIDENTIAL (FR) CLASS I - FOMC

TO: Federal Open Market Committee DATE: December 15, 1983 FROM: Normand Bernard  $\mathcal{NB}$ .

Attached is a memorandum from Messrs. Axilrod and Sternlight on contemporaneous reserve accounting, agenda topic no. 3 for the upcoming meeting of the Committee. Please note the Strictly Confidential (Class I -FOMC) classification of this memorandum.

Attachment

STRICTLY CONFIDENTIAL (FR) CLASS I - FOMC

TO: Federal Open Market Committee DATE: December 14, 1983 FROM: Messrs. Axilrod and Sternlight SUBJECT: Operating Procedures in Light of Contemporaneous Reserve Requirements

The shift from lagged to contemporaneous reserve requirements (CRR) will become effective with the reserve maintenance period beginning Thursday, February 2. <sup>1</sup> At that time the bulk of transactions deposits will be reserved essentially on a contemporaneous basis, while the reserve requirements on time and savings deposits (including MMDAs) will be lagged. The reserve maintenance period will also be lengthened from one week to two weeks. In addition, for a transition period of 6 months reserve excesses or deficiencies equal to 3 percent (instead of the present 2 percent) of required reserves will be eligible for carry-over into the succeeding statement period; that percentage will be reduced to 2-1/2 percent in the second six months before reverting to 2 percent.

This memorandum discusses the principal implications for setting reserve paths and for open market operations of the shift to CRR and a two-week reserve period, and suggests approaches to operations that might be considered. The memorandum does not discuss day-to-day operating techniques and decisions with regard to the character of specific open market transactions (RPs, with what maturity, or outright transactions) or their timing within a reserve period relative to the projected daily or weekly pattern of reserve need.

<sup>1.</sup> Smaller institutions which report deposits quarterly would not be subject to contemporaneous reserve requirements.

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In one sense, the shift to CRR might be considered to have no necessary implications other than purely technical ones for open market operations. Then, as now, a nonborrowed reserve path can be set based on an assumption (or decision) about borrowing by depository institutions. And that assumed level can be maintained as long as the Committee, on policy grounds, wishes it to be held.

The actual amount of borrowing in a reserve period would still differ from the assumed amount for a variety of reasons--the excess reserve assumption was wrong; market reserve factors on the last day of a period affected nonborrowed reserves by more or less than anticipated; the pattern of borrowing within a period or other special factors affecting the demand for borrowing (bank statement dates, holiday weeks, or computer breakdowns, for example) justified an adjustment to the nonborrowed path in the course of a statement period. But with CRR, one additional factor--a deviation in actual required reserves on transactions balances from that assumed in constructing the nonborrowed path--would also affect borrowing. With less required reserves than assumed, borrowing would be lower than expected (or excess reserves would be higher than expected) even if the nonborrowed path were precisely attained--and similarly, if required reserves turned out to be more than assumed, borrowing would be higher than anticipated (or excess reserves lower).

Because the reserve period has been lengthened to two weeks there will be an opportunity to revise required reserve expectations around the middle of the two-week period and also again in the last two days of the period. A similar revision can then be made in the nonborrowed reserve path to keep it consistent with the originally expected Authorized for public release by the FOMC Secretariat on 3/25/2022

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level of borrowing. Nonetheless, even if the revised nonborrowed path is reached, borrowing (or more precisely free reserves) will vary from expectations because actual required reserves (published eight or nine days after the statement week) and the estimate of required on the last day of the reserve period can be expected to differ by about \$100 to \$200 million on average.

Unless misses in market factors affecting nonborrowed reserves happen to offset misses in required reserves in terms of their impact on free reserves (as they probably will in some weeks), the effect of CRR will be to increase the statement period-to-statement period variability in borrowing and free reserves and, other things unchanged, in the federal funds rate. It would make each period's borrowing and net borrowed reserves somewhat less reliable to the market as a guide to an <u>intended</u> degree of reserve restraint or ease, though it should not affect the value of such a guide on average over time (since misses in required reserve estimates should generally average out to near zero over a reasonable length of time).

There are certain other technical problems that should also be noted. Some are mainly related to a transition period. For instance, it is not clear what effect CRR will have on the demand for excess reserves. One might assume, at least initially, that uncertainties in the process of adapting to a new reserve system, not to mention early glitches in banks' new information flow, would result in higher excess reserves. But the temporarily larger reserve carry-over provisions were designed to moderate excess reserves during the transition period and the two-week reserve period provides more opportunities for adjustment; moreover, unexpected reserve losses on the last day of a period Authorized for public release by the FOMC Secretariat on 3/25/2022

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have half as much effect on a bank's reserve position as they would in a one-week period.

It will also take some time before discount window borrowing patterns of depository institutions are fully understood. For instance, if institutions wait until the last day of a 2-week statement period to balance out, we will have to be prepared for considerably more borrowing on average every other Wednesday than we now face every Wednesday--with the possibility of relatively greater pressures on the funds rate at the end of the reserve period and less than might be expected during the bulk of the 2-week period. Efforts by institutions to stay more in balance with their estimated required reserves within the 2week period might distribute funds rate pressures more evenly (and also, to a degree, borrowing).

But one cannot be certain how banks will adapt the day-to-day management of their reserve positions to CRR. They, like the System, will undoubtedly learn from experience. For some transition period at least, it seems probable that fairly substantial adjustments to the 2week nonborrowed reserve path might have to be made in response to developing impacts on excess reserves and borrowing of depository institutions' reserve management decisions.

