Sinking float

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Federal Reserve float—the additional bank reserves the Federal Reserve creates when it passes credit before it receives payment—complicates monetary control and costs the Treasury revenue. For these reasons, the Federal Reserve System has set a sharp reduction in float as one of its main operational goals. Daily average float has been cut from more than $8 billion in early 1979 to less than $4 billion in April 1980.

How Federal Reserve float is created

Float develops from the day-to-day operation of the Federal Reserve's nationwide check-clearing mechanism. Until the creation of the Federal Reserve, checks were cleared through private arrangements, such as local clearing associations and networks of correspondent banks. To cover the cost of handling checks, banks and clearing houses routinely deducted a charge from the face amount of checks, a practice known as non-par clearing.

With the creation of the Federal Reserve, the government became involved in the payments mechanism. The Federal Reserve Act imposed on the system the requirement that checks be cleared at par. Most checks and check-like instruments, such as NOW accounts and credit union share drafts, are still cleared through correspondents and private clearing associations. Many checks, however, are cleared through the Federal Reserve, and these are the checks that can affect the level of Federal Reserve float.

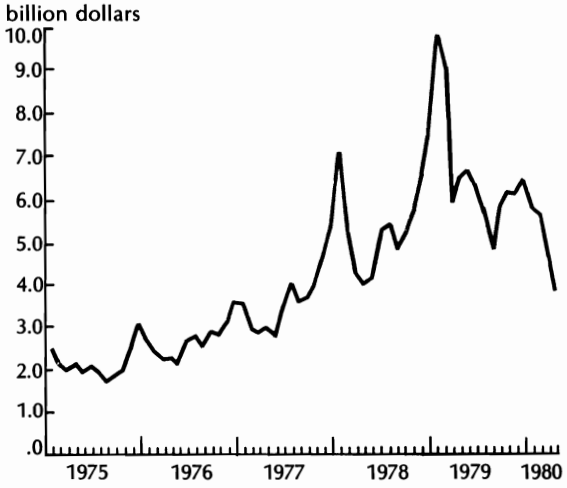
The Federal Reserve's check-clearing mechanism works through a system of deferred credits and charges. Federal Reserve banks publish availability schedules showing when credit will be passed on to banks depositing checks. For checks drawn on local banks, the schedules promise credit the same day. For checks drawn on more remote banks, the schedules defer credit as much as two business days.

In all cases, however, banks presenting checks are guaranteed credit according to the schedule—even though the Federal Reserve may not actually have collected on the checks. This guarantee reflects the Federal Reserve's longstanding belief that the efficiency of the payments mechanism requires that banks know exactly when reserves will become available.

Checks are sorted at the Federal Reserve Bank according to the locations of the banks they are drawn on. Nearly all the sorting is done on high-speed equipment that reads the magnetically encoded MICR numbers on the bottom of checks. Only checks in poor condition have to be sorted by hand.

Checks on banks in the same territory as the depositing bank are delivered to the paying bank by courier or first-class mail. Checks on banks in other territories are sent to the Federal Reserve offices there, where they are processed and delivered to the paying banks. Since 1916, it has been the policy of the

Federal Reserve float



Federal Reserve not to charge paying banks until they actually receive the checks and have some time to process them.

The Federal Reserve Bank passes credit and receives payment through the debiting and crediting of reserve accounts. The balances in these accounts are assets of the commercial banks and liabilities of the Federal Reserve Bank. The accounts are in many ways like checking accounts. That is one reason the Federal Reserve System is often called the banker's bank.

The Federal Reserve Bank, then, passes credit to a depositing bank simply by crediting the bank's reserve account. With an entry in its accounting system, the Federal Reserve increases the reserves held by the banking system. Likewise, it receives payment for a check by debiting the paying bank's reserve account.

If the debit and credit entries are not made the same day, so that they offset each other, reserves of the banking system as a whole are changed. Anything that causes actual collection to deviate from the availability schedule—unrealistic schedules, clerical errors, equipment failures, bad weather, transportation strikes, fuel shortages—can cause an increase in float.

Federal Reserve float is not a new development. For the first 25 years of the Federal Reserve's operations, float was low, primarily because the deferred availability schedule ran up to as many as eight days. A three-day maximum deferment schedule was adopted in 1940, and in 1951 the maximum was reduced to two days. Any reduction in the availability schedule that is not matched with faster collection of checks causes float to increase.

Its effects on monetary and fiscal policy

Federal Reserve float can have important effects on both monetary and fiscal policy. The additional reserves created by float cannot be distinguished from the reserves created by the Open Market Desk through purchases of government securities. To offset an increase in reserves that is out of line with monetary objectives, the Open Market Desk must sell securities from its portfolio.

Part of the trouble is that system float is literally as variable and unpredictable as the weather. One week in February last year, float jumped from $6.6 billion to over $12 billion. Most of the increase was due to a blizzard that snarled transportation on the East Coast.

