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896 President Corrigan sheds further light on the Salomon Brothers incident, shares his views on the workings of the government securities market, and says that as a part of the overall review of the lessons to be learned from this incident, the Federal Reserve Bank of New York will take a fresh look at its programs for monitoring primary dealers in U.S. government securities to see what changes may be needed, before the Subcommittee on Securities of the Senate Committee on Banking, Housing, and Urban Affairs, September 11, 1991.

902 J. Virgil Mattingly, Jr., General Counsel, Board of Governors, William Taylor, Staff Director, Division of Banking Supervision and Regulation, Board of Governors, and President Corrigan describe the Federal Reserve's role in the supervision of the Bank of Credit and Commerce International (BCCI) and the Federal Reserve's investigation of BCCI's secret acquisition of the shares of several U.S. banking organizations, before the House Committee on Banking, Finance and Urban Affairs, September 13, 1991.

918 President Corrigan reviews the role played by the Federal Reserve Bank of New York in the BCCI affair and says that the New York Reserve Bank has been intimately involved in virtually every aspect of the Federal Reserve's investigation into BCCI, including its illegal control of banking institutions in the United States, before the House Committee on Banking, Finance and Urban Affairs, September 13, 1991.

920 Robert P. Black, President, Federal Reserve Bank of Richmond, describes the role of the Richmond Reserve Bank in the supervision and regulation of Credit and Commerce American Holdings (CCAH), which came under the supervision of the Richmond Reserve Bank after CCAH acquired First American Bankshares, and says that the staff of the Richmond Reserve Bank is working with the staff of the Board to sever any improper connections between BCCI and the First American banks so that the banks will be free of any tarnish that they may be suffering from their association with BCCI, before the House Committee on Banking, Finance and Urban Affairs, September 13, 1991.

924 Robert P. Forrestal, President, Federal Reserve Bank of Atlanta, discusses the role of the Atlanta Reserve Bank in the supervision of the Florida offices of BCCI and in the supervision of the NBG Financial Corporation, the parent bank holding company of the National Bank of Georgia, and says that the Atlanta Reserve Bank supervised the regulation of BCCI's and NBG's activities in the Atlanta District and has made criminal referrals of suspicious activity and increased its on-site presence as warranted in full cooperation with law enforcement agencies, before the House Committee on Banking, Finance and Urban Affairs, September 13, 1991.

928 Thomas D. Thomson, Executive Vice President, Federal Reserve Bank of San Francisco, provides information on the San Francisco Reserve Bank's supervision and regulation of BCCI and related entities in the San Francisco District and says that the San Francisco Reserve Bank's supervision was concentrated on its on-site examination program adopted in cooperation with the California State Banking Department, its role in drafting enforcement actions issued against BCCI, its oversight efforts in light of money laundering allegations in 1988, and a continuous on-site presence since 1991 at a Los Angeles banking agency owned by BCCI, before the House Committee on Banking, Finance and Urban Affairs, September 13, 1991.

932 John P. LaWare, Member, Board of Governors, discusses issues related to mergers among U.S. banking organizations and says that the primary objectives of public policy in this area should be to help manage the evolution of the banking industry in ways that preserve the benefits of competition for the consumers of banking services and to ensure a safe, sound, and profitable banking system, before the House Committee

A Primer on the Settlement of Payments in the United States

George R. Juncker, of the Federal Reserve Bank of New York, and Bruce J. Summers and Florence M. Young, of the Board's Division of Reserve Bank Operations and Payment Systems, prepared this article.

In recent years, the soundness of the U.S. payment system, which can be measured by the certainty that payments will settle on schedule, has become a key public policy issue. Payment, or the transmission of an instruction to transfer value that results from a transaction in the economy, and settlement, or the final and unconditional transfer of the value specified in a payment instruction, need not, and in fact generally do not, occur simultaneously. Therefore, the recipient of a payment may face some uncertainty about receiving value even though a payment has been made to him or her. Efforts to reduce the gap of time between payment and settlement, or to ensure ultimate settlement of the payment, contribute to the integrity of the payment system and the efficiency of a market economy.

Four developments have led to the increased public policy attention to payment system integrity and settlement in the United States. First, the daily value of payments has increased significantly because of increased economic activity, growing sophistication and turnover of financial products, and opportunity costs associated with holding non-interest-earning demand deposits. Second, participants in the payment system have become increasingly aware of the credit and liquidity risks associated with clearing and settling payments. Third, the payment process has become more complex because of technological advances and increased emphasis on the efficient processing of payments and their underlying transactions. Finally, new settlement techniques involving netting are being increasingly employed to reduce liquidity requirements and to control risk.

This article examines the role of banks, including the central bank, in the payment and settlement process and explains the use of netting.[1] It also describes large-value netting arrangements that settle using the Federal Reserve and identifies issues arising in cross-border and multicurrency clearing arrangements. The article concludes with a summary of domestic and international public policy issues related to settlement.

Payment and Settlement

In a modern economy, payment obligations are discharged through the transfer of an accepted monetary asset. In earlier times, the monetary asset could take the form of a commodity, such as gold or silver. Today, most sovereign nations issue fiat money denominated in a national currency unit. Fiat money serves as a store of value and a medium of exchange because it has the public's confidence.

In the United States, the deposits held with banks by their customers, along with bank deposits held with the Federal Reserve, are the monetary assets most frequently used to discharge payment obligations. Accordingly, banks and the banking system are integral to the payment process. In important ways, the safety of the banking system is itself tied to the integrity of the payment system.

NOTE. The authors have received helpful comments from several Federal Reserve colleagues, especially Jeffrey C. Marquardt and Patrick M. Parkinson.

1. The term "bank" is used throughout this article to refer to all depository institutions other than the central bank that are participants in the payment system. The Federal Reserve System is the central bank of the United States and includes the Board of Governors and the twelve Federal Reserve Banks.

A large proportion of economic obligations are discharged primarily through the transfer of demand deposit claims on banks' books. Because a bank can fail, its depositors may bear some default and liquidity risk as a result of their decision to hold bank balances. Banks face no risk in holding deposits directly with the Federal Reserve, however, since a central bank—reflecting its governmental status—is immune from liquidity or credit problems. Thus, balances held with the Federal Reserve, which are referred to as "central bank money," have special significance when used by commercial banks to settle their payments. Settlement in central bank money is universally acceptable because the resulting deposit claim is free of default and liquidity risk.

Banks and the Federal Reserve together provide the settlement infrastructure for the nation's payment system. Commercial banks hold accounts through which the general public's payments are recorded and settled. The many thousands of payments that bank customers make each day result in transfers of balances between banks and therefore affect banks' positions with each other and with the central bank. Of course, banks also make their own payments in connection with carrying out the business of banking. These add to, and are often major sources of, large daily payment flows among banks. Banks can settle these interbank payments through accounts that they hold with each other or through accounts that they hold with a correspondent bank. However, many interbank payments, especially large-value payments, are made through the transfer of balances on the books of the Federal Reserve.

When a bank receives a payment on behalf of its customer, the account holder obtains a deposit claim. If the bank receiving the payment is satisfied that the payment will settle, the bank may make funds available to its customer, that is, it will allow the customer to withdraw, or typically to retransfer, the funds. When a bank makes funds available to its customers before settlement, it is exposed to credit risk because an account holder may withdraw funds and, if settlement does not occur, the bank may not be able to recover the funds. Banks sometimes guarantee the unconditional use of funds to their customers based on the receipt of payments before settlement. In this case, the bank is providing a credit service as well as a payment service to its customer by assuming the risk that settlement may not occur as scheduled. When settlement occurs at the same time the payment is made, however, settlement risk is eliminated for the bank and its customer.

THE WAY PAYMENTS ARE MADE

Most payments in the United States are still made with cash (currency and coin). In cash transactions, an instantaneous transfer of value occurs, and thus settlement and payment are simultaneous. Cash is used to settle the largest number of transactions, but it accounts for only about 1 percent of the total value of payments.

Checks are the next most popular type of payment, but they too still account for only a small portion, about 15 percent, of the total value of payments in the United States. When a check is received as payment, the payee must "collect" the value of the check by presenting the check to the bank upon which it is drawn so that settlement can occur. Consequently, payment by check can precede settlement by as much as several days. Banks, including Federal Reserve Banks, treat check deposits as deposit balances based on the ability to present the checks for collection to the banks on which they are drawn. Because checks can be returned, settlement does not truly occur until statutory deadlines governing the return of checks have passed.[2]

The automated clearinghouse (ACH) has been designed as a low-cost substitute for paper payments; and, while still used primarily for consumer payments, this mechanism is increasingly being used for business-to-business payments. Settlement for ACH payments occurs sometime after the payment is made, generally the next day or even the second day after the transaction. ACH payments take two forms. In ACH debit transactions, the receiver of the payment initiates the payment instruction, which must be honored by the party making the payment (like a check). In ACH credit transactions, the party making the payment initiates the payment instruction (like a

2. Checks can generally be returned unpaid until midnight of the banking day after the day of presentment.

funds transfer). It is estimated that between 0.5 percent and 1 percent of all payments, accounting for about 1 percent of the value of all payments, are made by using the ACH.

Two electronic funds transfer systems—Fedwire, operated by the Federal Reserve Banks, and the Clearing House Interbank Payment System (CHIPS), operated by the New York Clearing House—account for less than 0.1 percent of the number of all payments in the United States; however, they account for more than 80 percent of the value of payments. When a Fedwire payment is processed, the Federal Reserve debits the account of the sending bank and credits the account of the receiving bank. Payment instructions are for the immediate delivery of "central bank money," and Fedwire payments are settled when the amount of the payment is credited to the receiving bank's account with the Federal Reserve or when the receiving bank is notified of the payment. The Federal Reserve "guarantees" the payment to the bank receiving the Fedwire and assumes any credit risk if there are insufficient funds in the Federal Reserve account of the bank sending the payment.

Payments processed over CHIPS, however, are settled only when CHIPS participants fund their net obligations resulting from the day's payment instructions over CHIPS at the close of the business day. Settlement of CHIPS obligations occurs by Fedwire transfers initiated by those in a net debit position for the day's CHIPS activity. If the bank receiving a CHIPS payment makes funds available to its customers before settlement occurs at the end of the day, it is exposed to some risk of loss if CHIPS settlement cannot occur. To ensure that settlement occurs, the New York Clearing House has put in place risk control mechanisms (see description below).

Book-entry transactions involving U.S. government securities are cleared and settled over Fedwire, through a delivery-versus-payment mechanism. With this mechanism, one form of value (in this case, U.S. government securities) is simultaneously exchanged for another form of value (in this case, a balance with a Federal Reserve Bank). When book-entry transfers are processed, the sending bank's securities account at the Federal Reserve Bank is debited and its funds account is credited for the value of the sale. When the securities are delivered to the receiving bank, the receiver's funds account is debited and its securities account is credited. Payments to the banks sending book-entry securities are settled through the transfer of central bank balances. As with regular Fedwire payments, the Reserve Banks may extend intraday credit to receivers of book-entry securities transfers and therefore expose themselves to some credit risk.[3] In the United States, some other types of securities are cleared through privately operated book-entry transfer systems. These systems operate somewhat differently than Fedwire and settle on a net basis at the close of business in a way similar to that of CHIPS.

As indicated, the Federal Reserve Banks extend intraday credit to banks in conjunction with the payment services they provide. Similarly, banks often extend intraday credit when they make payments on behalf of their customers. Thus, both the Federal Reserve and private banks are exposed to credit risk in processing payment transactions. Private banks are also exposed to liquidity risk.

Banks typically control their risk by establishing intraday credit limits for their customers and by monitoring their customers' use of such credit. In some cases, banks require their customers to pledge collateral to cover daylight credit exposures. The Federal Reserve Banks have also adopted risk control procedures: They use "net debit caps" (or ceilings for net debits) to limit the amount of credit extended to individual banks that use Federal Reserve payment services. The Reserve Banks monitor the use of intraday Federal Reserve credit for healthy banks, in most cases, by examining historical data through an ex post monitoring system. Online, real-time account monitoring is used for the continuous control of intraday credit for certain institutions, especially those under financial stress. Real-time monitoring enables the Federal Reserve to reject or hold funds transfer requests pending the availability of funds to cover them. In some cases, the Reserve Banks may also

3. Beginning January 1991, banks that incurred "frequent and material" daylight overdrafts with the Federal Reserve as a result of receiving book-entry securities transfers began to collateralize fully their book-entry-related overdrafts. This procedure helps protect the Federal Reserve Banks from the credit risk they face as a result of processing book-entry securities transfers.

require banks to pledge collateral to secure the intraday credit they use.

Gross versus Net Settlement

The settlement of payments occurs on either a gross or a net basis. When payments are settled on a gross basis, each transaction is settled individually. For example, Fedwire is a gross settlement system. When payments are settled on a net basis, the parties to the payments offset the amounts they are due to pay and receive with each other (or with a central party, or clearinghouse) and maintain a running balance of the netted amounts. The offsetting of payable and receivable amounts can occur between two parties (bilateral netting) or among many parties (multilateral netting).

In markets characterized by a high volume or high value of transactions among a fixed group of participants, net settlement typically improves the efficiency of payment processing; reduces liquidity needs; and, depending on the type of legal foundation and risk controls used, can help control credit exposures. Netting may be applied in many real and financial markets. For example, petroleum companies active in trading crude oil have bilaterally netted their oil trades for many years and have also participated in a multilateral netting arrangement. Many organized exchanges for commodities and securities also employ forms of netting, usually through formal clearinghouses. Banks themselves actively participate in clearinghouses through which they exchange and net payment transactions.

Bilateral Netting

Interbank payments are often cleared and settled in bilateral arrangements. For example, two banks that exchange large volumes of payments may agree to exchange certain types of payments, such as checks or ACH items, and settle the net value of the payments between themselves at a specific time. This type of agreement reduces the value of settlement between the two banks participating in the exchange because they can total the net value of customer transactions payable to and receivable from each other and substitute a single, smaller, net settlement (see box 1). Two banks may also enter into an agreement to net financial contracts, such as those involving foreign exchange, and settle the net amount resulting from the trading.

Multilateral Netting

When three or more institutions participate in a clearing and settlement arrangement with netting, the arrangement is called multilateral netting. Banks form multilateral netting arrangements for various payments and financial contracts, including checks, ACH transactions, and large-value funds and securities transfers. Such arrangements typically have the potential to reduce the number and the overall value of settlements well beyond the reductions that can be realized through bilateral netting (see boxes 1 and 2 for examples).

Participants in multilateral netting arrangements may exchange transactions either at a single designated time (which is typical for a paper-based payment system, such as checks, or for electronic systems that process in a batch mode, such as ACHs) or within a specified period of time (as with some large-value funds and securities transfer systems). An agent for the netting group typically calculates each participant's position based on the value of payments that the participant has made and received within the netting cycle, which is usually one day. Institutions that have made a greater value of payments than they have received must transfer money to the clearing group, whereas participants that have received a greater value of payments than they have made receive money from the clearing group. The sum of all participants' obligations must equal zero.

Box 2 shows a simple numerical example of a funds transfer netting arrangement involving four participants; it illustrates settlement from the perspective of the clearinghouse. In this example, if the four banks did not participate in the clearinghouse, they would collectively need to make a total of ten interbank settlement payments with an aggregate value of $800 in connection with the underlying customer payments. As a result of multilateral netting, only one participant (Bank D) has an obligation to transfer money to the clearinghouse, and the clearinghouse must transfer money to three participants. Multilateral netting

1. Effects of the Netting of Payments

The following example illustrates the differences between the exchange of a series of gross payments and the bilateral and multilateral netting of the series of payments from the standpoint of one organization. The assumptions in the example are that Bank A makes payments to and receives payments from nine other banks on a given day. It makes ten $100 payments to and receives ten $95 payments from each of five banks. It also makes ten $95 payments to and receives ten $100 payments from each of four banks. The settlement activity in each of the three cases is as follows:

Gross Settlement

Bank A makes ninety payments worth $8,800 and receives ninety payments worth $8,750.

Total number of payments made or received by Bank A	180
Total value of payments made or received by Bank A that must be settled	$17,550
Day's settlement effect on Bank A	–$50

Bilateral Netting

Bank A nets payments with each of the nine counterparties throughout the day and settles at the end of the day with each. Bank A pays each of five banks $50 for a total of $250 and receives $50 from each of four banks for a total of $200.

Total number of settlement payments made or received by Bank A	9
Total value of settlement payments made or received by Bank A	$450
Day's settlement effect on Bank A	–$50

Multilateral Netting

Bank A nets payments with all nine counterparties as a group throughout the day and settles at the end of the day through a common agent for the multilateral netting arrangement. It makes a single payment of $50 for its obligation to this agent.

Total number of settlement payments made by Bank A	1
Total value of settlement payments made by Bank A	$50
Day's settlement effect on Bank A	–$50

In each case, the settlement result at the end of the day for Bank A is the same (as long as net settlement occurs normally); however, the number and the value of settlement payments drop dramatically with netting. In bilateral netting, the number of payments to Bank A's counterparties is reduced to just 9 from 180 in gross settlement. In multilateral netting, Bank A need make only a single payment to satisfy its obligation to the group. Because a much smaller amount of money actually changes hands, liquidity needs are also dramatically reduced.

and the use of a clearinghouse have allowed these efficiencies to occur.

In multilateral netting arrangements that do not involve banks, each participant's net money position is typically settled through a "settlement bank." When the parties to the arrangement are themselves banks, the settlement bank may be—but does not have to be—the central bank. If the settlement bank maintains accounts for all participants, settlement can occur by the posting of each participant's net debit or credit position to its account. Alternatively, if participants rely on several settlement banks, institutions in net debit positions may be required to fund their positions by transferring money to the settlement banks of participants that are in net credit positions.

When the central bank acts as the settlement bank, a special settlement account may be used to collect the settlements made by the parties with net debit obligations. The special settlement account is opened at a designated time, and institutions in net debit positions send Fedwire payments to fund the account. After the account is fully funded, the agent for the clearing group originates Fedwire transfers from the account to participants in net credit positions. After all funds transfers have been made and the account balance is zero, settlement of all underlying payments is complete.

Risks in Netting Arrangements

Two types of risk arise in bilateral and multilateral netting arrangements: namely, credit and liquidity risk. A third type of risk, systemic risk, may also be present in multilateral netting arrangements. These three types of risk are described in box 3.

In the case of bilateral netting arrangements, banks must evaluate the credit and liquidity risk

2. Transactions among Four Participants in a Funds Transfer Clearinghouse

Customer payments with customers of banks B and C

Bank A

originates 25 and 50

receives 50 and 100

net = 75

net = 25

originates 50, 150, and 25

receives 25, 125, and 100

Bank B

Customer payments with customers of banks A, C, and D

I. Gross payments among banks before netting

Bank receiving payment	Bank originating payment				Sum of claims
	A	B	C	D	
A	...	50	100	...	150
B	25	...	125	100	250
C	50	150	...	125	325
D	...	25	50	...	75
Sum of obligations	75	225	275	225	800

II. Net claim or obligation of each bank with the clearinghouse

	A	B	C	D	Net
Total	75	25	50	−150	0

Customer payments with customers of banks A, B, and D

Bank C

originates 100, 125 and 50

receives 50, 150, and 125

net = 50

net = −150

originates 100 and 125

receives 25 and 50

Bank D

Customer payments with customers of banks B and C

assumed with the bank on the other side of the bilateral netting arrangement—the "counterparty." If there is doubt about a counterparty, a bank receiving payments from the counterparty on behalf of a customer may choose not to allow the customer access to the funds until settlement has occurred.

A mutualization of the credit risk occurs when more than two banks participate in a netting arrangement. In particular, the timely completion of all the underlying gross transactions that are included in a multilateral netting depends on the ability of each party to meet its single net settlement obligation arising from the netting. If even one participant fails to meet its net settlement obligation, then settlement for all the underlying transactions could be delayed or otherwise disrupted, creating credit and liquidity risks for the participants. Indeed, even a bank that has no dealings with the participant in a multilateral netting that does not settle may be exposed to risk. For example, in the situation described in box 2, participant A has no direct dealings whatsoever with participant D: A does not make payments to D, nor does it receive payments from D. Nonetheless, participant D has a net obligation to the clearinghouse of $150, and participant A's net credit of $75 would be funded from participant D's settlement. Accordingly, participant A depends on participant D to meet its settlement obligation, even though the two have exchanged no payments.

The risks created by privately operated netting arrangements cannot be eliminated, but they can be effectively controlled and limited. The risks cannot be eliminated because extensions of credit between privately owned institutions are an inherent part of such arrangements, and these extensions of credit are subject to some degree of default risk. Two types of risk control systems are used—*decentralized and centralized. In netting arrangements based on a system of decentralized controls*, the individual participants are responsible for controlling their risk vis-à-vis the other participants with whom they deal as counterparties in the individual transactions (CHIPS is an example of a decentralized risk control

3. Risks in Netting Arrangements

Liquidity risk involves the possibility that a participant in a clearing arrangement will have insufficient funds at settlement to cover its obligation. If this situation occurs, other participants may be negatively affected if they have planned to use the proceeds from the settlement to cover other obligations or, in anticipation of settlement, have already permitted their customers to use such funds. Thus, other participants may have to find alternative sources of funding to cover their obligations while they wait for the "defaulting" participant's ultimate payment to meet its obligation.

Credit risk involves the possibility that a participant in a clearing arrangement will be unable to meet its settlement obligation, either in whole or in part, because of its insolvency. In this case, other participants not only face a liquidity problem but also may incur actual losses.

Systemic risk involves the possibility that one participant's inability to settle in a clearing arrangement will cause other participants in that clearing group to be unable to meet their obligations either to their customers or to other banks. The value of the transactions exchanged among participants in a clearing arrangement directly affects the degree of systemic risk associated with the arrangement. When high-value payments are exchanged and the turnover of funds within the arrangement is also high, the degree of systemic risk is generally high as well. Consequently, high systemic risk is usually associated with private large-value funds and securities transfer systems.

arrangement).[4] In contrast, systems with centralized controls typically rely on a central body that becomes the counterparty—usually a clearinghouse—to every transaction cleared through the system: The central counterparty becomes a "buyer" to every seller and a "seller" to every buyer (clearing bodies in the futures and options markets are examples of centralized risk control arrangements).

Clearing arrangements that use either decentralized or centralized risk controls use combinations of the following techniques. To protect participants against credit risk, many clearing organizations establish membership standards, which are used to screen participants when they apply to participate in the arrangement and which are monitored on an ongoing basis. Some clearing organizations require each participant to establish bilateral credit limits with every other participant whereby the volume of payments received from each other participant can exceed the volume sent to each other participant only by a predetermined amount. Bilateral credit limits thus provide a mechanism for controlling the risk that the participants face in exchanging payments with each other participant in the arrangement. To the extent that participants agree to share losses arising from the default of one or more other participants and that these loss-sharing arrangements are tied to the bilateral credit limits, incentives are created for each participant to manage its bilateral credit positions prudently.

Credit and liquidity risks may also be controlled by imposing limits on the net debit position of each participant. Such limits reduce the risk that any one participant may impose on the group and may be related in principle to each participant's ability to fund its daily settlement obligation. Assuming that such limits, or net debit caps, are set realistically, their use reduces the potential that an individual participant will be unable to settle its position at the close of business.

To handle settlement defaults, some clearing groups rely on settlement recasts and unwinds. In a recast, all of the defaulting participant's payments are deleted from the settlement, and the net settlement positions of the remaining participants are recalculated. As a last resort, if a clearing group is unable to achieve settlement after more than one recast, then it may decide to unwind *all* transactions. This procedure essentially requires all the participants to settle independently with each other.

For small-value arrangements, settlement recasts may be able to address both liquidity and credit risk without serious systemic implications. If a participant defaults, the clearing group relies on the resources of each remaining participant to fund its adjusted settlement position on the settlement day. Further, by removing all of the transactions of the defaulting participant, a settlement recast automatically allocates the losses associated with the default to the participants

4. Controls, typically credit limits, are set on a decentralized basis, but they may be enforced through a central computer facility.

that dealt with the defaulting participant. Such an approach to resolving a settlement default is viable only when the value of payments exchanged is relatively low and the potential change in participants' settlement obligations is relatively small and can be funded easily by the remaining participants.

In a large-value netting arrangement, the recast of the settlement could remove significant credits that other participants were relying on to meet their own obligations and thus cause them to be unable to settle. Therefore, recasts or unwinds can be a significant source of systemic risk.

To avoid the undesirable effects of a recast, large-value multilateral netting arrangements—such as CHIPS—may provide special "assurances" of settlement akin to "guarantees." The nondefaulting participants may, for example, agree in advance to share the burden of meeting the defaulting participant's obligation to allow settlement to occur on schedule. Lines of credit or pools of collateral may be maintained, either of which can be used for overnight borrowing to provide the funds to achieve settlement on the day of the occurrence. In such arrangements, the nondefaulting participants would share losses after the settlement had occurred, based on some method of loss allocation agreed upon in advance. Such arrangements would help prevent the sudden market disruptions that might otherwise occur with recasts or unwinds.

Legal Basis for Netting

Netting must have a sound legal basis for the settlement to be certain. In particular, in the event that a participant in the netting becomes insolvent, it is important that the net obligations of the participants be legally recognized so that a receiver of the insolvent participant is not able to "cherry pick," that is, accept incoming payments while voiding outgoing payments.

A variety of legal approaches may be used to net obligations. For example, netting by novation would substitute a new legal obligation each time an additional payment instruction is sent or received. Netting among several participants in an arrangement may be accomplished by placing an intermediary between the counterparties so that all obligations are due to or from this new intermediary. These approaches are applicable to the netting of financial contracts, such as foreign exchange deals, as well as to payments. Recent work by the Group of Ten central banks has emphasized the need for significant netting arrangements to have sound legal foundations.[5]

LARGE-VALUE NET SETTLEMENTS USING CENTRAL BANK SERVICES

In the United States, central bank net settlement services support two quite different types of private sector large-value netting arrangements. The first type is a "pure" payment netting arrangement in which credit transfers are processed among participants, with settlement across the Federal Reserve's books at the end of the day. The second type of netting involves payments arising from the exchange of a certain type of asset, such as securities transactions. As with the first type, the net payments arising from the asset transfers may be settled across the Federal Reserve's books at the end of the day.

Payment Netting Arrangements

At present, CHIPS is the only "pure" payment netting arrangement for large-value transfers operating in the United States.[6] It is the largest payment netting system in the world and processes nearly $1 trillion in payments daily. It has about 130 participants, the majority of which are branches or agencies of non-U.S. banks. Only twenty U.S. participants, however, are settling participants that actually send or receive net payments to settle on behalf of themselves and other, nonsettling participants.

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5. Bank for International Settlements, *Report on Netting Schemes*, prepared by the Group of Experts on Payment Systems chaired by Wayne D. Angell (Basle: BIS, February 1989); and Bank for International Settlements, *Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries*, prepared by the Committee on Interbank Netting Schemes chaired by M.A. Lamfalussy (Basle: BIS, November 1990).

6. The Federal Reserve Banks provide settlement for more than 160 small-value payment netting arrangements involving checks, ACH transactions, automatic teller machine networks, and the like.

Since its inception in 1970, CHIPS has adopted a variety of measures to control and reduce credit and liquidity risk. Currently, it employs admission standards; bilateral credit limits, which are used by each participant to establish its maximum exposure to each other participant in the event of a default; net debit caps, which are based on all bilateral credit limits established for each participant; explicit loss-sharing rules, which are based on the bilateral limits; and collateral requirements to ensure timely settlement.

Since moving to same-day settlement in 1981, CHIPS has used a special settlement account with the Federal Reserve Bank of New York to settle each day. Immediately after the system closes for the day at 4:30 p.m. eastern time, participants are notified of their final net settlement obligations. The settlement payments for the twenty U.S. banks that settle directly for themselves and the other participants are made over Fedwire into the special settlement account at the Federal Reserve Bank of New York.

If any participant fails to settle, the loss-sharing rules are invoked. In essence, an additional settlement obligation (ASO) is calculated for each participant that dealt that day with the defaulting member to make up that member's unpaid obligation, and the participants are given a reasonable period of time to cover this ASO. If any participant failed to meet its ASO, U.S. government securities held in a special CHIPS collateral account at the Federal Reserve Bank of New York would be tapped to collateralize a loan in the market to use for ensuring timely settlement. Sufficient collateral is kept in the special CHIPS account to cover any one participant's largest potential uncovered net debit. In certain cases, there would be sufficient collateral to cover several simultaneous defaults by participants with smaller uncovered net debits.[7] Thus, the CHIPS collateral account ensures timely settlement for all but cataclysmic default situations.

Delivery-versus-Payment Arrangements

In contrast to a payment-only netting system like CHIPS, the Federal Reserve also directly supports net settlement for two arrangements in which payments associated with the clearing of financial instruments are netted and settled across Fedwire. The Participants Trust Company (PTC), a specialized clearing and settlement arrangement for mortgage-backed securities, uses a risk-control system and settlement process roughly similar to those of CHIPS. Like CHIPS, PTC monitors intraday positions in real time and allows transfers of securities only if the amount of the resulting settlement obligations is within specified limits. Unlike CHIPS, which employs decentralized risk management techniques, PTC employs a centralized risk management system in which PTC is the central counterparty to each transaction accepted into the system and is responsible for the settlement obligations. To ensure timely settlement, PTC retains collateral rights to the securities it is transferring and stands ready to pledge this collateral to obtain liquidity by borrowing against prearranged credit lines should a participant fail to cover a settlement obligation at the end of the day.

PTC's settlement procedures at the end of the day are similar to those of CHIPS. Settlements are made over Fedwire into a special PTC settlement account at the Federal Reserve Bank of New York. After participants in a net debit position fully cover their obligations, PTC initiates transfers to the net creditors. In the event that a participant failed to cover its net debit position, PTC would activate its secured credit lines to achieve settlement.

Depository Trust Company (DTC) operates a same-day-funds settlement (SDFS) system, which is used to clear and settle new issues, redemptions, and trades for a variety of instruments, including commercial paper. This system uses Fedwire to settle and operates much like PTC. Unlike PTC and CHIPS, however, DTC's SDFS system does not employ a special settlement account but rather relies on DTC's regular account at the Federal Reserve Bank of New York to receive transfers from and make transfers to settlement banks acting on behalf of system participants. DTC does, however, provide the New York Reserve Bank with settlement data and notifies it when the settlement is complete. Like PTC, it uses securities held in the system as collateral to support credit lines that

7. The aggregate value of the collateral maintained by the CHIPS participants is currently about $3 billion.

supplement its own liquid reserves to ensure timely settlement.

Cross-Border and Multicurrency Settlement

The U.S. dollar is a key international currency. Many U.S. dollar payments are made "off shore" in connection with a variety of real and financial transactions. Banks around the world use a variety of techniques to settle these payments.

In general, the simplest form of clearing payments outside the home country of a currency is across the books of a single correspondent bank. That is, if X, a bank located in London, wishes to pay U.S. dollars to Y, a bank located in Germany, and both X and Y hold accounts at the same correspondent bank in New York, X may order (typically electronically) the New York correspondent bank to transfer funds from its account to that of Y. If X and Y do not hold accounts at a common correspondent bank, further intermediation will be involved. The correspondent bank need not be resident in, or even chartered in, the United States to perform these account transfer functions involving the U.S. dollar. Interbank settlement for off-shore U.S. dollar payments may become even more elaborate. A concrete example may help explain how interbank settlement occurs for cross-border payments involving the U.S. dollar.

Chase–Tokyo Dollar Clearing

In Tokyo, the Chase Manhattan Bank (Chase) operates a dollar clearing arrangement primarily to serve the Japanese and Asian interbank markets. Operating during the Tokyo business day before U.S. markets open, correspondent customers of Chase move dollar payments by sending and receiving payment orders that result in credits and debits to customer accounts at Chase's Tokyo branch throughout the day. Once Chase posts a payment to an account, the payment is final, Chase stands behind it, and the customer may withdraw funds. Some customers are allowed to overdraw their dollar accounts at the Chase–Tokyo branch during the Tokyo business day within specified limits, with the understanding that such overdrafts will be covered in New York during the U.S. business day. U.S. dollar account balances held at Chase–Tokyo at the end of the Tokyo business day can be moved by advising Chase–Tokyo to transfer part or all of the balance in New York during the U.S. business day beginning some fourteen hours after the Tokyo business day begins. These funds typically are transferred by Chase and its customers in Tokyo through their U.S. branches or through U.S. correspondent banks over CHIPS.

The Chase–Tokyo clearing arrangement for U.S. dollars is based on correspondent banking relationships with customers. Nonetheless, it differs from traditional correspondent banking in at least two ways. First, Chase's customers contract to participate in a specific loss-sharing arrangement to reimburse Chase on the next business day if a participant defaults. Second, in part because of the mutualization of risk resulting from the loss-sharing, the arrangement operates as a system with some of the same kinds of interdependencies that arise in a multilateral netting arrangement.

Foreign Exchange Settlements

The latest international estimate (as of April 1989) of the size of the foreign exchange (FX) market put average daily turnover conservatively at $650 billion.[8] The settlement of these transactions may represent the single largest global demand for payment services and is believed to account for a substantial proportion of payments made over the large-value funds transfer systems in countries with key international currencies. The traditional settlement practices for foreign exchange contracts, however, present special risks, since the settlement of these contracts typically involves payments and counterpayments that are settled at different times in different countries. For example, in a yen–dollar transaction, the yen leg must be settled in a yen arrangement and the dollar leg in a dollar arrangement. The party making the yen payment would be exposed to settlement risk from the time the payment was made during the Japanese

8. Bank for International Settlements, *Survey of Foreign Exchange Market Activity* (Basle: BIS, February 1990).

business day until the dollar counterpayment was received during the U.S. business day. At a minimum, this period represents about an eight-hour exposure and could reach almost twenty hours or more, depending on when individual payments were actually processed.[9] This temporal risk, during which payment has been made in one currency but not yet received in another currency because of time zone differences, is often termed "Herstatt" risk, as a result of the 1974 failure of a German bank, Bankhaus Herstatt. Bankhaus Herstatt failed at the end of the German business day, after mark payments had been made on the mark leg of a mark–dollar transaction, but before the end of the business day in the United States and thus before U.S. dollar payments in the United States were fully completed. Therefore, parties that had made payments and were owed dollars for the transactions did not receive dollar payments as scheduled.

Recently, the private sector has made strides in addressing risks in the FX market by developing bilateral netting arrangements that reduce both the number and value of payments necessary to support the settlement of the underlying contracts. The central banking community has been monitoring existing and proposed arrangements out of concern that the netting arrangements should in fact reduce risks and not just disguise them. In fact, in November 1990 the Group of Ten central banks adopted minimum standards for cross-border multicurrency interbank netting schemes.[10]

While the bilateral netting of FX transactions appears to be gaining market acceptance, such an arrangement does not exhaust the operational efficiencies or potential risk reductions that well-designed multilateral netting could offer. Two groups of banks, one in Europe and one in North America have explored multilateral netting of FX contracts. These groups have also explored the appropriate risk management facilities and operational capabilities to support multilateral netting and cross-border, multicurrency settlement for FX transactions.

Major challenges appear to remain. Indeed, finding a safe and efficient delivery-versus-payment mechanism that ensures the simultaneous settlement of payments in two or more currencies and virtually eliminates Herstatt risk remains both a goal and a challenge for market participants.

PUBLIC POLICY ISSUES

The United States has for decades had a payment system that achieves timely and reliable settlement. The banking system, including commercial banks, their clearing organizations, and the Federal Reserve, have played an active part in supporting the payment and settlement needs of the economy.

As noted in the introduction, however, public policy concern about the U.S. payment system has increased, especially with regard to the integrity of the settlement process. In large measure, this concern is related to the dramatic increase in daily payment flows, which in 1980 represented only about twelve times average reserve balances held with the Federal Reserve and today represent about fifty-five times reserve balances.

The increased demand for payment services is explained partly by the extensive reliance throughout the world on the U.S. dollar as a reserve currency and as a vehicle currency in foreign transactions. This reliance on the U.S. dollar is illustrated by the predominance of CHIPS payments that are related to settling the U.S. dollar part of FX transactions—an estimated $650 billion of the $1 trillion of daily CHIPS payment flows are related directly to FX settlement. However, the attractiveness of the U.S. dollar as an international currency depends partly on the efficiency and soundness of its settlement arrangements. Moreover, from an international standpoint, the efficiency and soundness of national payment systems are becoming increasingly interlinked because of the need to make and settle the growing number and variety

9. The exposure is shorter if settlement for the westernmost currency, the U.S. dollar, is made in the morning over Fedwire. It is longer if settlement for the U.S. dollar leg is made through CHIPS, which achieves settlement at the end of the banking day in the United States.

10. See BIS, *Report of the Committee on Interbank Netting Schemes.*

of off-shore, cross-border, and multicurrency payments.

The current context of public policy therefore is global. Participants in the payment system rely on settlement banks that engage in various businesses and provide services to domestic and foreign customers who rely on several currencies, the most important being the U.S. dollar. As technology and designs for settlement systems have evolved and have permitted more efficient interbank settlement of payments, there has been a commensurate increase in the sharing of risks among the participants in such arrangements through their clearinghouses and clearing organizations. Ensuring that these risks are properly managed presents an enormous challenge. Account holders at a bank whose particular patterns of payment may not directly require the use of a complex interbank netting arrangement are at least indirectly dependent on the successful operation of such an arrangement through the settlement bank on which it relies.

For these reasons, the Federal Reserve, as well as other central banks, has become more interested in and concerned about the safe and reliable operation of various types of interbank netting and settlement systems. The *Report of the Central Banks of the Group of Ten Countries on Interbank Netting Schemes* identifies minimum standards that netting systems should meet. Moreover, central banks have a great and continuing interest in the safe, efficient, and reliable operation of payment systems, such as those described in this article.

This review of U.S. netting and settlement systems suggests four public policy issues that will likely occupy the attention of bankers. First, how safe should netting arrangements be? At a minimum, the risk management systems for these arrangements should be designed to ensure settlement in the event of the default of the single largest participant. Should the risk management systems do more? If so, what is the trade-off between the costs incurred by banks to strengthen these systems further and the benefits to be gained by banks and the public?

Second, to what extent should the interdependencies among settlement systems with common participants be recognized in the calculations regarding risk management? For example, the same institution may have settlement obligations and settlement credits arising each day across netting and settlement systems associated with different markets (say, CHIPS for FX, PTC for mortgage-backed securities, DTC for commercial paper, and so forth). The sound and efficient management of settlement risk may well be a cross-system issue.

Third, to what extent can the temporal risk related to cross-border, multicurrency settlement be addressed through improved international settlement arrangements? The formation of multilateral foreign exchange clearinghouses is one possibility; this approach, however, itself raises fundamental questions about the payment infrastructure in different countries that must be used to effect actual settlement. The key issue here may be the desirability of extended payment system operations by central banks—perhaps even around-the-clock operations.

Finally, in the normal course of business, U.S. banks participate in off-shore payment and netting systems and assume large settlement obligations, or receive large payments, denominated in foreign currencies. The soundness of these banks may depend to some extent on the exposures and risk controls in these systems. Much needs to be known in the United States about the operation of these systems to develop the same understanding that authorities have about U.S. systems.

In conclusion, the integrity of the U.S. financial system depends on the safety and soundness of the settlement process for U.S. dollars. Much progress has been made to increase confidence in the proper functioning of the arrangements that together constitute the settlement process. But, as the questions raised here suggest, much remains to be done. □

Home Mortgage Disclosure Act: Expanded Data on Residential Lending

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Since 1976, most banks and other depository institutions that have offices in metropolitan areas have been required, under the Home Mortgage Disclosure Act (HMDA), to disclose to the public information about the geographic distribution of their loans for home purchase and home improvement. The data have revealed wide variations in the number and dollar volume of loans approved across neighborhoods grouped by the income and race of residents. These variations, together with data from other sources, have raised questions about whether the efforts of lenders have been adequate to help meet the credit needs of the low-income and minority residents of their communities.

