Federal Reserve Float: Not to Be Forgotten

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by Mardel F. Kelly

The process, or art, of "check-kiting" is commonplace and is closely related to the concept of float. "Kiters" write checks without sufficient funds in their accounts, intending to find the money before the checks clear. This may be why float has been referred to as "that life raft for the hard-pressed billpayer" (Business Week, 1972, p. 51). It gives billpayers the use of money they don't actually have (or allows them to keep their money invested elsewhere for a greater length of time).

Float arises out of the check-clearing process. Checks may be cleared in one of four different ways (Hoel, 1975, p. 247). Banks may settle with each other by sending checks directly to the bank on which they are drawn or by sending checks to correspondent banks which provide clearing services. Clearing checks through a clearing association of which the bank is a member is a third possibility. Finally, checks may be cleared through the Federal Reserve System (the Fed).

This article deals only with Federal Reserve float and, consequently, is concerned only with those checks that are cleared through the Fed. This is no trivial matter as, according to Cathcart, the Federal Reserve clears more than ten billion checks each year (1982, p. 366).

Federal Reserve Float Defined

Formally, float is the difference between two Federal Reserve balance sheet items: Cash Items in the Process of Collection (CIPC) and Deferred Availability Items (DAI). CIPC, an asset, indicates the value of checks in the Federal Reserve's possession on which the Fed has not yet collected. DAI, a liability, indicates the value of checks it hasn't yet paid. The Fed collects on checks by deducting their value from its deposit liabilities account with banks on whom the checks were written. Similarly, it pays on checks by adding to its deposit liabilities with banks from whom the checks were received.
When the Federal Reserve receives a check to be cleared, the depositing bank does not receive credit immediately. Instead, credit is deferred according to an availability schedule, the nature of which the Fed has determined by experience over the years. The length of deferral time for credit usually depends on the distance the payor bank (the bank on which the check is written) is from the payee bank (the bank which deposited the check with the Fed). Maximum deferral time for credit is two business days. The Fed then sets out to receive payment for the check from the bank on which it is drawn. On the day credit is due, the depositor’s reserves are automatically increased; on the day payment is made, the payor’s reserves are reduced.

If the payment and collection schedule were to work out perfectly, there would be no float. However, on those days when credit is given before payment has been received, float is created. In effect, float is an interest-free loan from the Federal Reserve to depository institutions. It is caused when the scheduled collection time is less than the actual time needed to collect payment. The result is a net addition to total bank reserves.

Float could theoretically be either positive or negative since it is the difference between two balance sheet items, one an asset and the other a liability. However, in practice float is always positive because, in the aggregate, checks are credited before enough time has elapsed to allow for payment to be made.

Float is created by a variety of problems which affect different aspects of the collection and transfer processes. In addition to unrealistic collection schedules, which may make it impossible to receive payment in fewer than two business days, other uncontrollable elements of float exist. Four components of float are discussed by Murdoch. Holdover float is caused by delays in processing checks at Fed offices due to an unexpected volume of checks, unusually high staff absences (due perhaps to widespread illness), computer malfunctions, or other causes. Transportation float is caused by delays in the transport of checks due to bad weather (e.g., heavy fog, snowstorms), mechanical breakdowns, strikes, or other problems. Delayed presentment float results from midweek closings or varying holiday observances. Disbursement float is caused by the writing of checks on accounts in institutions located in remote, hard-to-reach areas. This is known as the practice of remote disbursement. Rejected item float (Hoel, 1975) is another common component. This results from the rejection of some checks that were thought to be qualified for processing on high-speed computer sorting equipment, forcing their handling on slower, manually operated machines.
Behavior of Federal Reserve Float

Float tends to increase toward the end of each week and reaches a peak near the beginning and middle of most months. This seems to reflect the bill-paying patterns of most individuals and businesses (Campbell and Campbell, 1984, p. 223). Cargill (1983) notes that float also tends to be larger during the winter months due to adverse weather conditions.

The historical behavior of Federal Reserve float can be seen in Figure 1 (Young, 1986, p. 31).

Figure 1

Federal Reserve float

As can be observed, float was of little significance until 1939 when it started a general trend upward to record highs in the late 1970s. It has since fallen sharply. In determining some of the factors behind this pattern, it is helpful to look at float prior to and following the enactment of the Monetary Control Act of 1980 (MCA-80).

From 1916 to 1939 availability schedules had a maximum delay of eight days, which resulted in low levels of float during this period. Maximum credit deferral, however, was reduced first to three days in 1939, and then to two days in 1951, where it has remained. These actions increased float because collection times did not necessarily decrease along with the reduc-
tions in deferral time. The volume and dollar value of checks processed by the Fed increased from 1939 to 1979. This is known as a growth in the payments system and it accounted for at least part of the general increase in float during this time.