As the Open Market Desk uses estimates of system float for the following day in conducting its operations, misses in the estimate—which occasionally are billions of dollars—can create operational problems. The magnitude of this problem can be sensed from a comparison of system float with total reserves. The daily average of total reserves last year was around $40 billion. System float averaged nearly $6.7 billion.

Float also results in lost revenue to the Treasury. When the Open Market Desk sells securities to offset the effect of float on reserves, it reduces the Federal Reserve's portfolio. That reduces the interest payments the system receives and lowers the earnings the Federal Reserve can return to the Treasury.

A first approximation of the loss to the Treasury can be obtained by multiplying the daily average level of system float by some market interest rate. Since most open market transactions involve securities maturing within 90 days, an appropriate interest rate would be some average of the federal funds rate and the market yield on three-month Treasury bills. This average last year was between 10 and 11 percent. As float averaged about $6.65 billion a day, the reduction in Federal Reserve earnings due to float must have been around $700 million.

This is only part of the story, however. If the Federal Reserve could cut the daily average of float in half, net receipts to the Treasury would not necessarily increase by $350 million. There are several reasons why it would be less than that.

In reducing the public's holdings of government securities and, therefore, the Treasury's interest payments to the public, a reduction in float would also translate into

smaller total tax receipts. Some people have guessed the reduction in tax receipts could amount to half the increase in interest payments returned by the Federal Reserve to the Treasury. This would reduce the savings to the Treasury to about $175 million.

Also, to reduce float the Federal Reserve would have to increase its operating costs. Expenditures on additional personnel and equipment needed to step up the processing of checks and speed movement between Federal Reserve offices would reduce the net earnings passed on to the Treasury.

The Treasury would also receive less revenue from commercial banks, which will have to make more sorts of checks and prepare more cash letters. The additional workload will increase costs and lower profits and tax payments.

If float were cut in half in 1980, but at a substantial increase in the costs of operations of commercial banks and the Federal Reserve, net revenue to the Treasury might increase by only $100 million to $150 million. That is about 1 percent of the earnings the Federal Reserve is expected to pass to the Treasury in fiscal year 1980 and less than .02 percent of the total receipts the Treasury expects to collect.

Regardless of the perspective—whether current float is seen as involving high costs to the Federal Reserve and the Treasury or whether the costs are seen as comparatively minor items—float itself had increased rapidly in the last few years. From a daily average of about $3 billion from 1970 to 1976, it rose to $3.6 billion in 1977, $5.5 billion in 1978, and $6.7 billion in 1979.

Reflected in this increase was the higher value of checks and other collection items cleared through the Federal Reserve, including wire and securities transfers, interest coupon collection, and automated clearing house payments.

During that time, the costs of float also rose sharply, reflecting in part the increase in inflation. The interest rate on three-month Treasury bills more than doubled, increasing from a yearly average of 5 percent in 1976 to more than 10 percent in 1979.

Ways float could be reduced

To gain more insight into where float is created in the collection cycle, the Federal Reserve banks are adjusting their accounting systems so some components of float can be identified. These modifications will provide improved techniques to evaluate the performance of couriers carrying cash items between Federal Reserve offices and to paying banks. They can also be used to monitor the Fed's internal performance in handling float-generating cash items.

Other methods of reducing float are:

By speeding check collection—Guidelines have been established for justifying additional expenditures to reduce float. Subject to the guidelines, Federal Reserve banks can hire more personnel, buy better processing equipment, and arrange other transportation and delivery services, provided the change will significantly reduce system float by speeding collections.

By extending availability schedules—Federal Reserve float could be sharply reduced by adjusting availability schedules to reflect average clearing times. If experience for a particular type of item showed 90 percent of the funds collected in one day and 10 percent collected on the second day, the Federal Reserve could pass credit according to these percentages, increasing reserves 90 percent of the deposit in one day and 100 percent in two days—a practice known as fractional availability.

By giving priority to large checks—Special attention is being given to the collection of large checks. Surveys of check items collected by the Federal Reserve show that a large part of the dollar volume handled is accounted for by comparatively few checks. It has been estimated, for example, that a fourth of the float is generated by checks for a quarter-million dollars or more.

Several plans have been proposed for sorting out this small number of large checks and giving them special handling. Any of the proposals would affect the advantages of using Fed services. They would all require presenting banks to make additional sorts and

separate cash letters for large checks. The amount of paperwork—for presenting banks and for Federal Reserve banks—could increase substantially.

Under one proposal, large checks would be given priority handling within the existing check collection system. Under another, large checks would be presented for collection electronically. And under still another, they would be handled on a collection basis, with the Federal Reserve passing credit only after it received payment.

Under the second proposal, which is consistent with the Federal Reserve's intentions of going eventually to an all-electronic payments mechanism, Federal Reserve banks receiving large checks would copy the necessary information onto computer files that could then be sent to other Federal Reserve offices through the system's existing electronic communications network. The data would then be presented to the paying banks and their reserve accounts debited. The checks themselves could be delivered later or simply stored at a warehouse.