The variations in lending patterns also have generated controversy about whether lenders treat applicants for home loans fairly and on a racially nondiscriminatory basis. Some people interpret the variations as evidence of illegal discrimination. Others suggest that the patterns are attributable to differences in the demand for housing and home loans among individuals and across neighborhoods, and that they reflect the application of legitimate credit standards by lenders as they review individual requests for home loans.

Recent changes in HMDA have substantially increased the type and amount of information available about residential lending, beginning with data for 1990. In the past, covered institutions were required to disclose information only on loans they originated or purchased. Now, in disclosure statements released to the public in October 1991, lenders for the first time have reported on all home loan applications they received and their disposition, plus the race or national origin, gender, and annual income of the applicants. In addition, more lenders are now subject to the reporting requirements.

The changes in the act's requirements, as implemented by the Federal Reserve Board's Regulation C, will increase the usefulness of the HMDA data to community organizations, local governments, financial institutions, and others. The expanded data will make it possible, for example, to review how lenders act on applications and are likely to stimulate dialogue between institutions and members of their communities. Observed differences in the number of applications received and loans extended to various groups and neighborhoods are likely to lead financial institutions to reexamine their marketing and community outreach efforts.

Differences in approval and denial rates among groups and neighborhoods revealed by the new data can be expected to raise questions about the adequacy and fairness of the home lending process. The data have important limitations, however, and care must be taken in drawing conclusions from observed lending patterns. Foremost among these limitations is a lack of information about factors that are important in determining the creditworthiness of applicants and the adequacy of the collateral offered as security for their loans. Without taking into account such information, one cannot determine whether individual applicants or applicants grouped by a common characteristic (such as race or gender) have been treated fairly.

Major use of the expanded HMDA data will be made by the agencies charged with ensuring that covered institutions comply with the fair lending laws (the Fair Housing and Equal Credit Opportunity Acts) and the Community Reinvestment Act (CRA). Because bank examiners have access to loan application files, they will be able to overcome most of the limitations of the HMDA data. By using the HMDA data in conjunction with loan application files, related information, and other materials related to evaluating CRA performance, the agencies will be able to carry out their enforcement responsibilities more effectively.

This article gives an overview of the HMDA reporting system and describes analytical studies based on the geographic data available under the old reporting system. It presents some preliminary numbers drawn from nationwide aggregates of the 1990 data and sounds some cautions about limitations of the data. The article discusses potential uses of the data, with a focus on the supervisory agencies. Finally, it looks at an area newly covered by HMDA—sales of home loans to the secondary mortgage market.

HMDA'S PURPOSE: IDENTIFICATION OF HOME LENDING PATTERNS IN URBAN AREAS

The Congress passed the Home Mortgage Disclosure Act in 1975 in response to concerns that, by failing to provide adequate home financing to qualified applicants on reasonable terms and conditions, some depository institutions "have sometimes contributed to the decline of certain geographic areas." The law was intended to provide information about residential lending activity that could be used on several fronts:

- Generally, the data could help determine whether financial institutions are serving the housing needs of the communities in which they are located, by identifying pockets in which they are and are not providing credit.
- By providing information about the distribution of loan originations, the data could help guide public officials in distributing public funds so as to attract private investment to areas where it is needed.
- After examining data about a bank's lending, households could better decide where to invest their savings.

Following the most recent amendments to HMDA, contained in the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1989, the data may serve a fourth purpose: to assist in identifying possible discriminatory lending patterns and in enforcing antidiscrimination laws.

Recent Changes in Coverage

For more than a decade, HMDA applied only to depository institutions—commercial banks, savings banks, savings and loan associations, and credit unions—and their subsidiaries. Among that group, only those with assets exceeding $10 million and a home or branch office in a metropolitan statistical area (MSA) have been covered.[1]

Over time, the number and type of lenders and the specific institutions covered by the act have changed (table 1). Even as some institutions closed or merged into larger ones, many small institutions that once were exempt grew in assets, losing their exemption as they passed the $10 million mark. For example, in 1977 roughly 22 percent of commercial banks that had offices in MSAs had assets of $10 million or less, compared with fewer than 3 percent in 1990.

In 1988 and again in 1989, the Congress expanded the scope of HMDA. First, amendments passed in 1988 extended coverage to certain nondepository lenders that extend home loans, specifically to savings and loan service corporations and the mortgage banking subsidiaries of bank and thrift holding companies. The 1988 amendments took effect August 19, 1988.

The FIRREA amendments of August 1989 brought in independent mortgage companies—for the first time capturing lenders unaffiliated with depository institutions. For 1990, the first year of coverage, more than 400 independent mortgage companies disclosed information about their lending activity. Although the addition of these lenders increased the number of covered institutions in 1990 by only 5 percent, it

1. An MSA typically consists of a central city having a population of 50,000 or more, the county in which the city is located, and any surrounding counties that are tied economically and socially to the central city.

1. Residential lending activity reported by financial institutions covered by HMDA, 1981–90

Year	Number of loans[1] (millions)	Number of reporting institutions	Number of metropolitan statistical area reports
1981	1.28	8,094	10,945
1982	1.13	8,258	11,357
1983	1.71	8,050	10,970
1984	1.86	8,491	11,799
1985	1.98	9,072	12,567
1986	2.83	8,898	12,329
1987	3.42	9,431	13,033
1988	3.39	9,319	13,919
1989	3.13	9,203	14,154
1990	6.37	9,281	23,891

1. Except for 1990, includes only loans originated by covered institutions; for 1990 (first year under revised reporting system), includes loans originated and purchased, applications approved but not accepted by the applicant, applications denied or withdrawn, and applications closed because information was incomplete.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

increased the lending activity reported by roughly 15 percent.

Pre-1990 Data: Focus on Geography of Lending

Through 1989, lenders reported only their originations and purchases of home purchase and home improvement loans, under conventional and government-backed lending programs (those insured or guaranteed by the Federal Housing Administration (FHA), the Veterans Administration (VA), or the Farmers Home Administration (FmHA)). Lenders prepared two reports for each MSA in which they had offices—one for loans originated and the other for loans purchased during the calendar year.

From 1976 through 1989, the focus was strictly on where a lender made or purchased loans. Of primary interest was the volume of lending within the MSAs in which the lender had its home office or branch offices. In most instances, the location within an MSA of the property securing the mortgage (or of the property related to the home improvement loan) was identified by census tract number. For purposes of public disclosure, the number and dollar volume of lending for each census tract was reported as an aggregate. For counties having populations of 30,000 or less, the data were aggregated and reported by county rather than by census tract. Loans on properties outside the MSA were grouped to show the total number and the dollar value of such loans by type of loan.

Since 1980, the Federal Financial Institutions Examination Council (FFIEC) has aggregated HMDA data to show the overall lending activity of covered institutions in each MSA.[2] The FFIEC makes these reports available at a central data depository in each of the nation's 341 MSAs.[3]

1990 Data: Disclosure Procedures and Scope of Information

With the 1989 FIRREA amendments, institutions must continue to disclose information about residential loans extended and purchased and also must report on applications that did not result in an extension of credit. They are also making public for the first time information about loan applicants—their race or national origin, gender, and annual income.[4] Further, for loans originated or purchased during the year, institutions must report the loans they sold, classified by type of secondary market purchaser. Finally, they may, if they wish, report their reasons for denying loans.

Loan/Application Register. The Federal Reserve Board is charged with implementing the HMDA amendments. The Board's approach to collecting the data (developed in consultation with the other supervisory agencies[5]) is a relatively simple one that minimizes the burden on the reporting institutions and, at the same time, provides a reporting format that offers a large base of information for use by the public and the

2. The FFIEC is composed of representatives of the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, and the National Credit Union Administration.

3. A directory of the central data depositories is available from the FFIEC, 1776 G Street, NW, Suite 850B, Washington, DC 20006.

4. Depository institutions with assets of $30 million or less may, but are not required to, report these characteristics.

5. Supervisory agencies include the member agencies of the FFIEC and the U.S. Department of Housing and Urban Development (HUD), which was assigned supervisory duties for independent mortgage bankers under the FIRREA amendments to HMDA.

supervisory agencies. Covered institutions record data for each loan application acted on and each loan purchased on a separate line of a reporting form, the Loan/Application Register (LAR). At the end of the year, the institutions submit the LARs to their respective supervisory agencies, which send them to the Federal Reserve Board for processing. The Board, acting on behalf of the FFIEC, produces disclosure statements and sends them to the reporting institutions for release to the public. Under this system, institutions collect the required information but do not have to undertake the additional costly step of preparing their own disclosure statements, which would involve sorting and aggregating their data in multiple cross-tabulations.

Disclosure Statements and Aggregate MSA Reports. The disclosure statements made available to the public consist of a series of tables. An individual institution's statement may consist of as many as thirty-one tables for each MSA in which it has offices. The tables show the following:

- Disposition of loan applications, by type of loan and geographic location of the property (in most instances the census tract number)
- Loans purchased, by type of loan and geographic location of the property
- Loans sold, by type of secondary market purchaser
- For each of six categories of loans, the disposition of applications, by applicant characteristics (annual income, race or national origin, and gender) and characteristics of the neighborhood in which the property related to the loan application is located (median family income and percentage of the population that is minority).

The disclosure statement is available to the public at the lender's home office and at one branch office in each other MSA in which the lender has a branch. Copies of the disclosure statements for all lenders in an MSA also are available to the public at the central data depository in that MSA.

In addition, the FFIEC compiles and provides to the central data depository an aggregate report showing the overall lending activity for all covered institutions in that MSA. The aggregate report for an MSA may contain as many as thirty-three tables. The first thirty-one are an aggregate version of the individual institution disclosure tables. The other two show the disposition of loan applications by median age of homes in census tracts in the MSA and by the central city or non-central city location of the property.

One disadvantage of the new system is that processing the enormous volume of data takes a long time. Although more information is available, the data were not available to the public this year by March 31, as in earlier years. In this first year under the expanded coverage, the disclosure statements for 1990 were made public in mid-October 1991. To shorten the data-processing time, agencies are implementing such measures as having lenders submit reports in machine-readable form.

Scope and Volume of Disclosures. However measured, the 1990 effort to collect and process the data has been immense. The disclosure reports contain data on nearly 6.4 million loan and application records. At the Federal Reserve, the volume of HMDA data processed on behalf of the FFIEC this year was greater than that for any other single subject handled by the System. To put the effort in context, the amount of data processed was roughly eleven times the quantity of HMDA data handled prior to the 1989 amendments.[6] Moreover, given the relatively weak housing market in many sections of the country through most of 1990, the volume of loan activity reported can be expected to be significantly greater in subsequent years.

6. The federal supervisory agencies incurred an estimated one-time cost of $2.8 million to develop the system for processing the expanded HMDA data (primarily for computer software development). The agencies have spent approximately $2.6 million to process the 1990 data. The annual processing cost is expected to decline in future years as more institutions submit the data in machine-readable form. Despite a comprehensive effort to identify errors in the data and have them corrected, at the time the disclosure statements were distributed to the public the agencies were aware that about 4 percent of the LAR records contained errors. In addition, a number of institutions have contacted the FFIEC during the thirty-day review period with questions about the completeness of their reports.

2. Financial institutions covered by HMDA, by number of metropolitan statistical area (MSA) reports, 1990[1]
Percentage distribution, except as noted

Number of MSA reports	Financial institutions
1	80.6
2	8.6
3	3.0
4	1.8
5	1.1
6–9	2.1
10–19	1.4
20–49	.9
50 or more	.6
Total	100
MEMO	
Total number of financial institutions	9,281
Total number of MSA reports	23,891

1. Components do not sum to total because of rounding.
SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

For lending activity in 1990, the FFIEC distributed disclosure statements to 9,281 reporting institutions, consisting of 23,891 individual MSA reports (table 2, memo item). Disclosure statements for the vast majority of institutions (81 percent) covered a single MSA; for roughly 275 lenders, the reports encompassed ten or more MSAs.

In terms of paper, the volume of output is staggering: The FFIEC distributed 1.2 million printed pages of HMDA data to reporting institutions and central data depositories. The depositories in particular face a significant burden in storing and keeping track of the HMDA reports in their current paper form. The average central data depository received a printout of nearly 1,700 pages showing lending activity in its area. Depositories in MSAs with a large number of lenders are hardest hit: Los Angeles, Chicago, and New York, for example, received printouts of roughly 19,200, 18,500, and 11,200 pages respectively.

Efforts to Facilitate Public Access

In paper form, the HMDA data can be awkward to use and costly to duplicate. Consequently, the FFIEC is exploring ways to distribute the data in forms that reduce the volume of paper and facilitate public use, including microfiche, PC diskette, and CD-ROM discs. The FFIEC also is investigating the possible use of the government's Federal Depository Library System to increase public access to the data. These libraries—of which there are some 1,400 across the nation—are repositories for a wide range of documents and data produced by federal government agencies.

The standard disclosure statements and aggregate reports prepared by the FFIEC display the HMDA data in the cross-tabulations thought to be most generally useful. However, many other permutations of the data are possible. The FFIEC will make available to the public, in machine-readable form, an edited version of the microdata (application by application and loan by loan) for all the financial institutions covered by HMDA.[7] The data files, on magnetic tape, can be purchased from the FFIEC for a nominal fee, enabling the public to analyze the data in the manner that best suits their needs. Given the widespread use of personal computers, computerized access should enhance the ability to use the data. The supervisory agencies are exploring with members of the private sector the formats in which the computerized data might be most useful.

PRE-1990 STUDIES: FINDINGS AND DATA LIMITATIONS

HMDA data have long been the primary source of public information about the geographic distribution of home loans originated and purchased by financial institutions.[8] Dozens of studies have examined the distribution of home loans across neighborhoods stratified by residents' income and race.

The HMDA data most often have been used to assess the residential lending activities of individual financial institutions. For the most part, one basic lending pattern has stood out: Considerable differences exist in the levels of home lending

7. To help ensure the confidentiality of loan applicants, the edited version of the LAR excludes three reported items: the loan identification number, the date of application, and the date action was taken on the application.

8. Although HMDA data have been the basis of most analyses of the residential lending patterns of covered financial institutions, other data—such as property or lien transfer records—have also been used to obtain information about real estate transactions in which a mortgage was recorded.

activity across neighborhoods within local communities when the neighborhoods are grouped by median family income or racial composition. Although these differences in lending activity vary greatly among different institutions, depending on their specific circumstances, overall the HMDA data show that a smaller proportion of home purchase loans made by reporting lenders are for properties in low- or moderate-income neighborhoods (those where median family income is less than 80 percent of the median family income of their MSA). Although the proportion varies somewhat from year to year, since 1985 it generally has been between 10 and 12 percent of all the home purchase loans granted in MSAs. In comparison, roughly one-third of the home purchase loans are for properties in upper-income neighborhoods (those where median family income exceeds 120 percent of the median family income of their MSA).[9] The remainder are for properties in middle-income neighborhoods.

The HMDA data also have been used to assess the home lending activities of creditors as a group within selected geographic markets. In 1988, newspapers in Atlanta and Detroit gained nationwide attention when they used HMDA data to compare lending activity in predominantly white middle-income neighborhoods and seemingly similar, but predominantly minority, middle-income neighborhoods in their respective cities.[10] The analyses found that, as a group, the depository institutions covered by HMDA extended roughly three to four times more home purchase loans per single family housing unit in the predominantly white neighborhoods than in the predominantly minority areas. Other studies in such diverse locations as Louisville, Minneapolis, Washington, D.C., Chicago, and Denver found similar patterns in home lending activity across neighborhoods.

For home improvement lending, HMDA data have revealed an entirely different pattern in many cities: Covered institutions have extended more home improvement loans per single family housing unit in minority neighborhoods than in similar-income predominantly white areas.

Although the statistical disparities cited in these studies clearly exist, opinions on the reasons for the differences vary widely. Some people believe racial discrimination by commercial banks and thrift institutions is a contributing, if not the primary, source of these patterns. Others suggest that the patterns reflect fundamental differences in the economic circumstances of population groups (whether already living in or seeking to reside in the different areas) and in market specialization by different types of lending institutions.

Consider, for example, the analyses that focus on the level of home lending per housing unit in seemingly similar minority and nonminority neighborhoods. An assumption underlying these analyses is that by selecting neighborhoods that have certain similarities in aggregate characteristics (such as neighborhood median family income), one has effectively accounted for differences in the economic circumstances of the residents and that the only factor that differs—and that consequently would influence lending activity—is the racial makeup of the areas.

That assumption may not always be valid. In the Atlanta study, for instance, important differences existed between the two groups of "similar" neighborhoods selected for analysis. For one thing, the analysis did not account in a realistic manner for differences in the demand for home purchase loans from the current and would-be residents of the two areas.[11] It attempted to account for the differences in demand by controlling for differences in the number of single family units in each group of neighborhoods. Yet the predominantly white neighborhoods had experienced nearly twice as many property transfers per single family unit as had the minority areas. This finding suggests that demand for home purchase loans may have differed significantly between the two groups of neighborhoods.

9. As of the 1980 census, low- or moderate-income neighborhoods contained about 16 percent of the owner-occupied housing units in MSAs, while upper-income areas contained about 23 percent of the units.

10. See "The Color of Money," *Atlanta Journal Constitution*, May 1–16, 1988, and "The Race for Money," *Detroit Free Press*, June 24–27, 1988.

11. Federal Reserve Board staff analysis of the *Atlanta Journal Constitution* newspaper series, "The Color of Money," prepared in 1988 at the request of Senator William Proxmire.

In Atlanta, another factor that appeared to reduce demand for home purchase loans from depository institutions covered by HMDA was a much heavier reliance on government-backed forms of credit in the minority middle-income neighborhoods than in the predominantly white areas. Mortgage bankers, most of which were not then covered by HMDA, are much more likely to be the source of such credit. Nationwide, they extend roughly 80 percent of FHA and VA loans. Thus, the use of government-backed loans by home buyers in the minority community in effect reduced demand for credit offered by lenders covered by HMDA.

A review of Atlanta real estate transfer records revealed that 52 percent of the home purchases in the predominantly minority neighborhoods had been insured or guaranteed by the FHA or VA, compared with only 13 percent in the predominantly white neighborhoods. Undoubtedly a variety of factors contributed, in turn, to this difference in loan product utilization. The choice of FHA financing or conventional financing, for instance, may have reflected differences in the distribution of property prices in the two groups of neighborhoods. In Atlanta, the median value of owner-occupied units was considerably higher in the white areas than in the minority areas. This finding suggests that FHA loan-amount limits in some cases may have restricted the use of FHA loans in predominantly white areas.

The relatively heavy reliance on government-backed loans in Atlanta's minority neighborhoods also may have reflected differences in the ability of applicants in the two groups of neighborhoods to meet the underwriting standards for conventional loans established by creditors, including downpayment amounts and debt-to-income ratios. Information about the amount of assets available for downpayment and levels of debt burden of the Atlanta home buyers was not available. On a national level, however, black households have far fewer liquid assets, on average, than whites, even after controlling for differences in income.[12]

The findings about FHA financing patterns are consistent with the results of two recent studies that were based on nationwide consumer surveys. The first found that black and Hispanic purchasers of moderately priced homes are roughly 70 percent more likely to use FHA-insured loans than are similarly situated white home buyers.[13] Although all the reasons for these differing usage patterns are not clear, they may reflect differences in loan product recommendations made by real estate agents, self steering by loan applicants, or differences in marketing efforts by lenders.[14]

The second study estimated the proportion of families that could afford to buy a home using either a thirty-year, fixed-rate conventional loan or an FHA-insured loan of similar maturity and rate structure.[15] It found that the availability of FHA-insured credit, with its relatively low downpayment and more liberal standards for qualifying, increased the proportion of black and Hispanic households that could afford to buy a home more than it did for white households. With FHA financing, the proportion of white households that could afford to buy a home increased only slightly—from roughly 89 percent to 92 percent—compared with an increase from 60 percent to 78 percent for blacks and from 66 percent to 79 percent for Hispanics. Thus, everything else the same, one would expect to see FHA loans being used relatively more often in neighborhoods with modestly priced homes and high concentrations of minority households.

A 1989 study by the Federal Reserve Bank of Boston also documented differences in lending patterns across neighborhoods grouped by the

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12. See Board of Governors of the Federal Reserve System, *1983 Survey of Consumer Finances*. At the time of the survey, the average white household held roughly four times the amount of liquid assets as the average black household.

13. Glenn B. Canner, Stuart A. Gabriel, and J. Michael Woolley, "Default Risk and Mortgage Redlining: A Study of the FHA and Conventional Loan Markets," *Southern Economic Journal* (July 1991), pp. 249–262.

14. The 1989 Housing Discrimination Study sponsored by HUD found evidence that real estate agents are more likely to recommend FHA loans to blacks than to similarly situated whites. See Margery Austin Turner, Raymond J. Struyk, and John Yinger, *Housing Discrimination Study: Synthesis* (The Urban Institute, August 1991).

15. See Peter J. Fronczek and Howard Savage, "Who Can Afford to Buy a House?" Survey of Income and Program Participation, Current Housing Reports, H91-1, table 7 (Department of Commerce, May 1991).

3. Disposition of applications for home loans, by purpose and type of loan, 1990[1]

Number, in thousands, and percentage distribution

Disposition	Loans on one- to four-family dwellings							
	Home purchase							
	Federal Housing Administration		Veterans Administration		Farmers Home Administration		Conventional	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Loan originated	454.2	68.6	103.6	70.3	.6	55.0	1,565.5	68.6
Application approved but not accepted by applicant	21.3	3.2	1.3	.9	*	15.1	85.5	3.7
Application denied	111.6	16.9	22.1	15.0	*	20.0	379.9	16.6
Application withdrawn	67.7	10.2	18.4	12.5	*	9.2	233.1	10.2
File closed (information incomplete)	7.4	1.1	2.0	1.4	*	**	19.0	.8
Total	662.2	100	147.4	100	1.0	100	2,283.0	100

1. Components may not sum to totals because of rounding.
* Fewer than 500
** Less than 0.5 percent.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

race of residents.[16] The study used title lien records to gather information about lenders and the geographic distribution of their loans. As in the other studies, the researchers did not have information about the prospective home buyers and how their applications were treated by lenders. The study sought to determine whether differences in economic and other nonracial characteristics (primarily neighborhood characteristics) as reported in census data might account for the disparities. The researchers found that, after controlling for a wide variety of neighborhood factors, predominantly minority neighborhoods in Boston had been granted 24 percent fewer mortgage loans per housing unit than predominantly white areas. They concluded from this evidence that race may have been a factor in the lending patterns. They also indicated, however, that from their data it was not possible to determine with certainty the causes of the observed differences in lending.

Although the various studies can neither confirm nor refute the presence of systematic illegal lending practices based on race, they have raised questions about the effectiveness of depository institutions' efforts to help meet the residential credit needs of all segments of their communities. These questions have, among other things, caused many institutions to reexamine their marketing and community outreach efforts, and in some cases to establish or join with others in offering or participating in special lending programs to expand affordable housing opportunities.

16. See Katharine L. Bradbury, Karl E. Case, and Constance R. Dunham, "Geographic Patterns of Mortgage Lending in Boston, 1982-1987," *New England Economic Review* (September/October 1989), pp. 3–30.

SOME PRELIMINARY FINDINGS FROM THE 1990 DATA

Because the 1990 HMDA data have just been released, little is yet known about what the expanded data may reveal once they are thoroughly analyzed. This section takes a first look at some loan and application patterns discernible from the data. Myriad levels of analyses are possible, particularly with respect to different geographic areas and different groupings of financial institutions. The focus here is on nationwide totals and on some potential uses of the new and expanded data. In reviewing the nationwide data, it should be noted that the lending records of individual institutions may vary greatly, both from one another and from patterns for the nation as a whole, depending on their location, the types of applicants they serve, the types of loan products they offer, and their credit standards.

The statistics presented here are based on preliminary data and are subject to revision. It is anticipated that revised data will be available in January 1992. At that time, updated versions of the tables presented here will be made available to the public.

3.—Continued

Disposition	Loans on one- to four-family dwellings				Loans on multifamily dwellings (five or more families)	
	Refinancing		Home improvement			
	Number	Percent	Number	Percent	Number	Percent
Loan originated	691.1	67.5	716.1	65.1	27.2	61.5
Application approved but not accepted by applicant	36.6	3.6	50.7	4.6	1.1	2.5
Application denied	164.9	16.1	267.2	24.3	9.8	22.2
Application withdrawn	120.7	11.8	58.4	5.3	5.2	11.8
File closed (information incomplete)	11.2	1.1	8.3	.8	.9	2.0
Total	1,024.5	100	1,100.7	100	44.2	100

Volume of Applications

In 1990, lenders covered by HMDA took action on roughly 5.26 million home loan applications—3.09 million for purchase, 1.02 million for refinancing, and 1.10 million for improvement of residences housing one to four families, and the balance for loans on multifamily dwellings for five or more families (table 3).[17] Among home purchase loan applications, 74 percent were for conventional mortgage loans, and the remainder were for government-backed forms of credit—FHA, VA, and FmHA loans.

Use of Various Home Purchase Loan Products

Application patterns for various kinds of home purchase loans differ according to applicant income. Government-backed loans are much more likely to be used by households with relatively low incomes than by households with high incomes. The 1990 HMDA data indicate that 39 percent of applicants with low incomes (less than 80 percent of the median family income for their MSA) applied for government-backed home purchase loans, compared with only 15.6 percent of applicants with high incomes (more than 120 percent of the median family income for their MSA).

The new data also indicate that black (and to a much lesser extent Hispanic) applicants are more likely than either white or Asian applicants to seek government-backed home purchase loans.[18] Blacks in particular are relatively more likely to seek FHA and VA loans: Blacks constituted 4.3 percent of all applicants for conventional home purchase loans in 1990, but they accounted for 10.5 percent of all applicants for FHA loans and 11.7 percent of all applicants for VA credit (detailed data not shown in tables). Viewed in another way, 46 percent of all black home loan applicants applied for either an FHA or a VA loan, while only 28.6 of Hispanic applicants, 24.4 percent of white applicants, and 10.2 percent of Asian applicants sought such loans.

These simple summary statistics, though revealing, do not take into account the financial circumstances of the applicants that make up the various racial or ethnic groups. Income is the only financial characteristic of the applicant reported in the HMDA data. After controlling for applicant income, however, the 1990 HMDA data still indicate that blacks, and to a lesser extent Hispanics, are more likely than whites to use FHA and VA loans. For instance, 60 percent of low-income black applicants sought government-backed home purchase loans, compared with 37 percent of low-income white applicants.

17. Covered institutions also reported data for 1.1 million loans they purchased during 1990.

18. Data compiled by the U.S. Census Bureau differentiate between white Hispanics and non-white Hispanics. In the HMDA data, both are included in the Hispanic category.

Overall Approval Rates

Lenders approved the majority of home purchase loan applications they received—roughly 72.3 percent of applications for conventional loans and 71.7 percent of applications for government-backed loans (table 3).[19] Among the applications for conventional loans, 16.6 percent were denied by the lender and 10.2 percent were withdrawn by the consumer; in a relatively small number of cases (less than 1 percent) the application file was closed after the applicant was asked for but failed to submit information required for the credit decision. For government-backed home purchase loans, the denial rate was 16.5 percent and the withdrawal rate 10.6 percent.

The relatively high approval rates for home purchase loans likely reflect two characteristics of this market. First, prospective home buyers frequently work with real estate sales agents who help them determine in advance of any application the size of the loan for which they are likely to qualify. Second, because consumers incur upfront costs to file a home loan application—to cover, at a minimum, a property appraisal and credit bureau check—they have a strong incentive to learn about the prevailing standards for credit used by the industry and by particular lenders they might approach for credit.

Approval Rates for Minorities

Although the majority of home purchase loan applications are approved, many are not. Approval rates vary according to the applicant's income and demographic characteristics and the characteristics of the area in which the applicant resides or seeks to purchase a home.

Data previously available from sources other than HMDA indicate that blacks and Hispanics applying for mortgage loans at thrift institutions are significantly more likely than white applicants to be denied credit and that the experience of Asians is not greatly different from that of whites.[20] The 1990 HMDA data reveal a similar pattern for all lenders covered by HMDA.

Conventional Home Purchase Loans. Nationally, about 14.4 percent of white applicants for conventional home purchase loans were denied credit in 1990. In sharp contrast, the rate for black applicants was 33.9 and for Hispanics 21.4 percent (tables 4 and 5).[21] At 12.9 percent, the denial rate for applicants of Asian extraction was lower than for any other racial or ethnic group.

Applicant income can be expected to affect the ability to qualify for a home purchase loan, but income is just one criterion considered by lenders in evaluations of creditworthiness. A household with relatively low income may qualify for a loan of a given size and set of terms when a high-income household cannot because of differences in such things as level of their nonhousing debt, assets available for downpayment, employment experience, and credit history. On average, however, low-income households have relatively fewer assets and lower net worth, experience more frequent employment disruptions, and are more likely than high-income households to fall behind on scheduled debt repayments.[22]

The 1990 HMDA data reveal that the lower the income, the lower the acceptance rate (tables 4 and 5). Nationwide, 78.9 percent of the loan applicants whose income equaled or exceeded the median family income for their MSA were approved for conventional home purchase loans, compared with 69.4 percent of the loan applicants with lower incomes. Differences are even

19. Among loans approved, in a relatively small proportion of cases the consumer did not take out the loan, perhaps because the property sale did not go through or because the consumer filed applications with more than one lender and accepted the most attractive offer.

20. Office of Thrift Supervision, Data Submission Reports, selected years. These reports contain information on the disposition of mortgage applications filed with savings and loan associations. The data, which have been collected for more than ten years, include information on the race or national origin of the applicants.

21. Totals for subgroups shown in table 4 do not sum to the totals in table 3 because information on applicant characteristics and detailed geographic information is not available for all applications. Various provisions of HMDA create exceptions to the rules that require such information to be collected and disclosed.

22. See Robert B. Avery, Gregory E. Elliehausen, Glenn B. Canner, and Thomas A. Gustafson, "Survey of Consumer Finances, 1983," *Federal Reserve Bulletin*, vol. 70 (September 1984), pp. 679–692; and Glenn B. Canner and Charles A. Luckett, "Payment of Household Debts," *Federal Reserve Bulletin*, vol. 77 (April 1991), pp. 218–229.

greater when comparisons are made at the extremes of the income distributions (as shown by table 5).

The national level of denial rates for applicants categorized by race or national origin reflects, in part, differences in the proportion of each group that has relatively low incomes. For example, among white applicants for conventional home

4. Number of home loan applications, by purpose of loan, characteristics of applicant, and characteristics of census tract in which property is located, 1990

Applicant or census tract characteristic	Home purchase		Refinancing	Home improvement
	Government-backed [1]	Conventional		
Race of applicant				
American Indian/Alaskan native	3,281	11,320	4,960	5,727
Asian/Pacific Islander	10,721	94,284	39,897	16,968
Black	76,983	90,414	42,668	74,106
Hispanic	44,485	110,602	61,822	40,232
White	561,735	1,733,582	760,490	679,292
Other	2,201	14,290	5,888	5,563
Joint (white/minority)	19,293	40,295	18,480	14,564
Gender of applicant				
Male[2]	146,277	420,667	174,982	199,944
Female[3]	105,375	286,146	120,701	155,212
Joint (male/female)	478,079	1,444,093	680,605	596,803
Income of applicant (percentage of MSA median)[4]				
Less than 80	152,214	238,468	101,720	240,042
80-99	113,509	154,421	70,973	103,061
100-120	99,722	169,008	79,494	97,495
More than 120	199,755	1,083,435	533,143	358,914
Racial composition of census tract (minorities as percentage of population)				
Less than 10	318,464	1,010,345	421,329	484,935
10-19	106,831	293,852	162,894	120,556
20-49	87,125	222,493	131,275	100,650
50-79	25,171	77,729	53,470	43,353
80-100	21,534	52,159	41,447	57,016
Income of census tract[5]				
Low or moderate	81,483	204,107	115,763	129,581
Middle	354,883	931,665	449,578	484,459
Upper	122,579	520,806	245,074	192,470
Income of census tract and racial composition (minorities as percentage of population)[5]				
Low or moderate				
Less than 10	20,350	49,906	21,387	29,742
10-19	13,617	26,059	12,602	13,427
20-49	21,247	51,835	26,918	25,121
50-79	11,959	37,477	24,641	20,575
80-100	14,310	38,830	30,215	40,716
Middle				
Less than 10	213,219	585,705	246,019	316,852
10-19	68,859	169,225	90,095	72,916
20-49	53,842	131,282	79,598	60,088
50-79	12,114	34,070	24,539	19,601
80-100	6,849	11,383	9,327	15,002
Upper				
Less than 10	84,895	374,734	153,923	138,341
10-19	24,355	98,568	60,197	34,213
20-49	12,036	39,376	24,759	15,441
50-79	1,098	6,182	4,290	3,177
80-100	375	1,946	1,905	1,298

1. Loans backed by the Federal Housing Administration, the Veterans Administration, and the Farmers Home Administration.
2. One or more males.
3. One or more females.
4. MSA median is median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.
5. Low- or moderate-income census tracts are those in which median family income is less than 80 percent of the median family income of the MSA as a whole; in middle-income census tracts, median family income is 80 percent to 120 percent of the median MSA family income; in upper-income census tracts, median family income is more than 120 percent of the median MSA family income.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

5. Disposition of home loan applications, by purpose of loan and characteristics of applicant, 1990[1]
Percentage distribution

Applicant characteristic	Home purchase									
	Government-backed[2]					Conventional				
	Approved	Denied	With-drawn	File closed	Total	Approved	Denied	With-drawn	File closed	Total
Race										
American Indian/ Alaskan native	63.5	22.5	12.8	1.2	100	66.0	22.4	10.6	1.0	100
Asian/Pacific Islander	74.8	12.8	11.6	.9	100	72.7	12.9	13.5	.9	100
Black	60.9	26.3	11.3	1.5	100	55.7	33.9	9.4	1.1	100
Hispanic	68.7	18.4	11.6	1.3	100	65.1	21.4	12.4	1.0	100
White	77.4	12.1	9.7	.9	100	75.5	14.4	9.4	.7	100
Other	66.3	18.4	13.8	1.5	100	68.2	19.0	11.9	.8	100
Joint (white/minority)	75.6	14.1	9.5	.8	100	73.3	14.9	11.1	.8	100
Gender										
Male[3]	71.6	14.9	12.1	1.3	100	68.1	20.0	10.9	1.0	100
Female[4]	74.7	14.5	9.9	.9	100	69.8	19.9	9.5	.8	100
Joint (male/female)	75.0	14.3	9.8	.9	100	75.3	14.2	9.8	.7	100
Income (percentage of MSA median)[5]										
Less than 80	72.0	18.1	8.9	1.0	100	65.5	26.0	7.7	.8	100
80–99	77.9	13.0	8.3	.8	100	75.5	15.7	8.2	.6	100
100–120	79.1	11.5	8.6	.8	100	78.0	12.9	8.5	.7	100
More than 120	79.7	10.4	9.2	.8	100	79.0	9.9	10.4	.7	100

1. Components may not sum to totals because of rounding.
2. Loans backed by the Federal Housing Administration, the Veterans Administration, and the Farmers Home Administration.
3. One or more males.
4. One or more females.
5. MSA median is median family income of the metropolitan statistical area in which the property related to the loan is located.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

purchase loans, 14 percent had incomes below 80 percent of their MSA's median family income. Low-income black and Hispanic applicants, in contrast, accounted for 25 percent and 16 percent of all applicants in their respective groups. Low-income Asians accounted for only 8 percent of the conventional home purchase loan applications filed by Asians overall.

The differences in denial rates when applicants are grouped by race or national origin do not change notably when they also are categorized by income (table 6). For example, among applicants whose incomes place them in the lowest income group, the denial rates for blacks, Hispanics, and Asians were 40.1 percent, 31.1 percent, and 17.2 percent respectively, compared with 23.1 percent for white applicants. Among applicants in the highest income group, denial rates for blacks, Hispanics, and Asians were 21.4 percent, 15.8 percent, and 11.2 percent respectively, compared with 8.5 percent for whites.

The application withdrawal rate for conventional home purchase loans for both black and white applicants was 9.4 percent. The rates were higher for both Hispanic and Asian applicants, 12.4 percent and 13.5 percent respectively.[23]

The 1990 HMDA data also indicate some differences when home loan applicants are categorized by gender—male (one or more males), female (one or more females), or joint (one male and one female) (tables 4 and 5). For instance, joint applicants are more likely than either male or female applicants to have a conventional home purchase loan approved. Female applicants are somewhat more likely than male applicants to have a home purchase loan approved.

Government-Backed Home Purchase Loans. The pattern for denial of government-backed

23. Home purchase loan applications are withdrawn for a variety of reasons. For example, prospective home buyers who file a loan application may not be able to complete a purchase because of an inability to sell their own home. The 1990 HMDA data will enable supervisory agencies, which will have access to loan application files, to investigate differences in withdrawal rates across different gender and racial or national-origin groups for evidence of unfair treatment.

5.—Continued

Applicant characteristic	Refinancing					Home improvement				
	Approved	Denied	With-drawn	File closed	Total	Approved	Denied	With-drawn	File closed	Total
Race										
American Indian/ Alaskan native	67.7	17.9	13.6	.8	100	73.8	21.4	4.1	.7	100
Asian/Pacific Islander	66.0	17.8	15.2	1.1	100	65.0	24.6	9.1	1.3	100
Black	61.1	25.1	12.6	1.2	100	58.1	36.9	4.4	.6	100
Hispanic	61.9	21.6	15.4	1.1	100	60.2	32.5	6.4	.9	100
White	74.4	14.3	10.5	.9	100	78.1	17.0	4.4	.5	100
Other	60.7	23.2	15.4	.7	100	57.3	34.1	7.8	.8	100
Joint (white/minority)	71.1	16.4	11.8	.8	100	75.4	19.3	4.9	.4	100
Gender										
Male[3]	66.5	19.1	13.3	1.2	100	67.3	27.0	5.0	.7	100
Female[4]	69.4	17.7	12.0	1.0	100	66.0	28.2	5.2	.6	100
Joint (male/female)	73.6	14.7	10.9	.9	100	74.9	19.1	5.4	.7	100
Income (percentage of MSA median)[5]										
Less than 80	67.7	21.1	10.3	.9	100	62.7	32.4	4.5	.4	100
80–99	71.9	17.4	10.0	.8	100	70.0	24.8	4.8	.4	100
100–120	73.6	15.5	10.1	.8	100	73.4	21.4	4.8	.5	100
More than 120	73.0	14.4	11.7	.9	100	76.7	17.0	5.6	.8	100

home purchase loans is similar to that for conventional home purchase loans. The rates of denial were 26.3 percent for blacks, 18.4 percent for Hispanics, and 12.8 percent for Asians, compared with 12.1 percent for whites. The rates of application withdrawal were 11.3 percent for blacks, 11.6 percent for both Hispanics and Asians, and 9.7 percent for whites.

Looking at disposition of applications for government-backed loans by gender, joint applicants are somewhat more likely than either male or female applicants to have a home purchase loan approved. Female applicants are more likely than male applicants to have a home purchase loan approved.

Home Improvement Loans. The patterns for denial and withdrawal of home improvement loan applications are broadly similar to those for home purchase loan applications. Generally, for all groups the denial rates are higher than for home purchase loans, and the withdrawal rates lower; 36.9 percent of black, 32.5 percent of Hispanic, and 24.6 percent of Asian applicants were denied loans, compared with 17 percent of white applicants.

Looking at disposition by gender, joint applicants were more likely than either male or female applicants to have a home improvement loan approved. Males were somewhat more likely than females to have a home improvement loan approved.

