

# Bank funds management comes of age—a balance sheet analysis

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Changes over the past decade giving bank management greater control over growth, liquidity, and profitability have led bankers to seek guidelines for the appropriate strategy in managing bank funds.

The search comes partly, of course, from the rapid evolution from core-deposit banking into banking based on purchased funds, banks becoming not so much deposit creators as financial intermediaries and the profitability of banks depending not so much on the difference between lending rates and quasi-fixed deposit rates as the highly variable spread between borrowing and lending rates in constant flux. Control of growth, liquidity, and profitability is achieved by keeping interest rates on money market sources of funds competitive with the returns available on other money market instruments.

Various instruments are used in adjusting bank portfolios. Negotiable CDs and non-deposit instruments are most often associated with funds management, but the whole balance sheet of interest sensitive items, both assets and liabilities, can be managed to some extent. Management of all types of interest sensitive assets and liabilities has had an effect on the strategies used for generating and deploying funds at a bank's discretion.

## **Nature of funds management**

Management strategy focuses on interest sensitive funds that can be increased or decreased at the bank's initiative—in contrast to flows of funds that are beyond the bank's control. The notion, however, that some

assets and liabilities are subject to discretionary management, while others are not, is elusive. No crisp distinction can be made, certainly not one that is always accurate. But because of the way banks operate under different conditions, it is possible to identify candidates for the set of variables subject to discretionary control and candidates for the set that are beyond discretionary control.

Discretionary balance sheet items are those items over which, under ordinary circumstances, the bank has considerable short-run control. In contrast, nondiscretionary balance sheet items are those assets and liabilities over which the bank has little, if any, short-run control.

In managing their discretionary liabilities, banks can issue only the instruments allowed under state and federal laws. Limits are set in terms of maturity, denomination, rate of interest, insurance status or creditor preference, and the holders that will be allowed. Deposits at most banks are subject to reserve requirements and interest rate ceilings based largely on maturity and denomination. Other liabilities are exempt from these restrictions, but they are closely constrained regarding the lender, allowable collateral, or overall "borrowing limits" relative to capital stock and surplus.

Not all banks are subject to the same restrictions. Federal statutes and Federal Reserve regulations governing the operation of national and state member banks, plus parallel interest rate constraints on non-member banks with FDIC insurance, have had the most important effects on the overall structure of bank liabilities.

The table shows a slightly condensed version of the balance sheet of large weekly reporting member banks on January 2, 1980. Assets of these banks totaled \$716 billion (line 9). That was just under half the total assets of the entire banking system.

Although there are comparatively few large weekly reporting banks, they often purchase large amounts of funds in money markets to meet loan demands and deposit withdrawals. Most banks do not have easy access to money market sources of funds. As a result, they do not have clear discretion in the management of funds. For the few banks that practice active funds management, a clear understanding of the balance sheet items subject to immediate control is prerequisite to the determination of asset-liability management strategies.

### Regulations restrict discretion

The distinction between deposits and debt liabilities has grown increasingly fuzzy. For purposes of reserve requirements or interest rate ceilings, several bank liabilities are now defined as deposits. The traditional sources of bank funds, demand deposits (line 10) and consumer-type savings deposits (line 11), are nondiscretionary items.

Demand deposits, being deposits against which checks are drawn, are subject to the highest reserve requirements. Interest cannot be paid on domestically owned demand deposits. Savings deposits, having no specific maturity, are subject to the lowest reserve requirement. They are also subject to the lowest interest rate ceiling under Federal Reserve Regulation Q. Because of interest rate constraints, neither demand deposits nor savings deposits are under short-run bank discretion, though such core-deposit flows can be influenced through bank advertisement and marketing efforts.