The somewhat greater variability in borrowing and free reserves that may develop naturally in the short-run (because of unanticipated required reserve changes) as a result of CRR will sometimes lead to movements in short-term interest rates that may be consistent with the longer-run thrust of policy and at other times not. The interest rate developments would be consistent when, say, a drop in

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rates accompanied weakness in money, assuming that M1 (the only aggreqate whose reserve requirements are wholly contemporaneous) represents policy. Such a drop of rates would be inconsistent with policy when it occurs while Ml is on, or strong relative to, path. That could happen if required reserves weakened because of unexpected changes in U.S. Government deposits, interbank deposits, or in the mix within Ml among currency and transactions deposits at large and at small banks--that is, misses in factors affecting the multiplier between reserves and the level of M1 deposits. But, as noted earlier, the period-to-period misses in required reserve estimates--whether from multiplier or deposit level changes--should average out close to zero, so that over time, under the present operating procedures, there would be no trend in short-term rates as a result of those misses. Any trend in shortterm rates would still for the most part reflect judgmental adjustments to the reserve path raising or lowering the implied level of borrowing in response to monetary and economic developments.

The original purpose of the shift to CRR was to facilitate somewhat closer control of M1 by hastening the automatic response of money market conditions to deviations in M1 from path; CRR was also interpreted as making control of total reserves or the base technically more feasible. Since CRR was adopted, however, the Committee has come to place less stress on M1, and has relied on a more judgmental approach to use of the aggregates in general in policy implementation, given institutional changes over the past year and apparent shifts in, or at least uncertainties about, the public's attitude toward money in its various manifestations relative to GNP.

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The Committee could, if it wished, take the opportunity of the shift to CRR to introduce a degree of automaticity in the response of reserve positions to monetary data as consistent with the original purposes of the shift away from lagged reserve accounting. The desirability of such an approach depends in part on the degree of stress being placed on Ml (whose deposits are subject to CRR) relative to other aggregates (whose non-Ml deposits are either not reserved or are reserved on a lagged basis) and to the economy; the less the stress on Ml, the more limited the appropriate automatic response. The Committee's degree of emphasis on Ml could be reflected in the extent of automaticity, if any, in borrowing changes that it would permit during reserve maintenance periods.

One approach to achieving a limited degree of automaticity would be to allow some fraction--say 25 percent--of the overshoot or undershoot in required reserves associated with a deviation of M1 from its path to show through as a change in intended borrowing. A fraction on the order of 25 percent would imply only a limited response of borrowing and money market conditions to variations in money around path; for example, a miss of \$2 billion or so--not far from the average miss that can be expected in a two week period--would imply a change in borrowing of only around \$40 million. Greater stress on M1 as a target of policy might be associated with allowing a larger fraction of the money deviation to affect borrowing levels.

Another approach, which could be combined with the fractional technique or not, would be to limit "automatic" changes in borrowing to a certain amount in any one reserve period--choosing among, say, \$50, \$100, or \$150 million. Use of an "automatic" feature within a 2-week

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reserve period would not preclude--indeed presumes under current conditions--either adjustments in the intended level of borrowing when a new reserve path is constructed for the next reserve period or maintenance of the level originally assumed in FOMC deliberations. Such adjustments, or not, would, as now, depend on behavior of the monetary aggregates as a group, incoming economic information, or other factors specified by the Committee.

If the Committee were more or less formally to permit an intended variation in borrowing for any reserve period somewhere within a \$50 to \$150 million range, consideration would also have to be given to whether, or to what extent, that might be allowed to cumulate over an intermeeting interval. If the original level of borrowing were used to construct the path each two week period, there would be no automatic cumulation in the level of borrowing over the intermeeting period from continued departures of M1 from path. Except for judgmental adjustments, the average intended deviation in borrowing over the intermeeting period from the original level would be no greater than the "automatic" limit applicable to a 2-week period.

However, if an automatic rise, for example, in the intended level of borrowing in any 2-week reserve period were employed to construct the next reserve period's nonborrowed path, a further overshoot in Ml would automatically lead to cumulative increases in the borrowing level. A \$150 million reserve period limit could cumulate to as much as \$450 million over a 6-week intermeeting period, very roughly equivalent to one percentage point or so on the funds rate. A reserve period limitation of \$50 or \$100 million would have proportionately less market effect. A lower figure, and/or not permitting any cumulation, would, of course, -8-

be preferable to the extent that the Committee felt uncertain about desirable policy responses to incoming monetary information. If and as greater confidence is regained in the significance of Ml information, there would be room to introduce greater elements of automaticity, for example, by enlarging the deposit fraction (with full automaticity at 100 percent) or borrowing cap permitted to show through in changed of intended borrowing, or by providing for cumulation of automatic adjustments to borrowing over successive reserve periods.

Finally, whether or not the Committee wishes to introduce, with the shift to CRR, more automaticity in the response of bank reserve pressures, the staff would not recommend placing significantly more emphasis at this time on total reserves or the total monetary base in implementing policy. Because deposits and reserves are not exactly contemporaneous in the new system (there is a 12-day overlap between the deposit week and the reserve week, with 2 days of the reserve week extending beyond the deposit week), it is still highly probable that banks cannot be forced to adjust deposits to be completely consistent with a pre-determined supply of total reserves, although they can clearly be forced to adjust sooner than under the lagged reserve system. As a result total reserves to some extent will still depend on deposits, with the System's control exerted mainly through nonborrowed reserves and the discount rate. Even apart from such a technicality, though, present uncertainties about the significance of the aggregates would also at this time argue against risking the rigidities--and potential sharp interest rate fluctuations--of total reserves or base targeting.