Relation of Approval Rates to Neighborhood Income and Composition

The HMDA data make it possible to compare lending across neighborhoods grouped by racial makeup and the income level of their residents. Considerable caution should be exercised, however, when making such comparisons. The usefulness of these data is currently limited by the lack of an up-to-date match with the characteristics of census tracts. The recently released HMDA disclosure statements are based on 1980 census tract boundaries and population characteristics (neighborhood income level, racial composition, and housing stock characteristics). This census information is now more than ten years old, and in some cases the resulting figures may be misleading. For example, a low-income, predominantly minority neighborhood in 1980 may have undergone substantial change and may now have a much higher average income and a different racial composition. The Federal Reserve Board has published proposed amendments to HMDA reporting requirements, calling for a switch to the 1990 census tract definitions begin-

6. Disposition of home loan applications, by purpose of loan and income and race of applicant, 1990[1]

Percentage distribution

Applicant income[2] and race	Home purchase									
	Government-backed[3]					Conventional				
	Approved	Denied	Withdrawn	File closed	Total	Approved	Denied	Withdrawn	File closed	Total
Less than 80										
American Indian/ Alaskan native	63.5	26.5	9.2	.9	100	62.7	27.7	8.8	.9	100
Asian/Pacific Islander	75.0	13.9	10.3	.9	100	68.4	17.2	13.4	1.0	100
Black	58.5	29.4	10.7	1.4	100	51.4	40.1	7.6	.9	100
Hispanic	66.5	22.4	9.8	1.3	100	58.1	31.1	9.8	1.0	100
White	76.5	14.7	8.0	.8	100	69.0	23.1	7.2	.7	100
Other	67.7	21.3	10.2	.8	100	64.5	26.1	8.3	1.1	100
Joint (white/minority)	74.1	17.3	8.0	.6	100	64.8	26.3	8.0	.9	100
80–99										
American Indian/ Alaskan native	70.2	17.8	11.1	.8	100	73.3	16.6	9.4	.7	100
Asian/Pacific Islander	78.4	12.7	8.4	.6	100	75.1	13.7	10.5	.7	100
Black	64.5	24.8	9.5	1.2	100	60.8	29.3	8.9	1.0	100
Hispanic	72.2	17.0	9.9	.8	100	67.7	21.5	10.1	.7	100
White	81.0	10.6	7.7	.7	100	78.1	13.7	7.6	.6	100
Other	72.0	13.5	13.0	1.6	100	70.6	21.1	7.6	.7	100
Joint (white/minority)	78.2	13.0	8.2	.6	100	72.2	18.0	9.1	.8	100
100–120										
American Indian/ Alaskan native	68.0	17.0	13.6	1.5	100	72.6	14.0	12.7	.8	100
Asian/Pacific Islander	78.1	12.4	9.2	.4	100	75.0	12.6	11.5	.9	100
Black	65.7	23.1	10.1	1.1	100	63.8	26.3	9.3	.7	100
Hispanic	73.9	14.7	10.3	1.1	100	69.6	19.1	10.4	.9	100
White	81.9	9.5	8.0	.7	100	80.4	11.2	7.8	.6	100
Other	69.6	15.0	14.7	.7	100	72.1	18.0	9.2	.7	100
Joint (white/minority)	77.6	12.9	8.5	1.0	100	75.8	15.0	8.6	.6	100
More than 120										
American Indian/ Alaskan native	71.3	15.6	12.5	.7	100	74.4	12.8	11.9	.9	100
Asian/Pacific Islander	76.0	11.2	12.0	.8	100	75.2	11.2	12.9	.7	100
Black	68.0	20.8	10.3	1.0	100	65.7	21.4	11.6	1.3	100
Hispanic	72.4	14.2	12.4	1.0	100	71.1	15.8	12.2	1.0	100
White	82.4	8.6	8.3	.7	100	81.2	8.5	9.7	.6	100
Other	67.3	17.1	13.7	2.0	100	71.0	15.8	12.5	.8	100
Joint (white/minority)	79.2	10.6	9.4	.7	100	77.6	10.5	11.3	.7	100

1. Components may not sum to totals because of rounding.
2. Applicant income shown as percentage of the median family income of the metropolitan statistical area in which the property related to the loan is located.
3. Loans backed by the Federal Housing Administration, the Veterans Administration, and the Farmers Home Administration.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

ning January 1992. The FFIEC plans to reflect socioeconomic information about these areas in the disclosure tables portraying 1992 lending activity, which will be released in 1993.

Approval of Home Purchase Loan Applications. Although the majority of applications for home purchase loans are approved, experience differs across neighborhoods grouped by racial composition and the income levels of their residents. The patterns of loan acceptance and denial do not differ greatly whether the type of home purchase loan sought is conventional or government-backed.

Neighborhood income. The 1990 HMDA data indicate that the rate of loan denial declines as the income of the residents of an area increases. The rate of loan denial for conventional home loans relating to properties in low- or moderate-income neighborhoods was 20.2 percent, appreciably higher than the 13.9 percent for middle-income and 9.7 percent for upper-income neighborhoods (table 7). For government-backed loans, the rates of loan denial were 17.8 percent for low- or moderate-income, 13 percent for middle-income, and 11.2 percent for upper-income neighborhoods.

Neighborhood racial composition. The 1990 HMDA data indicate that the rate of loan denial increases as the proportion of minority residents increases. For conventional home loans, the denial rate is about 12 percent for areas with less

6.—Continued

Applicant income[2] and race	Refinancing					Home improvement				
	Approved	Denied	With-drawn	File closed	Total	Approved	Denied	With-drawn	File closed	Total
Less than 80										
American Indian/ Alaskan native	64.5	22.1	13.3	.2	100	69.6	26.9	3.4	.2	100
Asian/Pacific Islander	56.2	22.6	20.3	1.0	100	57.0	36.1	6.3	.6	100
Black	56.3	31.5	10.9	1.3	100	52.0	43.3	4.2	.5	100
Hispanic	57.0	27.5	14.6	1.0	100	55.7	38.9	4.5	.9	100
White	72.1	18.5	8.6	.8	100	72.5	23.4	3.9	.3	100
Other	51.6	33.0	14.4	1.1	100	50.5	43.0	6.1	.3	100
Joint (white/minority)	65.6	22.9	10.8	.7	100	70.8	25.7	3.5	.1	100
80–99										
American Indian/ Alaskan native	67.2	18.3	13.0	1.6	100	74.1	22.7	2.8	.4	100
Asian/Pacific Islander	66.6	18.8	13.5	1.2	100	60.5	30.5	7.9	1.2	100
Black	58.9	27.8	12.2	1.1	100	57.9	37.0	4.5	.6	100
Hispanic	62.9	22.7	13.5	.9	100	60.9	32.8	5.6	.7	100
White	75.7	15.0	8.6	.7	100	77.6	18.0	4.1	.3	100
Other	59.8	27.2	12.1	.9	100	59.6	33.0	7.0	.4	100
Joint (white/minority)	68.6	18.7	12.0	.6	100	74.4	21.2	4.2	.3	100
100–120										
American Indian/ Alaskan native	71.3	16.1	12.3	.3	100	77.9	18.1	2.6	1.4	100
Asian/Pacific Islander	69.8	17.9	11.6	.8	100	65.8	25.9	7.6	.7	100
Black	62.3	24.6	11.9	1.2	100	62.3	32.6	4.6	.5	100
Hispanic	66.3	19.5	13.5	.7	100	61.7	31.0	6.5	.8	100
White	76.8	13.6	8.9	.7	100	80.1	15.6	4.0	.3	100
Other	58.6	25.4	15.3	.7	100	63.6	31.5	4.6	.4	100
Joint (white/minority)	72.3	16.9	10.0	.8	100	76.3	19.3	4.3	.2	100
More than 120										
American Indian/ Alaskan native	68.2	17.3	13.7	.8	100	79.0	14.3	5.8	.9	100
Asian/Pacific Islander	67.3	17.3	14.4	1.1	100	68.0	21.4	9.1	1.5	100
Black	63.1	23.1	12.6	1.2	100	66.1	28.0	5.2	.7	100
Hispanic	64.8	19.7	14.5	1.1	100	65.6	26.0	7.3	1.1	100
White	75.7	12.8	10.7	.8	100	82.0	12.7	4.8	.5	100
Other	61.2	22.7	15.4	.7	100	62.9	26.3	9.6	1.2	100
Joint (white/minority)	72.8	15.0	11.4	.8	100	78.3	16.2	4.9	.6	100

than 10 percent minority residents and rises to about 24 percent for areas with 80 percent or more minority residents. The pattern of loan denial for government-backed loans is virtually the same as that for conventional loans.

Neighborhood income and racial composition. The difference in denial rates across neighborhoods of different racial composition is roughly the same even when differences in neighborhood median family income levels are taken into account. For the most part, whether the neighborhood is low or moderate income, middle income, or upper income, the proportion of home purchase loan applicants denied credit increases as the percentage of minority residents increases. This pattern is present for applications for both conventional and government-backed forms of credit.

Approval of Home Improvement Loan Applications. Like home purchase loans, the majority of home improvement loan applications are approved regardless of neighborhood income or racial composition (table 7). Also like home purchase loans, the denial rate for home improvement loans increases as neighborhood income declines and the percentage of minority residents increases.

CAUTIONS IN INTERPRETING THE 1990 DATA

The 1990 HMDA data offer more detailed information about the home lending activities of reporting institutions, bringing the prospect for a better understanding of lending patterns through

7. Disposition of home loan applications, by purpose of loan and characteristics of census tract in which property is located, 1990[1]
Percentage distribution

Census tract characteristic	Home purchase									
	Government-backed[2]					Conventional				
	Approved	Denied	With-drawn	File closed	Total	Approved	Denied	With-drawn	File closed	Total
Racial composition (minorities as percentage of population)										
Less than 10	79.5	11.2	8.4	.9	100	79.1	11.5	8.7	.7	100
10–19	75.6	13.4	9.9	1.1	100	72.7	13.8	12.7	.8	100
20–49	71.7	16.1	11.1	1.2	100	70.1	16.5	12.6	.8	100
50–79	66.0	21.1	11.6	1.3	100	67.5	19.3	12.3	.9	100
80–100	63.5	23.2	11.6	1.7	100	62.1	24.0	12.5	1.4	100
Income[3]										
Low or moderate	69.9	17.8	11.1	1.3	100	67.2	20.2	11.6	1.0	100
Middle	77.1	13.0	8.9	1.0	100	75.8	13.9	9.5	.7	100
Upper	78.2	11.2	9.5	1.1	100	78.7	9.7	10.8	.7	100
Income[3] and racial composition (minorities as percentage of population)										
Low or moderate										
Less than 10	75.3	14.0	9.8	1.0	100	71.9	17.8	9.4	.9	100
10–19	72.6	14.9	11.3	1.2	100	69.3	18.9	11.0	.9	100
20–49	70.8	17.3	10.7	1.2	100	67.3	19.4	12.4	.9	100
50–79	65.8	20.6	12.2	1.4	100	65.4	21.2	12.5	1.0	100
80–100	61.8	24.2	12.3	1.7	100	61.2	24.4	12.9	1.5	100
Middle										
Less than 10	79.8	11.3	8.0	.9	100	78.6	12.7	8.0	.7	100
10–19	76.0	13.5	9.5	1.0	100	72.7	14.5	12.0	.8	100
20–49	71.9	15.8	11.0	1.2	100	70.4	16.3	12.5	.8	100
50–79	65.5	22.2	11.0	1.3	100	68.9	18.1	12.1	1.0	100
80–100	66.3	21.5	10.7	1.5	100	63.8	23.7	11.3	1.2	100
Upper										
Less than 10	79.7	10.3	8.9	1.0	100	80.9	8.8	9.6	.7	100
10–19	76.5	12.0	10.1	1.3	100	73.6	11.3	14.3	.8	100
20–49	71.9	14.9	11.9	1.4	100	72.7	13.0	13.4	.8	100
50–79	73.0	13.9	12.1	1.0	100	72.3	15.3	11.9	.5	100
80–100	74.1	17.1	4.5	4.3	100	71.0	16.8	11.0	1.2	100

1. Components may not sum to totals because of rounding.
2. Loans backed by the Federal Housing Administration, the Veterans Administration, and the Farmers Home Administration.
3. Low- or moderate-income census tracts are those in which median family income is less than 80 percent of the median family income of the metropolitan statistical area (MSA) as a whole; in middle-income census tracts, median family income is 80 percent to 120 percent of the median MSA family income; in upper-income census tracts, median family income is more than 120 percent of the median MSA family income.

SOURCE. Preliminary data, Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

analyses previously not possible. Knowing the personal characteristics of loan applicants and the disposition of their applications makes it feasible, for example, to gauge more accurately the level of loan demand faced by an individual lender or a group of lenders seeking to serve different types of customers and various geographic areas within their communities. At the same time, the limitations of the data must be recognized.

The 1990 HMDA data document differences in the experiences of loan applicants grouped by their personal characteristics or by the characteristics of the neighborhood in which they seek to purchase or improve homes. Most prominently, the data indicate that black and Hispanic applicants are denied home loans more frequently than are white or Asian applicants who have similar incomes. The data also indicate that applicants seeking to purchase homes in low- or moderate-income neighborhoods (regardless of the race of the residents) are denied credit more frequently than are applicants seeking to buy homes in upper-income neighborhoods.

The HMDA data can and should be used to raise questions about lending activity and to develop hypotheses for further investigation. The application-disposition patterns, however, reflect a wide variety of economic factors that determine the creditworthiness of individual

7.—Continued

Census tract characteristic	Refinancing					Home improvement				
	Approved	Denied	With-drawn	File closed	Total	Approved	Denied	With-drawn	File closed	Total
Racial composition (minorities as percentage of population)										
Less than 10	75.2	14.0	9.9	.9	100	76.6	18.5	4.5	.4	100
10–19	68.8	16.8	13.4	1.0	100	68.9	23.9	6.2	.9	100
20–49	66.9	18.3	13.8	1.0	100	64.7	28.1	6.2	1.0	100
50–79	64.4	20.0	14.6	1.0	100	58.1	34.9	6.1	.9	100
80–100	61.5	22.0	15.3	1.2	100	50.3	43.3	5.7	.7	100
Income[3]										
Low or moderate	64.7	20.6	13.6	1.2	100	58.3	35.6	5.4	.6	100
Middle	72.5	15.8	10.9	.9	100	72.7	21.9	4.9	.5	100
Upper	71.8	14.5	12.7	1.0	100	75.7	17.9	5.8	.7	100
Income[3] *and racial composition (minorities as percentage of population)*										
Low or moderate										
Less than 10	71.2	17.9	9.9	.9	100	67.9	27.2	4.5	.4	100
10–19	67.5	19.1	12.3	1.1	100	64.0	30.1	5.4	.5	100
20–49	64.7	20.5	13.6	1.1	100	61.2	32.4	5.6	.7	100
50–79	62.7	21.4	14.7	1.2	100	55.9	37.5	5.8	.8	100
80–100	60.3	22.4	15.9	1.3	100	48.8	44.7	5.7	.7	100
Middle										
Less than 10	76.2	14.1	8.9	.8	100	76.7	18.7	4.2	.3	100
10–19	69.6	16.8	12.6	1.0	100	69.4	24.0	5.8	.9	100
20–49	67.5	18.0	13.5	1.0	100	65.4	27.4	6.2	1.0	100
50–79	65.1	19.2	14.6	1.0	100	58.9	33.7	6.4	1.0	100
80–100	63.5	21.8	13.8	.8	100	52.6	41.1	5.7	.7	100
Upper										
Less than 10	74.1	13.4	11.4	1.0	100	78.3	16.1	5.1	.5	100
10–19	68.0	16.3	14.7	1.0	100	69.9	21.4	7.5	1.2	100
20–49	67.3	16.9	14.8	1.0	100	67.2	23.9	7.6	1.3	100
50–79	69.5	16.1	13.6	.8	100	67.1	25.0	7.0	.9	100
80–100	70.4	15.0	14.1	.5	100	70.3	24.3	4.8	.6	100

home loan applicants and the adequacy of the collateral provided by the properties they seek to purchase or improve. Thus, caution in interpreting the numbers is called for. For example, although the expanded HMDA data show loans denied by race or national origin, that information alone does not provide a basis for an independent assessment of whether an applicant who was denied credit was in fact creditworthy. Similarly, the HMDA data do not establish whether the property involved in the proposed credit extension was appropriately valued. Thus, it is not possible to determine, from the HMDA data alone, whether loan applicants are being treated fairly and on a racially nondiscriminatory basis.

Fundamentally, the rates of approval and denial of loan applications reflected by the 1990 HMDA data represent the separate outcomes of a credit review process carried out by the more than 9,000 covered financial institutions located across the country. That process seeks to ensure that individuals granted credit will repay their debt as scheduled and that, should they fail to do so, the collateral offered as security will pay off the loan plus costs associated with foreclosure. Consequently, lenders evaluate the factors that they believe allow them to predict an applicant's ability to repay; among these factors are several consumer financial characteristics—the proportion of the consumer's income that will need to be dedicated to the repayment of the proposed loan plus other outstanding debts, the level of equity (through the downpayment) that the consumer is able and willing to put into the property, the consumer's employment experience and prospects, and the consumer's history of repaying debts. Lenders also consider the appraised value of the property serving as the collateral for the loan.

The HMDA data reveal little about the financial characteristics of loan applicants—only their annual income. Even here, two applicants who have similar incomes may be strikingly different in their asset levels, existing debt burdens, and credit histories. Applicants of different race and gender may differ systematically in their financial characteristics. Other sources of information, such as consumer surveys conducted by the Federal Reserve, provide extensive data on the financial situations of households grouped, for example, by annual income, race, or gender. Here, too, caution is called for, however. Consumer surveys generally represent a wider population of respondents than do the HMDA data, which represent only individuals who have applied for a home loan. To the extent that group profiles developed from these surveys reflect the characteristics of home loan applicants, such information may prove helpful in understanding variations in loan disposition rates among applicants grouped by race or gender.

Federal Reserve and other consumer surveys show the financial situation of households grouped by income. These data indicate that, compared with high-income households, low-income households tend to have relatively few assets available for a downpayment on a home; if they have consumer debt, tend to have relatively high repayment burdens and are more likely to have fallen behind in their scheduled debt repayments; and generally have more periods of involuntary unemployment or reduced work hours.

Generally, black and Hispanic households are much more likely to be in a low-income grouping than are white households. For example, the median income of households headed by blacks and Hispanics is roughly 57 percent and 71 percent respectively of the median income of families headed by whites.[24] These disparities reflect, among other things, sharp differences in employment experiences. For example, in mid-1991 the national unemployment rate for blacks was nearly twice that of whites.[25] Also, the financial asset and net worth positions of nonwhite and Hispanic households are substantially different from those of whites.[26] For instance, in 1986 the mean amount of financial assets held by black families was $5,900, compared with $64,000 for white families. Differences in net worth were even more pronounced, with black families having an average net worth of $29,000 and white families $165,000.

24. *Statistical Abstract of the United States*, Money Income of Households, 1990.

25. Bureau of Labor Statistics, *Current Population Survey* (July 1991).

26. Board of Governors of the Federal Reserve System, *1986 Survey of Consumer Finances*.

USES OF NEW AND EXPANDED HMDA DATA

Users of the HMDA data include community-based and other types of consumer-interest organizations, financial institutions, state and local government agencies, and federal supervisory agencies. Community-based organizations have long used HMDA data in assessing the home lending activities of institutions in their communities. Financial institutions covered by HMDA use the information to evaluate the success of their loan marketing efforts and community outreach programs and to compare their performance with the home lending activities of their competitors. State and local governments find the data useful in identifying areas that may need assistance.

Supervisory Agencies

Supervisory agencies will be a major user of the expanded HMDA data. The new information will help them better assess the performance of financial institutions in satisfying their obligations under the Community Reinvestment Act and their compliance with the fair lending laws.

Community Reinvestment Act. The CRA requires federal agencies to encourage depository institutions to help meet the credit needs of their communities, including low- and moderate-income neighborhoods, consistent with safe and sound lending practices. Historically, examiners have used the HMDA data to help them assess lenders' compliance. The regulations that implement the CRA establish twelve criteria for evaluating the record of depository institutions. The HMDA data help measure institution performance against several of the criteria, including the following:

- The geographic distribution of the institution's credit applications, extensions, and denials
- The institution's record of originating or purchasing residential mortgage loans, housing rehabilitation credit, home improvement loans, and loans to small businesses and small farms within its community
- Evidence of prohibited discriminatory or other illegal credit practices.

The HMDA data also help supervisory agencies evaluate lenders' CRA records when processing applications for charters, deposit insurance, branch or other deposit facilities, office relocations, mergers, and acquisitions. In addition, the HMDA data are used in assessing the merits of specific protests challenging an institution's performance in the context of these applications.

The recent amendments to HMDA enhance the agencies' ability to conduct that portion of CRA evaluations focusing on home lending. For instance, in the past it was difficult to determine whether the geographic distribution of a lender's home purchase credit extensions reflected the demand for its loan products. Although information about applications has been available to examiners, until now it has been available only through the original applications and loan documents. With ready access to a listing of applications from the LAR data, examiners will be able to identify easily the geographic distribution of a lender's loan applications.

Examiners can compare an institution's record with the records of other lenders serving the same locality to see if, for example, performance reflects an absence or low level of lending activity in the locality. If some peer lenders are receiving a significant number of applications and are extending home loans, the data likely will focus greater attention on the institution's efforts to determine community credit needs, on its marketing and outreach programs, and on the mix of loan products it offers. On the other hand, if peer lenders are receiving few applications for home loans, weak demand may be the explanation. Few applications might also indicate, however, that outreach efforts and marketing among all lenders are either ineffective or not aimed at the community in question.

The new HMDA data also can be used in assessing whether a lender has established a reasonable CRA community delineation.[27] Although many factors affect a lender's choice of the primary service area it seeks to serve, analyses of HMDA data can help determine whether the distribution of home loan applications received by a lender is consistent with this geographic delineation. If most of the lender's applications for home purchases come from outside its delineated community, examiners may question why it is not receiving more applications from its delineated community and whether the existing delineation is reasonable. The lender might need to reconsider the basis for its delineation and perhaps revise the boundaries of the area it seeks to serve.

Fair Lending Laws. Supervisory agencies also will use the expanded HMDA data in evaluating compliance with the fair lending laws—the Fair Housing Act and the Equal Credit Opportunity Act. For example, during on-site evaluations, Federal Reserve examiners currently review a sample of approved and denied loan applications to determine whether a bank is applying its stated lending standards consistently and fairly. Examiners look for instances in which loan applicants met established standards but were denied credit and, conversely, for instances in which applicants failed to meet the guidelines but were nonetheless granted credit. When they find exceptions, examiners seek to determine whether similarly situated applicants, particularly members of protected groups, were accorded like treatment.

With the new information about applicant race or national origin, gender, and annual income,

27. The CRA requires depository institutions to identify the boundaries of their primary service areas—referred to as their community delineation. The boundaries must seem reasonable, and low- and moderate-income neighborhoods must not be excluded arbitrarily.

examiners will be able to look for statistical indicators of possible discrimination, such as differences in denial rates among groups. They will then review individual home loan application records for specific evidence of any disparate treatment. Although different denial rates for majority and minority group applicants, for example, ultimately may be found to have a legitimate basis, the identification of such differences is one step in the assessment process.

To facilitate these statistical analyses, the supervisory agencies are working to develop a computer-based system that will help examiners identify groups of applicants whose application-disposition rates are significantly different from those of other groups. This system can provide examiners with lists of individual application files that can be targeted for in-depth review during on-site examinations. (The application or loan number on the institution's LAR will facilitate retrieval of individual files.) The on-site review will allow examiners to evaluate the specific factors considered by a lender when it acted on an application and to assess an institution's compliance with the fair lending laws.

HMDA Data on Secondary Mortgage Market Activity

The 1989 amendments to HMDA require lenders to report the type of secondary market purchaser of home loans they sold during the year. The legislative history of the amendments indicates that the Congress sought the new information to help identify, indirectly, secondary market requirements that might have a discriminatory effect on protected groups. The HMDA data provide an opportunity for the first time to profile, for loans covered by HMDA, the characteristics of both the borrowers whose loans are purchased by secondary market entities and the neighborhoods in which they reside.

Because not all financial institutions that deal with secondary market institutions are covered by HMDA, the patterns revealed by the HMDA data may differ from those that would be observed in a review of all secondary market activity. Moreover, information on borrower characteristics is not available for all loans sold by covered lenders—only for loans they themselves originated. Although HMDA information about the census tract location of properties is available for roughly 75 percent of the loans sold to, or securitized by, secondary market entities, information on borrowers' race or national origin, gender, and income is available for only about two-thirds of the loans (table 8). In most instances when information is unavailable, lenders had purchased the loans from other institutions and were not required to report applicant characteristics.

General Relation between Borrowers and Secondary Mortgage Purchasers

Participants in the secondary mortgage market buy and sell mortgage loans or securities backed by mortgage loans. They also guarantee payments on pass-through securities issued against pools of residential mortgage loans. In so doing, they enable institutions that originate loans to raise new funds. By selling assets that are otherwise relatively illiquid, loan originators are able to extend additional loans or to use the funds in other ways.

Three government-sponsored agencies dominate secondary market activity—the Federal National Mortgage Association (FNMA, or Fannie Mae), the Federal Home Loan Mortgage Corporation (FHLMC, or Freddie Mac), and the Government National Mortgage Association (GNMA, or Ginnie Mae)—although banks, thrift institutions, insurance companies, and other entities are active as well. FNMA and FHLMC mainly buy conventional mortgage loans. Most of these loans are packaged into securities and sold to investors. GNMA does not purchase loans, but rather guarantees the timely payment of principal and interest for privately issued securities backed by FHA-insured and VA-guaranteed loans. Secondary market institutions generally do not originate loans, but they do specify the underwriting guidelines that loans must meet to be eligible for purchase or securitization by the secondary market. These guidelines and related loan-size purchase limitations vary among secondary market institutions; thus, it should be expected that, for the loans these institutions purchase or securitize, the characteristics of the borrowers and neighborhoods where properties are located will differ as well.

For example, in 1990 the FNMA and FHLMC limit on home purchase loans on single family properties they purchased or securitized was $187,450. The maximum loan amounts backed by FHA insurance—between $67,500 and $124,875 (the larger amount corresponding to localities where housing costs were higher)—were the limits for GNMA's FHA-related activities. The limit on VA loans eligible for the loan pools that GNMA would back was $144,000 at the beginning of 1990, and was increased to $184,000 during the year.

Other secondary market purchasers do not necessarily follow these loan-size limitations. In particular, so-called "jumbo loans" (those exceeding the loan limit set by FNMA and FHLMC) are purchased by depository institutions, pension funds, insurance companies, and others.

Basic underwriting guidelines (such as maximum loan-to-value ratios and monthly debt-to-income ratios) also differ among the secondary market participants, although FNMA and FHLMC follow essentially the same guidelines. In the case of GNMA, underwriting standards are established by HUD and the VA. Given that HUD and the VA impose less-stringent loan standards than originators of conventional loans, and that they have different rules about the size of loans they will back, it should be expected that, overall, FHA and VA borrowers will differ markedly from conventional loan users. Consequently, borrowers whose loans are securitized by GNMA are also likely to differ from those whose loans are sold to or securitized by FNMA or FHLMC.

Borrowers using loans backed by GNMA may differ from those using loans supported by FNMA and FHLMC for another reason. FHA and VA loans are almost exclusively fixed-rate loans, whereas adjustable-rate mortgage loans (ARMs) are widely used in the marketplace (in 1990, ARMs accounted for about 30 percent of all loan originations). Both FNMA and FHLMC buy and securitize many ARMs. Thus, it should be anticipated that differences among groups of borrowers who choose ARMs and those who choose fixed-rate loans will be reflected in sales to secondary market institutions as well.

Preliminary Findings from the HMDA Data

Lenders covered by HMDA sold roughly 2.3 million loans to secondary market institutions in 1990 (table 8). Most of the activity (some 70 percent) was with FNMA, FHLMC, and GNMA.

Not surprisingly, given GNMA's focus on government-backed loans, the HMDA data indicate that GNMA is supporting home purchase loans made to low- or moderate-income, and to a lesser extent minority households, relatively more often than are other secondary market institutions. Overall, 22 percent of the loans backed by GNMA guarantees were made to families whose incomes were 80 percent or less of the median family income of the MSAs in which they reside. The comparable figures for both FNMA and FHLMC were roughly 10 percent. The average 1990 income of borrowers whose loans were guaranteed by GNMA was $43,535, compared with $64,390 for FNMA and $63,914 for FHLMC (data not shown in tables).

Differences in borrower income are also reflected in the size of loans purchased or backed by secondary market institutions (table 8, memo item). In 1990, the average loan backed by GNMA was $73,730, compared with $101,050 for FNMA and $100,890 for FHLMC.

Compared with other secondary market purchasers, relatively more GNMA-supported borrowers purchased properties in low- and moderate-income and middle-income areas. This pattern is similar to the lending patterns revealed in the HMDA data for loan originations, which showed that, compared with conventional loans, government-backed loans were used to finance home purchases relatively more often in neighborhoods whose residents had moderate incomes.

In Summary

The more complete information about home lending now being gathered under the Home Mortgage Disclosure Act will give many groups—financial institutions, community organizations, supervisory agencies, and others—a

8. Mortgage loans sold, by type of purchaser, characteristics of borrower, and characteristics of census tract in which property is located, 1990[1]

Number and percentage distribution, except as noted

Borrower or census tract characteristic	Federal National Mortgage Assn.		Government National Mortgage Assn.		Federal Home Loan Mortgage Assn.		Farmers Home Admin.		Commercial bank	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total loans sold	**584,203**		**656,495**		**349,140**		**3,769**		**61,625**	
Race of borrower										
American Indian/Alaskan native	1,935	.5	911	.4	1,284	.5	21	.8	237	.5
Asian/Pacific Islander	17,050	4.1	4,046	1.7	14,908	5.7	384	14.1	1,329	2.5
Black	11,995	2.9	20,968	8.6	7,993	3.0	101	3.7	3,388	6.5
Hispanic	14,803	3.6	14,245	5.8	20,906	8.0	251	9.2	1,721	3.3
White	360,756	86.5	198,132	80.8	210,077	80.1	1,902	70.0	43,964	84.1
Other	2,858	.7	768	.3	1,641	.6	17	.6	269	.5
Joint (white/minority)	7,495	1.8	6,029	2.5	5,524	2.1	43	1.6	1,376	2.6
Total	416,892	100	245,099	100	262,333	100	2,719	100	52,284	100
Gender of borrower										
Male[2]	65,664	15.5	51,300	20.5	43,672	16.4	498	17.3	10,285	19.1
Female[3]	52,825	12.4	33,367	13.4	35,853	13.4	427	14.9	6,734	12.5
Joint (male/female)	306,254	72.1	165,075	66.1	187,379	70.2	1,949	67.8	36,795	68.4
Total	424,743	100	249,742	100	266,904	100	2,874	100	53,814	100
Income of borrower (percentage of MSA median)[4]										
Less than 80	35,598	9.8	46,185	22.0	22,060	9.8	328	13.5	7,131	16.7
80–99	33,752	9.3	40,099	19.1	21,197	9.5	280	11.6	5,755	13.5
100–120	42,047	11.5	38,462	18.3	26,020	11.6	221	9.1	5,732	13.4
More than 120	253,412	69.5	85,200	40.6	154,710	69.1	1,592	65.8	24,055	56.4
Total	364,809	100	209,946	100	223,987	100	2,421	100	42,673	100
Racial composition of census tract (minorities as percentage of population)										
Less than 10	296,545	65.7	269,830	56.2	155,054	57.0	1,546	52.7	29,082	59.7
10–19	74,483	16.5	97,673	20.3	50,519	18.6	538	18.3	9,924	20.4
20–49	52,473	11.6	75,816	15.8	40,926	15.1	432	14.7	6,624	13.6
50–79	16,418	3.6	20,765	4.3	15,641	5.8	294	10.0	1,803	3.7
80–100	11,299	2.5	15,988	3.3	9,704	3.6	123	4.2	1,263	2.6
Total	451,218	100	480,072	100	271,844	100	2,933	100	48,696	100
Income of census tract[5]										
Low or moderate	40,132	8.9	62,482	13.0	32,352	11.9	424	14.5	5,343	11.0
Middle	255,961	56.7	307,361	64.0	155,408	57.2	1,756	59.9	28,136	57.8
Upper	155,125	34.4	110,229	23.0	84,084	30.9	753	25.7	15,217	31.2
Total	451,218	100	480,072	100	271,844	100	2,933	100	48,696	100
MEMO										
Mean size of loan (thousands of dollars)	101.05		73.73		100.89		119.7		95.24	

1. Components may not sum to totals because of rounding.
2. One or more males.
3. One or more females.
4. MSA median is the median family income of the metropolitan statistical area (MSA) in which the property related to the loan is located.
5. Low- or moderate-income census tracts are those in which median family income is less than 80 percent of the median family income of the MSA as a whole; in middle-income census tracts, median family income is 80 percent to 120 percent of the median MSA family income; in upper-income census tracts, median family income is more than 120 percent of the median MSA family income.

SOURCE. Preliminary data, 1990 Home Mortgage Disclosure Act, Board of Governors of the Federal Reserve System.

better understanding of the residential mortgage market. Financial institutions will be able to compare their performance with that of their peers, to help them better evaluate the effectiveness of their own marketing and outreach efforts. Such self-assessment may lead to more creative approaches to meeting the housing needs of low- and moderate-income families.

Differences in approval and denial rates revealed by the 1990 HMDA data—among applicants grouped by their personal characteristics or by the characteristics of the neighborhoods in which they seek to live—and differences in the number of applications from these groups will focus increased attention on whether lenders are treating individuals and groups of applicants

8. – Continued

Borrower or census tract characteristic	Savings bank or savings and loan		Life insurance company		Affiliate of institution		Other purchaser	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total loans sold	**61,205**		**12,801**		**159,773**		**430,950**	
Race of borrower								
American Indian/Alaskan native	240	.5	55	.7	481	.4	1,752	.5
Asian/Pacific Islander	1,876	3.7	462	5.7	2,479	2.1	10,660	3.0
Black	2,110	4.2	320	4.0	5,251	4.4	23,234	6.5
Hispanic	2,081	4.1	285	3.5	2,698	2.3	20,335	5.7
White	42,678	85.0	6,683	83.1	105,336	88.6	291,255	81.6
Other	175	.3	52	.6	584	.5	1,495	.4
Joint (white/minority)	1,049	2.1	181	2.3	2,037	1.7	8,402	2.4
Total	50,209	100	8,038	100	118,866	100	357,133	100
Gender of borrower								
Male[2]	9,045	17.8	1,246	15.2	21,363	17.8	67,662	18.6
Female[3]	5,995	11.8	902	11.0	14,691	12.3	54,452	14.9
Joint (male/female)	35,889	70.5	6,056	73.8	83,826	69.9	242,479	66.5
Total	50,929	100	8,204	100	119,880	100	364,593	100
Income of borrower (percentage of MSA median)[4]								
Less than 80	5,672	13.2	870	12.0	14,210	14.6	58,704	20.4
80–99	4,591	10.7	705	9.7	11,309	11.6	46,452	16.1
100–120	4,892	11.4	793	10.9	11,474	11.8	40,797	14.2
More than 120	27,927	64.8	4,897	67.4	60,172	61.9	141,912	49.3
Total	43,082	100	7,265	100	97,165	100	287,865	100
Racial composition of census tract (minorities as percentage of population)								
Less than 10	28,613	58.5	6.555	60.0	81,942	70.8	180,644	56.7
10–19	9,658	19.8	2,200	20.1	17,032	14.7	63,709	20.0
20–49	6,797	13.9	1,532	14.0	11,180	9.7	48,447	15.2
50–79	2,210	4.5	334	3.1	3,288	2.8	14,029	4.4
80–100	1,614	3.3	298	2.7	2,242	1.9	11,706	3.7
Total	48,892	100	10,919	100	115,684	100	318,535	100
Income of census tract[5]								
Low or moderate	6,043	12.4	846	7.7	10,950	9.5	38,685	12.1
Middle	28,083	57.4	5,519	50.5	65,009	56.2	185,781	58.3
Upper	14,766	30.2	4,554	41.7	39,725	34.3	94,069	29.5
Total	48,892	100	10,919	100	115,684	100	318,535	100
MEMO								
Mean size of loan (thousands of dollars)	123.29		123.57		115.05		101.43	

within their communities in a fair and nondiscriminatory manner. Because of certain limitations (the most important being incomplete information about applicants' financial characteristics), the expanded data alone cannot provide the answers to these questions. Nonetheless, the data can be expected to prompt useful dialogue between financial institutions and members of their communities.

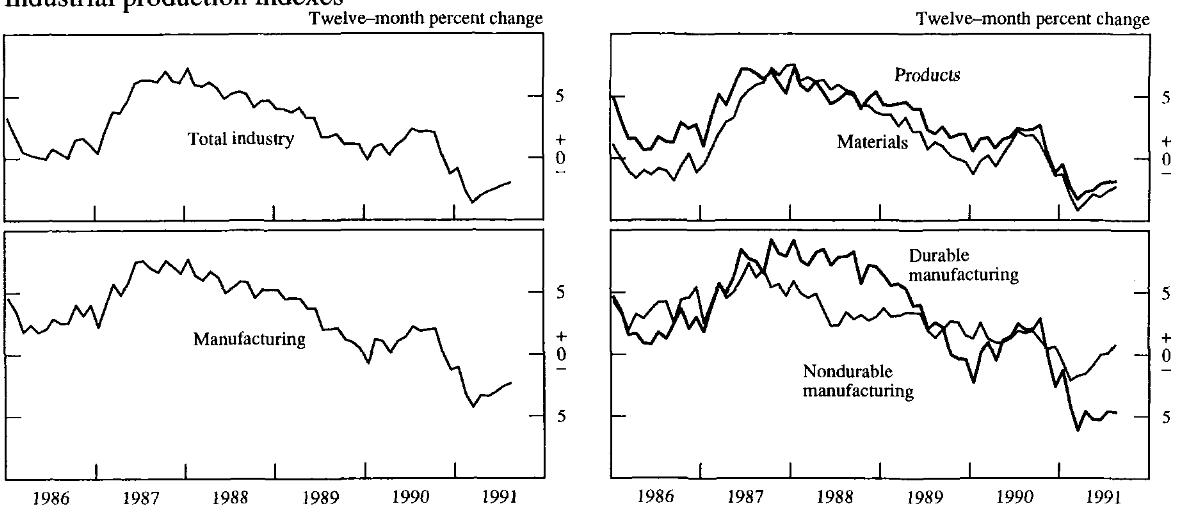
The expanded data will make it possible for supervisory agencies to evaluate more thoroughly lenders' compliance with community reinvestment and fair lending obligations. With access to individual applications and to information about institution lending standards, agency examiners are able to overcome most of the data's limitations. Computerization of the data will increase their efficiency. Finally, a switch to 1990 delineations of census tract boundaries, proposed for the 1992 data, will make the HMDA information more reflective of current lending practices. □

Industrial Production and Capacity Utilization

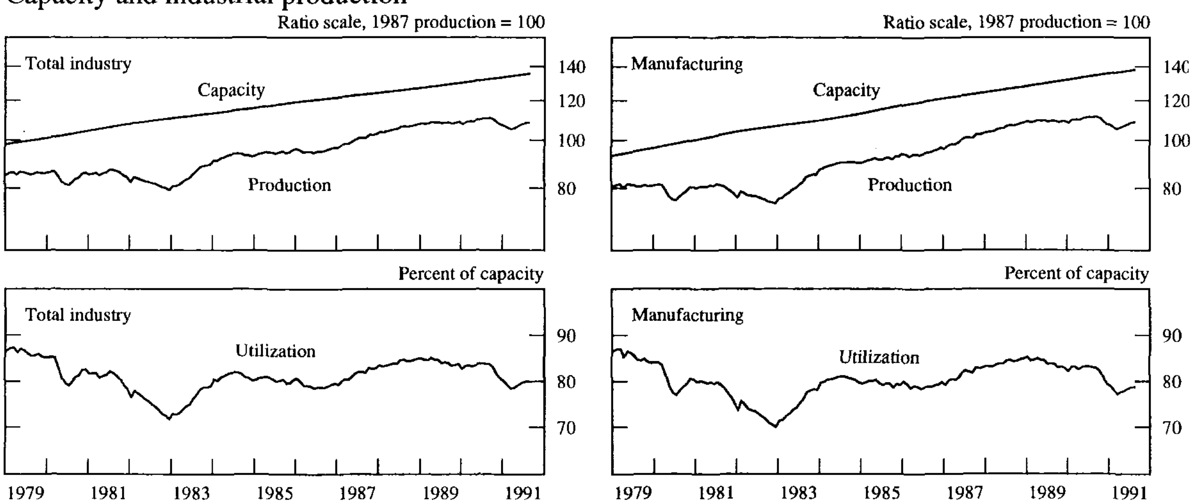
Released for publication on September 17

Industrial production rose 0.3 percent in August after increases of 0.6 percent in July and 0.8 percent in June, which are now shown to have been larger than estimated earlier. In August, the most significant increases in output occurred in consumer goods other than motor vehicles and in durable materials; in addition, production of construction supplies and nondurable materials improved further. After having increased sharply for five successive months, the output of motor vehicles fell 9.3 percent last month; excluding cars and trucks, total industrial production rose 0.5 percent. Total industrial capacity utilization increased 0.1 percentage point in August to 80.0 percent, 1.6 percentage points above its March trough.