The decrease seen in the early 1970s can be attributed partly to the installation of high-speed check-sorting equipment and the expansion of air charter services. Such advances helped reduce the delay in presenting checks for payment by decreasing processing time. According to Young (1986), another contributing factor was a 1972 amendment by the Fed to its Regulation J. As a result, payor banks located outside Federal Reserve cities have their reserve accounts debited on the day on which checks are presented by the Fed rather than on the next day as had been done previously.

From the mid to late 1970s, a drastic increase in the amount of float occurred. According to Campbell and Campbell (1984), from 1975 to 1978 float more than tripled; Murdoch notes that in 1979 Federal Reserve float reached a daily average of $6.7 billion. As was mentioned earlier, part of this general increase may have been due to the continued growth in the payments system. The rising value of checks was in part due to the high inflation rate of the late 1970s. This, however, is not enough to account for all of the large increase witnessed. Rising interest rates at this time also played a part by increasing cash management practices such as remote disbursement.

The record-level increase in float resulted in Congressional pressure to reduce float and eventually led to the previously mentioned MCA-80. Congress took an interest in the sharp increase in float in the latter half of the 1970s because the Fed rebates its net profits to the Treasury each year. When float increases, the amount of this rebate falls. If government spending is to remain the same, the Treasury is forced to cover the loss by additional taxes or increased borrowing. Therefore, the large increase in float prompted the attention of both the Treasury and Congress.

The subsequent decline in float in recent years can be attributed to a series of Federal Reserve actions taken both before and after the MCA-80. According to Young (1986), the Fed took several actions just prior to the MCA-80 which included criticizing remote disbursement and calling for its elimination, modifying check processing guidelines at Reserve Banks to limit holdovers to an average of three percent of check volume, and expanding its program to monitor direct sends. A direct send occurs when a bank sends checks drawn on banks in another Federal Reserve district directly to that Federal Reserve bank rather than to its own. The Fed also increased staffing and equipment, expedited the handling of checks of
$250,000 and more, and encouraged automated clearinghouse payments as a check substitute.  

In order to facilitate float’s reduction, the MCA-80 called for the pricing of float, i.e., charging banks interest for reserves provided in the form of float rather than allowing banks to receive these reserves interest free. After its enactment, as noted by Young (1986), the Fed advanced a series of measures to reduce and price float. Float reduction, through cost-effective operational improvements and modifications in availability schedules, was the Fed’s primary target. After these actions were taken, remaining float was to be priced at the federal funds rate, which is the interest rate banks charge each other for overnight loans. The MCA-80 was successful in accomplishing what it was designed to do. As noted by Murdoch, total Federal Reserve float was at a daily average of $1.8 billion by 1982, down significantly from the 1979 figure of $6.7 billion cited earlier. Also, according to Murdoch, by the end of 1983, Federal Reserve float had either been eliminated or priced.  

After determining the payments schedule for check clearing, the Fed really has no direct control over the volume of float at any point in time. This may not seem to be of any importance because, thus far, it may appear as if float is a fairly stable item with a general trend upward and a recent decline. This, however, is not the case.  

Contrary to the general trend as viewed in Figure 1, the amount of float varies widely from day to day and week to week. It is generally considered one of the most volatile and unpredictable items the Fed must contend with in making policy.  

**Float and Monetary Policy**  

It will be helpful at this point to examine the way in which float affects total bank reserves. An increase in float will increase total bank reserves dollar for dollar. In order to understand this relationship Table 1 is of use. This table divides into “Sources” and “Uses” the factors which affect reserves. Sources are those items which, when increased, will increase reserves. Uses, on the other hand, are those items which, when increased, will decrease reserves.  

As can be seen, float is a source; thus, an increase in float will increase reserves. While not appearing very large relative to the other amounts, float is perhaps the most volatile item affecting reserves (Luckett, 1984). Its importance lies in the fact that reserves affect the size of the money supply. The money supply equals the money multiplier for the reserve base times the reserve base. Hence, changes in the reserve base clearly result in changes in the money supply.
Table 1

Factors Affecting Depository Institution Reserves, Sept. 1987
(Monthly Averages of Daily Figures, Millions of Dollars)

<table>
<thead>
<tr>
<th>SOURCES: Factors supplying reserve funds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gold stock</td>
<td>11,068</td>
</tr>
<tr>
<td>SDR certificates</td>
<td>5,018</td>
</tr>
<tr>
<td>Federal Reserve credit outstanding</td>
<td>222,697 ▼ 1</td>
</tr>
<tr>
<td>Enhanced United States Government securities*</td>
<td>956 ▼ 2</td>
</tr>
<tr>
<td>Discount and advances</td>
<td>774</td>
</tr>
<tr>
<td>Float</td>
<td></td>
</tr>
<tr>
<td>Treasury currency outstanding</td>
<td>17,981</td>
</tr>
<tr>
<td>Other Federal Reserve assets</td>
<td>16,164</td>
</tr>
<tr>
<td>Total Sources</td>
<td>274,658</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USES: Factors absorbing reserve funds</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency in circulation</td>
<td>217,718</td>
</tr>
<tr>
<td>Treasury cash</td>
<td>459</td>
</tr>
<tr>
<td>Treasury deposit at the Federal Reserve</td>
<td>10,585</td>
</tr>
<tr>
<td>Other Federal Reserve accounts and capital</td>
<td>9,781</td>
</tr>
<tr>
<td>Total Uses</td>
<td>238,543</td>
</tr>
</tbody>
</table>