The third proposal would mean large checks were no longer paid according to a deferred availability schedule.

Any of these proposals could reduce float significantly. Before adopting any of them, however, the Board of Governors will ask member banks for comments.

By charging for float—Another approach is now being taken to Federal Reserve float. The Monetary Control Act requires the Federal Reserve to charge for float and other services and make its clearing services available to all depository institutions.

By keeping the use of availability schedules while charging depositing institutions for any float that was created, the Federal Reserve will adopt a float management practice of some commercial banks. Since the Fed will be required to charge the market rate for federal funds, the effect will be to offset the revenue lost by the Treasury through system float.

To implement this procedure, Federal Reserve banks will have to significantly change their accounting systems so that float-creating transactions are properly identified and assigned to the right depositing institutions. Although a fairly large initial investment will be required, the system should be inexpensive to operate, especially when compared with the costs of speeding up check processing.

Charging for float, however, will have a direct impact on banking costs to the public. With member banks charged for the funds the Federal Reserve created before it received payment, banks will try to pass the charges on to their customers. Charging for float and other check processing services will also result in increased competition from private clearing institutions.

Further in the future

All these ways of reducing float take for granted that the Federal Reserve will continue processing a large part of the country's checks and passing credit according to deferred availability schedules. Although the Federal Reserve sees these conditions as the constraints within which it must operate, the constraints could be changed.

The Fed could stop clearing checks—With approval of Congress, the Federal Reserve could phase out its check processing operations. Then, instead of trying to determine the right prices for processing checks, it could turn the function over to private clearing houses and correspondent banks.

Private processors, in having to compete for check collecting, would be subject to market forces in setting their prices and availability schedules. The Federal Reserve could continue as the central bank, maintaining reserve accounts for its member banks without processing their checks.

Private clearing houses would notify Federal Reserve banks at the end of the day of the amounts to be debited or credited to reserve accounts. The Federal Reserve System already has such arrangements with several automated clearing houses. If these arrangements were extended to all check clearings, Federal Reserve float could be essentially eliminated.

Unlike the hodgepodge of private clearing arrangements before the Federal Reserve was created, the system could be based on a single nationwide clearing procedure involving final adjustments in reserve accounts.

Schedules could be eliminated—Though it might be the most drastic change, the most straightforward approach would be the elimination of deferred availability schedules. Instead of credits being passed on the basis of individual checks, they could be passed on the basis of cash letters showing the total amount of checks that one bank was presenting for collection from another bank. There are some basic policy issues inherent in this proposal, as well as technical problems in implementing it, as for example, the redesigning of many operational procedures.

Because the procedure would represent a fundamental change in how the Federal Reserve passes credit, member banks would be prompted to reevaluate their schedules for making deposited funds available to their customers. The Federal Reserve has taken the position that availability schedules serve the public interest by ensuring a reliable flow of payments. As Governor Coldwell has said:

> This means that we (the Federal Reserve) absorb the float resulting from major snow storms, hurricanes and other natural disasters. It also means that we insulate the payments system from many more routine problems—aircraft delays, power outages, and so forth.

The benefits of this insurance need to be weighed against the cost associated with Federal Reserve float and efforts to reduce it.

Although certainty about the time deposited funds will become available is considered important, the Federal Reserve could still reduce the average level of float by adopting more realistic availability schedules. During the winter, for example, when float often increases drastically, an extended availability schedule could be adopted to reflect system experience with collections that time of year.

There are real costs associated with even this fairly minor change, however. Member banks would have to adjust the availability schedules they use in passing credit to their customers. Corporate cash managers and the public generally would have to adjust their plans to reflect the change.

The Giro system could be used—The approach to reducing Federal Reserve float that would involve the most fundamental changes in the existing system would be the replacement of the check-based payments mechanism with the Giro system advocated by former Governor Mitchell, an expert on the payments mechanism. Under this system, anybody wanting to initiate a payment against a bank deposit would notify the bank directly whom to pay, how much, and when. Notification could be by phone, a check-like form, or a standardized bill submitted by the payee.

Having verified the request, the bank would authorize a transfer from its reserve account to the account of the payee's bank on behalf of the payee's private account. The information could be put on computer tapes or could be sent directly to a clearing institution over a computer-to-computer telephone connection.

Items to be cleared through the Federal Reserve would be sorted according to receiving banks and transferred between reserve accounts. The payee's bank would be notified that it had an increase in reserves that matched the credit to the payee's account. There would be no need for physical sorting of paper checks. Payment instructions and sorting would be done electronically.

Adopted nationwide, the system would essentially eliminate Federal Reserve float. It would also reduce the costs of processing paper checks. Most European countries have Giro systems that allow depositors to instruct the post office to pay bills for them.