Industrial production indexes



Capacity and industrial production



All series are seasonally adjusted. Latest series, August.

Industrial production	1987 = 100				Percentage change from preceding month				Percentage change, Aug. 1990 to Aug. 1991
	1991				1991				
	May r	June r	July p	Aug. p	May r	June r	July p	Aug. p	
Total index	**106.4**	**107.3**	**108.0**	**108.2**	**.9**	**.8**	**.6**	**.3**	**−2.0**
Previous estimates	106.4	107.1	107.6	. . .	.8	.6	.5	. . .	. . .
Major market groups									
Products, total	**107.7**	**108.6**	**108.8**	**108.9**	**.8**	**.9**	**.2**	**.1**	**−1.8**
Consumer goods	106.6	107.9	107.9	108.4	1.0	1.3	.0	.5	.6
Business equipment	121.7	122.1	122.7	122.3	.4	.3	.5	−.3	−2.5
Construction supplies	95.8	97.4	97.9	98.4	.9	1.7	.4	.6	−6.6
Materials	104.5	105.4	106.7	107.2	1.1	.8	1.2	.5	−2.3
Major industry groups									
Manufacturing	106.6	107.4	108.2	108.5	.6	.8	.7	.3	−2.3
Durable	106.7	107.4	108.2	108.3	.7	.6	.8	.1	−4.6
Nondurable	106.5	107.5	108.2	108.9	.6	1.0	.6	.6	.8
Mining	100.2	102.1	103.1	102.0	−.7	2.0	1.0	−1.1	−.4
Utilities	111.4	111.5	110.4	111.4	5.2	.1	−.9	.8	.0

Capacity utilization	Percent of capacity								Capacity growth, Aug. 1990 to Aug. 1991
	Average, 1967–90	Low, 1982	High, 1988–89	1990	1991				
				Aug.	May r	June r	July r	Aug. p	
Total industry	**82.2**	**71.8**	**85.0**	**83.7**	**79.1**	**79.6**	**79.9**	**80.0**	**2.6**
Manufacturing	81.5	70.0	85.1	82.9	77.8	78.3	78.6	78.7	2.9
Advanced processing	81.1	71.4	83.6	81.6	77.3	77.6	77.7	77.6	3.2
Primary processing	82.4	66.8	89.0	86.1	79.0	79.9	80.9	81.2	2.1
Mining	87.4	80.6	87.2	89.4	87.6	89.2	90.0	89.0	.0
Utilities	86.8	76.2	92.3	87.6	86.7	86.7	85.8	86.4	1.3

r Revised.
p Preliminary.

NOTE. Indexes are seasonally adjusted.

At 108.2 percent of its 1987 annual average, industrial production in August was 2 percent below its year-ago level.

In market groups, output of consumer goods other than motor vehicles increased about 1 percent in August, reflecting widespread gains in nondurable goods, such as food and clothing, and further increases in goods for the home. Production of business equipment other than motor vehicles rose 0.5 percent to a level about 1 percent above its low in March. Since output in this sector reached its trough, the recovery in output has been lackluster: This modest improvement since March has been led by gains in aircraft and in some types of equipment primarily used outside the industrial sector, such as farm and service industry equipment; the production of information processing equipment, which includes computers, and industrial equipment has changed little, on balance, in recent months. Materials production expanded another 0.5 percent in August, owing primarily to another sharp gain in durables. Despite the curtailment in output of cars and trucks in August, output of materials used by the motor vehicle industry rose again last month, and production of basic metals increased further. Among nondurables, production of textiles posted another sizable gain in August, and output of paper, which surged in July, edged down. Production of energy materials was little changed in August; an increase in electricity generation was about offset by a decline in coal.

In industry groups, output in manufacturing increased 0.3 percent in August; excluding motor vehicles and parts, output increased 0.6 percent, about the same as in recent months. Utilization for manufacturing as a whole edged up 0.1 percentage point in August to 78.7 percent. Within manufacturing, the operating rate for primary processing industries continued to move upward, increasing 0.3 percentage point further, while the rate for advanced processing was about unchanged again last month. Among primary processing industries, the utilization rates for textile mill products, petroleum products, primary metals, and fabricated metal products all increased more than ¾ percentage point in August. Within advanced processing, the utilization rate for apparel also increased more than ¾ percent in August and has risen nearly 5 percentage points since March; however, the operating rate for motor vehicles dropped sharply last month. Elsewhere, the utilization rates for most other advanced processing industries rose a bit.

Outside manufacturing, output at mines fell about 1 percent, owing mainly to a drop in coal and to reduced oil and gas well drilling. Production at utilities increased about ¾ percent, about retracing the decline in July; on balance, the output of utilities has changed little since the weather-related surge in May.

Statements to the Congress

Statement by David W. Mullins, Jr., Vice Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Telecommunications and Finance of the Committee on Energy and Commerce, U.S. House of Representatives, September 4, 1991

I am pleased to be here today to testify in connection with the regulation of the government securities market. President Corrigan's statement has detailed both the role of the Federal Reserve Bank of New York in this market, including its relationship with the primary dealers, and the circumstances surrounding the disclosures by Salomon Brothers.[1] As he noted, the Board of Governors of the Federal Reserve System was actively involved in the consultations among regulators during this episode. In my prepared remarks, I shall first delineate the role of the Board of Governors in this market and then turn to the other issues we were asked to address—specifically, the potential implications of this episode for regulatory and legislative initiatives.

The Board of Governors considers the U.S. government securities market to be the most important securities market in the world. It is important for at least three reasons. First, market conditions there determine the cost to the taxpayer of financing U.S. government operations. Second, this market serves as the foundation for other money and capital markets here and abroad, and as a prime source of liquidity for financial institutions. Finally, and for us perhaps most important, the U.S. government securities market is the market through which the Federal Reserve implements monetary policy, and thus this market must be an efficient and reliable transmitter of our monetary policy actions.

1. President Corrigan's statement follows this one.

Though the U.S. government securities market is an important market, the Board of Governors has little direct regulatory authority for this market. In this market, the Reserve Banks operate as fiscal agents of the U.S. Treasury, and the New York Reserve Bank also serves as the operating arm of the Federal Open Market Committee (FOMC). The Board, however, retains general oversight responsibility for all Federal Reserve District Bank activities. Moreover, the Board of Governors bears the responsibility for determining overall policy for the Federal Reserve System with respect to this market and all other matters. For example, the Board consults with the Treasury Department and the Securities and Exchange Commission (SEC) on issues related to administration of the Government Securities Act. Because of these responsibilities and the importance of this market, the Board is committed to participate actively in the process of ensuring and enhancing the efficiency and integrity of this market.

The market under consideration here is at the center of the nation's financial system. Its depth and breadth are unparalleled. And it is because of the importance of the market for U.S. government securities that the events of recent months are of such concern. The price distortions in certain securities, the admissions of wrongdoing by Salomon Brothers, and the allegations of further misconduct have raised troubling questions about the government securities market. While the government securities market has been extraordinarily resilient and has continued to function well over this period, this episode underscores the importance of ensuring the integrity of this market.

Of course, we must not overlook the fact that existing enforcement mechanisms appear to have been instrumental in this unfolding episode. These mechanisms included surveillance activities, inquiries, and other enforcement activities by the Federal Reserve Bank of New York, the

Treasury, the Securities and Exchange Commission, and the Justice Department. Although senior Salomon Brothers officials were aware of rule violations months before, the firm finally admitted wrongdoing only under the pressure of these advancing enforcement processes. And, of course, these enforcement processes continue to move forward as we meet here today. It is already apparent to all observers that the consequences of willful violations in this area are quite severe indeed.

While this episode has been a troubling one, it is not apparent that sweeping changes in regulation are warranted. It is clear that tightening up on enforcement would be efficacious in detecting and deterring future offenses. For example, the Federal Reserve regularly receives information on dealer positions in when-issued securities. These reports were not actively monitored. Though these reports were not designed for enforcement purposes, closer attention to them may be helpful in raising questions about situations with possible enforcement implications. Going forward, the Federal Reserve is committed to ensuring active monitoring of all incoming data and prompt referral of anomalous findings to appropriate regulatory authorities. Indeed, surveillance and enforcement activities have already been intensified.

And yet this episode has raised concerns that go beyond the straightforward process of detecting and punishing wrongdoing. With the revelations by Salomon Brothers, the price distortions in certain recent issues, and allegations of other misconduct, some have felt that the fairness of the market has been called into question. Others have raised concerns about the efficiency of market mechanisms. The smooth functioning of this market in recent months demonstrates that there appears to have been no economically meaningful loss of confidence in this market as yet. Nonetheless, these concerns need to be addressed. Reduced confidence in the fairness and efficiency of the government securities market could potentially impair liquidity and raise the cost of Treasury financing.

In response to these concerns, a wide variety of proposals have been advanced for changes in regulation or market structure. I believe that this broad-based reassessment is appropriate and healthy. This episode has presented us with an opportunity to undertake a thorough analysis of the structure of this market and its regulations.

I also believe that the assessment of these important issues should not be done in haste. Nor should changes be considered in a piecemeal manner. The issues are too complex and the consequences of mistakes too severe for us to rush to judgment on fundamental issues of market structure and regulation.

What is needed is a rigorous, comprehensive, and coordinated review of the government securities market—its structure, practices, and regulation. The objective should be to find ways to ensure and enhance the efficiency and integrity of this market.

A key question to be addressed in the course of such a review is whether current laws, regulations, procedures, and enforcement efforts foster the efficiency and liquidity of this market, as well as provide adequate protection against the potential for manipulative practices. A wide range of issues should be on the table, pertaining to both the primary and secondary markets for Treasury securities. It may well be that, upon review, additional rules or reporting requirements or significant changes in the auction process or in the oversight structure of the market will be found to be in order. At this point, however, conclusions would be premature. The issues are complex and interrelated, investigations are not yet completed, and the data needed to make informed judgments are still being gathered.

In thinking about such issues, the Board begins from the premise that it is absolutely essential that the extraordinary liquidity and efficiency of the government securities market not be impaired. This liquidity is important to the smooth functioning of the financial system; it facilitates the implementation of monetary policy through open market operations; and it allows the Treasury to issue federal debt at the lowest possible cost to the taxpayers.

With well over \$2 trillion in Treasury debt held by the public, the stakes are high and the consequences of mistakes are severe. Should either concerns about market integrity or inappropriate regulation raise the interest rate on Treasury debt even 1/100 of a percentage point, this rise would aggregate into more than \$200 million in increased interest cost every year that would have to be borne by U.S. taxpayers. Time is needed for a careful, analytical approach to the issues of market structure and regulation.

The Department of the Treasury, the Federal Reserve, and the SEC have agreed to undertake an intensive examination of market practices, structure, and regulation, culminating in recommendations for changes needed to ensure and enhance the efficiency and integrity of this market. We would expect this review to take place over the span of the next ninety days. I appreciate that this timetable does not mesh with the sunset date on the Treasury's rulemaking authority under the Government Securities Act, but I believe that the added time is necessary to bring adequate resources to bear on this very important matter. In any case, our timetable need not serve as an impediment to action on the Government Securities Act. The legislative process can usefully go forward in extending the Treasury's rulemaking authority and addressing other concerns that already had been under consideration; if it wishes, the Congress can always take up other related issues later, perhaps after the agencies have completed their review.

Disclosures to date about wrongdoing in the market have not fundamentally altered the Board's views—conveyed in letters and congressional testimony earlier this year—on the amendments that had been proposed with respect to the Government Securities Act. Specifically, we continue to support the recommendation that the Treasury's rulemaking authority be extended past its current sunset date. Beyond that, however, we do not feel that the need for the additional legislation, calling for sales practice rules or mandating the dissemination of information, has been decisively demonstrated, nor has the Salomon episode produced evidence of such a need.

Should the Congress nevertheless conclude that additional rules are desirable to help curb existing or potential abuses, we would urge that, in the case of securities trading information, the market be given adequate opportunity to satisfy congressional concerns before backstop authority mandating dissemination may be exercised. And, with regard to sales practice rules, perhaps the least costly and most responsive added measure would be a simple removal of the prohibition on the National Association of Securities Dealers (NASD) applying its sales practice rules to government securities transactions. That change would bring NASD firms into line with what is already the case for New York Stock Exchange member firms, thereby extending sales practice rules to all nonbank brokers and dealers. In this process, which would in essence take place with oversight by the SEC, we would favor substantive consultation and cooperation with the Department of the Treasury as the primary regulator of this market. In general, we favor consultation and cooperation and oppose the granting of veto powers over other agencies' regulations in this market.

In sum, recent events have raised troubling questions about the U.S. government securities market. These concerns must be addressed. A thorough and thoughtful investigation is the first step in this process. Ultimately, a careful and wide-ranging examination of the government securities market, with the goal of enhancing its efficiency and its fairness, will be an important input to our consideration of the appropriate changes in this market. Though I am deeply concerned about recent revelations and await the results of ongoing investigations, I do not believe that the government securities market is broken in any fundamental sense. I do, however, believe that it can be improved, and the Board of Governors is committed to this end. □

Statement by E. Gerald Corrigan, President, Federal Reserve Bank of New York, before the Subcommittee on Telecommunications and Finance of the Committee on Energy and Commerce, U.S. House of Representatives, September 4, 1991

I appreciate the opportunity to provide the subcommittee with my views concerning the recent disclosures by Salomon Brothers Inc. and the implications of those disclosures for the government securities market. These disclosures are clearly serious matters that must be addressed to ensure that confidence in the U.S. government securities market is maintained at the highest levels. My statement touches on three topics: first, the role of the Federal Reserve Bank of New York as it relates to the government securities market; second, the Bank's understanding of the circumstances surrounding Salomon Brothers' disclosures over the period August 9 to August 19, including the steps the firm has taken or is planning to take to protect against similar problems in the future; and third, my thoughts on a prudent course for the near term.

The Structure of the Government Securities Market and Role of the Federal Reserve Bank of New York

As the subcommittee knows, the market for U.S. government securities is the world's largest, most efficient, and most important securities market. Given the sheer size of the federal government debt that needs to be financed, we all have a big stake in ensuring that the debt is financed at the lowest possible cost and that the liquidity and efficiency of this market is preserved.

The market consists of several broad categories of private and public participants. First, there is the U.S. government itself as issuer of the securities. Second, there are Federal Reserve Banks operating as the Treasury Department's fiscal agent. Third, there is the Federal Reserve Bank of New York, acting on behalf of the Federal Open Market Committee, in entering the market for day-to-day purchases and sales of government securities as the chief instrument for the implementation of monetary policy. Further, the New York Bank also acts in the market as agent for foreign central banks and other official institutions. Fourth, there are government securities dealers and banks that act as intermediaries between the Treasury and others in the distribution and trading of government securities. Finally, there is the multitude of individual and institutional holders of the Treasury's securities.

For descriptive purposes, it may be useful to think of the operation of the market in two separate but closely related classes of activities. First, there are those activities that center on the issuance of new debt (or the rollover of existing debt) by the Treasury. This function is performed under rules established by the Treasury, including the so-called 35 percent rule. Primary dealers (whose characteristics are described below) are the major takers of new debt issued by the Treasury either for the dealer's own account or for the accounts of their clients or customers. Entities that are not primary dealers may also submit competitive bids on their own, but many choose to make such bids through primary dealers. Finally, any entity or individual may submit noncompetitive bids in an amount up to $1 million. Such bids are accepted by the Treasury at the average price that results from the competitive bidding process.

The second class of activity relates to investing and trading in the vast stock of Treasury debt that makes up the market as a whole. At this level, the scope of the market widens appreciably and ultimately encompasses the millions of individuals and institutions on a global basis that are active in the market for U.S. government securities. This vast secondary market in government securities functions with elements of liquidity, efficiency, and resiliency that are unique, on a global scale, to that market. In part, this is made possible by the Treasury–Federal Reserve book-entry system for the electronic custody and transfer of these securities.

As noted above, among the private participants in the market are the so-called primary dealers in U.S. government securities with whom the Federal Reserve Bank of New York conducts its open market operations. The primary dealers are the main market makers for government debt. They maintain two-way markets for government securities and participate directly and actively in the Treasury's auctions. Today, there are about forty primary dealers—about half are banks or securities affiliates of banks and half are diversified or specialized securities firms. All Federal Reserve transactions in the market, whether for its own account or for the accounts of other official institutions, are conducted with the primary dealers. During 1990, the aggregate volume of such transactions conducted by the Federal Reserve with primary dealers was close to $525 billion.

The mere fact that the Federal Reserve Bank of New York must conduct transactions with private-sector counterparties implies, of necessity, that the Bank incurs the same elements of counterparty credit, delivery, and settlement risk that any private-sector market participant also incurs. For this reason, the Bank has established criteria for selecting those firms with whom the Bank does business. (The criteria for primary dealers are described in Attachment A.[1]) It should also be noted that in several other major industrial countries there are broadly similar arrangements between central banks and a designated group of firms with whom those other central banks conduct their business.

It is important to note that the role of the Federal Reserve Bank of New York in its business relationship with the primary dealers takes place in a framework in which the Federal Reserve has no express statutory authority to regulate or supervise the primary dealers. Indeed, the Government Securities Act of 1986 established a formal supervisory and regulatory framework for the government securities market for the first time, with the Treasury as rulemaker and the Securities and Exchange Commission and banking supervisors as responsible for enforcement. While the Federal Reserve Bank of New York does not have statutory rulemaking or enforcement authority in this area, we recognize that our public nature carries with it certain implicit responsibilities to work closely with those having such authority to preserve and enhance the health and vitality of this market. We also recognize that the smooth functioning of the market for U.S. government securities—given its role as the anchor for other markets—has obvious implications for the smooth functioning of other money and capital markets here and abroad.

The number of primary dealers has varied over the years as the U.S. Treasury market has grown. From eighteen in the early 1960s, the number increased to twenty-three in 1971 and to thirty-six in 1981. Today there are about forty primary dealers, after having peaked at forty-six in 1988. These firms are expected to facilitate the Federal Reserve's Open Market Operations, to make markets in the full range of U.S. government securities for customers in good times and bad, and to be consistent and meaningful participants in Treasury auctions of new securities. Firms choose to take on these responsibilities as primary dealers for a variety of reasons, including the desire to have an active role in the largest market worldwide. Firms also choose to withdraw for business considerations such as the belief that they may achieve better returns on their capital from other lines of business. For example, during 1990, two firms were added to the list while five firms were deleted.

From time to time, the Federal Reserve Bank of New York has carefully considered possible changes in its approach to the selection of those entities with whom it will do business. Those deliberations always collide head-on with two realities that seem to limit practical alternatives to current arrangements. First, the fact that we must deal with private-sector counterparties necessarily implies that some will be chosen and some will not. Second, the fact that some will be chosen and others not necessarily implies that whether they are called primary dealers or not, the unique relationship between the Federal Reserve Bank of New York and those entities with whom the Bank does business will remain. Recent events have obviously called into even sharper focus these difficult questions.

While the primary dealer system is, in the first instance, based on business counterparty relationships, our interests in the health and wellbeing of the market extend beyond that narrow framework. The breadth, depth, and liquidity of this market are essential characteristics that the Federal Reserve relies on for the implementation of monetary policy, the Treasury relies on for financing the federal government, and investors rely on in committing their funds.

An Overview of the Federal Reserve Bank of New York's Understanding of the Events Surrounding the Salomon Brothers' Disclosures of August 9 through August 19

On Friday, August 9, 1991, top officials at Salomon Brothers telephoned the Federal Reserve

1. The attachments to this statement are available upon request from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Bank of New York and almost simultaneously faxed to the Bank a copy of the firm's August 9 press release. Before that phone call, the Federal Reserve Bank of New York had no knowledge of the wrongdoing then or subsequently disclosed by Salomon. However, in the normal review of the bids for the February five-year note auction, an employee of the Federal Reserve Bank of New York had noted that *another dealer firm* had submitted a bid, which, if added to the bid submitted by Salomon Brothers for an affiliate of that same second dealer firm, would have placed that entity's consolidated bid over the Treasury's 35 percent limit for a single entity. The Federal Reserve Bank of New York notified the Treasury of this finding, and the Treasury subsequently wrote to Salomon's customer—with a copy to Salomon—informing it that all of its affiliates would be considered a single entity for purposes of the administration of the auction rules.

The circumstances surrounding these events strongly suggest that it was the receipt by Salomon of the copy of the Treasury letter to that second firm that prompted a senior official of Salomon to disclose to his superiors the fact of the unauthorized bid in the February auction. Despite this disclosure within the firm, the fact of the unauthorized bid was not disclosed to the Federal Reserve Bank of New York or any other official entity until the telephone call of August 9, 1991.

While not directly the subject of Salomon Brothers' August 9 press release, there was also a considerable amount of discussion between officials of the Federal Reserve Bank of New York and Salomon Brothers in the period after the Treasury's May auction of two-year notes. In that timeframe, there was no evidence that Salomon had breached the Treasury's 35 percent rule in the May auction. There was, however, concern in the marketplace and in official circles that the auction results may have created something of a "squeeze" in the market for that particular issue. Those concerns prompted the Securities and Exchange Commission, in consultation with the Treasury and the Federal Reserve, to commence an in-depth review and investigation into the May two-year note auction and its market aftermath. Given the amount of attention and discussions that surrounded the May auction, the disclosures made by Salomon during the course of the Friday, August 9 telephone call were particularly unsettling, especially as it pertained to top management's knowledge since late April of the unauthorized customer bid in the February auction.

On the basis of the disclosures made by Salomon Brothers on Friday, August 9, the Federal Reserve Bank of New York informed Salomon Brothers by letter on Tuesday, August 13 that it wanted a written explanation of the circumstances surrounding the disclosures made on August 9 and a full report on managerial and other changes that would be taken to prevent a recurrence of these irregularities in the future.

Early in the evening of Tuesday, August 13 the Federal Reserve Bank of New York received another call from top management at Salomon. At that time, further disclosures of irregularities were made. These irregularities were the subject of the press statement issued by Salomon Brothers late in the day of Wednesday, August 14.

On the basis of the August 14 disclosures, there were further discussions between top officials of Salomon Brothers and the Federal Reserve Bank of New York on the evening of Thursday, August 15 and on the morning of Friday, August 16. During the discussion on Friday, August 16, it became clear that the top two officials of the firm intended to resign and that Mr. Buffett would take on the position of interim chairman over the weekend. In the face of these important changes in top management at the firm and the strong commitments made by the incoming chairman, the Federal Reserve Bank of New York deemed it appropriate to provide the firm with a limited amount of additional time to respond to the questions raised in the Bank's letter of August 13.

Over the entire period from the late morning call of Friday, August 9 to the Federal Reserve Bank of New York through the conversations between the Federal Reserve Bank of New York and the firm on the morning of Friday, August 16, the Bank kept the Federal Reserve Board, the Treasury, and the Securities and Exchange Commission informed as to the nature of these conversations. Over this same interval, officials of the Federal Reserve worked closely with the Securities and Exchange Commission and law enforcement entities in the sharing of information and in the shaping of concepts and approaches to the investigations then under way. All such discussion occurred in the context of full cooperation and strong working relationships between the three official entities and the Justice Department.

Over the course of Sunday, August 18, the Federal Reserve Bank of New York was in constant contact with the Treasury Department, the Board of Governors of the Federal Reserve System, and Salomon Brothers. The Bank was fully aware of the decisions taken by the Treasury in regard to the extent of Salomon's ability to participate—either for its own account or for the account of customers—in Treasury auctions, and it regarded all such decisions as appropriate. Indeed, the Bank shared the view that the decision to permit Salomon to continue to participate in auctions for its own account was appropriate in light of the further management changes announced on Sunday, August 18, as well as the further assurances received as to the future course of conduct by the firm. Throughout all of these discussions, however, the Federal Reserve Bank of New York was mindful that the nature and extent of its future business relationship with the firm were under review, and the Bank made that quite clear to all, including the new management of the firm.

In looking at the acknowledgements by the firm since the first statement on August 9 regarding wrongdoings in the auctions of December 1990 and February 1991—especially in light of the fact that the latter was known by the top management of the firm in late April—one can only be shocked and dismayed by this sequence of events. Having said that, it will take some time for the various criminal and civil proceedings to sort themselves out in a setting in which due process must be allowed to run its course. Similarly, some breathing room is needed for the new management of the firm to be able to respond in detail as to what steps the firm, its lawyers, its accountants, and its advisers have taken, or are planning to take, to prevent and detect similar activities in the future. Finally, we, along with other authorities, will rigorously evaluate these changes. In the meantime, one cannot help but be impressed with the sweeping management changes that have already been made and with the strength of the new management's commitment to proper behavior and strengthened management and control systems.

Steps for the Near Term

At this point in time, while awaiting the results of current investigations by several agencies, it seems premature to come forward with any broad-based plans for regulatory changes or legislative proposals with respect to the government securities market. In coming weeks, we will be coordinating closely with officials and staff of the Treasury Department, the Securities and Exchange Commission, and, of course, the Board of Governors of the Federal Reserve System. The agencies together will be looking at this situation with an eye toward developing a coherent approach that deals with the abuses that have come to light and does so in a manner that recognizes the need to proceed very carefully in respect to this highly important market. We would aim to have recommendations within ninety days—although on certain more limited points it may be possible to move sooner. With a carefully thought-out and implemented approach, we believe that it will be feasible to maintain the integrity and efficiency of this vital market. □

Statement by David W. Mullins, Jr., Vice Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Securities of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, September 11, 1991

I am pleased to be here today to testify in connection with the regulation of the government securities market. President Corrigan's statement has detailed both the role of the Federal Reserve Bank of New York in this market, including its relationship with the primary dealers, and the circumstances surrounding the disclosures by Salomon Brothers.[1] The Board of Governors of the Federal Reserve System was actively involved in the consultations among regulators during this episode. In my prepared remarks, I shall first delineate the role of the Board of Governors in this market and then turn to the other issues we were asked to address—specifically, the potential implications of this episode for regulatory and legislative initiatives.

The Board of Governors considers the U.S. government securities market to be the most important securities market in the world. It is important for at least three reasons. First, market conditions there determine the cost to the taxpayer of financing U.S. government operations. Second, this market serves as the foundation for other money and capital markets here and abroad and as a prime source of liquidity for financial institutions. Finally, and for us perhaps most important, the U.S. government securities market is the market through which the Federal Reserve implements monetary policy, and thus this market must be an efficient and reliable transmitter of our monetary policy actions.

Nonetheless, the Board of Governors has little direct regulatory authority for the U.S. government securities market. In this market, the Reserve Banks operate as fiscal agents of the U.S. Treasury and the Federal Reserve Bank of New York also serves as the operating arm of the Federal Open Market Committee (FOMC). The Board, however, retains general oversight responsibility for all Federal Reserve District Bank activities. Moreover, the Board of Governors bears the responsibility for determining overall policy for the Federal Reserve System with respect to this market and other matters. For example, by statute the Board consults with the Treasury Department and the Securities and Exchange Commission on issues related to administration of the Government Securities Act. Because of these responsibilities and the importance of this market, the Board is committed to participating actively in the process of ensuring and enhancing the efficiency and integrity of this market.

The market under consideration here is at the center of the nation's financial system. Its depth and breadth are unparalleled. And it is because of the importance of the market for U.S. government securities that the events of recent months are of such concern. The price distortions in certain securities, the admissions of wrongdoing by Salomon Brothers, and the allegations of further misconduct have raised troubling questions about the government securities market. While it has been extraordinarily resilient and has continued to function well over this period, this episode underscores the importance of ensuring the integrity of this market.

Of course, we must not overlook the fact that existing enforcement mechanisms appear to have been instrumental in this unfolding episode. These mechanisms included surveillance activities, inquiries, and other enforcement activities by the Federal Reserve Bank of New York, the Treasury, the Securities and Exchange Commission (SEC), and the Justice Department. Although senior Salomon Brothers officials were aware of rule violations months before, the firm finally admitted wrongdoing only under the pressure of these advancing enforcement processes. And of course, these enforcement processes continue to move forward as we meet here today. It is already apparent to all observers that the consequences of willful violations in this area are quite severe indeed.

While this episode has been a troubling one, it is not apparent that sweeping changes in regulation are warranted. It is clear that tightening up on enforcement would be efficacious in detecting and deterring future offenses. For example, the Federal Reserve will be contacting customers bidding through dealers to confirm the accuracy of those bids. In addition, the Federal Reserve regularly receives information on dealer positions in when-issued securities. These reports were not actively monitored from an enforcement perspective because they were not designed for that purpose. Nonetheless, closer attention to them may be helpful in raising questions about situations with possible enforcement implications, and we will explore the redesign of this report to enhance its potential useful-

1. President Corrigan's statement follows this one.

ness in the enforcement process. The Federal Reserve is committed to ensuring active monitoring of all incoming data and prompt referral of anomalous findings to appropriate regulatory authorities.

And yet this episode has raised concerns that go beyond the straightforward process of detecting and punishing wrongdoing. With the revelations by Salomon Brothers, the price distortions in certain recent issues, and allegations of other misconduct, some have felt that the fairness of the market has been called into question. Others have raised concerns about the efficiency of market mechanisms and the efficacy of the current regulatory structure. The continued smooth functioning of this market demonstrates that there appears to have been no economically meaningful loss of confidence in this market as yet. Nonetheless, these concerns need to be addressed; reduced confidence in the fairness and efficiency of the government securities market could potentially impair liquidity and raise the cost of Treasury financing.

In response to these concerns, a wide variety of proposals have been advanced for changes in regulation or market structure. I believe that this broad-based reassessment is appropriate and healthy. This episode has presented us with an opportunity to undertake a thorough analysis of the structure of this market and its regulations.

I also believe that the assessment of these important issues should not be done in haste. Nor should changes be considered in a piecemeal manner. The issues are too complex, highly interrelated, and the consequences of mistakes are too severe for us to rush to judgment on fundamental issues of market structure and regulation.

What is needed is a rigorous, comprehensive, and coordinated review of the government securities market—its structure, practices, and regulation. The objective should be to find ways to ensure and enhance the efficiency and integrity of this market.

A key question to be addressed in the course of such a review is whether current laws, regulations, procedures, and enforcement mechanisms foster the efficiency and liquidity of this market, as well as provide adequate protection against the potential for manipulative practices. A wide range of issues should be on the table, pertaining to both the primary and secondary markets for Treasury securities. It may well be that, upon review, additional rules or reporting requirements or significant changes in the auction process or in the oversight structure of the market will be found to be in order. At this point, however, conclusions would be premature. The issues are complex and interrelated, investigations are not yet completed, and the data needed to make informed judgments are still being gathered.

However, a promising approach is to explore ways to make access to the primary market easier and more efficient. Broader-based participation in auctions should reduce the vulnerability to collusion and result in a deeper, more efficient market. For example, an electronic bidding process in the primary market promises to provide easier access, thereby broadening the market. Moreover, a computerized auction process will greatly enhance the efficiency of market surveillance and monitoring efforts and allow rapid and easy detection of many potential abuses. The Federal Reserve and the Treasury have accelerated their effort to automate major aspects of the auction process. Broader participation in auctions and more efficient surveillance mechanisms may render collusion impractical and obviate the need for cumbersome, restrictive regulations that risk raising the cost of Treasury financing.

Several commenters have questioned the primary dealer system. As an integral part of the government securities market, the primary dealer system has served us well for thirty years. Nonetheless, the market has changed over that span, and it is therefore appropriate that the role of the primary dealer system in this market be considered in a thorough review.

Another topic for examination in our review is the difficult issue of the appropriate amount and nature of information sharing among market participants. Some sharing of information is useful, even necessary to the smooth functioning of the Treasury market. Information sharing can reduce uncertainty and facilitate lower cost Treasury financing. Nonetheless, some kinds of information sharing can lead to collusive behavior and market distortion. One approach is to derive appropriate standards of conduct with respect to the sharing of information among market participants.

The issue of the Treasury's consultations with the Public Securities Association's borrowing committee is more appropriately addressed by the Treasury. They must assess the benefits of this arrangement, which may well be substantial, against the potential for abuse, which may well be limited.

Among the suggestions from academe is that the Treasury replace the current auction technique with a so-called Dutch auction. While not a new suggestion, it is one worthy of rigorous analysis. Analysis is necessary because, applied in this context, it is not at all clear that a Dutch auction would reduce the cost of Treasury financing; indeed, it might actually increase the Treasury's costs. Nevertheless, this area is a fruitful one for examination. Redesigning the auction process has the potential to attract broader-based interest in the auction and to reduce the risk of collusive behavior. And, of course, there are numerous other issues that deserve careful and deliberate consideration in a thorough review of this market.

In thinking about such issues, the Board begins from the premise that it is absolutely essential that the extraordinary liquidity and efficiency of the government securities market not be impaired. This liquidity is important to the smooth functioning of the financial system, it facilitates the implementation of monetary policy through open market operations, and it allows the Treasury to issue federal debt at the lowest possible cost to the taxpayers.

With well over $2 trillion in Treasury debt held by the public, the stakes are high and the consequences of mistakes are severe. Should concerns about either market integrity or inappropriate regulation raise the interest rate on Treasury debt even 1/100 of a percentage point, this rise would aggregate into more than $200 million in increased interest cost every year, which would have to be borne by U.S. taxpayers. Time is needed for a careful, analytical approach to the issues of market structure and regulation.

The Department of the Treasury, the Federal Reserve, and the SEC have agreed to undertake an intensive examination of market practices, structure, and regulation, culminating in recommendations for any changes needed to ensure and enhance the efficiency and integrity of this market. We would expect that this review would take place over the span of the next ninety days. I appreciate that this timetable does not mesh with the sunset date on the Treasury's rulemaking authority under the Government Securities Act, but I believe that the added time is necessary to bring adequate resources to bear on this very important matter. In any case, our timetable need not serve as an impediment to action on the Government Securities Act. The legislative process can usefully go forward on extending the Treasury's rulemaking authority and addressing other concerns that already had been under consideration; if it wishes, the Congress can always take up other related issues later, perhaps after the agencies have completed their review.

Disclosures to date about wrongdoing in the market have not fundamentally altered the Board's views—conveyed in letters and congressional testimony earlier this year—on the amendments that had been proposed with respect to the Government Securities Act. Specifically, we continue to support the recommendation that the Treasury's rulemaking authority be extended past its current sunset date. Should the Congress conclude that additional rules are desirable to help curb existing or potential abuses, we would urge that, in the case of securities trading information, the market be given adequate opportunity to satisfy congressional concerns before backstop authority mandating dissemination may be exercised. And, with regard to sales practice rules, perhaps the least costly and most responsive added measure would be a simple removal of the prohibition on the National Association of Securities Dealers (NASD) applying its sales practice rules to government securities transactions. That change would bring NASD firms into line with what is already the case for New York Stock Exchange member firms, thereby extending sales practice rules to all nonbank brokers and dealers. In this process, which would in essence take place with oversight by the SEC, we would favor substantive consultation and cooperation with the Department of the Treasury as the primary regulator of this market. In general, we favor consultation and cooperation and oppose the granting of veto powers over other agencies' regulations in this market.

In sum, recent events have raised troubling questions about the U.S. government securities market. These concerns must be addressed. A thorough and thoughtful investigation is the first step in this process. Ultimately, a careful and wide-ranging examination of the government securities market, with the goal of enhancing its efficiency and its fairness, will be an important input to our consideration of the appropriate changes in this market. Though I am deeply concerned about recent revelations and await the results of ongoing investigations, I do not believe that the government securities market is broken in any fundamental sense. I do, however, believe that it can be improved, and the Board of Governors is committed to this end. □

Statement by Oliver Ireland, Associate General Counsel, Legal Division, Board of Governors of the Federal Reserve System, before the Committee on Agriculture, U.S. House of Representatives, September 11, 1991

I am pleased to be here today to discuss the provisions of H.R.6, the Financial Institutions Safety and Consumer Choice Act of 1991, concerning Payment System Risk Reduction. Subtitle A of title VI of H.R.6 contains provisions designed to confirm the validity of contractual agreements providing for the netting of payment obligations between and among financial institutions, including depository institutions, securities brokers or dealers, and futures commission merchants.

The Board strongly supports these provisions as an important step in reducing systemic risk in the U.S. financial system and maintaining the competitiveness of U.S. financial institutions and markets. We understand, however, that the committee is concerned that these provisions may conflict with provisions of the Commodity Exchange Act and rules promulgated thereunder as well as provisions of the Bankruptcy Code. The Board believes that the purpose of these netting provisions is consistent with the purposes of the Commodity Exchange Act and would support amendments to H.R.6 designed to clarify the relationship between the netting provisions, the provisions of the Commodity Exchange Act, and other federal laws.

On every business day, financial institutions engage in transactions with one another that involve trillions of dollars. These transactions involve normal day-to-day payments between commercial businesses as well as foreign exchange, securities, and commodities transactions. The certainty of settlement of payments associated with these transactions is critical to the efficiency of the U.S. economy and to the role of the dollar as an international trade currency. The failure of a major financial institution could call into question the status of billions of dollars of these transactions and jeopardize the soundness of its financial institution counterparties, thereby creating systemic risks for the financial system.

To limit these risks, many financial institutions enter into netting contracts under which the payment obligations between two parties, or among several parties, are netted so that each party to the netting contract is required or entitled to make or to receive only a single payment that is the net of all of that party's transactions. Thus, in a bilateral netting contract—that is, a netting contract involving only two parties—one party makes a single, net payment to the other party. In a multilateral netting contract—that is, a netting contract involving several parties—each party in a net debtor position makes a single payment, and each party in a net creditor position receives a single payment. Because individual net payments are far smaller than the gross value of the payment obligations to be settled between and among the parties, the effect of the failure of one of the parties in a net debtor position to settle its payment obligation is far smaller than the effect of unwinding all of the underlying transactions. Further, the amount of any failed net payment can often be covered by margin or other collateral requirements, or by coinsurance or other arrangements to ensure that underlying transactions are settled with the minimum of systemic risk to the financial markets. The value of netting in reducing systemic risk was recognized in 1990 in a Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries.

The operations of the New York Clearing House Interbank Payments System, also known as CHIPS, demonstrates the ability of netting to reduce systemic risk. Each day CHIPS participants exchange payments totaling, on average, about $870 billion. However, the net payments made at the end of the day to settle these transactions total, on average, only about $6.7 billion, with the single largest debtor making a payment of less than $1.9 billion. To limit systemic risk further, CHIPS has instituted arrangements under which the single largest debtor's position is covered by a collateralized coinsurance system based on the participants' dealings with the failed participant. Under this arrangement, CHIPS participants can be assured that the system would settle in the event of the failure of a large participant and that individual transactions processed through the system would not have to be unwound. Other payment or clearing systems have similar netting and settlement arrangements. Critical to these systems is the ability to net their participants' positions on either a bilateral or a multilateral basis.

The ability to reduce the systemic risk to financial markets by netting is important not only to the safety and soundness of U.S. financial institutions but also to the competitiveness of U.S. financial markets with foreign financial markets. Investors will be attracted to financial markets in which they can be certain their transactions will be subject to prompt final settlement.

We believe that under the laws of the United States and the various states there is a fairly high degree of certainty that netting contracts would be enforced. Nonetheless, the slightest doubt as to the validity of carefully drawn netting contracts presents unacceptable levels of systemic risk due to the enormous volume of dollar transactions that are settled each day.

