## Treasury to invest surplus tax and loan balances

Legislation signed by the President on October 28, 1977, will allow the Treasury Department to earn a direct return on temporary cash surpluses. The new law authorizes the Secretary of the Treasury to invest any portion of the Treasury's operating cash for periods up to 90 days in (1) open-end obligations of depositaries maintaining Treasury tax and loan accounts secured by a pledge of acceptable collateral and (2) obligations of the United States and its agencies. Besides commercial banks and mutual savings banks, qualifying savings and loan associations and credit unions will be authorized to act as Treasury depositaries, to receive federal taxes upon opening Treasury tax and loan accounts, and to issue interest-bearing obligations to the Treasury. In lieu of noninterest balances, the Treasury will pay fees to depositaries for their services in handling tax and loan accounts and savings bond transactions.

The implementation of this program not only will have a significant impact on the availability of funds to individual financial institutions involved but also should reduce monetary control problems that have been associated with recent Treasury cash management policies. These benefits, in turn, can be expected to reduce temporary shifts in supply-demand forces in money markets that aggravate investor uncertainties. Just what the impact will be, however, depends mainly on the choice by depositaries of the options offered them.

#### Two kinds of deposits

The federal government—like individuals and corporations—must maintain a working balance to cover its current expenditures. Because receipts (including the proceeds of debt issues) never precisely match disbursements in timing and amount, total funds at the Treasury's disposal vary widely over short periods, especially around tax and financing dates. The Treasury Department holds its cash balances in two types of accounts-demand deposit balances at Federal Reserve Banks and Treasury tax and Ioan (TT&L) accounts at commercial banks. All Treasury checks are paid through Federal Reserve Banks, which are the fiscal agents of the federal government. Through periodic "calls," the Treasury orders funds in TT&L accounts to be transferred to Reserve Bank balances.

The tax and loan accounts are maintained at about 13,000 commercial banks that qualify as special depositaries. Banks can qualify by applying through a Federal Reserve Bank and posting collateral to cover funds in the accounts.<sup>1</sup> The system of tax and loan accounts was devised during World War I to facilitate the sale of bonds necessary to finance the war. Under the terms of the First Liberty Loan Act of 1917, Congress authorized the use of tax and loan accounts for the deposit of proceeds from the sales of new Treasury securities. The

<sup>&</sup>lt;sup>1</sup>Although U.S. Government securities constitute the principal collateral for these deposits, a variety of other types of securities and paper have been pronounced "eligible" by the Treasury (although not all at book value), including obligations of U.S. Government agencies, state bonds, and high-grade corporate and municipal bonds, certain commercial and agricultural paper, bankers' acceptances, and notes representing loans guaranteed by certain U.S. Government departments and bureaus.

value of those deposits helped induce commercial banks to distribute new issues at no direct commission costs to the government. Later, after World War II, Congress broadened the use of these special accounts to include deposits of payroll taxes and certain excise taxes. Today, balances in tax and loan accounts come mostly from tax collections.

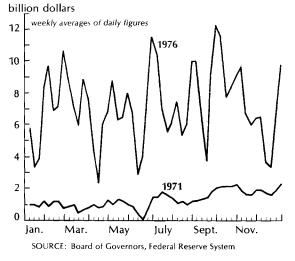
The depositaries are divided into three groups-A, B, and C. Calls on Group A depositaries, the smallest banks, are generally made once a week for previous week balances. B bank balances are generally called each day, as of three days earlier; and C bank balances at the end of each day are called on the following day. In addition, Group C depositaries, the largest banks, are subject to special calls (or redeposits) for same-day payment. These special orders are used to withdraw additional funds from the commercial banking system, to cancel part or all of a previous call, or to allow the Treasury to move funds back to commercial banks from Federal Reserve Banks. Special calls give the Treasury better control and more flexibility in managing its deposits at the Federal Reserve in response to short-run changes in the timing of expenditures and receipts.