These flows are estimated in advance, but the estimates are subject to wide error. Banks usually consider time deposits other than CDs (line 12) as nondiscretionary. Because maturity schedules are known in advance, time deposits can be forecasted. But they are also

### Assets and liabilities of all large weekly reporting commercial banks (January 2, 1980)

<u>Assets</u>	<u>Million dollars</u>
1. Cash items (including reserves, CIPC)	113,746
2. Investment account securities	
U.S. government securities	47,052
Obligations of states and political subdivisions	49,923
Other securities	2,650
3. Trading account securities	8,422
4. Federal funds sold and reverse RPs	34,300
5. Broker and dealer loans	7,739
6. Commercial and industrial loans	158,296
7. Other loans (including real estate and consumer instalment)	221,223
8. Other assets (including lease financing receivables)	72,554
9. Total assets	715,905
 <u>Liabilities</u>	
10. Demand deposits	219,175
11. Savings deposits	74,613
12. Time deposits (other than large CDs)	64,450
13. Large CDs	128,319
14. Federal funds purchased and RPs	100,742
15. Borrowing from Federal Reserve	1,545
16. Treasury tax and loan notes	6,906
17. Other borrowing	14,692
18. Other liabilities and subordinated note and debentures	59,957
19. Total liabilities	670,399

subject to rate ceilings under Regulation Q, and although they can sometimes be influenced by changes in deposit rates, which implies some discretion, they cannot always be controlled. Both interest rate ceilings on these deposits and reserve requirements vary with the maturity.

Legislation, signed by the President on March 31, 1980, will phase out interest rate ceilings on deposits over a six-year period. The implementation of the six-year phase out of rate ceilings under Regulation Q will have a significant impact on the flow of funds to individual banks. By changing offering rates, banks not only will be able to influence core-deposit flows but also consumer-type time deposit flows.

Banks can now offer two new floating rate consumer-type time accounts. Since mid-1978, they have been allowed to offer

\$10,000 minimum-denomination, six-month maturity time certificates at issuing rates tied to the average weekly rate on six-month Treasury bills with the same maturity. Through use of these floating rate certificates, they have been able to influence their consumer-type time deposits. Beginning this year, they can also offer a new category of nonnegotiable time certificates with initial maturities of 2½ years or longer at monthly issuing rates 75 basis points below the average daily yields on 2½-year Treasury securities. The interest rate is determined for any month by the average yield available on Treasury securities during the last three business days of the previous month.

In March 1980, the Federal Reserve imposed a temporary ceiling rate of 11.75 percent on new 2½-year money market certificates issued at commercial banks. When yields on 2½-year Treasury securities rise more than 75 basis points above the ceiling rate, the flow of funds into 2½-year money market certificates is limited.

While the table does not show bank capital explicitly, criteria are set for capital needs as the implementation of bank funds management unfolds. Capital is not, of course, a short-run decision variable. Nor does it change much over the near term.

The most important component of bank capital is equity, which consists of common and preferred stock, surplus, undivided profits, and capital reserves. Capital notes and debentures (included in line 18) have recently substituted for generally more costly equity accounts as sources of bank capital. Because capital can be used both directly to extend credit and indirectly as a base for attracting additional funds, bank funds management considers capital needs and discretionary sources of funds at the same time.

### **Assets beyond short-run control**

On the asset side, cash items in line 1, consisting primarily of reserves, interbank balances, and cash-items-in-process-of-collection, are beyond bank control. They must, therefore, be forecast. The far greater

part of a bank's cash represents reserves required to support deposits.

To satisfy reserve requirements and provide working balances, member banks are required to hold as reserves at the Federal Reserve Bank a proportion of their average deposits for every weekly reporting period (Thursday through Wednesday). Because the reserves to be held in the current week are based on deposits two weeks earlier (lagged reserve requirements), every bank knows at the beginning of a statement week what its reserve balance will have to average that week. Any imbalances between its average daily reserve balances and its average daily required reserve are especially important in determining day-to-day funds requirements.

Treasury holdings and state and local obligations (line 2) are estimated on the basis of recent experience. These investment categories are not discretionary, because they are needed to meet pledging requirements against government deposits, but there are some elements of discretion in line 2. "Free governments" can be used for repurchase agreements (line 14). And as state and local obligations often total more than required, they can usually be sold.

Trading account assets in line 3 are securities banks hold solely for their market-making activities. Many large banks not only purchase securities for their own investment but also serve as underwriters for government securities and CDs, distributing new securities to their customers in line with customers' investment needs. Banks hold trading portfolios of these securities apart from their own investment accounts and stand ready to buy and sell them at prices that reflect current yield trends.

Trading account assets are more discretionary than most assets. This is because the trading positions at some banks depend on funds the bank allocates to its dealer department, though this allocation depends much on the level and structure of interest rates. At other banks, trading positions are financed by the bank's own dealer department, much like nonbank security dealers.