The provisions of subtitle A of title VI of H.R.6 are designed to remove any such doubts by providing that, as a matter of federal law, netting provisions of contracts between and among depository institutions, securities brokers and dealers, futures commission merchants, and commodities and securities clearing organizations are valid and binding on the parties. These provisions would provide certainty that the netting provisions would be enforced, even in the event of the bankruptcy of one of the parties.

We do not believe that these provisions were intended to validate contracts that are otherwise invalid because they violate provisions of federal law. Nevertheless, the Board understands that the committee has expressed concern that the netting provisions of H.R.6 would override provisions of the commodities, securities, or banking laws. For example, under federal commodities and securities laws, certain rules of clearing organizations or contract markets are not considered to be valid unless they have received required regulatory approvals. We believe that the netting provisions of H.R.6 were not intended to validate such contracts.

Similar concerns were raised concerning the Senate version of this legislation. In response to these concerns, the Senate version was revised to include provisions clarifying that this legislation does not validate netting contracts prohibited by or requiring agency approval prior to becoming effective under relevant federal law. The Board supported these clarifications and supports the addition of similar clarifying provisions to title VI, subtitle A of H.R.6. □

Statement by E. Gerald Corrigan, President, Federal Reserve Bank of New York, before the Subcommittee on Securities of the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, September 11, 1991

I am pleased to appear before you this morning to shed further light on the Salomon Brothers incident and to share with you my views on the workings of the government securities market. I also want to provide some general thoughts as to how we can best ensure that this vital market remains the most efficient, liquid, and trusted market in the world.

Primary Dealers and Their Association with the Federal Reserve Bank of New York

Among the private participants in the market for government securities are the so-called primary dealers in U.S. government securities with whom the Federal Reserve Bank of New York conducts its open market operations. The primary dealers are the main market makers for government debt. They maintain two-way markets for government securities and participate directly and actively in the Treasury's auctions. Today, there are thirty-nine primary dealers—about half are banks or securities affiliates of banks, and half are diversified or specialized securities firms. All Federal Reserve transactions in the market, whether for its own account or for the accounts of other official institutions, are conducted with primary dealers. During 1990, the aggregate volume of such transactions conducted by the Federal Reserve with primary dealers was close to $525 billion.

The mere fact that the Federal Reserve Bank of New York must conduct transactions with private-sector counterparties implies, of necessity, that the Bank incurs the same elements of counterparty credit, delivery, and settlement risk that any private-sector participant in the market also incurs. For this reason, the Bank has established criteria for selecting those firms with whom the Bank does business. (The criteria for primary dealers are described in attachment A.[1]) It should also be noted that in several other major industrial countries there are broadly similar arrangements between central banks and a designated group of firms with whom those central banks conduct their business.

It is important to note that the role of the Federal Reserve Bank of New York in its business relationship with the primary dealers takes place in a framework in which the Federal Reserve has limited statutory authority to regulate or supervise primary dealers. Indeed, the Government Securities Act of 1986 established a formal supervisory and regulatory framework for the government securities market for the first time, with the Treasury as rulemaker and the Securities and Exchange Commission (SEC) and banking supervisors responsible for enforcement.

The number of primary dealers has varied over the years as the U.S. Treasury market has grown. From eighteen in the early 1960s, the number increased to twenty-three in 1971 and to thirty-six in 1981. Today there are thirty-nine primary dealers, after peaking at forty-six in 1988. As profitability ebbs and flows, firms come and go as primary dealers. For example, during 1990, two firms were added while five firms withdrew. Thus far in 1991, two more have left. These firms are expected to facilitate the Federal Reserve's open market operations, to make markets in the full range of U.S. government securities for customers in good times and bad, and to be consistent and meaningful participants in Treasury auctions of new securities.

From time to time, the Federal Reserve Bank of New York has carefully considered possible changes in its approach to the selection of those entities with whom it will do business. Those deliberations always collide head-on with two realities that seem to limit practical alternatives to current arrangements. First, the fact that we must deal with private-sector counterparties necessarily implies that some will be chosen and some will not. Second, the fact that some will be chosen and others not necessarily implies that whether they are called primary dealers or not, the unique relationship between the Federal Reserve Bank of New York and those entities with whom the Bank does business will remain. Recent events obviously have called into even sharper focus these difficult questions.

While the primary dealer system is, in the first instance, based on business counterparty relationships, our interests in the health and well-being of the market extend beyond that narrow framework. The breadth, depth, and liquidity of this market are essential characteristics that the Federal Reserve relies on for the implementation of monetary policy, the Treasury relies on for financing the federal government, and investors rely on in committing their funds.

In summary, the primary dealer arrangement fundamentally grows out of the fact that the

1. The attachments to this statement are available on request from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Federal Reserve, like other central banks, must—as a wholly practical matter—conduct market operations with private-sector counterparties. It is therefore, in the first instance, a business relationship. Having said that, we recognize fully that as the central bank and fiscal agent for the Treasury we have a natural interest in the smooth workings of the market. We also recognize that our public nature and our participation in the market make it impossible to fully or even materially ignore the reality that our relationship with the market surely carries with it the implication that we are one of its "regulators."

For example, the mere presence of our limited program for the periodic monitoring of primary dealers and the fact that we regularly collect certain statistical information from the dealers create that impression. However, I should stress that the primary dealer monitoring program is quite narrow in its purpose and its scope and is not remotely similar to the bank examination program. The basic purpose of the monitoring program is to satisfy ourselves that the Federal Reserve—by virtue of its transactions with dealers—is not incurring unacceptable risk of financial loss in a context in which the nature of our transactions with dealers is relatively low in risk to begin with.

The data and information that we collect from primary dealers are aimed at providing broad insights into the workings of the market. These information-gathering activities have never been structured with a view toward enforcement or compliance activities, even though we fully recognize that there will always be a degree of overlap between these functions and our broad market-monitoring activities. For example, with the one exception of the so-called when-issued statistical report, none of the data we collect from the dealers on positions and turnover are specific as to any one security. We receive weekly data, grouped by broad maturity ranges. As such, these reports have virtually no utility in detecting the kind of problem that arose in the Salomon case because they were not designed for that purpose. Even the when-issued report, which is daily, has very limited utility in this regard.

In these circumstances, it follows quite naturally that as a part of our overall review of the lessons to be learned from the Salomon case, we will take a fresh look at these programs to see what changes may be needed and how those changes can best be coordinated with the needs of the Department of the Treasury and the Securities and Exchange Commission (SEC).

There is one last point regarding the system of primary dealers that should be discussed to fully grasp the dynamics of these arrangements. Namely, why do firms—domestic and foreign—want to be primary dealers in the first place? In part, the answer to that question is straightforward because some firms must judge that this particular function is an economically effective way to deploy their capital. In point of fact, however, returns on capital for primary dealers do not come easily. Indeed, it is not at all unusual for individual primary dealers to lose money. In fact, we have had any number of years in which a significant fraction of individual dealers has incurred losses in their operations in government securities.

For some, however, low returns and even periodic losses are tolerable because the firm may judge that having a major presence in this market is important because of the synergies that arise with other aspects of the firm's business here and abroad. In other words, the unique character and importance of the market for U.S. government securities may be such that some firms view a major presence in that market as so important to their overall business strategy that even subpar returns on capital deployed to this specific activity are acceptable.

There is another factor that may also be relevant in this regard—although its importance is diminishing. Historically, interdealer brokers in government securities made the wholly private business decision to provide access to the so-called brokers wires on a "no-name give-up" basis only to primary dealers. The Federal Reserve played no role in that decision and has sought to distance itself from it. With changing technology and more widespread price dissemination, that practice is now breaking down. The Federal Reserve wholeheartedly supports initiatives that move in that direction so long, of course, as these initiatives are consistent with the dictates of efficiency, reliability, stability, and soundness of the marketplace as a whole.

There is one last factor that must be cited as one of the key factors that attracts firms to the fold of primary dealers and that factor is prestige. Whether we like it or not, the fact remains that there is an element of prestige associated with primary dealer status. It is also true that in times of stress that prestige factor can loom very large indeed. In that regard, it is clear to me that the letter the Federal Reserve Bank of New York sent to Salomon Brothers on Tuesday, August 13, which discussed our review of the firm's status as a primary dealer, played a major role in the changes in top management at the firm announced on Friday, August 16. I might also add that then, and now, I regarded those changes in top management as an absolutely essential first step in the healing process for the market.

The primary dealer system has worked well over the years. It has served the Federal Reserve, the Treasury, the nation, and the world effectively. Yet, the system is not without its drawbacks. However, as we consider whether basic changes in these arrangements are needed, it seems to me that we must keep two basic propositions in mind. First, regardless of what they are called and how they are selected, for at least the foreseeable future, there will be a finite group of private-sector counterparties with whom the Federal Reserve will have to do business. One way or another, the identity of these firms will be known in the marketplace. Second, the sheer size of the financing and refinancing requirements of the federal government are such that, one way or another, for the foreseeable future there will have to be some relatively large firms that play a central role in the underwriting and distribution of that debt and in making secondary markets in the government's debt instruments. If the returns are not there to attract private capital to that business or if the burdens of excessive regulation so stifle the efficiency and liquidity of that market, the cost to the taxpayers and to the prestige of the United States can be enormous.

THE FEDERAL RESERVE AS THE TREASURY'S FISCAL AGENT IN THE AUCTION PROCESS

The basic rules governing the auctions of Treasury securities—including the 35 percent rule—are established by the Treasury. Compliance and enforcement responsibility for these rules rests with the Treasury. However, as the Treasury's fiscal agent, the Federal Reserve—as with most central banks throughout the world—is the Treasury's point of contact with the marketplace. As such, the Federal Reserve has a natural responsibility to call to the Treasury's attention events or circumstances, which, in its judgment, suggest that the Treasury's rules or intentions may have been breached in the auction process.

Over a very long period of time, the process by which Treasury securities are auctioned or otherwise placed in the market has worked exceedingly well. Indeed, until the Salomon event, we had no knowledge of any event or events that would constitute a significant breakdown in the workings of the auction process.

Although the auction process is open to all qualified bidders, the fact remains that over the long haul the primary dealers—and in recent years their large customers—are, by far, the major takers of government securities in the auction process. This development is natural given the capital that they have devoted to this business as well as their distribution network, their expertise, and their role as market makers in government securities. Having said that, it is also true that in recent years the auction awards have tended to become more concentrated, especially if one takes account of the large institutional clients of the primary dealers that *choose* to bid in the auctions through the primary dealers.

The mechanics of the auction process are, in one sense, quite simple. Those submitting competitive bids must present those bids on a prescribed tender form at a Federal Reserve Bank by 1:00 p.m. eastern time on the day of the auction. As a practical matter, the overwhelming share of such bids (often in the range of 80 percent to 90 percent) is received by the Federal Reserve Bank of New York. To minimize market uncertainties, the results of the auction are announced about one hour later, or around 2:00 p.m. eastern time.

Within that single hour, between 1:00 p.m. and 2:00 p.m., the initial responsibility for tabulating and checking the bids—including checking for compliance with the 35 percent rule— falls to the staff of the Federal Reserve Bank of New York. It was this initial check of the bids submitted for the February 1991 five-year note auction that we now know began the unraveling of Salomon's illegal activities. At the time, however, there was absolutely no reason to suspect any illegal activity. Nevertheless, since the circumstances surrounding that auction have received so much attention, allow me to recount what happened and how it was to shape subsequent events.

Included in the bids received at 1:00 p.m. for the February 21 auction in question was a small bid, for its own account, for S.G. Warburg & Co., itself a primary dealer, and a bid at the 35 percent limit submitted by Salomon for a customer described on the tender form as Warburg Asset Management. It should be noted that there was nothing unusual about an affiliate of one primary dealer submitting a bid through another primary dealer. What was unusual was the fact that *if*, under Treasury rules, the two Warburg entities were considered a single entity and if both bids were awarded in full, the result would have slightly exceeded the 35 percent limit. The Federal Reserve promptly called both Salomon and the Treasury. Salomon indicated that the client name was in error and that the bid had been received from their London office for Mercury Asset Management—an affiliate of Warburg. As this was occurring, it became evident that the actual awards in the auction would be such that the 35 percent limit would not be breached even if the entities in question were a single entity for purposes of the auction rules. In those circumstances, and in a setting in which there was, at the time, no reason whatsoever to suspect wrongdoing, the Treasury indicated to the Federal Reserve that it would accept both bids. It was understood at that time that the Treasury would subsequently investigate the legal relationships between the various Warburg entities.

Over the ensuing two or three weeks the Bank shared with the Treasury information it had regarding the bids, and on March 14, the Treasury, in response to an inquiry by the Federal Reserve, indicated that it was continuing its review of the corporate relationship between the entities in question. That review culminated with the Treasury's letter of April 17 to Warburg informing the firm that in the future the entities in question would be considered a single entity for purposes of the auction rule. A copy of that letter was sent to Salomon.

When Salomon finally disclosed its wrongdoings in August, and when the top management acknowledged to me that they knew of the unauthorized customer bid in the February auction, I surmised that it was the pressure of the inquiries about the "Mercury" bid submitted by Salomon in February that spooked Mr. Mozer into disclosing his wrongdoing to his superiors.

It is now quite clear that my suspicion was correct. What I did not know, however, until I read the statement submitted to the Congress by Salomon last week was that in the face of those developments Mr. Mozer apparently went to rather considerable lengths in requesting an official of Warburg not to respond to the Treasury's letter. This raises another question about possible wrongdoing. The SEC and the Justice Department are aware of these developments, and the Treasury and the Federal Reserve have arranged a meeting with Warburg for this week to learn its side of this story.

In all of these circumstances, it is only fair to ask whether a more rigorous investigation into the February auction might have made a difference in terms of the course of subsequent events. Given (1) the history of the auction process; (2) that there was not then a shred of evidence to suggest illegal activity; and (3) what now seems to have transpired between officials at Salomon and Warburg in April, it does not seem unreasonable to conclude that the steps followed by the Federal Reserve and the Treasury *in that setting* were appropriate. The one thing that surely would have made a difference would have been the timely disclosure of these events by the top management of Salomon when they learned of them in late April.

Having said that, three things are now clear *in retrospect*. The first is that despite the fact that the auction had worked so well for so long, we must be more rigorous in our review of the bids when received. Steps already have been taken to move in that direction. Second, programs currently under way to provide a higher degree of automation in the auction process should be accelerated to the extent possible—keeping in mind that even a fully automated auction system brings with it its own risks. Third, some further changes in the auction rules may be needed.

Symptoms of Other Possible Problems

Within the context of the Salomon affair the great bulk of attention has, understandably, focused on the 35 percent rule and the firm's systematic violation of that rule. There is, however, another aspect of this situation that may warrant careful consideration. For example, operating wholly within the spirit and the letter of the auction rules, it is possible for a single dealer firm and one or two of its clients to win a very large share of any auction. If, in those circumstances, there are large short positions in the market, it is likely that one or both of the following will occur: First, the price of the securities in question will rise relative to close substitute securities, or, second, the financing cost of the securities in the repurchase agreement (RP) market will drop, thereby providing the owners of those securities with a very favorable cost of carry. When this latter condition occurs, the particular security is said to be "on special" in the RP market.

Either or both of these phenomena occur with some regularity in the market. Moreover, these phenomena tend to be self-correcting because the relative rise in the price of the specific security in question should provide clear incentives for the holders of such securities to sell, reap the arbitrage profit, and in the process add to the supply of the security in the market as a whole.

Over the past couple of years, however, the frequency with which particular issues are "on special" in the RP market has increased. It is also true that the emergence in the market of a handful of very large "hedge funds" that acquire large amounts of securities *and* may finance those positions through primary dealers may be contributing to this phenomenon. This development need not be a worry unless one were to conclude that highly concentrated holdings *and* financings of positions in a single issue create a condition in which the dangers of market manipulation are unacceptably large. At this point, I do not have a view on this question, but I do think that it is one of the issues we must look at over the period ahead.

Financial Scandals in Perspective

The events surrounding the Salomon episode are shocking, but what makes them even more worrisome in terms of public confidence in financial markets and institutions is that they come on the heels of several other cases involving highly questionable, if not outright illegal, activities. Moreover, while we are naturally sensitive to these problems in this country, the phenomenon is global in nature. That, of course, raises the very important question of whether the incidence and nature of these unhappy events are worse than they have been in the past or whether it just seems that way. For example, there surely are some economic historians who might suggest that these problems are not all that unusual after a long boom, especially in the financial sector. However, others might suggest that the problems are different in nature and frequency, even allowing for the cyclical factor and that the cause lies with "deregulation." That, however, is a little hard to accept, in part, because we have seen at least some of these problems in segments of markets, or in institutions or even in countries where deregulation has not been a particularly important factor in influencing behavior.

Perhaps we will not fully understand what is happening, why it is happening, and whether it is truly out of line with historical experience until we are able to look back on these developments with the benefit of hindsight. On the other hand, confidence in our financial markets and institutions is simply too important to push these questions aside and leave them to the historians.

Having said that, I do not want to leave the impression that I have anything even resembling an answer to these questions at this time. But, there are two things that keep coming back to my mind as I ponder this situation. One is that "high-tech" financial practices are a two-edged sword. To be sure, this technology is doing many wonderful things for us all, but it also creates nightmares for control systems, for top managers, and, yes, for regulators. Indeed, the combination of high technology and financial innovation may even help to create the impression among some practitioners that sheer complexity makes it too easy and too inviting to cut corners and to play close to the edge. Finally, and more important, high technology and financial innovation are probably a major reason why profit margins are so thin, with the resulting need to push that much harder to earn that extra dollar of profit. Even if all of that is correct, however, the problem remains since we cannot and certainly should not seek to hold back technology and innovation. That being the case, the burdens on managers and regulators loom even larger. I might add that the burdens on legislators are also great in these circumstances. For example, some might look at the Salomon episode as a reason to further delay much needed progressive banking legislation. That, in my view, would be a mistake that I hope we can avoid.

The second thing that keeps haunting me when I ponder these issues is bound to be highly controversial. It is compensation practices in the financial sector. Maybe I am too old-fashioned, but I cannot see the merit of compensation practices that yield millions of dollars per year, for example, for individual securities or foreign exchange traders. Maybe it is asking too much, but somewhere I would like to think that there must be a chief executive officer or a board of directors that will have the courage and the conviction to begin the process of reversing these excesses. I cannot help but think that once that process gets started, others would quickly follow. In saying that, I am under no illusions that more conservative compensation practices will solve all or even many of these problems. On the other hand, human nature being what it is, compensation practices that hold out the potential for millions of dollars of annual income seem to me to entail the clear danger that reasonable standards of prudence and ethics can, all too easily, be cast aside for the sake of writing that next ticket.

I thank you, for your patience in allowing me to drift so far from the direct subject matter of this hearing, but I do think that as we search for remedies to the problems immediately at hand, we should also keep an eye on the larger picture. □

Statement by J. Virgil Mattingly, Jr., General Counsel, and William Taylor, Staff Director, Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, and E. Gerald Corrigan, President, Federal Reserve Bank of New York, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1991

We are pleased to appear before the committee to describe the Federal Reserve's role in the supervision of the Bank of Credit and Commerce International (BCCI) and the Federal Reserve's investigation of BCCI's secret acquisition of the shares of several U.S. banking organizations.

This testimony will focus first on the operations of BCCI around the world, particularly BCCI's use of a fragmented, unsupervised structure operating in foreign jurisdictions with minimal supervision and strong bank secrecy laws; second, on the Federal Reserve's efforts to deny BCCI entry into this country; third, on the Federal Reserve's continuing investigation, which has detected and produced hard evidence of BCCI's secret acquisition of the stock of U.S. banks; and finally on the very valuable lessons learned from the Federal Reserve's experience with BCCI.

In considering these matters, we believe that five major points should be stressed:

First, the Federal Reserve has never approved any presence by BCCI in this country, and for that reason BCCI has never been authorized to take deposits from U.S. citizens through an insured bank. Our investigation indicates that BCCI was aware that the Federal Reserve presented a serious obstacle to acquisition of banks in this country—a fact that may well explain BCCI's campaign to acquire illegally and surreptitiously the shares of U.S. banking organizations through a complex web of nominees and sham loan arrangements.

Second, in 1987 and 1988, the Federal Reserve detected money laundering and operational problems at the state-licensed agencies that BCCI established in this country. Through the action of the Federal Reserve and state regulators, BCCI's U.S. agencies were eliminated or substantially wound down over the next three years. By the time of BCCI's seizure on July 5, 1991, BCCI's U.S. operations had shrunk from about $1 billion to $250 million, and BCCI's two remaining U.S. agencies had less than $25 million in liabilities to third parties. Thus, at the time of BCCI's closing, the vast majority of funds at its two remaining U.S. agencies were its own. This situation sets the United States apart from numerous other countries in which local depositors have lost their funds, or access to their funds, as a result of the seizure of BCCI.

Third, the Federal Reserve did act to prevent an illegal BCCI presence in this country when Middle Eastern investors applied in 1978 and 1980 to acquire Financial General Bankshares, now renamed First American Bankshares. In considering the application in 1980, the Board sought to make certain that BCCI did not have a stake in the holding company formed to make the acquisition, Credit and Commerce American Holdings, N.V. (CCAH), and was not funding the acquisition.

Although the Federal Reserve did not have at that time any evidence of fraud or illegality in BCCI's overseas banking operations, the Federal Reserve nevertheless was concerned by BCCI's unregulated character and rapid growth. Concerned also because BCCI was acting as adviser to the investors, the Federal Reserve sought to ensure that BCCI would not gain control of First American. The Federal Reserve received explicit commitments from BCCI, the investors, and their representatives that the acquisition of First American was being made with the investors' own funds and that BCCI would not acquire any CCAH shares or finance the investors. The Federal Reserve did not accept these representations without question but made substantial efforts to verify what it was being told.

The Federal Reserve requested and received from the investors financial statements and other documentation confirming the various representations. The numerous materials submitted by the banks and accounting firms of the principal shareholders indicated that the investors were persons of substantial wealth who were fully able to make the investment by using their own funds and without borrowing from BCCI or anyone else. Even today, it is undisputed that some of the principal investors are persons of great wealth. Further, the Federal Reserve conducted background investigations of the investors: The Departments of State and Commerce stated that the investors were persons of substance and, along with the Central Intelligence Agency, reported no adverse information on the investors. Finally, the Federal Reserve took the unusual step of holding a hearing on the application at which the largest investor, three other investors, and the investors' representatives appeared and further denied any BCCI involvement in the investment or its financing.

Throughout this process, there was no evidence that the shareholders and their representatives were being untruthful in their written and oral statements that BCCI was not involved in the financing of the acquisition. Under the Bank Holding Company Act with its due process requirements, the Federal Reserve is not authorized to act on suspicion or rumor but must have evidence to support its decision. The Federal Reserve had no grounds at the time to deny and, operating under this statutory standard, approved the application. The necessary state authorities approved as well.

Fourth, since allegations of an illegal BCCI–CCAH link reached the Federal Reserve in late 1988 from the Internal Revenue Service (IRS) and another source, the Federal Reserve has continuously investigated the relationship between the two, detecting and producing, in our view, substantial evidence of violations by BCCI and others of the Bank Holding Company Act and other statutes.

In January 1989, after receipt of these allegations, the Federal Reserve conducted a special review of CCAH and its relationship to BCCI, examining the financial relationship between BCCI and the First American banks. The Federal Reserve continued to make inquiries into any possible link through 1989 and 1990. BCCI and CCAH representatives consistently denied that such a link existed, and the records available to the Federal Reserve at that time provided no evidence to refute their assertions.

The Federal Reserve asked regulators in Luxembourg and the Cayman Islands, where the principal BCCI bank subsidiaries were chartered, to verify the reports of a BCCI–CCAH link. The Luxembourg regulator in 1990 advised that it would investigate the matter but was having difficulty obtaining the necessary information. Cayman regulators stated that they had no relevant records on the matter.

The Federal Reserve also sought information from law enforcement agencies conducting probes of BCCI. In June 1989, while the U.S. Attorney's Office in Tampa was continuing its investigation of BCCI, a Federal Reserve official met with attorneys from that office, offered the assistance of examiners, and indicated that the Federal Reserve wished to obtain information on the investigation when completed. On February 7, 1990, two days after BCCI was sentenced for money laundering, two experienced Federal Reserve counsel went to Tampa to determine from the U.S. Attorney's Office whether their investigation had unearthed any evidence that BCCI owned or controlled CCAH. The U.S. Attorney's Office referred the Federal Reserve counsel to IRS investigators, who indicated that a report of the findings of their investigation had been prepared. The IRS did not provide a copy of the report, or mention any tapes made during their investigation, because of considerations of grand jury secrecy and witness safety. The Federal Reserve investigators were told of the existence of an informant, whose credibility the IRS said they seriously doubted, and of another lead. In April 1990, the IRS provided the name of the informant and arranged for him to call the Federal Reserve. The Federal Reserve was unsuccessful in repeated attempts to contact the informant until 1991.

In further efforts to obtain information on the alleged control by BCCI of CCAH, the Federal Reserve, in the spring of 1990, pursued another avenue of the investigation. In June 1990, the Federal Reserve reached an information-sharing agreement with the New York County District Attorney's Office and subsequently obtained access pursuant to a New York Supreme Court order to certain of the materials presented to a state grand jury investigating BCCI. This agreement and the information sharing and ongoing collaboration of the Federal Reserve and the District Attorney's Office were to be of great benefit to both agencies in uncovering evidence of what Mr. Morgenthau, the New York County District Attorney, has characterized as the largest banking fraud in history.

In fall 1990, the Federal Reserve, acting on information provided to us by the New York County District Attorney, demanded and—after initial refusals by BCCI's auditors, Price Waterhouse—was able to review at BCCI's London offices a report confirming the existence of more than $1 billion in nonperforming loans by BCCI secured by CCAH shares. Based on the evidence gathered by Federal Reserve investigators, the Board, on January 4, 1991, formalized and broadened the investigation, authorizing use of discovery and subpoena powers. Later that month, the Federal Reserve initiated examinations of the entire First American banking organization, focused on determining whether there were any financial dealings with BCCI.

The Federal Reserve's investigation has been intense and thorough, encompassing the seizure and review of tens of thousands of pages of documents both here and abroad, weeks of depositions, interviews of more than fifty persons in the United States and overseas, and cooperation with federal, state, and foreign law enforcement agencies. The evidence unearthed by our staff establishes the nature and extent of numerous violations of law, the methods by which the violations were engineered and implemented, and the nature and whereabouts of the evidence establishing the violations.

The quality and quantity of evidence uncovered by the Federal Reserve's investigation are evident from our 110-page July 29 Notice of Charges and the boxes of relevant documents turned over to the committee under its subpoena. In that notice and one other notice issued on July 12 relating to Independence Bank, the Federal Reserve has assessed a civil money penalty of $200 million against BCCI and initiated actions to bar nine individuals associated with BCCI from involvement with U.S. banks. At the request of the U.S. Attorney for the District of Columbia, the Board has deferred temporarily the assessment of substantial civil money penalties against the individuals involved pending completion of the U.S. Attorney's criminal inquiry. Finally, after discussions with the Federal Reserve, First American and its parent holding companies have recently changed management to further distance the First American banks from the taint of any association with BCCI.

Fifth, in assessing the BCCI matter, it is important to keep in mind that this matter is essentially a case of systematic and deliberate criminal fraud. Although our bank examination powers allowed the Federal Reserve to detect poor operating controls as well as evidence of money laundering at BCCI's U.S. agencies, more extensive and intense efforts were required to uncover BCCI's ownership of stock in U.S. banking organizations. BCCI took maximum advantage of an unsupervised cooperate structure to conceal and warehouse in bank secrecy jurisdictions billions of dollars in fraudulent transactions.

The Federal Reserve does not have the power to coerce truthful testimony from uncooperative criminal conspirators. Nor can the Federal Reserve offer immunity to those willing to come forward. Using the authorities available to it, the Federal Reserve continued to investigate the matter both here and abroad, and we now know that BCCI's top management was seriously concerned with the supervisory initiatives of the Federal Reserve. Eventually our efforts paid off, and we uncovered the truth. Once the Federal Reserve obtained credible evidence, we acted quickly to marshal the facts and move against BCCI and others involved in the alleged illegal activity. We have also taken care in accordance with the due process requirements under which we operate to bring actions only when we have sufficient evidence to support them, thereby avoiding any misstep at this stage that might allow BCCI and others to escape the consequences of their actions.

The Federal Reserve recognizes that one of the best ways to deter the kind of fraud that occurred at BCCI is through criminal punishment that sends a loud and clear message to would-be offenders. Throughout the Federal Reserve's investigation of BCCI, we have made criminal referrals whenever we discovered illegal activity, and have provided to criminal investigators the evidence and investigative leads that we have gathered, as well as our hard-won knowledge and expertise regarding the BCCI case. We believe that this will be vital to any prosecution of BCCI and others involved in BCCI's illegal acquisitions of U.S. banks. We are greatly encouraged that the New York County District Attorney's Office has secured indictments against BCCI and two of its senior officers and that the Tampa U.S. Attorney's Office has indicted senior BCCI officers for racketeering involving money laundering. We are continuing to work with the U.S. Department of Justice and the New York County District Attorney, who are actively pursuing the BCCI fraud.

Bank of Credit and Commerce International

Structure of BCCI

BCCI was founded in 1972 and until recently operated principally under the leadership and management of individuals from Pakistan. Initial equity financing of BCCI was provided by Middle Eastern investors and Bank of America. Bank of America sold its ownership interest in 1980. In April 1990, to bolster BCCI's sagging financial position, the ruling family and the government of Abu Dhabi provided additional capital that increased their ownership interest in BCCI shares from about 30 percent to 77 percent.

BCCI's operations eventually encompassed subsidiaries, branches, and affiliates in sixty-nine countries, with the largest concentration of local deposits in the United Kingdom. BCCI's total assets of about $20 billion ranked it as about the 200th largest bank in the world, roughly the size of a major regional bank in this country.

At the apex of the BCCI organization was the parent holding company, BCCI Holdings (Luxembourg) S.A., which was chartered and headquartered in Luxembourg. Below the parent were two principal banking subsidiaries: Bank of Credit and Commerce International S.A., and Bank of Credit and Commerce International (Overseas) Limited, which were chartered in Luxembourg and the Cayman Islands respectively. Although BCCI was headquartered in Luxembourg, Luxembourg authorities did not supervise BCCI on a consolidated basis, thereby allowing BCCI to escape normal banking oversight.

Under Luxembourg law, holding companies are not subject to supervision. Thus, BCCI's holding company was able to establish an elaborate and extensive network of subsidiaries and affiliates to carry out its activities. Our investigation indicates that when BCCI encountered a legal impediment, it would often create another affiliate or use one of its myriad existing or affiliated entities to circumvent it. In one instance, BCCI apparently created an affiliate whose sole purpose was to serve as BCCI's alter ego in warehousing fraudulent transactions in which BCCI could not safely engage directly. BCCI was able to do this in substantial part because there was no consolidated home country supervision of its banking activities.

In this regard, it is instructive that during the late 1960s, when U.S. banks began to form holding companies to engage in activities that the bank was not permitted to conduct directly, the Congress responded with amendments to the Bank Holding Company Act that provided for increased supervision, regulation, and examination of U.S. bank holding companies to ensure that the companies were financially responsible and that their activities were consistent with federal banking laws. No such system was in place with respect to BCCI's holding company.

Supervision of BCCI's Operations in the United States

As noted, BCCI has never been permitted to operate a branch in the United States or to accept deposits from the general public; nor was it authorized to operate or control an insured bank. BCCI at one time maintained state-licensed agencies in New York, San Francisco, Los Angeles, Miami, Tampa, and Boca Raton, and representative offices in other U.S. cities, including Washington, D.C. and Houston, Texas. Representative offices can be established simply by obtaining the consent of the state and registering with the Treasury Department, but such offices are severely limited in their activities and may not accept deposits. Agencies may hold credit balances from customers associated with international banking transactions but may not accept deposits from U.S. residents.

As we will discuss later, the unrestricted ability of foreign banks to establish branches, agencies, and representative offices without federal review has prompted legislative proposals by the Federal Reserve that would require federal approval of, and establish prudential standards for, foreign bank offices in the United States.

Under current law governing foreign bank operations in the United States, established in the International Banking Act of 1978, the states are the primary regulators of the branches and agencies they license, and the Federal Reserve is directed under the Bank Holding Company Act to rely on state reports of examination insofar as possible, just as the Federal Reserve is directed to rely on reports by the Comptroller of the Currency for national banks and the Federal Deposit Insurance Corporation (FDIC) for nonmember banks. BCCI's agencies in the United States were licensed and supervised by state authorities, and therefore primary supervision was in the respective states. As the residual supervisor of U.S. branches and agencies of foreign banks, the Federal Reserve participated in some state examinations and conducted some examinations of its own. During one of these examinations of the Miami agency of BCCI, in April 1987, the Federal Reserve identified money laundering activities, and a criminal referral was filed with the Internal Revenue Service, the Federal Bureau of Investigation, and the U.S. Attorney in Miami.

On October 8–9, 1988, as a result of an undercover operation by Customs and IRS dating back to 1986 (Operation C-Chase), BCCI and several of its U.S. employees were indicted for money laundering through BCCI's Tampa office. The IRS had advised Federal Reserve staff in September 1988 of the projected seizure, and the Federal Reserve had, in coordination with the IRS, scheduled an examination to commence after the seizure so as not to compromise the IRS operation. On October 11, the Federal Reserve, with cooperation from state banking authorities, commenced the coordinated examination of all of BCCI's U.S. agencies through the New York, Atlanta, and San Francisco Reserve Banks. The examinations of the New York and Boca Raton offices revealed other money laundering activities, and the Federal Reserve made additional criminal referrals in October and November 1988.

The examinations also revealed that internal controls and lending practices of the BCCI agencies were quite poor and that remedial action was required. The Federal Reserve issued a cease and desist order against BCCI on June 12, 1989, designed to strengthen the U.S. banking operations of BCCI and enforce compliance with currency reporting requirements. This order was issued by the Federal Reserve notwithstanding concerns expressed by foreign and state bank regulators over the potential effect of the action.

Moreover, the U.S. Attorney in Tampa incorporated this cease and desist order into the plea agreement reached with BCCI regarding its illegal money laundering activities. Thus, compliance with the Federal Reserve's order was made a condition of BCCI's probation. This arrangement was a unique one, which enhanced the Federal Reserve's ability to enforce its corrective cease and desist order.

The indictment for money laundering in the United States further weakened BCCI's already fragile reputation in the world financial community. In the period after the indictment, Federal Reserve staff was advised that BCCI was experiencing some outflow of deposits in London and was encountering difficulty in finding counterparties for its banking transactions. In these circumstances and in the face of large losses being discovered in the bank in early 1990, the government and ruling family of Abu Dhabi provided new capital of nearly $400 million to BCCI, increasing their ownership of BCCI from 30 percent to about 77 percent.

BCCI's problems, however, continued to worsen significantly. On October 3, 1990, Price Waterhouse delivered a secret report to BCCI's board of directors that identified massive additional problem loans. This report gave rise to an intensification of discussions among BCCI management, BCCI's principal shareholder, and European banking authorities concerning possible approaches to a broad-based restructuring of the bank. These discussions continued into 1991.

On March 4, 1991, the Board issued a second cease and desist order against BCCI, in part, to address concerns about the funding of its U.S. agencies. The order required that BCCI have sufficient liquid assets to cover liabilities in its U.S. agencies. A corollary action by the Federal Reserve Bank of Richmond required that First American terminate any residual business with BCCI.[1]

Because of actions taken by the Federal Reserve and state supervisory authorities, BCCI's U.S. operations had been substantially curtailed by the time of its seizure. Four of the six agencies were closed by January 1991, and the representative offices were closed by August 1990. Under the Federal Reserve's March 4 order, operations at BCCI's two remaining agencies—in Los Angeles and New York—were scaled back, and the company was also ordered to terminate its activities in the United States by year-end 1991.

The Seizure of BCCI on July 5

By early 1991, information received by the Bank of England about BCCI's financial condition and integrity prompted the Bank of England to commission Price Waterhouse to undertake a special audit under the provisions of British banking law. The resulting so-called section 41 report was made available to the Bank of England on June 22, 1991. The Bank of England's filings in British courts indicate that the report disclosed evidence of a complex and massive fraud at BCCI, including substantial loan and treasury account losses, misappropriation of funds, unrecorded deposits, the creation and manipulation of fictitious accounts to conceal bank losses, and concealment from regulatory authorities of BCCI's mismanagement and true financial position.

Based on this report, foreign regulatory authorities in England, Luxembourg, and elsewhere decided to seize BCCI. The Federal Reserve was informed of this decision and, in turn, briefed other U.S. regulatory agencies. The Federal Reserve dispatched senior officials to London to participate in a special unit established at the Bank of England to coordinate global regulatory actions and to provide a central point of supervisory information and advice. A parallel unit, focusing particularly on payment and set-

1. The divestiture provisions and other aspects of this cease and desist order are discussed in the next section.

tlement issues, as well as activities in U.S. banking markets more generally, was established at the Board and at the Federal Reserve Bank of New York. The primary concern of the Federal Reserve was to take all reasonable steps to ensure that the seizure of the BCCI banks did not precipitate serious disruptions in U.S. banking markets or in dollar-based payment and clearing systems here or abroad.

The main seizure of BCCI occurred on July 5, 1991, with the Federal Reserve coordinating information necessary for the closing of BCCI's remaining U.S. agencies by state regulators in California and New York. As of July 6, governments of eighteen countries had closed or restricted the activities of BCCI operations in their jurisdictions. By July 29, 1991, a total of forty-four countries had closed BCCI offices in their respective jurisdictions.

Because of the international cooperative supervisory effort and earlier actions by the Federal Reserve and state authorities to scale back BCCI's limited operations in the United States, the seizure of BCCI caused virtually no adverse effects on U.S. markets or institutions. As a result of earlier regulatory action, BCCI was funding its business in the United States from other non-U.S. BCCI offices and *not* from U.S. sources at the time BCCI's U.S. agencies were closed by the states of California and New York. As of July 30, about $17 million of the $252 million in liabilities on the books of the U.S. agencies of BCCI was owed to creditors not affiliated with BCCI. Because of the care and precision with which the seizure of BCCI and its affiliates was coordinated among U.S. and foreign authorities, there were, in fact, no problems of any consequence encountered in the operation of the payments system as a result of the seizure.

We will now proceed to discuss how BCCI, apparently frustrated in its efforts to establish a substantial legal presence in this country, acquired illegally the stock of U.S. banking organizations.

The First American Banks and Other U.S. Institutions

Financial General—the predecessor to First American Bankshares—was one of a handful of bank holding companies that were grandfathered under the Bank Holding Company Act to retain ownership of banks acquired in more than one state. In 1966, Financial General owned banks in Virginia, Maryland, Georgia, Tennessee, New York, and the District of Columbia.

Initial Stock Purchases in 1977–78

On April 29, 1977, an investor group led by J. William Middendorf II acquired control of Financial General. Within a few months, dissatisfaction with his leadership developed among some of the investors, who then went in search of a buyer for their shares. They discussed a purchase of Financial General's shares with the chief executive officer of BCCI, Agha Hasan Abedi.

In late 1977 and early 1978, BCCI, allegedly acting for four of its clients, began to purchase shares of Financial General. These investors eventually acquired approximately 20 percent of its voting shares, but none purchased more than 5 percent of the shares. The investors were two prominent citizens of Saudi Arabia and Kuwait and two sons of the ruler of Abu Dhabi. In various official filings, BCCI stated that it acted only as investment adviser to these individuals in connection with their purchases of Financial General shares and did not itself own, control, or vote any of the shares.

When the purchases were made public, the Securities and Exchange Commission filed a complaint alleging that each of the four Middle Eastern investors, BCCI, Mr. Abedi, and certain U.S. shareholders of Financial General had acquired, as a group, control of more than 5 percent of Financial General's shares in violation of the Williams Act. The investors denied these allegations. In March 1978, the investors, without admitting fault, entered into a consent decree with the SEC whereby the investors agreed to proceed with a tender offer for all of Financial General's shares.