#### Why distribution matters

The distribution of the Treasury's operating cash between deposits at Federal Reserve Banks and tax and loan deposits at commercial banks affects the availability of funds to the private sector and may impact on money market conditions. When taxes are collected, deposits are shifted from the public to the Treasury. If these funds are retained in the tax and loan accounts, they remain a source of loanable funds in the commercial banking system, although the money supply, which is defined to exclude Treasury deposits, is reduced by tax payment. If, on the other hand, the funds are shifted to the Federal Reserve Banks, aggregate commercial bank deposits decline. The Federal Reserve transfers the funds by crediting the Treasury's account and debiting the reserve accounts member banks maintain at Federal Reserve Banks.<sup>2</sup>

Because member bank deposits are not only working balances but also comprise the legal reserves held against commercial bank deposit liabilities, this shift absorbs part of the reserve base of the banking system as a whole and can reduce by some multiple the volume of commercial bank deposits and, hence, the money supply. In the absence of offsetting Federal Reserve action, such transfers would force banks to liquidate earning assets in order to bring about the shrinkage of private deposits necessary to restore their reserve-todeposit ratios to required levels and would exert upward pressure on market interest

### In contrast to 1971, Treasury deposits at Federal Reserve Banks have been more volatile



<sup>&</sup>lt;sup>2</sup>A member bank must maintain deposits in its district Federal Reserve Bank to satisfy legal reserve requirements in excess of its vault cash. Upon receipt of instructions from the Secretary of the Treasury, the Federal Reserve Banks send notices of withdrawal to each depositary covered by such calls. Payment for the amount of withdrawal is handled as follows: For member bank depositaries the bank's reserve account is charged. For nonmember bank depositaries the reserve account of the member bank, designated in the agreement between such bank and the depositary, is charged. Where no such agreement has been executed, nonmember banks are required to return the remittance advice with payment in immediately available funds to the Federal Reserve Banks no later than the day payment is due.

rates.<sup>3</sup> Of course, the Federal Reserve can offset these effects by supplying reserves to the banking system through open market operations, but only at the expense of vastly expanding and complicating the operations necessary for monetary control.

In recognition of this problem, the Treasury for a long time sought to minimize the reserve impact of variation in its overall balances by holding its deposits at Federal Reserve Banks at a low and fairly constant level. From 1964 until 1974 the Treasury's policy was to keep deposits at Federal Reserve Banks at minimum efficient operating levels. Receipts in excess of immediate disbursements were allowed to accumulate in tax and loan accounts at commercial banks. And the Treasury quickly redeposited in tax and loan accounts any surplus in operating balances at Federal Reserve Banks. Although this strategy sometimes resulted in a large buildup of noninterest-bearing balances in the banks, it was believed that the earning value of the tax and loan funds to banks was a rough offset to the cost banks incurred in providing services to the federal government and its agencies. Between 1964 and 1974 the

Treasury's balances at the Federal Reserve remained relatively stable around \$1 billion, in contrast with the great volatility of balances in tax and loan accounts at commercial banks. After 1974 the size of the Treasury balances at Federal Reserve Banks increased substantially, as did their volatility, because the Treasury reversed its policy and began keeping minimal balances in tax and loan accounts.

#### **Recent Treasury policy**

A 1974 Treasury study of tax and loan accounts concluded that the value of the balances to depositaries exceeded the value of the services provided.<sup>4</sup> These conclusions reflected both an increase in average balances and higher investment interest rates. The study recommended that, for reasons of monetary management, the tax and loan account system be retained, but that means be developed for (1) employing a portion of the funds in ways that would provide adequate returns to the Treasury and (2) compensating banks from appropriated funds for a limited number of services performed.