Although banks can change their lending

policies to control commercial and industrial loans, and other loans over the long run, they often consider these loans nondiscretionary over the short run. This is because the bank funds group assumes that business loan demand will be accommodated. Instalment loan repayment schedules are given and decisions regarding credit risk exposure have already been made. Fluctuations in the volume of loans, especially commercial and industrial loans, tend to reflect the importance of bank customers as a source of deposits as well as other business. For other loans, the customer relationship is much weaker, at least in the short run.

Linkage between banks as lenders and businesses as borrowers has been strengthened by the tendency of banks to make commitments to lend in the future. The result is a significant reduction in the flexibility a bank has in managing its loans, especially as potential borrowers often pay a fee for the commitment. The dollar amounts of loan commitments can be controlled, however, by changing both interest and noninterest terms on credit lines.

Other assets and liabilities included in lines 8 and 18 can be considered residual categories. They reflect items not explicitly categorized in the Federal Reserve's "Report of Condition" instructions. Other assets include such items as income earned but not collected, prepaid expenses, and other minor items. Other liabilities include accrued expenses, dividends declared but not yet payable, and the IRS bad-debt reserve.

There is an entry for net balance due to foreign branches under "other liabilities." If the balance results in a net "due from," the amount appears in "other assets." Though business with foreign branches can be influenced by rate changes, the business is so discretionary that it shows up adequately in either "other liabilities" or "other assets."

The projected changes in non-discretionary and semi-discretionary assets and liabilities over the next month, say, will produce a number that, if negative, means funds must be raised. If positive, which it hardly ever is at large money center banks, it

means funds are available for investment. Two asset and four liability items are usually used to dispose of funds or generate funds at a bank's discretion.

### **Instruments of discretionary management**

Federal funds transactions and repurchase agreements are especially useful in disposing of funds and generating funds at the bank's discretion. These entries appear on the asset side in line 4 and the liability side in line 14.

Federal funds are unsecured overnight interbank loans settled in immediately available funds. These transactions often involve transfers of reserve balances from reserve-surplus banks to reserve-deficit banks. Banks, however, can purchase federal funds from correspondent banks that find this outlet provides both greater liquidity and, when short-term interest rates are high, better average returns than securities.

Execution of federal funds transactions involves only accounting entries on the books of the borrower and lender. Correspondent banking transfers of federal funds consist of reducing the correspondent bank's demand deposit balance at the bank and crediting the account-designated "federal funds purchased" from the correspondent. It is easy to see that the federal funds market is not limited to the borrowing and lending of reserve balances.

Immediately available funds can also be acquired (or disposed of) through the sale (or purchase) of securities. Repurchase agreements (RPs) in government securities are particularly useful in providing a bank loanable funds. Reverse RPs are used to dispose of excess funds.

RPs involve the purchase of immediately available funds through the sale of government securities—with a commitment on the part of the bank to repurchase the securities at a specified date and price. RPs are most commonly made for one business day, though longer maturities are frequent.

There are no reserve requirements or interest rate ceilings on RPs of \$100,000 or more.

RPs on securities of less than \$100,000 with maturity greater than 90 days are subject, however, to the same interest rate ceiling as deposits of similar maturity.

Repurchase agreements are effectively secured federal funds, collateralized by government securities. In providing a bank loanable funds, they also create a liability to repurchase the securities at maturity. The entry on the liability side (line 14) is securities sold under agreement to repurchase.

Conversely, banks with excess funds can enter into reverse RPs. From the perspective of the supplier of funds, the agreement involves the purchase of blocks of securities, with a commitment on the part of the seller to repurchase the securities at a specified date and price. The bank loses funds but gains securities for the duration of the contract. Securities purchased under agreements to resell appear on the asset side as reverse RPs in line 4.

Large CDs (line 13) are the most important source of discretionary funds. CDs can be negotiable or nonnegotiable instruments payable on a certain date not less than 30 days after the deposit.

As large negotiable CDs can be issued directly to corporate treasurers and tailored to meet maturity requirements, they cultivate a "reverse customer" relationship. They can be sold more impersonally, however, through security dealers that also maintain secondary markets. Within limits depending on its size, a bank can influence the volume of its outstanding stock of CDs by adjusting its offering rate.