Three of the original four investors proceeded with the tender offer, joined by eleven additional individual and corporate investors from the Middle East who were also advised by BCCI. The investors formed CCAH, a Netherlands Antilles corporation, to make the tender offer.[2]

CCAH's Application to Acquire Financial General: 1978–81

CCAH could not proceed to acquire Financial General's shares without Board approval under the Bank Holding Company Act. On October 19, 1978, CCAH filed an application seeking such approval. The application was opposed by Financial General and its Maryland subsidiary bank. On February 16, 1979, the Board dismissed the application, concluding that the acquisition would be unlawful under a Maryland law that forbade any hostile acquisition of a Maryland bank.

The applicants challenged the Board's decision, but before the matter was adjudicated, the investors and Financial General's management negotiated an agreement for the acquisition of Financial General by CCAH. In November 1980, CCAH again sought Board approval to acquire Financial General.

In reviewing such an application, the Board is required by statute to consider the competitive effects of the proposal, the financial and managerial resources and future prospects of the companies concerned, and the convenience and needs of the relevant communities. The statutory factors do not distinguish between foreign and domestic acquirers, and thus these factors were applied to the CCAH application as they would be to a domestic holding company application. Under the Bank Holding Company Act, the Board does not have discretion to deny applications as it chooses. Its decision must be made on the basis of the statutory factors and must be supported by evidence.

The application specified that the Middle Eastern investors were to be passive and would take no part in the management or operation of Financial General. The management of Financial General was vested in a board of directors that would include former Senator Stuart Symington, former Secretary of Defense Clark M. Clifford, and retired Lieutenant General Elwood R. Quesada. Investors controlling more than 50 percent of CCAH's shares transferred the power to vote their shares to Senator Symington for a period of five years. An experienced banker was to be selected as president and chief executive officer of Financial General, and this person was identified before the Board acted on the application.

As a result of the SEC case, the Board focused great attention on the relationship between CCAH and BCCI, specifically whether BCCI had a stake in the planned acquisition, either directly or indirectly. The Board's concern was sufficiently serious that the Board took the unusual step of convening a hearing on this question and others raised by the application, requesting that the principal shareholders of CCAH appear and testify at the hearing.

In response to the Board's questions, CCAH and its principal shareholders stated that BCCI would not be involved in the acquisition other than as investment adviser to the CCAH investors and, in particular, would not fund the acquisition. At the hearing and in written submissions, CCAH shareholders and their counsel, Clark Clifford and his partner, Robert A. Altman, of the law firm of Clifford & Warnke, made the following statements:

- The application filed by CCAH stated: "BCCI owns no shares of FGB, CCAH or CCAI, either directly or indirectly, nor will it if the application is approved. Neither is it a lender, nor will it be, with respect to the acquisition by any of the investors of either FGB, CCAI or CCAH shares."
- In a letter submitted to the Board in response to questions about the relationship between BCCI and CCAH, counsel for CCAH stated: "With regard to the stockholders of CCAH, all holdings constitute personal investments. None are held as an unidentified agent for another individual or organization."
- Kamal Adham, the largest shareholder of CCAH, stated at the Board's hearing, "There is . . . no understanding or arrangement regarding any future relationship or proposed transactions

2. There were two other companies in the ownership chain: Credit and Commerce American Investment, B.V. (CCAI), a Netherlands company and a wholly owned subsidiary of CCAH; and Financial General Bankshares (FGB) Holding Corporation, a District of Columbia corporation and wholly owned subsidiary of CCAI. FGB Holding Corporation was subsequently renamed First American Corporation and was the entity that acquired Financial General Bankshares.

between Financial General and BCCI." He further stated, "[I]t appears that there is doubt that there is somebody or BCCI is behind all of this deal. I would like to assure you that each one on his own rights will not accept in any way to be a cover for somebody else."

- CCAH counsel, when asked at the hearing about the relationship among CCAH and CCAI and BCCI, stated, "[T]here is no connection between those entities and BCCI in terms of ownership or other relationship."
- Asked about the function of BCCI in the proposal, CCAH counsel stated, "None. There is no function of any kind on the part of BCCI." He added, "I know of no present relationship. I know of no planned future relationship that exists . . . ."

The same representations were made to the other regulators involved in the application. The Comptroller of the Currency was advised by the investors' counsel that "none of the investors are borrowing to finance their respective equity contributions" and that "BCCI will have no involvement with the management and other affairs of Financial General nor will BCCI be involved in the financing arrangements, if any are required, regarding this proposal."

The Board did not rely solely on these representations that the investors were acting for themselves. The Board requested detailed information from the investors regarding their financial resources and affiliations, including financial statements prepared by accounting firms, some of which were affiliated with the largest accounting firms in the world. Financial statements were submitted, and, in the case of the largest shareholders, a statement about the source of funds to be used to make the acquisition was required. The Board also obtained letters from the largest investor's banks confirming balances and containing references. All these materials indicated that the investors were persons of considerable means and that the purchases were to be made from their own personal resources.

To further verify that the representations being made were accurate, the Board conducted background checks on the shareholders, soliciting information from the Central Intelligence Agency, the Departments of State and Commerce, and a foreign bank supervisor. The Board also obtained information from the SEC regarding the original acquisition and two CCAH shareholders.

None of the agencies performing background checks—the CIA and State and Commerce Departments—reported any adverse information on the investors, and the Departments of State and Commerce reported that the investors were persons of substance. Neither the Board nor any other regulator received any evidence from other sources that the representations made to them were false. The Comptroller's Office wrote to the Board, stating that its earlier concerns about the application had been addressed by the responses of the investors and their representatives. The Maryland Banking Board approved the acquisition of the Maryland bank on June 25, 1981.

On August 25, 1981, after having considered the hearing record, reports from staff members, and the views of federal and state agencies, the Board approved CCAH's acquisition of Financial General. Consummation of the acquisition was delayed, however, pending approval of the New York State Banking Department of the acquisition of Financial General's New York banks. The Department initially disapproved the application, principally because of an alleged lack of reciprocity for American banks in the investors' home countries. However, on March 2, 1982, the Department granted its approval after CCAH's commitment to divest one of the New York banks. In a subsequent letter, the Department stated that it had made a thorough investigation, that "all the information we received indicated that the investors were prestigious and reputable people," and that "the investors' character and financial responsibility warranted approval of the application." The Department further noted that "this application received more scrutiny from more regulatory agencies than any other application in recent memory."

The acquisition was consummated on April 19, 1982. Financial General was renamed First American in August 1982. [3] Mr. Clifford became chairman of the board of First American, and

3. During the course of the takeover, prior Financial General management had renamed most of the subsidiary banks First American banks.

Mr. Altman was named president of First American Corporation and secretary and a managing director of CCAH.

The Period 1982–87

In the years immediately after the acquisition, the Board received no indications to suggest that CCAH and First American were functioning other than in accordance with the statements made to the Board and the other regulators. The investors adhered to their commitment to inject $12 million in new capital into First American, and no dividends were paid to the investors in keeping with another commitment. On several occasions, the investors made very substantial additional capital injections, in the hundreds of millions of dollars, to support First American's activities. Both federal and state examinations of First American and its subsidiary banks by the Comptroller of the Currency, the FDIC, and the states of Maryland, Virginia, Tennessee, and New York, and of the U.S. offices of BCCI conducted during this period detected no evidence that BCCI and CCAH were improperly linked. The fact that substantial fresh capital was supplied at various times and that the investors did not take dividends from the CCAH was consistent with the representations made by the investors at the time of the acquisition that this was intended to be a personal investment.

The Money Laundering Period: 1987–89

As discussed previously, the Federal Reserve through its examination function detected evidence of money laundering in 1987, and appropriate criminal referrals were made. The coordinated examinations conducted after the October 1988 indictment stemming from Operation C-Chase led to further criminal referrals. It is now apparent that the publicity surrounding BCCI's illegal money laundering activities in the United States had the understandable effect of beginning to shake loose insights into other aspects of BCCI's activities and operations in the United States and around the world that only recently have been more fully understood by the international community of bank supervisory and law enforcement officials. Insofar as the Federal Reserve was concerned, the first indications of more widespread wrongdoing in the United States began to surface in the period between late December 1988 and the summer of 1989.

Federal Reserve Investigation of the BCCI–CCAH Link: 1989–Present

The information described in this section is based on recent interviews with several persons involved in this matter, and we are continuing in our efforts to reconstruct the events of two and one-half to three years ago. Based on this information, we know that, in early September 1988, an IRS special agent investigating BCCI contacted a supervisory official of the Board for technical assistance in connection with the proposed seizure of BCCI's Florida offices and indictment for money laundering. He stated that the IRS was investigating BCCI's money laundering in Florida. The agent explained that this was a sensitive undercover operation and that any leaks could jeopardize lives and compromise the investigation. The agent has recently stated to us that, for these reasons, he could not provide to the Federal Reserve staff member a lot of information or detail regarding the investigation.

The Board staff member had several follow-up conversations with the IRS agent in late 1988 and early 1989. Probably during a telephone call in December 1988, the agent mentioned an allegation that he had received during the undercover operation from a "banker" that BCCI owned First American. The Federal Reserve staff member's calendar reflects a December 27, 1988, call from the IRS agent and that First American and the National Bank of Georgia were mentioned. The staff member recalls that, at some point during their telephone conversations, the IRS agent mentioned the allegation. According to the agent, the Federal Reserve staff member requested the evidence but was not given the name of the person or other details because the information was not then public. As noted above, during late 1988, the agent and the staff member also discussed and agreed on the timing of the Federal Reserve's coordinated examinations of the BCCI agencies to occur after the indictment.

The agent states that, on December 27, 1988, he telephoned the Federal Reserve staff member, and during the conversation, which was brief, asked what kind of information the Federal Reserve would need to order BCCI from the country. The staff member had told the agent earlier that BCCI was an issue for the Federal Reserve and that, if the evidence were available, the Federal Reserve would order BCCI out of the country. The agent states that he asked, hypothetically speaking, whether a case could be made if he could provide the Federal Reserve with the names of five or six former BCCI officials who would testify that at an annual meeting of BCCI, a high level official stated that BCCI owned and controlled First American. The Federal Reserve staff member is reported to have said that such statements would not be enough—that documentary evidence would be needed. The Federal Reserve staff member recalls that the agent at some point in their discussions mentioned a hypothetical but does not recall that the agent's hypothetical included mention of five or six witnesses. The IRS did not provide the name of any witness until 1990 (as discussed later).

The IRS agent indicates that on February 2, 1989, he had to travel to Washington for other purposes and decided to meet with the Federal Reserve staff member principally for the purpose of obtaining Federal Reserve information on BCCI and our investigation of the original CCAH application and to secure the Federal Reserve staff member's input into the agent's thinking on the investigation. According to the agent, he was interested in historical information on BCCI and any relationships between BCCI, the National Bank of Georgia, and First American because of earlier information he had obtained during the undercover operation about such relationships. There were several follow-up calls by the IRS to arrange access to Federal Reserve information and subpoenas for examination material. Also, in late December 1988, a staff member of the Federal Reserve Bank of Richmond received a press inquiry in which the reporter referred to an affidavit for a search warrant by an undercover agent stating that, during the undercover operation, a BCCI employee said that BCCI controlled the National Bank of Georgia and other banks.

A Federal Reserve investigator has subsequently interviewed this witness, who was the source of the allegation mentioned by the IRS agent to the Federal Reserve staff member in December 1988 and who was one of the BCCI employees indicted in October 1988 and convicted in May 1990. The witness stated, consistent with a transcript of his conversation with the undercover agent in September 1988, that he has no direct evidence that BCCI owns First American and that his statement was based on rumor within the BCCI organization. This witness produced no evidence to support the Federal Reserve's case.

In spring 1989, the IRS talked to staff members of the Federal Reserve Bank of Richmond regarding information on CCAH and First American, and subsequently the Tampa U.S. Attorney's Office subpoenaed all relevant records, including Federal Reserve examination reports and internal documents. During spring and summer 1989, Federal Reserve Bank of Richmond personnel met with and provided information to the IRS regarding CCAH. The San Francisco and Atlanta Reserve Banks provided information as well.

Richmond Reserve Bank Review: January 1989

Because of these allegations raised by the IRS and because CCAH at that time had before the Federal Reserve an application to acquire another subsidiary bank, the Federal Reserve Bank of Richmond undertook in January 1989 a fresh review of any relationships between BCCI and CCAH. During the review, senior management of CCAH and First American stated that the relationship between CCAH and BCCI was no different than that represented to the Board in 1981 at the time of the original application and that BCCI did not exercise a controlling influence over CCAH. The examiner at the Federal Reserve Bank of Richmond requested that Mr. Altman write to the president of each First American bank subsidiary, requiring a report on the relationship of the bank to BCCI and on any transactions conducted with BCCI by the bank. This survey of presidents disclosed no unusual relationships or transactions between the banks and BCCI. New York State authorities had also recently completed an examination of the New

York bank subsidiary, during which the examiners focused closely on BCCI correspondent accounts and transactions and detected no irregularities. Moreover, again according to the IRS agent, the Federal Reserve staff member called him sometime in early 1989 requesting any information that the IRS had on BCCI links with First American because of a then-pending application. The agent said that he told the staff member he did not have anything, believing that the request related only to documentary evidence.

In its report on February 8, 1989, the Federal Reserve Bank of Richmond found no evidence of irregular or significant contacts between the First American banks and BCCI, or of failure by CCAH to adhere to the commitments it made to the Board in 1981. The Reserve Bank noted that the common ownership of CCAH and BCCI had increased. The Bank Holding Company Act does not prohibit common ownership of banks or nonbanks by individuals, as it does for companies.

Continuing Investigation

During 1989 and continuing into 1990, Federal Reserve efforts to pursue reports of a BCCI–First American link were often frustrated by our inability to obtain the documentary or corroborating evidence necessary to initiate actions against individuals or institutions that we now allege have violated laws and regulations. The Federal Reserve's investigation persisted into 1991, and it was the complex chain of information developed over this period that ultimately led to the needed evidence and to our criminal referrals and civil enforcement actions.

During this period, Federal Reserve personnel made inquiries of law enforcement authorities and foreign bank supervisors seeking information. As we noted in the introduction, on June 1, 1989, a Federal Reserve official met with the Tampa prosecutors and stated that the Federal Reserve would be interested in the results of their investigation and would send staff down when the investigation was completed. The official offered the assistance of Federal Reserve examiners. In summer 1989, during the course of a meeting on another matter, a senior official from the New York County District Attorney's Office informed a Federal Reserve official of certain unsubstantiated reports that BCCI owned CCAH through nominees. No concrete or specific information as to particulars or evidence was provided. On February 7, 1990, two experienced Federal Reserve counsel followed up these contacts by meeting with the U.S. Attorney's Office and IRS investigators who were investigating BCCI and, in June 1990, by arranging an information-sharing agreement with the New York County District Attorney, who was also investigating BCCI. We have described in the introduction the information on the BCCI–CCAH relationship that these agencies provided to the Federal Reserve during those contacts in 1990.

Also in fall 1989, Federal Reserve staff inquired of, and received informal advice from, a Luxembourg banking supervisor that BCCI had loans outstanding to certain CCAH shareholders. The supervisor did not know when the loans were booked and whether they were for the purchase of CCAH stock or for other business activities of the shareholders. Federal Reserve staff wrote to Mr. Altman on December 13, 1989, asking for information on any loans by BCCI or its affiliates to the original or subsequent investors in CCAH, either directly or indirectly and regardless of the purpose of the loan. Mr. Altman forwarded the letter to BCCI for response.

In February 1990, Mr. Altman responded with a letter stating that no pledge or security interest had ever been recorded on CCAH's share register by any lender. Mr. Altman did not mention the security interest BCCI had held in his and Mr. Clifford's shares from 1986 to March 1988. Mr. Altman also attached the response from the acting chief executive of BCCI, Mr. Naqvi, stating that BCCI had not financed the acquisition of Financial General in any respect and that none of the CCAH shareholders had personal loans from BCCI during the acquisition, secured by the CCAH shares. Mr. Adham, the principal shareholder of CCAH, also confirmed by letter in March 1990 that his CCAH acquisition was primarily from personal funds and was not financed by BCCI. To check the statements by Mr. Naqvi, Federal Reserve staff subsequently requested the assistance of the foreign bank supervisor that had originally provided information to the Board. The supervisor responded that he had encountered difficulties in obtaining the necessary information but would continue his investigation. An inquiry was also made of the Cayman supervisor, who reported that he had no relevant records.

During August and September 1990, Federal Reserve investigators continued to meet with investigators from the New York County District Attorney's Office and obtained access to grand jury materials. In October 1990, the New York County District Attorney's Office informed us that a confidential source had stated that a report prepared on October 3, 1990, by BCCI's outside auditors, Price Waterhouse, indicated that BCCI had made substantial loans to CCAH shareholders secured by CCAH shares. The District Attorney's Office did not have the report, and Federal Reserve staff immediately requested access to it from the U.S. General Manager of BCCI. After a delay occasioned by the refusal of the auditor to permit the report to be examined by the Federal Reserve, BCCI agreed that a member of the Federal Reserve's supervision staff could review the report at BCCI's London office. The review was conducted on December 10, 1990.

The auditor's report and a conversation on that date with the new chief executive officer of BCCI indicated that BCCI had more than $1 billion in loans outstanding, secured by CCAH stock, and that these loans were nonperforming. This confirmed that BCCI held CCAH shares as collateral for substantial loans to CCAH shareholders. Shortly thereafter, attorneys from a U.S. law firm representing BCCI and its Abu Dhabi shareholders contacted the Board's General Counsel to request a meeting. At a meeting on December 21, 1990, BCCI's counsel confirmed that a substantial amount of the stock of CCAH had been pledged to BCCI as collateral for hundreds of millions of dollars in loans to certain shareholders of CCAH. BCCI's counsel identified the borrowing shareholders and the amount of the loans. BCCI's counsel was advised of the seriousness of the matter under the Bank Holding Company Act, and was asked to provide all information regarding the loans and BCCI's arrangements with the borrowers.

Based on this information and the other information uncovered during the Federal Reserve's investigation during 1989 and 1990, the Board, on January 4, 1991, issued an order formalizing our ongoing investigation and authorizing the use of subpoena powers. The Federal Reserve's investigation has been wide ranging but directed chiefly into the circumstances of BCCI's acquisition of control of CCAH and whether false or misleading statements had been made to the Board during the application process in 1981 and subsequently. Thus far, the investigation has included taking weeks of depositions, interviewing more than fifty witnesses, and seizing and reviewing a very large number of documents, including all CCAH records in the United States and the Netherlands Antilles and BCCI loan and other records relating to CCAH located abroad. The investigative team spent a week in Abu Dhabi, reviewing BCCI's loan files on CCAH and conducting numerous interviews with BCCI officers.

The Federal Reserve's investigation has uncovered evidence of extensive and secret loan and nominee arrangements between BCCI and customers of BCCI designed to allow BCCI to acquire, in the name of these customers, the stock of the First American banking organization as well as other depository institutions in the United States. These arrangements in many cases involved sham loans to the BCCI customers, with side agreements that the customers would not be required to repay or service the loans and that BCCI could sell the shares and retain the profits. In return for their services, the customers received fees and indemnities. These nominee arrangements are described in detail in the Board's civil money penalty and prohibition actions of July 12 and 29, 1991.

Many of these CCAH loans were never serviced or repaid except through other loans from BCCI. From the evidence available, it appears that these arrangements, particularly in later years, enabled BCCI to generate hundreds of millions of dollars in fictitious assets to conceal massive losses in its trading and lending accounts.

Our investigation has also revealed more about how BCCI's ownership of CCAH stock was concealed from the Federal Reserve and other investigators. The shareholder register and other CCAH records in the United States and the Netherlands Antilles that were subject to Federal Reserve examination or review indicated that the individuals and companies listed in CCAH's filings with the Federal Reserve were, in fact, the owners of the shares of CCAH. There was no record of a security or other interest by BCCI in the CCAH shares. The documents that evidence the arrangements between CCAH shareholders and BCCI were all maintained outside the United States by the most senior management of BCCI in files that we understand were not available to the bank's auditors. Moreover, documents reviewed during the investigation suggest that BCCI deliberately structured various transactions so as to conceal from the Federal Reserve the relationship between BCCI and CCAH. Finally, there were the numerous denials by BCCI and CCAH representatives that any link existed.

1991 Cease and Desist Order Requiring Divestiture of CCAH Shares

To terminate the illegal relationship between BCCI and CCAH, the Federal Reserve, on January 22, 1991, sent a proposed cease and desist order to counsel for BCCI and made criminal referrals to the Department of Justice. The cease and desist order, which was consented to by BCCI on March 4, had five principal components: (1) requiring BCCI to divest promptly its CCAH shares; (2) significantly restricting business transactions between BCCI and the First American banks; (3) ensuring that BCCI had sufficient liquid assets to cover liabilities in the U.S. agencies; (4) terminating BCCI's residual business presence in the United States; and (5) requiring that BCCI cooperate in the Federal Reserve's investigation.

The order required BCCI promptly to divest its interest in CCAH through a plan to be submitted to the Board for its approval. The order, and a similar one on February 1, 1991, against CCAH, also prohibited transactions between BCCI and the First American banks (other than capital injections into the banks and certain clearing transactions in the ordinary course of business). After entry of the CCAH order on February 1, 1991, the Federal Reserve informed the First American Bank of New York that its clearing transactions for BCCI should be wound down and terminated. As a result of these actions, transactions between BCCI and the First American banks have been steadily eliminated. The relationship between BCCI and the First American Bank of New York—with which BCCI had maintained a correspondent relationship—was substantially wound down by July 5.

Additional Acquisition of U.S. Depository Institutions

The Federal Reserve's investigation continued after issuance of the March 4 order and discovered evidence that BCCI acquired interests in three additional U.S. depository institutions. Our evidence indicates that BCCI in 1985 acted through a nominee, Ghaith Pharaon to acquire the Independence Bank, Encino, California, in violation of the Bank Holding Company Act. Independence Bank is a state nonmember bank supervised by the FDIC. The Federal Reserve's investigation also uncovered substantial evidence indicating that BCCI, acting through Mr. Pharaon, acquired during the 1980s a substantial interest in the National Bank of Georgia (NBG), a bank supervised by the Comptroller of the Currency. NBG was purchased by First American in 1987 with funds the Board believes were provided to First American by BCCI. Finally, later in the investigation, we uncovered evidence that BCCI financed and acquired control of shares of CenTrust Savings Bank, Miami, Florida in 1988–89, again acting through or with Pharaon.

On May 3, the Federal Reserve issued a second cease and desist order requiring BCCI to submit to the Federal Reserve a plan for the divestiture of any shares of Independence Bank within its control. A criminal referral relating to this violation was also filed.

In conjunction with the investigation, the Federal Reserve has also taken steps to monitor through the examination process the operations of the First American banks and to determine what relationship the banks have with BCCI. Examinations and special reviews were undertaken by the Federal Reserve starting in January 1991. More than fifty senior Federal Reserve examiners have for the past nine months closely reviewed the First American banking organization, and these efforts continue. In addition, Federal Reserve investigators are working with other federal and state agencies to review transactions that may involve BCCI and related persons.

Status of Divestiture Orders

Recent events have made the requirement that BCCI divest the shares of CCAH and Independence Bank under its control the most difficult part of the cease and desist order to achieve. On May 3, BCCI submitted to the Federal Reserve a proposed divestiture plan for the CCAH shares, and on July 3, BCCI submitted a divestiture plan for the Independence Bank shares. The CCAH plan called for transfer of the shares of CCAH held by BCCI, and possibly shares held by other CCAH shareholders, to a trust administered by an independent trustee acceptable to the Federal Reserve. The trustee would vote the stock and negotiate its sale within a time frame agreed to by the Federal Reserve. We found the trust arrangement to be acceptable but considered the proposal to be deficient because it failed to set forth the timing of the sale—specifically, there were no guarantees that the divestiture would be a prompt one, as required in the Federal Reserve's order. We therefore rejected BCCI's proposal by letter of May 10, and required BCCI to submit within ten days a revised plan that addressed this concern.

On May 20, BCCI did submit a revised plan, which also relied on a trust arrangement. Although this new plan did not contain a timetable, it did contain details and conditions that appeared to expedite the sale. A preliminary draft of the trust agreement was submitted by BCCI on June 20.

Implementation of BCCI's proposed divestiture plans has been delayed by the seizure of BCCI by regulatory authorities. After those authorities seized control of BCCI on July 5, the officers and directors of BCCI were no longer able to negotiate or effectuate a divestiture of CCAH or Independence Bank stock on behalf of BCCI.

In our view, the July 5 seizure order does not void the Federal Reserve's divestiture orders, however. The orders remain effective and legally binding. The seizure shifts the task of implementing the orders from BCCI to the receivers for BCCI. We have been in contact with the receivers, explaining to them the need to achieve total divestiture as soon as possible, and requesting that they submit promptly a revised divestiture plan. The receivers have indicated a willingness to achieve divestiture through the trust arrangements, and our discussions are continuing.

Federal Reserve Enforcement Actions to Date

As part of its investigation, the Federal Reserve is proceeding with enforcement actions as the evidence to support such actions is accumulated. On July 12, the Federal Reserve issued a notice of intent to bar from U.S. banking individuals participating in the Independence Bank violation. Those individuals are Agha Hasan Abedi and Swaleh Naqvi, two former senior officers of BCCI; Kemal Shoaib, a former officer of BCCI and the former chairman of Independence Bank; and Ghaith Pharaon, the owner of record of Independence Bank and a shareholder of BCCI.

More recently, on July 29, the Federal Reserve issued a notice of assessment of a civil money penalty of $200 million against BCCI for its illegal acquisition of CCAH, the National Bank of Georgia, and CenTrust Savings Bank. The Federal Reserve also issued a notice of intent to bar permanently nine individuals associated with BCCI from any future involvement with U.S. banking organizations. On the same day, the District Attorney's Office for the County of New York secured indictments of BCCI and Messrs. Abedi and Naqvi. As noted, the U.S. Attorney in Tampa has also recently indicted senior officials of BCCI for racketeering involving money laundering.

The Federal Reserve is continuing to cooperate with law enforcement agencies, and will, of course, consult those agencies before taking enforcement action so as to avoid prejudicing any criminal investigation. Thus, at the request of the U.S. Attorney for the District of Columbia, the Federal Reserve has deferred temporarily the assessment of substantial civil money penalties against the individuals already charged, pending completion of the U.S. Attorney's criminal inquiry.

THE LESSONS OF THE BCCI AFFAIR

Domestic Initiatives

As a result of the BCCI matter and other recent compliance problems with foreign banks, the Federal Reserve reviewed the statutes, regulations, and supervisory policies governing foreign bank operations in the United States. To help prevent a recurrence of such problems, the Federal Reserve has sent to the Congress proposals to control the entry of foreign banks into the United States and strengthen the supervision and regulation of foreign banks once they have entered. Those proposals, collected as the Foreign Bank Supervision Enhancement Act of 1991, have been incorporated into comprehensive banking reform bills that have been reported out of this Committee and its counterpart in the Senate.

This legislation would establish uniform federal standards for entry, operation, and expansion of foreign banks in the United States. The proposed legislation includes, importantly, requirements of consolidated home country supervision and supervisory access to information regarding the banking organization, and the application to foreign banks of the same financial, managerial, and operational standards that govern U.S. banks. The proposal would also grant federal regulators the authority to terminate the U.S. presence of a foreign bank that is engaging in illegal, unsafe, or unsound practices.

As the BCCI affair amply demonstrates, continuing consolidated supervisory oversight of a bank's operations is essential to maintaining the integrity of the bank's operations and preventing adverse effects on the financial system. BCCI operated without a supervisor who could regulate and examine the consolidated financial organization, and BCCI was therefore able to manipulate its books and conceal its actual financial condition with minimal chance of detection.

Of course, the Federal Reserve's legislative recommendations would not guarantee that criminal activity by foreign banks would not recur. Fraud is extremely difficult for any regulator to detect, especially when transactions are deliberately and illegally structured to conceal relationships and when the relevant information is maintained secretly outside the United States. The Federal Reserve's proposals attempt to address the potential for illegal activities by creating a bar to U.S. entry by weakly capitalized, poorly managed, or inadequately supervised organizations.

As a result of recent experience, the Federal Reserve is devoting more resources to examining, tracking, and monitoring foreign bank operations and will need to increase resources in this area if the legislation is enacted. In addition, we believe that it would be useful to establish a small unit of trained investigators to handle cases in which examination procedures and methods are not sufficient to detect or prove the wrongdoing.

Improving International Cooperation

The BCCI case also highlights the pressing need for greater international cooperation among bank regulators.

The vehicle for improved international banking supervision is the Basle Supervisors Committee, composed of the Federal Reserve and other central banks and bank regulators. That committee's achievements so far have included the adoption of the Concordat, which is the statement of fundamental principles governing supervision of banks operating across borders, and the establishment of international capital standards.

At its meeting in Stockholm in early September, the committee, under the guidance of President Corrigan, its newly elected chairman, began discussions of the important lessons to be learned from the BCCI matter. The committee has commissioned, and hopes to have finished by its December meeting, an issues paper that will consider a range of subjects stemming from the BCCI matter. These include the following: (1) standardized criteria for the establishment by foreign banks of branches or subsidiaries; (2) what steps can be taken to strengthen procedures for the cross-border sharing of supervisory information, especially in times of stress; (3) whether contagion problems are of such a nature as to render distinctions between branches and subsidiaries of little utility in times of stress; (4) the relationship between home country and host country supervisors as it pertains to the supervision of branches; (5) whether consolidated supervisory responsibility should rest in a single home country supervisor or be shared among several supervisors acting as a college; and (6) whether and to what extent supervisors may require changes in corporate structures when such structures may, by their nature, hinder effective supervision.

One major practical issue confronts the Federal Reserve and other U.S. regulatory agencies in efforts to cooperate with foreign regulators. Whereas certain other Western nations have statutes that protect confidential bank supervisory information obtained from foreign regulators from release to the public or even to the legislature, information obtained by U.S. regulators from foreign sources does not enjoy the same confidentiality. Because as U.S. regulators we may not assure our foreign counterparts that the information that we receive from them will be held confidential, those governments may be less willing, or legally unable, to share information with us fully or completely, or to do so on a regular or timely basis. While we are sensitive to and respectful of the prerogatives of the legislature to seek and obtain necessary information, we also believe that the conflict between U.S. regulators' need for international cooperation, particularly with the increasing globalization of banking and the need of the Congress to gain access to information for its oversight and investigatory responsibilities is a question that merits careful consideration.

CONCLUSION

The Federal Reserve is actively engaged in dealing with the BCCI matter and has deployed its most experienced and proven staff members to the task. The Federal Reserve will continue to cooperate with federal, state, and foreign bank supervisors and law enforcement agencies. Our immediate goals are to conclude our investigation; to make the current separation in fact between BCCI and U.S. banks a complete separation in law, so that these banks can be relieved of any remaining BCCI taint and operate free and clear of this controversy; and to ensure that all wrongdoers are prosecuted civilly and criminally to the extent permitted by law. □

Statement by E. Gerald Corrigan, President, Federal Reserve Bank of New York, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1991

I am pleased to have this opportunity to appear before you this morning to review the role played by the Federal Reserve Bank of New York in the Bank of Credit and Commerce International (BCCI) affair. To put it briefly, beginning at the time of the October 1988 indictment of BCCI in Tampa and continuing to this day, the Federal Reserve Bank of New York has been intimately involved in virtually every aspect of the Federal Reserve's investigation into BCCI, including its illegal control of banking institutions in the United States. Over the past twelve to fifteen months, I, personally, have been significantly involved in the investigation, often on a daily basis. My involvement has entailed frequent consultations with my own staff, with Messrs. Mattingly and Taylor, with Chairman Greenspan, with senior regulatory officials from abroad, and, from time to time, with Robert Morgenthau, the New York County District Attorney.

The summary report of the investigation conducted by the Federal Reserve, which is being submitted to this committee today, together with the Board of Governors' July 12 and July 29 Notices of Charges, speak—eloquently in my judgment—to the scope and precision of this investigation, but even they do not tell the whole story. Allow me, therefore, to share with the committee my own observations on the process, its results, and its implications for the future.

For starters, it should be recognized that the scope and complexity of this investigation, together with the almost unimaginable patterns of deceit, lies, misrepresentations, fraud, and criminality that had to be overcome to obtain hard evidence of wrongdoing, is wholly unprecedented in my experience and probably in the seventy-seven-year history of the Federal Reserve. Indeed, Federal Reserve investigators were engaged—*successfully I might add*—in an investigation that would be considered very formidable by even the most sophisticated law enforcement authorities.

Having said that, it is only appropriate to ask why it took so long to produce the results that are now before us. In part, the answer to that question lies in the pattern of lies and deceit that had to be overcome in getting at the truth. In that regard, it is important to note that there is no other governmental institution here or abroad that has had a greater or faster measure of success in getting at the truth than has the Federal Reserve, even though some of those institutions have considerably more experience and discovery power in this type of investigation than the Federal Reserve. But, even allowing for these factors, there were other considerations that help account for the duration of the investigation. Among these other factors are the following:

First, we wanted to be absolutely sure that our efforts were always consistent with the dictates of due process. This is a nation of laws. Rumors, allegations, unsupported accusations, and even claims made by informants or "insiders" do not constitute evidence of wrongdoing. Obtaining that hard evidence was an extraordinarily difficult task that was to take the Federal Reserve's lead investigative personnel to locations throughout the United States, Europe, and the Middle East. It also entailed those investigators taking thousands of pages of statements and depositions from individuals here and abroad as well as reviewing tens of thousands of pages of documents. Getting the necessary hard documentation of wrongdoing was not easy, but it was done.

Second, from the earliest stages of the active investigation of the money laundering problem in 1987, we had to be very careful that our own efforts did not compromise the investigative efforts of other supervisory and law enforcement authorities in the United States or elsewhere.

Third, as the scope of the Federal Reserve's and other investigations widened, and as allegations of serious criminal activities of BCCI began to emerge, we had to be concerned about protecting the confidentiality and well-being of witnesses, and, in the latter stages of the investigation, we were mindful of the need to be sensitive to the well-being of the officials in the Federal Reserve who were conducting the investigation. We were also concerned about the possibility that documentary evidence so vital to the outcome of our case might be destroyed.

Finally, the possibility exists that there may have been information available to other official institutions that might have expedited the Federal Reserve's investigation had such information reached the Federal Reserve in a more timely fashion.

Taken together, these factors—especially in a setting of widespread fraud and deceit—made the investigation frustratingly slow at times. Also, and with the benefit of hindsight, there are probably some things that might have been done differently or in a different order that might have saved some time. But, even under optimal conditions, I believe that any such time saved would be measured in months, not years. On the other hand, the experience gained from this investigation surely has influenced our attitudes regarding certain aspects of banking law and supervisory policies and procedures.

To a very important extent, those lessons already are incorporated into the Foreign Bank Supervisory Enhancement Act of 1991 that is currently before the Congress and that I urge be enacted this year. That legislation, it should be noted, will have important resource implications for the Federal Reserve, especially for the Federal Reserve Bank of New York. Beyond that, I think that we must carefully consider the question of whether we should be significantly augmenting our legal staff, including developing a small "SWAT team" of investigative specialists—something we have not felt was needed in the past. We also must guard against efforts that, while well intended, may work in the direction of weakening existing supervisory tools and techniques.

For example, if there was ever any doubt about the necessity of consolidated supervision of overall banking entities, including all of their component parts—and there never was any such doubt in my mind—this case should settle that debate once and for all.

Another area of great importance that has been brought into sharper focus by the BCCI affair is the need to strengthen still further the international coordination of bank supervision and bank supervisory policies. As the committee members may know, in early July of this year, I was named by the Group of Ten (G-10) Central Bank Governors to the position of Chairman of the Basle Committee on Banking Supervision. Last week the committee had its first regularly scheduled meeting since my designation as its chairman. At the meeting, there was a lengthy discussion of the BCCI affair and the lessons to be learned from it by the international community of bank supervisors.

On the basis of that discussion, the committee hopes to have finished by its December meeting an issues paper that will consider a range of subjects stemming from the BCCI matter including (1) whether and how standardized criteria for the establishment by foreign banks of branches or subsidiaries in the G-10 countries should be put in place; (2) what steps can be taken to strengthen procedures for the cross-border sharing of supervisory information, especially in times of stress; (3) whether the potential for contagion problems within a single organization renders distinctions between branches and subsidiaries of little utility in times of stress; (4) the relationship between home country and host country supervisors as it pertains to the supervision of branches; (5) whether the locus of consolidated supervisory responsibility should rest in a single home country supervisor or be shared among several supervisors acting as a college, and (6) whether and to what extent supervisors should be prepared to insist upon changes in corporate structures that, by their nature, hinder effective supervision.

As noted above, my hope and expectation are that an issues paper will be finished for the committee's deliberation at its December meeting. That issues paper will not, however, contain recommendations. Rather, I have in mind that the discussion in December would help the committee to shape a follow-up paper containing recommendations that would be considered over the first half of 1992.

In saying this, I want to caution about expecting too much too soon. Getting eleven countries to agree on these complex matters that strike so close to legitimate issues of national prerogative, if not national sovereignty, will not be easy, especially in a setting in which majority rule is not enough. That is, in this forum, everyone must agree on the chosen course of action or there is no action.

I cannot, in good conscience, leave the subject of international coordination of banking supervision without saying a brief word about what I know will be a sensitive subject. I, and all members of the international community of banking supervisors, deeply respect the prerogatives of legislative bodies, including their prerogative to seek and obtain information. By the same token, it is vitally important that the manner in which that prerogative is exercised in a cross-border setting is fully sensitive to laws and traditions in other countries, for if it is not, the necessary process of sharing supervisory information across national borders can be seriously impaired.

In closing, let me add one further point. In a nation of law and due process, no system of law and regulation can prevent crime or wrongdoing. That is one of the prices we choose to pay for the enormous benefits of a free and open society that places such a high premium on individual rights. However, preserving a free and open society implies that when transgressions occur, those responsible for administering laws and regulations must see to it that the parties who have violated the law or regulation are found out and are appropriately punished. I would hope that the message growing out of the Federal Reserve's persistent, vigorous, and unrelenting investigation of the BCCI affair would be clear to all, and that message is that we will not tolerate this kind of behavior, no matter how formidable the obstacles put in the way of our efforts to get at the truth. □

Statement by Robert P. Black, President, Federal Reserve Bank of Richmond, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1991

I shall describe for you this morning the role of the Federal Reserve Bank of Richmond in the supervision and regulation of Credit and Commerce American Holdings (CCAH) and its subsidiaries located in the United States. Since the only authorized presence of the Bank of Credit and Commerce International (BCCI) in the Fifth Federal Reserve District was a representative office in the District of Columbia, I shall leave the discussion of the Systems's efforts to regulate BCCI's activities in the United States to members of the staff of the Board of Governors and to my colleagues from the Federal Reserve Banks of Atlanta, New York, and San Francisco. Others have testified on the Federal Reserve System's efforts to deny BCCI's entry into the United States and the original acquisition of First American Bankshares by a group of Middle Eastern investors. I shall discuss the role of the Federal Reserve Bank of Richmond in the application process and describe our supervisory work since the purchase, including efforts to determine whether or not any BCCI ownership or influence existed.

BACKGROUND

Financial General Bankshares, as First American was originally called, was one of a very few multistate bank holding companies that was exempted from the provisions of the Bank Holding Company Act by virtue of its registration under the Investment Company Act. When it became subject to the Bank Holding Company Act in 1966, it controlled banks in Virginia, Maryland, Tennessee, New York, and the District of Columbia.

Other Federal Reserve officials have discussed the attempts by the Middle Eastern investors to obtain approval of the Board of Governors for the acquisition of Financial General Bankshares, and I shall not review this effort. I would like to point out, however, how the Federal Reserve Bank of Richmond participated in the application process that led to the Board's approval of the second application to acquire Financial General on August 25, 1981.