Three potential methods by which the

Commercial Bank		Federal Reserve Bank	
Assets	Liabilities	Assets	Liabilities
Reserves with F.R. Bank –100	U.S. Government deposits (TT&L) –100		Member bank reserves deposits –100
Required –15 Deficit 85			U.S. Government deposits +100

<sup>3</sup>Suppose a Treasury call, payable by a member bank, amounts to \$100. The following "T" accounts illustrate the effects of this transfer on member bank reserves and government deposits at both member bank and Reserve Bank:

Reserves and government deposits of the member bank are reduced. On the books of the Reserve Bank member bank reserves decline and government deposits rise. Under a 15 percent reserve requirement system and assuming nothing else is changed, this withdrawal of Treasury funds will cause a reserve deficiency of \$100 immediately and a net of \$85 when account is taken of the reserve released by the decline in government deposits at commercial banks. To eliminate the reserve deficiency the bank's reserve manager could, among other things, sell short-term securities, thereby depressing asset prices and raising interest rates. But unlike checks deposited in other banks, this shift does not increase deposits and reserves of other banks and thus results in a reserve shortage for the banking system as a whole. The opposite occurs as the Treasury's deposits at the Reserve Banks decline.

Report on a Study of Tax and Loan Accounts, Department of the Treasury, June 1974.

The most commonly performed services are (1) issuing and redeeming U.S. savings bonds, (2) promoting new offerings of and handling subscriptions to U.S. securities, (3) handling matured government obligations, (4) cashing government checks, and (5) handling "depositary receipts" relating to withheld income and other Internal Revenue taxes.

Treasury could realize a greater return on its tax and loan balances were examined in the 1974 report. One method, and the most direct, would be for commercial banks to pay interest directly on tax and loan balances. Under present federal statutes that prohibit payment of interest on demand deposits, this option is not open. Moreover, for the Treasury to seek new legislation to remove the prohibition solely for government deposits can be opposed on grounds that it would place the government in a privileged position relative to other bank depositors.

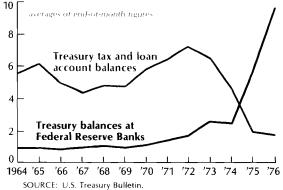
A second method would be for the Treasury to place some of its balances in interest-bearing time deposits at commercial banks. The constraint here is the Federal Reserve regulation defining time deposits as obligations with maturities of 30 days or longer. Because of the large short-run fluctuations in tax and loan account balances, only a limited part of the balances could be placed on deposit for as long as 30 days. At best, the earnings would fall short of the full earning potential of the balances.

A third method, and one that was favored in the report, would be for the Treasury to invest its temporary surplus balances in shortterm money-market instruments, preferably obligations of the tax and loan depositary institutions. If the Treasury were to make loans on a secured basis to each institution maintaining a tax and loan account, the funds would remain in the private sector. However, the Treasury did not have the authority to invest its idle funds in short-term earning assets.

Lacking the authority to invest its surplus cash balances, the Treasury shifted to a policy of transferring to its balances at Federal Reserve Banks all but about \$1.5 billion it estimated would compensate depositaries for the services performed. This resulted in a drastic change in the distribution of cash between the Treasury's tax and loan accounts at commercial banks and the Treasury accounts at Federal Reserve Banks (see chart). Before 1974 an average of about 80 percent of Treasury operating cash was held in tax and loan accounts, and 20 percent was held in Federal Reserve Banks. Since 1974 the propor-

# Since 1974 the bulk of the Treasury's operating cash has been held at Federal Reserve Banks

billion dollars



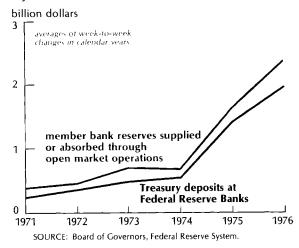
tion has just about reversed.

By keeping larger deposits at Federal Reserve Banks, the Treasury avoided implicitly subsidizing commercial banks with public funds and increased its own receipts via payments from Federal Reserve Bank earnings. In conducting its operations to implement monetary policy, the Federal Reserve attempts to offset disturbances to the money market and credit availability caused by other factors affecting bank reserves, including changes in gold and foreign currency holdings, Federal Reserve float, currency in the hands of the public, and Treasury balances at Federal Reserve Banks. By increasing their holdings of Government securities in order to offset the drain on bank reserves resulting from the shift of Treasury deposits from the commercial banks, the Federal Reserve Banks have increased their earnings on securities which, after expenses, are paid back to the Treasury.