Eurodollar borrowings have become an important discretionary source of purchased funds. Eurodollars are deposits denominated in U.S. dollars at banks outside the United States, including foreign branches of U.S. banks. These deposits arise when the owner of a demand deposit at a U.S. bank transfers ownership of the deposit to, say, a foreign branch of a U.S. bank in exchange for a dollar-denominated deposit claim against the branch. These claims usually take the form of a time deposit, but overnight and call deposits are also made. The domestic bank gains

access to the funds by crediting "due to foreign branches" on its balance sheet.

Eurodollar borrowings are not an explicit category in the Report of Condition. Rather, net balances due directly to related foreign institutions are reported as a memorandum item on the consolidated balance sheet. Changes in this item show the discretionary flow of funds between banks and their foreign branches.

The Federal Reserve in August 1978 reduced reserve requirements (under Regulation M) on net borrowings of member banks from their foreign branches to zero percent from 4 percent. Because Eurodollar borrowings are also exempt from interest rate ceilings and maturity minimums, they provide banks with foreign branches diversity of sources and maturity of discretionary funds.

Although there is a zero percent reserve requirement on Eurodollar borrowings and no basic reserve ratio on purchases of federal funds and repurchase agreements with institutions that are not members of the Federal Reserve, an 8 percent marginal reserve requirement was established in October on total "managed liabilities," and raised to 10 percent on March 14. These include large CDs, Eurodollar borrowings, and RPs and federal funds borrowings from nonmember institutions above a base level. All these sources of funds are still under bank discretionary control. The amount of managed liabilities above a base level, however, has been made more costly by the application of marginal reserve requirements.

Borrowing from Federal Reserve banks (line 15) is less important than CDs in terms of dollar volume. As borrowing by member banks is intended to cover unusual short-term needs, the borrowing privilege is not freely available on a regular basis. Administration of the discount window imposes an implicit cost in the form of Federal Reserve surveillance of banks that use the window for extended periods. Because current borrowings tend to reduce the willingness of the Federal Reserve to accommodate future borrowings, banks use the window sparingly, conserving their access for times of urgent need.

Treasury tax and loan notes (line 16) are interest-bearing obligations of banks. The government holds its cash balances in two types of accounts—demand deposit balances at Federal Reserve banks and Treasury tax and loan (TT&L) note balances at commercial banks qualifying as special depositories.

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 transferred to Federal Reserve balances. TT&L balances, which come mostly from tax collections, must be transferred immediately on call or purchased by the bank at a rate of interest a quarter-percent below the federal funds rate.

Given that rate of interest, the amount borrowed is determined by the rate of flow of deposits through the tax and loan accounts of banks that hold TT&L note balances. Funds acquired through this arrangement depend also on the amount and frequency of Treasury calls.

Other borrowing in line 17 is intended to reflect the total amount of short-term funds that are not specifically reported elsewhere on the liability side of the balance sheet. Term federal funds and loans sold under repurchase agreements are two of the most important items in this category.

Term federal funds are federal funds purchased for a maturity of more than one day, in practice, anywhere from two days to a year. Because term federal funds have maturi-

ty longer than one business day, the Comptroller of the Currency in 1978 made them subject to both overall “borrowing limits” and “lending limits” relative to capital stock and surplus.

Loans sold under agreements to repurchase surfaced in 1969. They are similar to security RPs, except that they are not exempt from reserve requirements and interest rate ceilings. As the Federal Reserve defines loans sold under agreements to repurchase as deposits, they are subjected to all the regulations governing deposits of similar maturities. Loans sold under agreements to repurchase are also subject to overall “borrowing limits” relative to capital stock and surplus.

On the asset side in line 5, loans to brokers and dealers for the purpose of carrying securities are under the bank’s short-run discretion. They are call loans, payable on demand. Banks do not have an irrevocable commitment to renew them. If, for example, federal funds cost more than a bank is willing to pay, it can terminate some dealer loans as another source of funds. Reducing an asset is just as much a source of funds as increasing a liability.

The instruments of discretionary funds management have grown in number since modern funds management emerged in the early 1960s. This evolution is a continuing process. There is little doubt that as economic and money market conditions change, so will the instruments of bank funds management.