The Federal Reserve Bank of Richmond shared the same concerns as did many others about the possible involvement of BCCI in the takeover attempt. We participated in the hearing the Board of Governors conducted on the application during which the testimony presented both by individual investors and by their counsel (Clark Clifford and his partner, Robert A. Altman, of the firm of Clifford & Warnke) stated that BCCI would not be involved in the acquisition other than as investment adviser to the individual investors and, in particular, that BCCI would not fund the acquisition. The senior representative of our Reserve Bank specifically asked about BCCI's current and future role and was provided unqualified assurance by Mr. Clifford that BCCI was not involved in the takeover other than as investment adviser and that no other role was contemplated for the future. Similar representations were made to the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), and the banking commissioners of the states of Maryland, Virginia, and New York where First American's subsidiary banks were located.

Despite the assertions of the shareholders and their counsel, the Board conducted thorough investigations of the investors and, in this process, solicited information from the Central Intelligence Agency, the Departments of State and Commerce, and a foreign bank supervisor. None of the background checks uncovered any adverse information regarding the investors. In addition, neither the Board nor any other federal or state regulator received any evidence that the representations made to them were false.

On the basis of the record of the application, the Federal Reserve Bank of Richmond saw no legal basis for recommending denial of the application to the Board. On August 25, 1981—after having considered the hearing record, the recommendations from the Board staff and the Reserve Bank, as well as the views of the federal and state agencies—the Board approved CCAH's acquisition of Financial General. The acquisition was consummated on April 19, 1982, and Financial General was renamed First American Bankshares in August 1982. Mr. Clifford was named chairman of the board of First American Bankshares, former Senator Stuart Symington became chairman of the board of CCAH, and Mr. Altman was elected president of another First American holding company and secretary and managing director of CCAH.

THE PERIOD 1982–OCTOBER 1988

Once the acquisition was consummated, the supervision of CCAH and First American fell to the Federal Reserve Bank of Richmond, which also had been responsible for supervising Financial General. In such supervisory work, the Reserve Banks perform their bank holding company inspection duties under authority delegated by the Board and thus work much more closely with the staff of the Board on an ongoing basis than is true in the case of many of our other responsibilities. An inspection, the primary supervision tool for bank holding companies, is designed to ascertain whether the strength of the bank holding company is being maintained and to determine the impact or consequences of transactions between the parent holding company or its nonbanking subsidiaries and its subsidiary banks. The scope of those inspections includes, among other factors, a review of intercompany receivables and payables, earnings, capital, asset quality, and dividend payments to the parent company. In measuring financial strength of a bank holding company, the inspection process focuses on financial indexes of both the consolidated entity and its component parts. With respect to the component parts of a bank holding company, Reserve Banks review the reports of examination of its subsidiary banks prepared by the banks's federal and state regulators. The ability of a bank holding company to maintain an adequate level of capital, as well as to preserve its overall ability to act as a source of financial strength to its bank subsidiaries, is a primary consideration and focus of the inspection. Besides the regular inspection of a parent holding company, our Reserve Bank monitors the condition of the entire holding company through the review of regulatory reports filed quarterly, semiannually, or annually with us or other regulatory authorities.

Since the acquisition of the First American banks by the Middle Eastern investors, the company has been inspected by the Federal Reserve Bank of Richmond eight times. The Federal Reserve Bank of Richmond does not examine any of the company's subsidiary banks since none are state member banks. These inspections have included the review of the reports of the other bank supervisors to verify the condition of the individual First American banks and, most important, to determine whether the FDIC, the OCC, or respective state bank supervisors uncovered any improper or illegal BCCI connection concerning actions taken by either the investor group or BCCI.

In the years immediately after the acquisition, there was no evidence developed through the supervisory process to suggest that CCAH and First American were functioning other than in accordance with the statements made to the regulatory authorities at the time of the application. During this period, the Reserve Bank's inspections found compliance with the conditions and commitments of the original application and no violations of the law. The examiners in charge of these inspections, I should emphasize, were well aware of the Federal Reserve System's concerns about the investors and the possible involvement of BCCI. The examiners regularly discussed the relations between the investor group with various members of the company's senior management team, both to determine compliance with the commitments and to probe for involvement of the BCCI group. In addition, numerous discussions were held with other bank regulatory agencies responsible for supervising First American's subsidiary banks, and no adverse information surfaced about the banks from them.

The examination and inspection record between 1982 and late 1988 is clear. Neither the reports of our First American inspections nor any of the reports of examination prepared by other federal and state regulators contained comments or criticisms regarding involvement of, influence by, or improper payments to BCCI. On the contrary, since the acquisition in 1982 there were no dividend payments by the First American holding companies to the investors and capital injections into the First American organization totaled more than $500 million.

The Period October 1988–90

In October 1988 indictments of BCCI and its officers were announced, and Federal Reserve Banks with supervisory responsibility over BCCI agencies in Florida, New York, and California initiated extensive examination of those agencies. Since our Reserve Bank did not have supervisory responsibility for any BCCI agencies, we did not participate in those examinations.

In early 1989, after BCCI's indictment for money laundering and the emergence of allegations that BCCI and CCAH were linked, the Federal Reserve Bank of Richmond conducted a special inquiry into the relationship between CCAH and BCCI. The inquiry included questioning First American senior management on the relationship to BCCI, reviewing records of the organization, and requesting each First American subsidiary bank to report on any transactions with BCCI. The report on our findings of the inquiry, dated February 8, 1989, presented no evidence of irregular or significant contacts between the First American banks and BCCI or any indication that CCAH had failed to adhere to its commitments. Our report disclosed that First American senior management represented to us that the relationship between CCAH, First American, and BCCI was no different than at the time of the original application and that BCCI did not exercise a controlling influence over CCAH. While we found that the degree of common ownership between CCAH and BCCI had increased since the original acquisition of Financial General, the Bank Holding Company Act does not prohibit such common ownership of banks and nonbanks by individuals as it does for companies. Thus, this common ownership, while significant, did not provide grounds for any action on the part of the Federal Reserve Bank of Richmond or any recommendation by us for action by the Board.

During this period, examinations of First American's banks conducted by the states of Maryland, New York, Virginia, the OCC, and the FDIC also found no irregularities or relationships between First American and BCCI. Consistent with these examinations, our two inspections of First American in 1988 and 1989 found continued compliance with application commitments, including finding no linkage between CCAH shareholders and BCCI other than the common shareholder interests, which were not illegal.

Supervisory Activities Since 1990

In December 1990, a senior member of the Board of Governors's staff was permitted to review a copy of BCCI's external auditors' October 1990 report, which detailed substantial loans made by BCCI to CCAH shareholders secured by CCAH shares. The existence of these loans was later confirmed at a meeting with representatives of the investors held on December 21, 1990, at the Board. As it became increasingly clear that an unauthorized relationship existed with BCCI, an in-depth inspection of the First American organization was initiated in early January under the direction of the Federal Reserve Bank of Richmond and Board staff. This inspection was coordinated with examinations of all of First American subsidiary banks to assess the general safety and soundness of the organization. At the same time, extensive discussions were begun with senior staff members at the Board, the Federal Reserve Banks of Atlanta, San Francisco, and New York, and the agencies participating in the coordinated examinations of all the banking subsidiaries of First American, including the FDIC, the OCC, and the banking departments of Maryland, New York, and Virginia.

A significant part of this examination included a review of bank records for any deposits of, payments to, or exposures to individuals or companies related to BCCI or CCAH. The examination is seeking to determine if the resources of First American's banks have in any way been utilized improperly, either directly or indirectly, for the benefit of its owners. To date, a total of fifty-two examiners from all twelve Federal Reserve Districts with an average experience level of approximately eight years have expended in excess of seven man years on this examination. While this examination is ongoing, results to date have not disclosed any abuse of the subsidiary banks or any lending practices that are widely at variance with other area banks, and no additional evidence of BCCI ownership has been uncovered in First American records. Simply put, no connection between the banks' lending practices and their unauthorized ownership by BCCI has been uncovered.

Besides this ongoing examination process, the Federal Reserve Bank of Richmond has been monitoring compliance with CCAH's February 1, 1991, cease and desist order, which, among other things, prohibits transactions between CCAH, subsidiary banks of First American, and

BCCI except for capital injections into the banks and certain clearing transactions in the ordinary course of business. In this role, on March 1, 1991, the Federal Reserve Bank of Richmond informed the First American Bank of New York that its clearing transactions for BCCI should be wound down and terminated before the end of 1991. As a result of this action, the transactions between BCCI and the First American Bank of New York were liquidated in an orderly manner so that by July 5, when BCCI was closed, the correspondent relationship had been reduced substantially.

CONCLUSION

The Federal Reserve Bank of Richmond will continue to keep examiners on site to monitor the situation and to continue to review transactions of First American and its subsidiary banks for any possible irregularities connected with BCCI. We are working with the staff of the Board to sever any improper connections between BCCI and the First American banks so that the banks will be free of any tarnish that they may be suffering from their association with BCCI. □

Statement by Robert P. Forrestal, President, Federal Reserve Bank of Atlanta, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1991

I am pleased to appear today to discuss with you the role of the Federal Reserve Bank of Atlanta in the supervision of the Florida offices of the Bank of Credit and Commerce International (BCCI), and in the supervision of the NBG Financial Corporation, the parent bank holding company of the National Bank of Georgia (NBG).

My remarks will first address BCCI. Since the previous witnesses have set forth the supervisory and regulatory framework within which the Federal Reserve System operates with respect to its supervision of international branches and agencies, I will therefore confine my remarks regarding BCCI to the Federal Reserve Bank of Atlanta's supervision and regulation of BCCI's offices in Miami, Boca Raton, and Tampa, Florida.

HISTORY OF BCCI IN THE SIXTH FEDERAL RESERVE DISTRICT

The BCCI–Miami agency opened on March 15, 1982; the Boca Raton agency opened on September 12, 1983; and the Tampa agency opened on June 29, 1984. Each of these offices was licensed by the Comptroller's Office of the Department of Banking and Finance of the State of Florida. These were not the initial entries by BCCI into the United States, as its first office was opened on September 1, 1981, in San Francisco. Other offices in Los Angeles (February 7, 1983) and New York (April 16, 1984) were also opened.

BCCI also had an administrative office in Miami that supervised Latin American and Caribbean activities and provided back office support to the three Florida agencies. The administrative office was permitted under Florida law and was supervised by the Florida Department of Banking and Finance.

The Miami agency managed and coordinated the activities of the Tampa and Boca Raton offices, including regulatory reporting to the Federal Reserve. From the opening of the BCCI–Miami office, the Federal Reserve Bank of Atlanta carried out its supervisory responsibilities pursuant to the International Banking Act of 1978. As was the case with other Florida agencies under that act, our responsibility as the residual supervisor of the state-licensed agencies was essentially to ensure that the BCCI Florida offices received timely examinations from the licensing authority, the State of Florida.

During this time, our examiners participated in these examinations in a limited manner. Our participation normally consisted of a one- or two-day visitation of the agency in which we conducted a review of financial reports submitted to the Federal Reserve Bank of Atlanta and a review of compliance with federal banking laws, including the Bank Secrecy Act. These visitations coincided with the state's examinations, and during the visitations our examiners learned the state's preliminary findings. After having conducted the compliance visit, Reserve Bank examiners wrote a memorandum detailing their findings and the state's preliminary results. Copies of the state's final report of examination and BCCI's responses were forwarded to the appropriate offices within the Federal Reserve System. Irregularities in compliance with the Bank Secrecy Act were detected at various times during our visitations and resulted in two criminal referrals, which are described below.

In 1983, the Treasury Department referred numerous institutions, including BCCI–Miami, to our attention after having found technical deficiencies in their reporting of transactions subject to the Financial Recordkeeping Act. The deficiencies concerned improper completion of forms designed to report individual cash transactions of $10,000 or more. We found additional technical compliance problems at BCCI–Miami in a visit in 1984, in which examiners noted that the agency had failed to file currency transaction forms for three cash transactions of more than $10,000. The agency filed the forms during the examination. Both cases represented isolated technical problems and did *not* raise suspicions of money laundering. In each instance, agency management took corrective action. In March 1985, while visiting during the state's examination, Reserve Bank examiners detected suspicious transactions carried out by a customer of BCCI–Miami. After having become aware of the transactions, the agency ceased doing business with the customer. To our knowledge, this customer has not been implicated in subsequent indictments of BCCI.

After the receipt in August 1985 of the state's March 1985 final Report of Examination of BCCI–Miami, which noted continued asset problems, the Federal Reserve Bank of Atlanta conducted an independent examination of the Miami office in October 1985. The examination revealed a significant deterioration in asset quality. However, no further evidence of suspicious transactions was noted at the time. As a result of the deterioration in asset quality, the Atlanta Reserve Bank requested that BCCI begin quarterly reporting on its classified assets.

While participating in an April 1987 examination of BCCI–Miami, examiners discovered possible money laundering transactions that appeared to be structured to evade reporting requirements. The transactions were detected in a review of checks and money orders sent from BCCI–Panama to BCCI–Miami for payment.

The following circumstances prompted examiners' suspicions. BCCI–Miami frequently received such deposits from BCCI–Panama, consisting of 300 to 500 individual money orders totaling $300,000 and more. These money orders were all purchased from institutions in the New York City area and were issued in bearer form, then stamped payable to the order of one account number. No other endorsements ever appeared. The purchasers of the money order wrote in their name and address and the date purchased. The same handwriting appeared for different names and different addresses. Some money orders bore sequential numbers but were given different purchase dates. These transactions appeared to be designed to facilitate a money-laundering operation. A criminal referral concerning the activities discovered at the Miami agency was filed with the U.S. Attorney's office in Miami and with the Federal Bureau of Investigation in North Miami Beach on May 18, 1987. The staff of the Board of Governors copied the referral to the Internal Revenue Service, Washington, D.C., on June 5, 1987.

In October 1988, the U.S. Attorney in Tampa issued indictments against BCCI and several employees for money laundering. In connection with the indictments, U.S. Customs agents searched the offices of BCCI in Florida over the weekend of October 8.

Reserve Bank examiners entered the Miami, Boca Raton, and Tampa agencies to monitor liquidity and review operations in the week after the search by law enforcement officials and remained on site for several weeks until the situation stabilized. Our efforts were part of a System review of all of BCCI's U.S. offices. During this period, activities resulting in the Atlanta Reserve Bank's second criminal referral were discovered. Federal Reserve examiners detected two separate series of suspicious transactions while on site at BCCI–Boca Raton. Both cases were similar to the scheme detected in Miami in 1987. Our ability to investigate the suspected schemes was limited because many original records had been seized by law enforcement authorities in their search. The second criminal referral was filed on November 7, 1988, with the U.S. Attorneys in Tampa and Miami and the FBI. The staff of the Board of Governors sent a copy of the referral to the Internal Revenue Service, Washington, D.C., on November 14, 1988.

Copies of workpapers and documents supporting the two referrals were provided in response to a subpoena from the U.S. Attorney in Miami on February 27, 1989. Reserve Bank personnel have continued to cooperate with law enforcement authorities, including the U.S. Attorney, the Federal Bureau of Investigation, and the Internal Revenue Service, on matters relating to BCCI. On June 12, 1989, the Reserve Bank received a second subpoena, from the U.S. Attorney in Tampa, Florida, requesting all records relating to BCCI, the National Bank of Georgia (NBG), and related companies. All information was supplied as requested.

As a result of the System's review of BCCI's U.S. operations in 1988, a cease and desist order against BCCI was issued by the Board of Governors on June 12, 1989, requiring BCCI to strengthen U.S. operations and enforcing compliance with the Bank Secrecy Act. The Reserve Bank conducted an independent examination of BCCI–Miami as of September 30, 1989, to assess the condition of the agency and to determine compliance with the Board's order. This examination was coordinated with other Reserve Banks' examinations of BCCI's U.S. offices. Examiners noted significant asset quality problems and weakness in credit administration, internal controls, and the audit function.

The need for further examination of BCCI's Florida offices was eliminated when the Tampa and Boca Raton offices closed in September 1989, and the Miami agency closed in January 1991.

Reserve Banks' Supervision of NBG

Application History of NBG

Ghaith Pharaon, a Saudi Arabian national, acquired a 60 percent interest in NBG in 1978 and continued to acquire stock in NBG until, by December 30, 1980, he owned 98.6 percent of the total outstanding shares. Because NBG was a national bank, the Office of the Comptroller of the Currency (OCC) was its primary regulator. According to information supplied by the OCC, Pharaon purchased the shares in NBG from Bert Lance and numerous other individuals, through direct negotiations and through tender offers. A change of ownership notice was filed with the OCC on August 7, 1978. The Reserve Bank was not a party to this notice because NBG was not yet owned by a holding company.

Pharaon incorporated GRP, Inc., in Georgia in March 1981, for the purpose of forming a bank holding company. The Reserve Bank learned of Pharaon's intent and requested information regarding his financial strength and business activities. No negative information was received.

Pharaon's banking interests first came under the jurisdiction of the Federal Reserve Bank of Atlanta in July 1981, when GRP, Inc., filed an application to become a bank holding company by acquiring an existing bank holding company and its bank subsidiary—not NBG—located in Cobb County, Georgia. The Reserve Bank approved the application in October 1981, based on the following factors: (1) the positive impact of Pharaon's ownership on his existing banking interests, as evidenced by the OCC's recognition of the improved condition of NBG, and Pharaon's injection of $3 million to improve its capital; and (2) Pharaon's ability to repay debt associated with the acquisition, and provide continued support to the holding company. Pharaon's financial statement showed a net worth in excess of $100 million, not including the bulk of his assets, which were in Saudi Arabia. Pursuant to the application, GRP, Inc. acquired the Cobb County bank, and thus, became subject to the Reserve Bank's supervision.

The Federal Reserve Bank of Atlanta's supervision and regulation responsibility for NBG's parent bank holding company began in November 1981, when Pharaon filed applications to place his stock in NBG under his existing bank holding company, GRP, Inc., and to acquire two more banks, in Clayton County, Georgia, and in Gwinnett County, Georgia. In evaluating the applications, the Atlanta Reserve Bank again considered Reports of Examination, issued by NBG's primary regulator, the OCC, which indicated that NBG had improved under Pharaon's ownership, and again reviewed Pharaon's ability to financially support the bank, by requesting a summary of the sources of the most recent year's income and a list of annual obligations. Pharaon again provided evidence of a non-Saudi net worth in excess of $100 million, and committed to make an additional capital injection of $10 million into NBG. He also offered not to take dividends from the bank to allow it to improve its capital position. The continued improvement in NBG's condition and Pharaon's ability and willingness to contribute financial support were positive factors leading to the approval recommendation by the Federal Reserve Bank of Atlanta. The Board of Governors of the Federal Reserve System approved the application in March 1982, and the parent holding company came under the Federal Reserve's supervision. The OCC remained the primary regulator of NBG, while the Federal Reserve Bank of Atlanta directly supervised GRP, Inc., NBG's parent company.

The Federal Reserve Bank of Atlanta approved the reorganization of NBG's parent holding company structure in two subsequent applications, processed in 1982 and 1983. In connection with the reorganization, GRP, Inc. changed its name to NBG Financial Corporation. The applications involved the creation of two new bank holding companies, and the merger of Pharaon's Atlanta banking interests into a single bank. Pharaon remained the sole shareholder of NBG and its parent bank holding companies. The stated purpose of the proposed reorganization was for estate and tax planning, and to take advantage of a Georgia law related to bank mergers.

Before approving these applications, the Reserve Bank again considered the condition of banks controlled by Pharaon, reviewing reports of examination from the OCC and the State of Georgia, and considered his ability to provide financial support for NBG. According to the application, the transactions would not require any parties (Pharaon, the bank, or the holding company) to incur additional debt. The projected cash needs of NBG Financial Corporation, the "new" bank holding company, would be met through Pharaon's personal resources. After considering these factors, the application was approved. The transactions proposed in the applications were consummated in 1983.

In response to the committee's question, let me reiterate that, during this period, there was no information or evidence to indicate that Pharaon was not, in fact, the owner of NBG or that his source of funds for acquisitions differed from what he had reported. Pharaon had been the owner of record of NBG for several years before the formation of the holding company, and he had established a satisfactory record during this control of the bank, as evidenced by the improvement in the condition of the bank, his ability to make capital injections, and his ability to defer dividends.

In January 1985, the Atlanta Reserve Bank recommended that the Board of Governors approve an application filed by NBG to convert an existing wholly owned service subsidiary to an Agreement Corporation, called NBG International Bank. (An Agreement Corporation is permitted to conduct business of an international nature only, similar to an Edge Act corporation. NBG could not own an Edge Act corporation because Pharaon was not a U.S. citizen.) The approval recommendation was based on an evaluation of the condition of NBG, using Reports of Examination provided by the OCC, and other financial data supplied by the applicant. The Board of Governors approved the application on February 25, 1985.

The Federal Reserve Bank of Atlanta received an application from NBG International Bank in 1987 to increase the authorized capital stock in the Agreement Corporation. The application was submitted to correct an inadvertent violation of Regulation K. The corporation increased its capital stock without prior approval from the Reserve Bank. The Board of Governors approved the application on April 26, 1989, after NBG International Bank took steps to ensure that further violations would not occur. On October 23, 1987, the Atlanta Reserve Bank approved an application by NBG International to change its name to First American International Bank.

Inspection–Examination Supervision of NBG and NBG International Bank

The activities and financial condition of NBG's parent bank holding company were routinely monitored by the Federal Reserve Bank of Atlanta, through inspections of NBG Financial Corporation, and examinations of NBG International Bank, according to the supervision programs adopted by the Board of Governors of the Federal Reserve System. These supervision programs were developed pursuant to the authority granted in the Bank Holding Company Act of 1956, and its various amendments, and Section 25(a) of the Federal Reserve Act.

The bank holding company supervision program focuses on assessing the condition of the bank holding company and determining its ability to serve as a source of strength for its subsidiaries. In 1978, annual inspections were mandated for companies with assets in excess of $300 million. In accordance with this program, the Federal Reserve Bank of Atlanta inspected NBG's holding company once each year from 1983 through 1986. Each inspection considered the ability of the bank holding company to support its bank subsidiaries and found the contribution of the sole indirect shareholder, Ghaith Pharaon, to be positive. Never in the course of our supervision of the parent holding company, including reviews of the Examination Reports of the primary regulator, the OCC, did the Federal Reserve Bank of Atlanta discover any information indicating BCCI's ownership of NBG Financial Corporation.

NBG International Bank (now First American International Bank) has been examined annually by the Atlanta Reserve Bank since its inception.

NBG Financial Corporation was acquired by First American Bankshares, Inc., Washington, D.C., on August 19, 1987. The acquisition application was processed by the Federal Reserve Bank of Richmond, the responsible Reserve Bank for First American Bankshares, Inc.

CONTACTS WITH OTHER REGULATORS

In keeping with the regulatory structure prescribed in the Bank Holding Act of 1956 and in the International Banking Act of 1978, the Reserve Bank has maintained regular contact with the State of Florida, and with the Comptroller of the Currency in its routine supervision of BCCI and NBG's parent holding company, relying, as directed by statute, on the reports of these other supervisory agencies whenever possible. When concerns regarding the condition of BCCI's Florida agencies arose, the Reserve Bank departed from its usual residual supervision and conducted an independent examination to directly assess BCCI's condition. The Reserve Bank continues to participate in coordinated investigations of BCCI and related parties within the Federal Reserve System, and is also continuing to cooperate with law enforcement agencies in their ongoing investigations of BCCI and NBG.

SUMMARY

In summary, the Federal Reserve Bank of Atlanta supervised BCCI's and NBG's activities in the Sixth District as directed by the International Banking Act of 1978 and the Bank Holding Company Act of 1956. We made criminal referrals of suspicious activity and increased our on-site presence as warranted. With respect to NBG and First American, we evaluated on several occasions the owner of record, Pharaon, and had every reason to believe that he was a person of substance financially and that he was acting on his own behalf. Throughout this period, we have cooperated with law enforcement agencies in every way possible and, even at the present time, are contributing an examiner to the U.S. Attorney's ongoing effort in Atlanta. □

Statement by Thomas D. Thomson, Executive Vice President, Federal Reserve Bank of San Francisco, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 13, 1991

I am pleased to appear before this committee to provide information on the Federal Reserve Bank of San Francisco's supervision and regulation of Bank of Credit and Commerce International (BCCI) and related entities. My name is

Thomas D. Thomson. I have overall executive responsibility for the San Francisco Reserve Bank's supervision and regulation activities, among other functions, and, therefore, the supervision and regulation of BCCI in the Twelfth Federal Reserve District. President Parry is unable to deliver this testimony today because he is traveling in Asia to keep a long-standing commitment to meet with other Pacific Rim central bankers.

Overall Federal Reserve supervision of BCCI has been described by other representatives of the Federal Reserve System. My comments will fall into two parts: first, the Federal Reserve Bank of San Francisco's participation in the supervision and regulation of BCCI, and second, our role in the regulation of Independence Bank in Encino, California.

BANK OF CREDIT AND COMMERCE INTERNATIONAL

Twelfth District Supervision and Regulation

The San Francisco Reserve Bank's initial supervisory contact with BCCI was indirect, through the initial acquisition by Bank of America of 2.5 percent of BCCI's outstanding shares on December 21, 1973. Bank of America was a founding shareholder and, over the next three-year period, increased its equity interest in BCCI to 45.0 percent. In 1978, Bank of America began to withdraw from its investment in BCCI and completed its divestment on June 30, 1980.

This Reserve Bank reviewed Bank of America's investment in BCCI annually through the examination of the Edge Act corporation that held Bank of America's interest in BCCI. Because it was not a subsidiary, information required to be made available to our examiners was limited to financial data such as balance sheets and income statements and other documents such as Bank of America's internal investment files on BCCI. Because it was not a controlled subsidiary, no on-site examination was conducted. Our examinations of Bank of America's investment in BCCI during this period did not disclose any suspicious or criminal activities.

BCCI's presence in the Twelfth Federal Reserve District began on September 1, 1981, when its subsidiary, Hong Kong Metropolitan Bank Limited, opened an agency in San Francisco licensed by the State of California. It was converted to a direct office of BCCI on June 1, 1985, and its name changed to reflect its ownership status. BCCI established an agency in Los Angeles on February 7, 1983.

The Federal Reserve Bank of San Francisco has been involved directly in the examinations of both the San Francisco and Los Angeles agencies since their inception as a result of an arrangement with the California State Banking Department. This arrangement was worked out with the state under the provisions of the International Banking Act of 1978, which, at the federal level, gave the Federal Reserve System supervisory responsibilities for monitoring the consolidated operations of foreign banks in the United States, while primary supervisory responsibilities for each branch or agency remained with its chartering authority. Under this arrangement, our Reserve Bank shared examination responsibilities with the California State Banking Department.

The oversight efforts of this Reserve Bank intensified after notification of the BCCI indictments in October 1988 in Tampa, Florida. Our examiners participated in special examinations that were conducted in conjunction with investigations of BCCI's money-laundering activities. Special examinations were conducted at both the Los Angeles and San Francisco agencies of BCCI beginning on October 11, 1988. These examinations focused on a review of the agencies' policies and procedures to ensure compliance with the Bank Secrecy Act. Currency transactions that occurred within the previous year were reviewed for compliance with currency reporting requirements.

No evidence warranting the filing of a criminal referral was discovered as a result of the special examinations of BCCI's Los Angeles and San Francisco agencies in 1988. However, examiners cited BCCI for asset-quality problems and lack of adequate credit documentation, internal control deficiencies, errors in regulatory reporting, and inadequate record-keeping procedures. BCCI's management was criticized for lax supervision. Violations of both state and federal laws and regulations were noted; however, they were technical in nature and related principally to deposit-taking activities.

As a result of these findings, our Reserve Bank participated actively in drafting a Memorandum of Understanding, which was issued to BCCI by the California State Banking Department on February 14, 1989. Our Reserve Bank also participated in drafting a cease and desist order, which addressed these and other deficiencies in BCCI found by other Reserve Banks, which was issued to BCCI by the Federal Reserve Board on June 12, 1989. The memorandum of understanding and the cease and desist order required that BCCI improve asset quality and credit procedures, correct internal control deficiencies, and develop procedures to ensure compliance with all state and federal laws and regulations, including the Bank Secrecy Act.

Adverse publicity surrounding the filing of the indictments against BCCI caused a moderate shrinkage in assets and liabilities at both the San Francisco and Los Angeles agencies, as certain customers elected to curtail their business relationship with BCCI. Also as a result of these indictments, the California State Banking Department required both agencies to maintain a more restrictive ratio of assets to liabilities and to require a higher-than-normal level of assets pledged to the State of California for faithful performance. The result of these more restrictive requirements was to increase the costs of operating these offices.

In light of the above developments, BCCI management closed the San Francisco agency on December 1, 1990, and transferred the assets to the Los Angeles agency. Also in December 1990, BCCI management transferred the assets of the Miami office to Los Angeles when the Miami agency was closed by the State of Florida. In both cases, the assets that were transferred were principally loans to small businesses and trade-related financing.

In terms of asset size, the Los Angeles office reached its zenith at year-end 1990, after the transfer of assets was complete. On December 31, 1990, the Los Angeles agency reported total loans of $142.9 million and total assets of $190.4 million.

On February 19, 1991, in conjunction with the Federal Reserve Board staff's coordinated supervisory efforts, we conducted an examination of the Los Angeles agency. Besides the standard procedures conducted in a full-scope examination, particular attention was devoted to testing compliance with state and federal laws and regulations, including the Bank Secrecy Act. Examiners also reviewed the loans transferred from the Miami and San Francisco agencies in December 1990. As with other recent examinations, the results of this examination disclosed weaknesses in asset quality, internal controls, and management supervision.

On July 5, 1991, the State of California closed the Los Angeles agency in conjunction with the coordinated closure of BCCI's offices worldwide. On that date, the state assumed responsibility for the disposition of the assets of the agency. At the time of its closure, all funding of the agency was from either its head office or BCCI affiliates. Accordingly, no U.S. depositors or institutions are likely to suffer depository losses from the closure of the California office.

Our Reserve Bank has maintained a continuous presence at the Los Angeles office since the start of the February 1991 examination. Our examiners are still on site and are reviewing the agency's records. We are continuing to cooperate with the investigations now under way. Relevant information is being shared with appropriate federal and state judicial authorities, other regulators, and the Congress.

Independence Bank

Independence Bank is a state-chartered nonmember bank and is not owned by a bank holding company. Accordingly, the Federal Deposit Insurance Corporation (FDIC) and the California State Banking Department are the bank's primary regulators and supervisors. Our relationship has been limited essentially to an application that was made in 1986 to form a bank holding company. We have not examined Independence Bank, nor have we participated in examinations of the bank by the California State Banking Department or the FDIC. Because it is a nonmember bank, its acquisition by Gaith Pharaon in November 1985 was reviewed by the FDIC and the California State Banking Department, not the Federal Reserve.

Bank Holding Company Application

The San Francisco Reserve Bank did, however, have discussions with the management of Independence Bank about the possibility of forming a bank holding company because bank holding company formations require Federal Reserve approval.

On January 8, 1986, we received a draft application to form a multitiered holding company structure over Independence Bank. This application raised significant concerns related to the proposed bank holding company's high debt level and low consolidated capital ratios.

The draft application reflected proposed debt-to-equity and consolidated primary capital ratios that did not meet Federal Reserve System guidelines. The applicant was informed that additional equity would be needed if the proposed holding company was to maintain an adequate tangible primary capital ratio.

On August 6, 1986, the Federal Reserve Bank of San Francisco received the final application to form a multitiered holding company that would own Independence Bank. In a subsequent exchange of correspondence, we requested certain commitments from the applicant.

The applicant was requested to commit itself to achieve and maintain minimum capital ratios meeting Federal Reserve System guidelines at both the parent company and Independence Bank. It also was requested to declare that Independence Bank, if acquired by the applicant, would not engage in nonbanking activities prohibited to bank holding companies and national banks by federal law but permitted to state-chartered banks by California law, such as real estate investment and development. The applicant indicated to the San Francisco Reserve Bank's staff that it did not want to make this commitment because it limited the powers and rights of Independence Bank as a state chartered bank.

San Francisco Reserve Bank staff actions, namely requests for these commitments and discussions with the applicant of the financial issues raised by its proposal, apparently discouraged the applicant from proceeding with its proposal to form a holding company over Independence Bank. The applicant, after these discussions and requests for commitments, never submitted the information and the commitments necessary to complete the application for acceptance, processing, and action by the Federal Reserve System. The Reserve Bank returned the application to the applicant on December 5, 1986, as a result of its failure to provide the various required commitments.

Because the applicant failed to proceed with the application, it never reached the stage at which the Federal Reserve System would have conducted background investigations of principals of the applicant and formed conclusions concerning management of the applicant and Independence Bank. The Reserve Bank ceased having any direct supervisory or regulatory role with Independence Bank following the return of the application.

SUMMARY AND CONCLUSION

In summary, our efforts to determine the ownership of Independence Bank were limited, as we had no direct supervisory or regulatory role with the bank other than its application to form a bank holding company. The application never reached the stage at which the Federal Reserve System would have investigated and formed conclusions about the management and ownership structure of Independence Bank.

The Federal Reserve Bank of San Francisco's supervision and regulation of BCCI was concentrated on our on-site examination program adopted in cooperation with the California State Banking Department, our role in the drafting of enforcement actions issued against BCCI, our intensified oversight efforts in light of money laundering allegations in 1988, and our continuous on-site presence at the Los Angeles agency since February 1991. □

Statement by John P. LaWare, Member, Board of Governors of the Federal Reserve System, before the Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, September 24, 1991

I am pleased to appear before this committee on behalf of the Federal Reserve Board to discuss issues related to mergers among U.S. banking organizations. The last ten years have seen considerable consolidation of our banking system, a process that probably will continue for some time. And while banking consolidation is in many ways a natural response to the evolution of the overall banking environment, the significant changes that we have observed do raise a number of public policy questions and concerns. In the Board's view, the primary objectives of public policy in this area should be to help manage the evolution of the banking industry in ways that preserve the benefits of competition for the consumers of banking services and to ensure a safe, sound, and profitable banking system. My statement today will focus on how, within the context of existing law, the Federal Reserve is pursuing these goals and will review the potential economic effects of bank mergers.

MERGER TRENDS IN THE 1990S

It is useful to begin a discussion of the public policy and other implications of bank mergers with a brief description of recent bank consolidation trends. The statistical tables in appendix A of my statement provide some detail that may be of interest to the committee. [1]

From a variety of perspectives the pace of bank mergers has accelerated over the last decade. For example, *excluding* acquisitions of failed or failing banks by healthy banks, in 1980 there were 188 bank mergers involving about $9 billion in acquired assets; by 1987 the annual number and the dollar value of mergers peaked for the decade at 710 mergers and $131 billion of acquired assets. In 1989, the number of mergers dropped back to an estimated 550, involving an estimated $60 billion of acquired bank assets. The number of mergers involving large bank holding companies also increased. In 1980, there were no mergers or acquisitions of commercial banking organizations in which both parties had more than $1 billion in total deposits. The years 1985 through 1990 averaged 13 such transactions per year.

Another perspective is provided by the fact that the total number of U.S. banking organizations declined steadily throughout the 1980s. In 1980, there were 12,679 banking organizations (including 14,737 banks); by 1985, 11,377; and in 1990, about 9,688 (including 12,526 banks), a 24 percent decline in organizations and a 15 percent decline in numbers of banks from 1980. These trends have been accompanied by an increase in the share of total banking assets controlled by the largest banking organizations. For example, the proportion of domestic banking assets accounted for by the 100 largest banking organizations went from 48 percent in 1980, to 55 percent in 1985, to 62 percent at year-end 1990.

The trends that I have just described must be placed in proper perspective because, taken by themselves, they hide some of the key dynamics of the banking industry. For example, although a major reason for the decline in the number of banking organizations over the 1980s was the fact that almost 1,100 banks failed, the decline in the total number of banks was offset considerably by the fact that over that decade about 2,700 new banks were formed. Similarly, while more than 6,600 bank branches were closed during the 1980s, the same period saw the opening of well over 16,000 new branches. Perhaps even more significant, the total number of banking offices increased sharply, from about 48,500 in 1980 to almost 60,000 in 1990, a 23 percent rise.

Data on the nationwide concentration of U.S. banking assets must also be viewed in perspective. None of the increase in such concentration among the 100 largest banking organizations has occurred among the very largest—the 10 largest—banks. Rather, the large regional banks have accounted for all of the increase in the concentration ratio. Of course, if the recently announced mergers of some of our largest banks

1. The attachments to this statement are available upon request from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

are implemented, concentration among the top 10 will increase.

Given the Board's statutory responsibility to ensure competitive banking markets, it is critical to understand that these nationwide concentration statistics are not the important concept for assessing competitive effects. Virtually all observers agree that the relevant issue is competition in local banking markets. And the facts are that, over the last decade, the average proportion of bank deposits accounted for by the three largest firms in urban markets has increased only 1 percentage point and has remained virtually unchanged in rural markets. These ratios have actually declined in both types of markets since the mid-1970s. The apparent contradiction between increased concentration ratios nationally and virtually unchanged ratios locally can be explained by several factors. As my statement will describe in more detail, key considerations include, first, the fact that most mergers are between noncompeting banks and, second, the fact that those mergers between entities in the same market have faced new entrants and antitrust constraints and have found that smaller bank competitors effectively limit their ability to increase market share.

Overall, then, the picture that emerges is that of a dynamic U.S. banking structure, with the number of banking offices increasing sharply and with their location extremely sensitive to the demands of consumers. In such an environment, it is potentially very misleading to make broad generalizations without looking more deeply into what lies below the surface. In part, for the same reasons that make generalizations difficult, the Federal Reserve devotes considerable care and substantial resources to analyzing individual merger applications.

Federal Reserve Methodology for Analyzing Proposed Bank Mergers

The Federal Reserve Board is required by the Bank Holding Company Act (1956) and the Bank Merger Act (1960) to assess the effects when (1) a holding company acquires a bank or merges with another holding company or (2) the bank resulting from a merger is a state-chartered member bank. The Board must evaluate the likely effects of such mergers on competition, the financial and managerial resources and future prospects of the firms involved, the convenience and needs of the communities to be served, and Community Reinvestment Act requirements.

This section of my statement briefly discusses the methodology that the Board uses in assessing a proposed merger. In light of the committee's specific questions, emphasis is placed on competitive factors. In addition, more detailed discussion of the legal and economic bases for the Board's assessment of competition is found in appendix B.

Competitive Criteria

In considering the competitive effects of a proposed bank acquisition, the Board is required to apply the same competitive standards as those contained in the Sherman and Clayton Antitrust acts. The Bank Holding Company (BHC) Act and the Bank Merger Act do contain a special provision, applicable primarily in troubled bank cases, that permits the Board to balance public benefits from proposed mergers against potential adverse competitive effects.

The Board's analysis of competition begins with defining the geographic areas that are likely to be affected by a merger. Under procedures established by the Board, these areas are defined by staff members at the local Reserve Bank in whose District the merger would occur, with oversight by staff members at the Board. To ensure that market definition criteria remain current, and in an effort to better understand the dynamics of the banking industry, the Board has recently sponsored several surveys, including the 1988 National Survey of Small Business Finances, the national Survey of Consumer Finances, and telephone surveys in specific merger cases, to assist it in defining geographic markets in banking. These surveys and other evidence continue to suggest that small businesses and consumers tend to obtain their financial services in their local area. This local geographic market definition would, of course, be less important for the financial services obtained by large businesses.

With this basic local market orientation of consumers and small businesses in mind, the staff constructs a local market Herfindahl-Hirschman index (HHI), which is widely accepted as a sensitive measure of market concentration to conduct a preliminary screen of a proposed merger. The merger would not be regarded as anticompetitive if the HHI and the change in that index do not exceed the criteria in the Justice Department's merger guidelines for banking. However, although the HHI is an important indicator of competition, it is not a comprehensive one. Besides statistics on bank concentration, economic theory and evidence suggest that other factors, such as local market services available from nonbank providers of financial services and potential competition, may have important influences on bank behavior. These other factors have become increasingly important as a result of many recent procompetitive changes in the financial sector. Thus, if the level and change in the HHI are within the Justice Department's guidelines, there is a presumption that the merger is acceptable, but if they are not, a more thorough economic analysis is required.