However, the transfers of funds to Federal Reserve Banks have complicated the task of monetary management in another way. This is because the minimization of funds in tax and loan accounts has caused the Treasury balances at Federal Reserve Banks to become not only larger but more volatile, reflecting changes in total Treasury operating balances. In each planning period the manager of the Federal Reserve's open market operations must estimate the change in Treasury deposits at Federal Reserve Banks and how much of this variation might be offset by other factors outside Federal Reserve control that affect bank reserves. If the Treasury deposits were expected to rise, this would, ceteris paribus, reduce reserves of the banking system. To the extent that this variation was inconsistent with monetary objectives and was not offset by other independent factors, the manager of the Federal Reserve's open market account would plan to offset the resulting reserve drain by providing reserves. Similarly, if deposits were expected to decline, the manager would plan to absorb reserves. The complications are of two kinds: (1) errors in estimates of the amount and timing of changes in these deposits and (2) problems in effecting purchases or sales of securities in the volume necessary to offset the effects on bank reserves.

Federal Reserve open market operations have grown enormously since the Treasury changed its cash management policy and a much larger part of this activity is attributable to efforts to insulate monetary objectives from the effects of swings in the Treasury's balances (see chart). In 1971, before the

# Recent Treasury policy caused increased defensive operations by Federal Reserve



Treasury began to alter its cash management techniques, the average weekly change in Treasury deposits at Reserve Banks was \$227 million, while the average weekly provision or absorption of reserves through open market operations was \$351 million. In 1976 the corresponding numbers were \$1,968 million and \$2,344 million, respectively. Authority for the Treasury to invest tax and loan funds is expected to allow the Treasury to stabilize the size of its deposits at the Federal Reserve. With the return to more stable Treasury balances at the Federal Reserve, the System could substantially reduce its defensive open market operations with their attendant effects on the money markets and on investor uncertainty about policy intent.

### Tax and loan system under investment authority

The enactment of the investment authority will enable the Treasury to realize more fully the value of its funds held in tax and loan depositaries. The amount of this return will depend on the extent to which the depositaries choose to participate and the rate of interest they will be required to pay. Depositaries, on the other hand, will choose their options on the basis of how they expect their earnings to be affected and this will differ among depositaries depending on a number of factors. These include need for funds, rate of interest paid to Treasury, cost of alternative sources, customer demand for tax deposit services, cost of providing those services relative to Treasury's fee schedule, and ability to meet remittance schedules.

Under the investment program, the proposed plan, as published for comment, is to require each tax and loan depositary to select one of the following options: (1) to maintain a tax and loan open-ended note or (2) to deliver to the Federal Reserve Bank advices of credits processed to the tax and loan accounts no later than one business day after receipt of such deposits. After selection of an option category, a depositary is subject to the rules applicable to that option. A depositary will be permitted to switch from one option to the other after having provided the Federal Reserve Bank of its district a notice of at least 28 days.

Under the note option, loans to depositaries will bear a rate of interest determined by the Treasury Department, effective one day after the date of the tax deposit. It is expected that the interest rate paid on tax and loan borrowing will be set so as to reflect market rates applicable to other collateralized borrowing by banks. The Treasury's stated intention is to base the rate paid on each week's average "note balances" on the average rate the Federal Reserve Bank of New York charged banks and nonbank Government securities dealers on repurchase agreements in Government securities. Given that rate of interest, the quantity borrowed will be determined by the rate of flow of deposits through the tax and loan accounts of those institutions that have chosen the note option. Depositaries cannot issue notes to the Treasury in excess of their own TT&L balances. Calls for withdrawals of funds invested in the obligations of tax and loan depositaries will be based on the present A, B, and C bank groupings.

The effects of tax and loan borrowings on depositary earnings will depend on the cost of such funds and the opportunities to invest them at returns over those costs. Unless depositaries can invest the funds in higheryield assets the appeal of such borrowings will be low.