Depositary institution reserves at Federal Reserve

(Sources—Uses) 36,115
(Sources—Uses)** 36,685

MEMORANDA

Plus: vault cash 23,128

Equals: Total depositary institution reserves 59,813

Of which

Required reserves are 59,020 ▼ 3
Excess reserves are 793

* Includes Federal Agency obligations of $8,399

**The discrepancy is due to the fact that these figures are based on prorated monthly averages of biweekly averages as are all subsequent figures in this table.

Modeled on Luckett, 1984, p. 335.
One of the primary functions of the Fed is regulation of the money supply in order to achieve its policy targets, which include the desired levels of unemployment, price inflation, economic growth, and exchange rates. As a result, the Fed’s monetary powers are derived largely from the degree of control it exerts over the reserves of depository institutions.

If float increases or decreases and the Fed takes no action, total reserves, and hence the money supply, are affected. For the Fed to reach or maintain the desired money supply, it needs to predict changes in float and other uncontrollable items in the sources and uses chart. It then must use its policy instruments to offset the net changes.

The policy instruments of the Fed are open market operations, discount rate policy, and variations in reserve requirements. Changes in these policies will affect United States Government securities, discounts and advances, and required reserves, respectively, as shown by items 1, 2, and 3 on Table 1. The Fed relies mainly on its open market operations to reach or maintain the desired level of reserves.

As a result, Federal Reserve float is of interest from the viewpoint of monetary policy primarily because it influences the conduct of the Fed’s open market operations. The manager of the open market account must not only detect changes in float and other uncontrollable items as they occur, but also forecast future changes in order to carry out the correct policy actions. Float, one of the most variable factors affecting reserves, has proven to be difficult to forecast with accuracy. This can create substantial operational problems for the Fed.

The Fed follows three basic steps in conducting monetary policy. It must:
1) determine a target level of reserves,
2) estimate the net change in reserves that will occur due to movements in uncontrollable factors, such as float, and
3) undertake open market operations that increase or decrease security holdings by enough to bring about the targeted level of reserves.

During short periods of time, reserves may move in ways that are contrary to the Fed’s intention. But in the long run, Luckett states that “the Fed can compensate for these erratic fluctuations and on the average achieve a fairly high degree of control over the reserve base” (1984, p. 340).

Differing Economic Views

There has been, and continues to be, a controversy over the conduct of policy by the Fed. There are those who feel the Fed should not attempt discretionary policy of any kind. A dispute also exists over what the Fed should use as a target.
Some feel that the money supply is important only in determining the interest rate. Others feel that the interest rate is secondary to the size of the money supply. Appeasement of both groups is not possible, for if the Fed attempts to achieve an interest rate target, it loses control over the money supply. These two different approaches are best summarized in Figures 2a and 2b.

**Figure 2**
If the Fed wishes to maintain a constant money supply, such as $\text{MS}$, it must allow the interest rate to fluctuate with changes in money demand (see Figure 2a). However, if the Fed attempts to achieve an interest rate target, such as $r$, it must alter the money supply to accommodate changes in money demand (see Figure 2b).

The different schools of economic thought each have distinct ideas about what the "correct" policy of the Fed should be. Monetarists and new classical economists come to noninterventionist policy conclusions. They prefer a stable money stock, or a constant rate of growth in the money stock, similar to the policy depicted in Figure 2a previously. Float, then, becomes important only in that it needs to be considered for a constant growth rate to be achieved. If float increases more than expected, the money supply will increase by more than the desired amount.

The modern Keynesian approach favors discretionary monetary policy actions, viewing them as a tool to stabilize income. The proper role of monetary policy is to offset swings in economic activity. The Keynesians come to policy conclusions that are similar to those shown earlier in Figure 2b.

Knowledge of the value of float is needed in order to determine how much the money stock will have to change to reach desired goals. Sometimes float may result in changing the money stock in the desired direction, and other times it may move it in the opposite direction. The directions and their magnitudes need to be predicted so that policy actions can take them into consideration.

**Summary**

It should be clear that float is a complex variable playing an important role in the behavior of our economy. It is among the many variables that are uncontrollable and yet need to be taken into consideration during the formulation of monetary policy. A firm understanding of what Federal Reserve float is, how it arises, and how it affects monetary policy is needed. No matter what school of economic thought policymakers follow, float should not be taken lightly.
References