Depositaries not willing to sell obligations to the Treasury will be required to arrange delivery of advice of credit to the Federal Reserve Bank of their district on the first business day following the date they receive the tax and loan deposits from their customers. A depositary whose advices of credits are delivered to the Federal Reserve Bank later than the specified time for processing such deposits will be assessed either an interest charge or analysis fee, depending on the volume of deposits credited to its tax and loan account. If advices of credits frequently arrive at the Federal Reserve Bank late, the depositary will be permittd to continue to accept tax and loan deposits if (a) its volume

of such deposits is less than a specified amount or (b) if the volume is in excess of such amount, the depositary will be required to select the note option. Depositaries administering their TT&L accounts under the remittance option will be able to retain the funds for one business day. The depositaries can thereby earn one day's revenue from these deposits without paying interest on them to the Treasury.

While depositaries will receive direct compensation for services performed for the Treasury Department, customer demand for tax deposit services and the cost of providing those services relative to the Treasury's fee schedule will, in part, determine the participation rate of eligible financial institutions in the TT&L system. The plan for the Treasury to pay explicitly for services rendered by depositaries might be advantageous to some institutions.

Reimbursable services are those deemed specifically for the benefit of the government. Processing of Federal Tax Deposits (FTDs) and issuing savings bonds are the type of services for which a depositary had charged explicit fees. The Treasury's stated intention is to base the fees paid for services on estimated depositary costs. In the 1974 study of the tax and loan account system, processing of FTDs was found to cost approximately \$0.50 per deposit; and issuing and redeeming savings bonds were estimated to cost \$0.70 and \$0.30 per bond, respectively.<sup>5</sup> The fee method of reimbursement for such services should produce much more equitable cost/benefit trade-offs than the present system of payment via balances that are not related to the volume of services.

The most efficient institutions might receive some additional benefits from being able to perform the services at a lower cost

<sup>&</sup>lt;sup>5</sup>These cost estimates were based simply on cost data reported by the banks surveyed. The units costs varied widely among reporting banks. For example, the cost reported for FTDs ranged from a low of  $1\frac{1}{2}$  cents per transaction to a high of \$3.10. Similar ranges occurred for issuing and redeeming savings bonds. These cost estimates also differ from Federal Reserve Functional Cost Analysis numbers.

than other institutions, but for some depositaries the service fees will be below cost. Those depositaries may nevertheless choose to accommodate the customer demand for tax deposit services and related transactions because of the importance of the customer as a source of deposits as well as other business. Such provision of tax related services below cost can be viewed as a systematic, rational attempt by depositaries to maximize long-run profits under existing institutional arrangements when viewed from the perspective of the customer relationship.

The net impact on income to tax and loan depositaries will be the result of (1) revenue from investment of the tax and loan deposits and note balances, plus (2) fees paid for services, less (3) total interest payable on the note balances, less (4) interest charges or analysis fees.

While enactment of the investment program has the potential to reduce significantly both the need for defensive open market operations and related uncertainty in financial markets, monetary control problems may still be substantial, depending on the choice by depositaries of the options offered them. If eligible depositaries choose to take the note option, the amount and timing of Treasury calls can be arranged to minimize the impact on bank reserves and thus reduce monetary control problems. If, on the other hand, depositaries choose not to take the note option, the amount of transfers of funds into the Treasury's account at Federal Reserve Banks will depend on the rate of flow of deposits through the tax and loan accounts, and this could be an additional source of uncertainty for the Federal Reserve. Inasmuch as the amount of such transfers could be large as well as volatile, the Federal Reserve must worry, as at the present time, about movements of tax and loan funds from depositaries to the Treasury's account at the Federal Reserve Banks. Most of the large banks that handle the bulk of the dollar volume of tax deposits are expected to choose the note option, but some uncertainty will remain a problem for monetary control.

Congress has also authorized the Secretary of the Treasury to invest excess operating cash directly in federal Government securities. The availability of this authority will add another dimension of flexibility to the Treasury's cash management. However, there is no indication that it will be used in connection with the TT&L investment program.

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