Because the importance of the other factors that may influence competition often varies from case to case and market to market, an in-depth economic analysis of competition is required in each of those merger proposals in which the Justice Department HHI guidelines are exceeded. To conduct such an analysis of competition, the Board uses information from its own major national surveys noted above; from telephone surveys of consumers and small businesses in the market being studied; from on-site investigations by staff; and from various standard databases with data on market income, population, deposits, and other variables. These data, along with results of general empirical research by Federal Reserve System staff members, academics, and others, are used to assess the importance of various factors that may affect competition. To provide the committee with an indication of the range of "mitigating" factors that the Board may consider in evaluating competition in local markets, I shall briefly outline these considerations.

Potential competition, or the possibility that other firms may enter the market as a result of the merger, may be regarded as a significant procompetitive factor. It is most relevant in markets that are attractive for entry and in which barriers to entry, legal or otherwise, are low. Thus, for example, potential competition is of relatively little importance in markets in which entry via intra- or interstate branching is severely restricted, or in markets in which branching is restricted and it may be difficult for investors to raise the minimum capital needed to start a bank. For potential competition to apply, it will generally be necessary for there to be potential acquisition targets as well as meaningful potential entrants. This factor is most likely to be relevant in urban markets.

Deposits at thrift institutions are now typically accorded 50 percent weight in calculating statistical measures of the impact of a merger on market structure for the Board's analysis of competition. In some instances, however, a higher percentage may be included if thrift institutions in the relevant market look very much like banks, as indicated by the substantial exercise of their transactions account, commercial lending, and consumer lending powers.

Competition from other depository and nonbank financial institutions may also be given weight if such entities clearly provide substitutes for the basic banking services used by most consumers and small businesses. In this context, credit unions and finance companies may be particularly important.

The competitive significance of the target firm can be a factor in some cases. For example, if the bank being acquired is not a reasonably active competitor in a market, its market share might be given a smaller weight in the analysis of competition than otherwise.

Adverse structural effects may be offset somewhat if the firm to be acquired is located in a declining market. This factor would apply when a weak or declining market is clearly a fundamental and long-term trend, and there are indications that exit by merger would be appropriate because exit by closing offices is not desirable and shrinkage would lead to diseconomies of scale. This factor is most likely to be relevant in rural markets.

Competitive issues may be reduced in importance if the bank to be acquired has failed or is about to fail. In such a case, it may be desirable to allow some adverse competitive effects if this means that banking services will continue to be made available to local customers rather than be severely restricted or perhaps eliminated.

A very high level of the HHI could raise questions about the competitive effects of a merger even if the *change* in the HHI is permissible within the Justice Department criteria. This factor would be given additional weight if there has been a clear trend toward increasing concentration in the market.

Finally, factors unique to a market or firm would be considered if they are relevant to the analysis of competition. These factors might include evidence on the nature and degree of competition in a market, information on pricing behavior, and the quality of services provided.

Some merger applications are approved only after the applicant proposes, or agrees to, the divestiture of offices in local markets when the merger would otherwise violate Justice Department guidelines and cannot be justified using any of the criteria that I have just discussed. We believe that these divestiture actions have deterred many banking organizations from applying for mergers that would be acceptable to the Board only with divestitures that the applicant is not willing to make.

Safety and Soundness Criteria

In acting upon merger applications, the Board is required to consider financial and managerial considerations. In doing so, the Board's goal is to promote and protect the safety and soundness of the banking system and to encourage prudent acquisition behavior by applicant banking organizations.

The Board expects that holding company parents will be a source of strength to their bank subsidiaries. In doing so, the Board generally requires that the holding company applicant and its subsidiaries be in at least overall satisfactory condition and that any weaknesses be addressed before Board action on a proposal. The holding company applicant must be able to demonstrate the ability to make the proposed acquisition without unduly diverting financial and managerial resources from the needs of its existing subsidiary banks.

The Board has long stressed the importance of capital in reviewing applications to expand. It is the Board's policy that acquisitions or mergers should not result in a diminution of the overall capital strength of the combined organizations. For this reason, the Board has generally expected that significant acquisitions or mergers be funded in whole or in part by the issuance of additional capital.

In this connection, the Board has held that banking organizations undertaking significant growth, either internally or through acquisitions or mergers, should operate with capital ratios well in excess of the supervisory minimums, without significant reliance on intangible assets. The Board has indicated that this cushion should be at least 100 to 200 basis points above the minimum ratios; still larger margins could be called for, depending on the actual financial condition of the organization and the risks being undertaken. This emphasis on capital underlies the Board's strong preference that expansionary applications be substantially financed from the proceeds of equity.

Applications from organizations that do not meet these capital standards would not be approved unless the organization has under way a capital augmentation program and can demonstrate the ability to raise additional tier 1 (essentially equity) capital contemporaneously with the acquisition. As noted, additional capital may also be required to correct any weaknesses in the bank or company to be acquired. This public policy serves to protect the existing satisfactory financial strength of the organization and to prevent an undesirable decline in capital adequacy caused by the acquisition of significant additional assets. It also can serve to moderate the rate of expansion and enable the organization to absorb the additional risks.

These general principles apply regardless of the type of acquisition—banking or nonbanking. The financial and managerial analysis of the applicant includes an evaluation of the existing bank, nonbank subsidiaries, the parent company, the consolidated organization, and the entity to be acquired.

Community Reinvestment Act Criteria

The Community Reinvestment Act (CRA) performance of banking organizations that seek the Board's approval to acquire a bank or a thrift institution is a major component of the "convenience and needs" criteria that must be considered by the Board. In making its judgments, the Board pays particular attention to CRA examination findings. In addition, any comments received from the public regarding an applicant's CRA performance become part of the official record, and such comments are reviewed carefully. Indeed, the Board has just announced its intention to hold public meetings in various locations on the CRA record of the banks involved in a major merger application.

Banks supervised by the Federal Reserve System—regardless of the size or the geographic scope of a bank's operations—are examined for CRA purposes at least every eighteen to twenty-four months. Banking organizations with identified weaknesses in their consumer compliance are examined even more frequently. Our practice is to review the performance of banks with large intrastate branching systems by examining a sample of branches, which consists of all major branches plus one-tenth of all small branches selected on a rotating basis. This type of system probably could be used for large, interstate branch systems as well if the Congress agrees to permit interstate branching. Some adjustments may be necessary, however, to ensure that the CRA examination process continues to work well for banking organizations that span several states.

The Board expects that banking organizations will have policies and procedures in place and working well to address and implement their CRA responsibilities before Board consideration of bank expansion proposals. These efforts must include methods for ascertaining the credit needs of the entire service area, including low- and moderate-income neighborhoods; credit products designed to meet those identified needs; outreach and marketing efforts throughout this service area; involvement by senior management and the institution's board of directors in establishing and supervising the implementation of those efforts; and a record of performance in helping to meet the community's credit needs through products that are consistent with the institution's overall business orientation.

The Board generally does not accept promises for future action in this area as a substitute for a demonstrated record of performance. Instead, the Board has accepted commitments for future action as a means of addressing areas of weakness in an otherwise satisfactory record. When commitments have been accepted, the Board monitors progress in implementing the proposed actions, both through reports and through the application process.

Protection of the Deposit Insurance Fund

In recent years, many bank merger and acquisition cases have involved failed or failing banks. By far the most common resolution method used by the FDIC has been the so-called purchase and assumption procedure. Under this procedure, a healthy banking organization assumes all or a part of the assets and liabilities of a failed or failing bank. The Federal Reserve favors continuing to give the FDIC some flexibility in how it resolves such banks.

The need for flexibility derives from our concern about the possibility of systemic risk associated with a failing bank. Systemic risk refers to the chance that financial difficulties at one bank, or possibly a small number of banks, may spill over to many more banks and perhaps to the entire financial system. In principle, systemic risk could develop if several smaller or regional banks were to fail. However, in practice systemic risk is more likely to be associated with failures of large institutions. In any event, in some individual cases the prevention of systemic risk can be an important factor in assessing a proposed merger or acquisition.

That systemic risk is most likely in cases of financial distress at large institutions raises a public policy concern with mergers that create large banking organizations. Clearly, it would be unwise to approve mergers that significantly increase systemic risk. For this reason, in any merger application that comes before it, the Board places great weight on the capital ratio and on other indicators of its financial strength that I have already discussed.

However, there is an additional point that should be stressed. The logical connection between bank merger policy and the potential for systemic risk emphasizes the interdependence between our discussion today and the need for comprehensive reform of our system of banking and financial regulation. If the United States is to have a safe, sound, competitive, and profitable banking system, then the Board strongly urges that the Congress pass a broad reform package along the lines of that proposed by the Treasury and supported by the Board. Such legislation would call for strong capital, prompt corrective action policies to deal with financially distressed depositories, frequent on-site examinations, increased opportunities for geographic diversification of risk and reduced costs through full interstate branching, and a broader range of permissible activities for financial services holding companies with well-capitalized bank subsidiaries. By increasing the safety and soundness of our banking system, these reforms would lessen the likelihood of a major systemic threat and would allow our banking system to adjust to evolving market and technological realities. But even with these reforms, the Board believes that it would be a mistake to eliminate entirely the ability of the authorities to act to protect the economy by assisting in the acquisition of a large failing bank in such a way as to protect all depositors. We agree that this approach has been overused in the past and requires some constraints. We urge, however, that the authorities' hands not be tied as they would be under H.R.6.

POTENTIAL IMPLICATIONS OF BANK MERGERS

The increased rate of bank mergers has raised several concerns regarding the potential effects of banking consolidation on consumers whose demands for banking services are primarily local in nature, on the performance of the merged banks (including prices paid by consumers at those banks), and on the overall structure of the U.S. banking industry.

Effects of Mergers on Locally Limited Customers

The current merger wave in the banking industry is likely to have only modest effects on the availability of services to consumers and small businesses that rely primarily on local providers for their financial services. There are two reasons for this: (1) to date, most mergers have not been between banks operating in the same local banking markets and (2) the effects of intramarket mergers can be, and thus far have been, limited by antitrust constraints on such mergers.

Even in those places in which in-market mergers have occurred, the effect on competition has, on average, not been substantial. This situation, of course, does not mean that no consumers have ever been harmed by mergers. No policy can guarantee that result. But it does suggest that increases in local market concentration have been limited by the Board's application of antitrust standards to within-market merger applications. In addition, the Board's policies have almost certainly discouraged some potential bank mergers before an application was ever filed. Moreover, considerable intramarket consolidation could occur without significant anticompetitive effects. Many urban markets could see a relatively large number of in-market mergers before antitrust guidelines would be violated. Recent legislative changes have made thrift institutions more important competitors for banking services, and this competition has helped to reduce concerns about anticompetitive effects from intramarket bank mergers.

Although, as I shall be discussing shortly, small banks remain viable competitors in markets after larger bank mergers, some research suggests that large banks may adopt new banking technologies—such as automated teller machines and bank credit cards—more rapidly than small banks. Thus, bank mergers may enhance consumer convenience. On the other hand, in-market bank mergers often lead to some branch closings, raising concerns that consumer convenience may be harmed. Indeed, one of the factors reviewed in a CRA examination is the bank's record of opening and closing offices. However, as I pointed out earlier, there has been a substantial increase in the number of bank offices in the

United States in recent years. More important, there is no reason to suspect that the market factors that have led to this increase in the number of offices have changed. Indeed, the abolition of constraints on interstate branches would greatly facilitate this process. That is, if merging banks should close branches, the opening of branches by existing competitors or by new entrants to the market is, based on past experience, likely to occur, and would become even more so with full interstate branching. If consumers demand locational convenience, banks of all sizes will need to be responsive if they expect to remain viable.

Effects of Mergers on Bank Performance

Federal Reserve System staff members have conducted several studies over many years on the effects of bank mergers and acquisitions. Some of these studies have focused on the effect of mergers on bank profits and prices, while others have looked at the potential for cost savings and efficiencies derived from mergers. At the committee's request, a detailed review of the studies appears in appendix C.

Of those studies concerned with profits and prices, some have looked at the effects of specific mergers, but a majority have approached this issue more indirectly by examining how bank profits and prices differ across banking markets. Each type of study is relevant to an assessment of the impact of bank mergers on performance.

Studies of differences in bank profitability across markets with varying degrees of concentration represent the oldest type of study relevant to the issue. Typically, such studies have found that banks operating in more concentrated markets exhibit somewhat higher profits than do banks in less concentrated markets. These higher profits may reflect the lesser degree of competition in more concentrated markets. Many people have argued, however, that these profits are simply an indication of the greater efficiency and lower costs of the largest firms in such markets. Because of this fundamental disagreement, there is no consensus concerning the meaning of this type of study for merger policy.

Other studies have looked across banking markets for differences in the prices that banks charge their loan and deposit customers. For the most part, such studies have found that banks located in relatively concentrated markets tend to charge higher rates for certain types of loans, particularly small business loans, and tend to offer lower interest rates on certain types of deposits, particularly transactions accounts, than do banks in less concentrated markets. These studies tend to be clearer in terms of their implications for merger policy because they suggest that mergers resulting in relatively high levels of local banking market concentration can adversely affect local bank customers. That is, these studies support the need to maintain antitrust constraints if locally limited bank customers are to continue to receive competitively priced banking services.

Whether or not specific past mergers have resulted in higher loan rates, lower deposit rates, or in other ways disadvantaged banking customers is very much a different question. Studies of the competitive impact of individual bank mergers, in essence, focus on the issue of whether regulatory authorities have been successful in applying antitrust constraints.

In general, such studies have been rare, making generalizations hazardous. Of those studies that have been conducted, however, no evidence of significant anticompetitive effects attributable to past mergers has been found. One such effort examined the impact of the merger of two large in-state banks on two types of deposit rates and found no adverse effects on bank customers. Other studies using different approaches have also failed to find anticompetitive effects. Thus, it appears that while significant mergers, particularly intramarket mergers that directly affect market concentration, can in principle adversely affect banking customers, there is no direct evidence to date that those mergers passing regulatory scrutiny have, in fact, done so.

A related issue relevant to the effect of mergers is the prospect that, through merger, greater bank efficiency can be achieved, thus yielding a healthier, more competitive banking firm. As in the case of the bank pricing studies, studies of the effect of mergers on bank efficiency may be divided into those that do and those that do not look at the effects of specific mergers.

A large number of studies have sought to determine whether larger banking organizations exhibit lower average costs than do smaller organizations. In general, these studies of "scale economies" find that cost advantages of large firms either do not exist or are quite small, and most do not find scale economies to exist beyond the range of a small- to medium-sized bank.

Another strand of research has attempted to discover whether there are important differences in the efficiency with which banks use inputs to produce a given level of services. These studies, which essentially focus on management skills, suggest that some banks, both large and small, are just a lot better than others at using their inputs, such as labor and capital, in a productive way. Indeed, estimates of these so-called cost inefficiencies suggest that management skills dominate any benefits from economies of scale. In addition, there is some evidence that these differences in management efficiencies play a role in the incidence of bank failure. More than 50 percent of the bank failures in the 1980s are estimated to have come from the highest (noninterest) cost quartile of banks, while less than 10 percent are estimated to have occurred in the lowest cost quartile.

In the past couple of years, several researchers have sought to determine whether individual past mergers have resulted in cost savings. Typically, such studies examine the changes in noninterest expenses observed before and after the merger and, in some cases, compare them to the same changes observed concurrently in banks that did not participate in mergers. With one or two exceptions, these studies generally have not found evidence of substantial cost savings beyond those associated with shrinkage of the firms in question after merger.

However, the previously noted evidence indicating substantial differences in the relative efficiency of banks suggests that substantial cost savings are theoretically possible for many banks. For example, a study recently completed at the Board has estimated that annual cost savings of about \$17 billion would result if the lowest-cost banks in the country were to acquire the highest-cost banks and if the costs of the acquired banking organizations were subsequently reduced to the level of the acquiring banks. Although some of these cost differences may simply reflect differences in the level of services offered to the public, such results nevertheless suggest potential gains from acquisitions of inefficient firms by efficient ones. Indeed, as banking becomes even more competitive, such results indicate that it may become increasingly common for relatively efficient banks to take over relatively inefficient ones and convert them into viable, low-cost competitors. Surely consumers of financial services could only be better off if such a future were to be realized and competitive markets were to be maintained.

Once again, however, I would point out and emphasize the connections between our discussion here today and the need for fundamental reform of our banking and financial regulatory system. Achievement of the scenario that I have just described depends heavily upon creating an environment not only in which banks can compete more effectively but also in which the likelihood that the deposit insurance funds will suffer losses is greatly reduced, such as would occur with higher capital, more frequent examinations, and prompt corrective action. Such reforms would put even more pressure on inefficient banks to achieve cost economies. In this regard, I would emphasize one more key point. Care should be taken to ensure that the bank reform package does not impose costly new regulations on banks that would substantially offset the cost savings that result from other reform actions. A competitive, safe, and sound banking system must also be one in which banks can make a profit.

Effects of Mergers on Banking Structure

Ultimately, the effects of bank mergers on consumer welfare depend to a substantial extent on the resulting degree of concentration in local banking markets. As I have already indicated, one of the tasks of public policy is to apply the antitrust standards in such a way as to maintain competitive banking markets. Because it appears that anticompetitive concerns are normally most serious in local banking markets, this section provides somewhat more detail on the implications of bank mergers for local market concentration. In addition, because the committee's letter of invitation asked for some ideas on what the U.S. banking industry might look like in the twenty-first century, I shall briefly address this inherently highly speculative issue.

Metropolitan statistical areas (MSAs) and non-MSA counties are often used as proxies for urban and rural banking markets. The average three-firm concentration ratio for urban markets so measured increased only 1 percentage point between 1980 and 1990. Average concentration in rural counties was virtually unchanged. Thus, despite the fact that there were more than 5,000 bank mergers during the 1980s, concentration in local banking markets has remained about the same.

Why haven't all of these mergers increased concentration by a greater amount? There are several reasons. First, as I have already indicated, many mergers are between firms operating in different local banking markets. Although these mergers may increase national or state concentration, they do not increase concentration in any local banking market.

Second, as I have also already pointed out, there is new entry into banking markets. In most markets new banks can be formed fairly easily, and some key regulatory barriers, such as restrictions on interstate banking, are much lower than they used to be. Anecdotal evidence suggests that new independent local banks have been formed in many of the banking markets that are dominated by the large multistate banks.

Third, the committee may be surprised to discover that the evidence overwhelmingly indicates that banks from outside a market usually cannot increase their market share after entering a new market by acquisition. An oft-mentioned example here is the inability of the New York City banks to gain significant market share in upstate New York. More general studies indicate that when a local bank is acquired by a large out-of-market bank, there is normally some loss of market share. The new owners are not able to retain all of the customers of the acquired bank.

Fourth, it is important to emphasize that small banks have been, and continue to be, able to retain their market share and profitability in competition with larger banks. Our staff has done repeated studies of small banks; all these studies indicate that small banks continue to perform as well as, or better than, their large counterparts, even in the banking markets dominated by the major banks.

Finally, administration of the antitrust laws has almost surely played a role. At a minimum, banking organizations have been deterred from proposing seriously anticompetitive mergers. And in some cases, to obtain merger approval, banks have agreed to divest banking assets and deposits in certain local markets when the merger otherwise would have resulted in substantially adverse effects.

Future Banking Structure

Where will all of these mergers and changes in banking lead us? What will the future structure of the banking industry look like? To the extent that such forecasts can reasonably be made, it seems quite likely that the future will contain thousands of small banks, some regionals, some superregionals, and a small number of large nationwide banks. There is no reason to believe that small banks will not continue to remain viable head-to-head competitors in local markets with their larger rivals. These rivals will be both regional banks and a few nationwide banks with offices in hundreds of local markets coast to coast. Some of today's large bank mergers are probably the early stage of the formation of nationwide banks.

I hesitate to make a prediction about the number of banking organizations in the future. There is simply no way to know or forecast that number with any high degree of certainty. However, a recent study by Board staff members attempted to make some ball-park projections in this matter. Relying primarily on trends observed in the 1970s and 1980s and on the assumption that interstate banking would be allowed through holding companies rather than through branches, this study projected that the total number of U.S. banking organizations could be about 5,500 by the year 2010. This number of holding companies probably implies the existence of 6,000 to 7,000 banks. These 5,500 banking organizations include a large number of local community banks as well as regional banks and large, nationally active banking organizations. I would guess that full interstate banking via branching would reduce the number of banking organizations only somewhat further because the staff study had already assumed interstate operations through the more expensive option of using multibank holding companies.

CONCLUSION

The increased pace of bank mergers since the early 1980s has greatly reduced the number of U.S. banking organizations and resulted in a substantially higher nationwide concentration of banking assets in the 100 largest banks. However, concentration in local banking markets, which is normally considered most important for the analysis of potential competitive effects, has remained virtually unchanged. In addition, there have been a large number of new bank entrants and a sharp increase in the number of banking offices. This development illustrates that the U.S. banking structure is highly dynamic and that sweeping generalizations are extremely difficult to make.

The dynamic nature of U.S. banking means that analysis of the potential competitive and other effects of individual bank mergers must be done case by case, market by market. The Federal Reserve devotes considerable resources to this end. All key factors are considered, including actual competition from bank and nonbank sources, potential competition, the general economic health of the market, a variety of factors unique to a given market, and in the case of mergers involving failed or failing firms, systemic risk. In addition, safety and soundness and CRA concerns are highly relevant. In the end, complex judgments are required to ensure the appropriate balance of benefits and costs in the public interest.

To date, the available evidence suggests that recent mergers have not resulted in adverse effects on the vast majority of consumers of banking services. It is certainly possible that some customers have been disadvantaged by some mergers. And, mergers can no doubt be very disruptive to bank employees as functions are consolidated and reorganized. But these disruptions do not appear to differ substantively from similar disruptions in other industries undergoing fundamental change.

It is also clear that substantial harm to consumers would occur if mergers were allowed to decrease competitive pressures significantly. Thus, it is crucial that antitrust standards be enforced by the bank regulatory agencies and the Department of Justice. Given the record of success to date, the Board believes that our current statutory authority in this area is sufficient to meet existing and foreseeable concerns. However, if future developments warrant, the Board would not be reluctant to seek additional authority in this area.

The evidence to date does not indicate that substantial cost savings have resulted from bank mergers. However, our staff work does suggest the potential for such savings if well-managed entities acquire and modify the operations of high-cost organizations. Given the continuing pressures for cost minimization in banking, it certainly seems possible that some of the potential will be realized in the future.

Last, I would emphasize once again the close link between our discussion here and the need for comprehensive reform of our system of banking and financial regulation. All of us want consumers of financial services to have available competitively priced, high-quality banking services, and we want to ensure that U.S. taxpayers are not exposed to excessive risk of loss through the deposit insurance fund. To achieve these objectives, U.S. banks must have the ability to compete effectively and profitably both at home and abroad, and U.S. regulators must be able to act in timely and effective ways. The Board therefore urges the Congress to pass the reform proposals that have been advanced by the Treasury and supported by the Board. □

Statement by David W. Mullins, Jr., Vice Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Oversight of the Committee on Ways and Means, U.S. House of Representatives, September 26, 1991

I am pleased to be here today to testify in connection with the regulation of the government securities market. Mr. Sternlight's statement has detailed both the role of the Federal Reserve Bank of New York in this market, including its relationship with the primary dealers, and the circumstances surrounding the disclosures by Salomon Brothers.[1] The Board of Governors of the Federal Reserve System was actively involved in the consultations among regulators during this episode. In my prepared remarks, I shall first delineate the role of the Board of Governors in this market and then turn to the potential implications of this episode for regulatory and legislative initiatives.

The Board of Governors considers the U.S. government securities market to be the most important securities market in the world. It is important for at least three reasons. First, market conditions there determine the cost to the taxpayer of financing U.S. government operations. Second, this market serves as the foundation for other money and capital markets here and abroad and as a prime source of liquidity for financial institutions. Finally, and for us perhaps most important, the U.S. government securities market is the market through which the Federal Reserve implements monetary policy, and thus this market must be an efficient and reliable transmitter of our monetary policy actions.

Nonetheless, the Board of Governors has little direct regulatory authority over the U.S. government securities market. In this market, the Reserve Banks operate as fiscal agents of the U.S. Treasury, and the Federal Reserve Bank of New York also serves as the operating arm of the Federal Open Market Committee (FOMC). The Board, however, retains general oversight responsibility for all Federal Reserve Bank activities. Moreover, the Board of Governors bears the responsibility for determining overall policy for the Federal Reserve System with respect to this market and other matters. For example, by statute the Board consults with the Treasury and the Securities and Exchange Commission (SEC) on issues related to administration of the Government Securities Act. Because of these responsibilities and the importance of this market, the Board is committed to participating actively in the process of ensuring and enhancing the efficiency and integrity of this market.

The market under consideration here is at the center of the nation's financial system. Its depth and breadth are unparalleled. And it is because of the importance of the market for U.S. government securities that the events of recent months are of such concern. The price distortions in certain securities, the admissions of wrongdoing by Salomon Brothers, and the allegations of further misconduct have raised troubling questions about the government securities market. Although the government securities market has been extraordinarily resilient and has continued to function well over this period, this episode underscores the importance of ensuring the integrity of this market.

Of course, we must not overlook the fact that existing enforcement mechanisms appear to have been instrumental in this unfolding episode. These mechanisms included surveillance activities, inquiries, and other enforcement activities by the Federal Reserve Bank of New York, the Treasury, the SEC, and the Justice Department. Although senior officials of Salomon Brothers were aware of rule violations months before, the firm finally admitted wrongdoing only under the pressure of these advancing enforcement processes. And of course, these enforcement processes continue to move forward as we meet here today. It is already apparent to all observers that the consequences of willful violations in this area are quite severe indeed.

Although this episode has been a troubling one, it is not apparent that sweeping changes in regulation are warranted. It is clear that tightening up on enforcement would be efficacious in detecting and deterring future offenses. For example, the Federal Reserve has begun contacting customers bidding through dealers to confirm the accuracy of those bids. In addition, the Federal Reserve regularly receives information on dealer positions in when-issued securities. These reports were not actively monitored from an enforcement perspective because they were not designed for that purpose. Nonetheless, closer attention to them may be helpful in raising questions about situations with possible enforcement implications, and we will explore the redesign of this report to enhance its potential usefulness in the enforcement process. The Federal Reserve is committed to ensuring active monitoring of all

1. Mr. Sternlight's statement follows this one.

incoming data and prompt referral of anomalous findings to appropriate regulatory authorities. We are working with other government agencies to ensure that an effective system of surveillance is in place.

And yet this episode has raised concerns that go beyond the straightforward process of detecting and punishing wrongdoing. With the revelations by Salomon Brothers, the price distortions in certain recent issues, and allegations of other misconduct, some have felt that the fairness of the market has been called into question. Others have raised concerns about the efficiency of market mechanisms and the efficacy of the current regulatory structure. The continued smooth functioning of this market demonstrates that there appears to have been no economically meaningful loss of confidence in this market as yet. Nonetheless, these concerns need to be addressed; reduced confidence in the fairness and efficiency of the government securities market could potentially impair liquidity and raise the cost of Treasury financing. Of course, the Treasury's costs also will rise if regulators and legislators overreact by instituting unnecessarily burdensome and restrictive rules that discourage bidding for Treasury securities. The integrity of this marketplace must be ensured through means that do not unduly restrict demand or impose unreasonable costs on bidders.

In response to these concerns, a wide variety of proposals have been advanced for changes in regulation or market structure. I believe that this broad-based reassessment is appropriate and healthy. This episode has presented us with an opportunity to undertake a thorough analysis of the structure of this market and its regulations.

I also believe that the assessment of these important issues should not be done in haste. Nor should changes be considered in a piecemeal manner. The issues are too complex and highly interrelated, investigations are not yet completed, and the data needed to make informed judgments are still being gathered. The consequences of mistakes are too severe for us to rush to judgment on fundamental issues of market structure and regulation.

What is needed is a rigorous, comprehensive, and coordinated review of the government securities market—its structure, practices, and regulation. The objective should be to find ways to ensure and enhance the efficiency and integrity of this market. Accordingly, the Treasury, the Federal Reserve, and the SEC have agreed to undertake an intensive study, culminating in recommendations for any changes needed to ensure and enhance the efficiency and integrity of this market.

A key question to be addressed in the course of such a review is whether current laws, regulations, procedures, and enforcement mechanisms foster the efficiency and liquidity of this market as well as provide adequate protection against the potential for manipulative practices. Before us is a wide range of issues pertaining to both the primary and secondary markets for Treasury securities.

A promising approach is to explore ways to make access to the primary market easier and more efficient. Broader-based participation in auctions should reduce the vulnerability to collusion and result in a deeper, more efficient market. For example, an electronic bidding process in the primary market promises to provide easier access, thereby broadening the market. Moreover, a computerized auction process will greatly enhance the efficiency of market surveillance and monitoring and allow rapid and easy detection of many potential abuses. Consequently, the Federal Reserve and the Treasury have accelerated their effort to automate major aspects of the auction process. We also need to analyze alternative auction techniques. Although it is not clear at this stage that different ways of conducting auctions would attract a sizable number of additional bidders and reduce the costs to the Treasury, this area is a potentially fruitful one for examination. Broader participation in auctions and more efficient surveillance mechanisms may render collusion impractical and obviate the need for cumbersome, restrictive regulations that risk raising the cost of Treasury financing.

In thinking about such issues, the Board begins from the premise that it is absolutely essential that the extraordinary liquidity and efficiency of the government securities market not be impaired. This liquidity is important to the smooth functioning of the financial system, it facilitates the implementation of monetary policy through open market operations, and it allows the Treasury to issue federal debt at the lowest possible cost to the taxpayers.

With well over $2 trillion in Treasury debt held by the public, the stakes are high and the consequences of mistakes are severe. Should either concerns about market integrity or inappropriate regulation raise the interest rate on Treasury debt even one one-hundredth of a percentage point, this rise would aggregate into more than $200 million in increased interest cost that would have to be borne by U.S. taxpayers every year. Time is needed for a careful, analytical approach to the issues of market structure and regulation.

In sum, recent events have raised troubling questions about the U.S. government securities market. These concerns must be addressed. A thorough and thoughtful investigation is the first step in this process. Ultimately, a careful and wide-ranging examination of the government securities market, with the goal of enhancing its efficiency and its fairness, will be an important input to our consideration of the appropriate changes in this market. Although I am deeply concerned about recent revelations and await the results of ongoing investigations, I do not believe that the government securities market is broken in any fundamental sense. I do, however, believe that it can be improved, and the Board of Governors is committed to this end. □

Statement by Peter D. Sternlight, Executive Vice President, Federal Reserve Bank of New York, before the Subcommittee on Oversight of the Committee on Ways and Means, U.S. House of Representatives, September 26, 1991

Thank you for the opportunity to be here this morning to help shed light on the market for U.S. government securities. Recent revelations of irregularities have cast a shadow across this most important financial market, and that shadow must not be allowed to remain. Although I believe that improvements in market practice and official oversight are needed, I do not believe that this market is fundamentally flawed. Particular care should be taken not to rush into drastic changes that could do more harm than good. My comments are from the perspective of my position at the Federal Reserve Bank of New York, where I have responsibility for the day-to-day implementation of Federal Reserve monetary policy through operations in the government securities market. My department also receives and reviews Treasury auction tenders on behalf of the Treasury in the New York Reserve District.

ROLE OF PRIMARY DEALERS

A key component of the government securities market is the group of so-called primary reporting dealers. These dealers are the firms with which the Federal Reserve's trading desk conducts its open market operations. They are major participants in the market, maintaining active markets to customers across a broad spectrum of issues. They are also active in the distribution of Treasury debt, buying large portions of the Treasury auctions and placing the securities with a wide variety of investors here and abroad. At present there are thirty-nine primary dealers, of which about half are banks or the securities affiliates of banks and half are diversified—or in a few cases specialized—securities firms. Last year, the total volume of activity conducted by the Federal Reserve with primary dealers to carry out open market operations was about $460 billion. Our trading desk also operates in this market to effect investment orders for foreign central banks and monetary authorities—another $65 billion of volume last year.

As a major market participant and public entity, the Federal Reserve naturally has sought private-sector counterparties that can meet the standards for handling our large orders efficiently and safely from the standpoint of credit, delivery, and settlement risk. We have developed standards for selecting those firms with which the Federal Reserve does business, described in an attachment to this statement.[1] Central banks in several other countries with well-developed financial markets have developed broadly similar arrangements to

1. The attachments to this statement are available on request from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

designate a group of firms with which to conduct money market operations.

The number of primary dealers has grown in the last few decades, although there has been some shrinkage in the last couple of years. From eighteen in the early 1960s, the number increased to thirty-six in 1981 and to a peak of forty-six in 1988, growing as the market expanded, and—as this committee well knows—the debt expanded. Since late 1988, there has been a shrinkage in the number of dealers, to thirty-nine today. The decline largely reflects a reaction to the exuberant increase in numbers of participants in the 1980s and some years of poor profitability in the industry. In 1989, four firms withdrew while two were added. In 1990 five firms withdrew while two were added, and so far in 1991 another two firms have withdrawn.

Besides having strong financial credentials, the primary dealers are expected to facilitate the Federal Reserve's open market operations, to make markets to a wide variety of customers in the full range of government securities in good times and bad, and to be consistent and meaningful participants in the Treasury auctions for new securities.

From time to time the Federal Reserve Bank of New York has carefully considered possible changes in its approach to the selection of firms with which it will transact business. We feel somewhat between a rock and a hard place on this question. We need financially sound private-sector counterparties, and the size and speed requirements for our operations mean that the number must be limited in some fashion. Thus, our criteria result in some firms being chosen and some not, and the Federal Reserve will have a trading relationship with a selected group of firms whether or not we call them primary dealers. Inevitably, recent events bring this matter under examination again, but whether another approach would better serve our business needs and public policy needs remains a difficult question.

It is worth noting that the business relationship of the Federal Reserve Bank of New York with the primary dealers exists in a framework in which the Federal Reserve Board has only limited statutory authority to regulate or supervise primary dealers or, for that matter, other participants in the government securities market. Indeed, the Government Securities Act of 1986 established a formal supervisory and regulatory framework for the government securities market for the first time, with the Treasury as rulemaker and the Securities and Exchange Commission and banking supervisors responsible for enforcement.

Although our relationship with the primary dealers is rooted in a "business counterparties" connection, our interests in the health and well-being of the market extend well beyond that framework. The breadth, depth, and liquidity of this market are essential characteristics that the Federal Reserve relies on for the implementation of monetary policy, the Treasury relies on for financing the federal government, and investors rely on in committing their funds. Thus, we recognize fully that as the central bank and fiscal agent for the Treasury, we have a natural interest in the efficient working of the market and hence in the integrity of the market and its major participants. At the same time, we recognize that the extent and nature of our own participation in the market, for ourselves and for the Treasury, make it difficult to ignore the reality that we are regarded as one of its "regulators."

For example, the presence of our limited program for the periodic monitoring of primary dealers and the fact that we regularly collect certain statistical information from the dealers help create that impression. In reality, the primary dealer monitoring program is relatively narrow in its purpose and scope and is not comparable, say, to the bank examination program. One basic aim of the monitoring program is to satisfy ourselves that the Federal Reserve, in its transactions with dealers, is not incurring substantial operational risk or unacceptable risk of financial loss—in a context in which the nature of our transactions with dealers is relatively low in risk to begin with.

The data and information that we collect from primary dealers are aimed at providing broad insights into the workings of the market. The statistical reports also help monitor whether the dealers are meeting our standards for breadth of market-making activity. These information-gathering efforts have not been structured with a view toward enforcement or regulatory compliance, although we recognize that there will always be some overlap between such activities and our broad market monitoring. Except for the so-called when-issued reports, the statistical data collected from dealers on positions and transactions are not specific as to a particular security. Rather, we get weekly data grouped by broad maturity ranges. These reports have virtually no application in detecting the kind of problem that arose in the Salomon case. Even the when-issued report, which is daily for a limited period, would have only limited value in this regard.

However, we are taking a fresh look at the statistics that we gather to see whether they can better serve the coordinated needs of the Treasury, the SEC, and ourselves in either their existing or potentially revised formats.

Before leaving the subject of primary dealers, it is worth asking why firms seek to be primary dealers in the first place. A starting point is that many firms evidently regard this function as an economically effective way to deploy their capital. In fact, however, positive returns do not come easily. As noted earlier, profits were particularly spotty in the last few years, with a significant fraction of individual firms incurring losses—a circumstance that no doubt contributed to attrition in the ranks since 1988.

For some firms, however, low returns and even periodic losses apparently are tolerable because the firm may judge that having a major presence in this market provides advantages related to other aspects of the firm's business. Or it might be that a long-term view is taken, in which prospects for the government securities area are viewed over a timeframe of more than just a few years. Another factor that should be mentioned explicitly as an attraction of the primary dealer designation is that of prestige—although one could think of it, long run, as related to profitability, too. The fact is that, whether we like it or not, there is an element of prestige associated with primary dealer status—and in times of stress that factor can loom very large indeed.

In sum, the primary dealer system has worked well over the years, serving the Federal Reserve, the Treasury, and the nation effectively. It also has its problems, including the elevated importance that can attach, in the public view, to this designation. As we consider possible changes in these arrangements, we need to keep in mind that, regardless of what they are called and how they are selected, for at least the foreseeable future, there will be a finite group of private-sector counterparties with whom the Federal Reserve will do business. One way or another, the identity of these firms is likely to be known in the marketplace. Further, the sheer size of the federal government's financing needs is such that, for the foreseeable future, there will have to be some relatively large firms that play a central role in the underwriting and distribution of that debt. If the returns are not there to attract private capital to that business—perhaps because the burdens of excessive regulation stifle the efficiency and liquidity of that market—the cost to the taxpayer could be enormous.

The Federal Reserve's Role in the Auction Process

The basic rules governing the auctions of Treasury securities—including the 35 percent rule—are set by the Treasury. Responsibility for ultimate compliance with, and enforcement of, these rules also rests with the Treasury. However, just as most central banks throughout the world act as fiscal agents for their treasuries or finance ministries, the Federal Reserve is the U.S. Treasury's point of contact with the market. It is the Federal Reserve's responsibility to call to the Treasury's attention events or circumstances that, in its judgment, suggest that the Treasury's rules or intentions may have been breached. By the same token, it is the Federal Reserve's responsibility to alert the Treasury or other regulatory or enforcement authorities to situations in which it finds evidence of improper secondary market activity in government securities.

For many years, the process by which Treasury securities are auctioned or otherwise placed in the market has worked very well. Until the Salomon events, we had no knowledge of circumstances that would constitute a significant breakdown in the workings of the auction process. Granting that the recent events *do* constitute a significant exception that must be dealt with and *are* being dealt with, I would still say that the auction process continues to work well on the whole.

Although the auction process is open to all qualified bidders, the fact remains that over the long haul the primary dealers—and in recent years their large customers—are by far the major buyers of government securities in the auctions. This situation is natural, given the capital that they have devoted to this business as well as their distribution network and role as market-makers.

The mechanics of the auction process are straightforward. Competitive bids must be submitted to a Federal Reserve Bank or to the Treasury by 1:00 p.m. eastern time on the auction day. The overwhelming share of such bids (often in the range of 80 percent to 90 percent) is received by the Federal Reserve Bank of New York. To minimize market uncertainties, the results of the auction are announced about one hour after the bid deadline.

Within that single hour between 1:00 and 2:00 p.m., the initial responsibility for tabulating and checking the bulk of bids—including their compliance with the 35 percent rule—falls to the staff of the Federal Reserve Bank of New York. In fact, we have only about one-half hour because we must get our results to the Treasury to be combined with reports from elsewhere around the country.

It was this initial check of bids submitted for the February 1991 five-year auction that we now know began the unraveling of Salomon's improper bidding activities. At the time, however, there was no reason to suspect any illegal activity in the form of trumped-up customer bids. Rather, we were simply checking for compliance with the Treasury's rule limiting any single entity to 35 percent of the issue. As it happens, the bids submitted in that auction included a small bid for S.G. Warburg and Co., itself a primary dealer, as well as a bid submitted at the 35 percent limit by Salomon for a customer listed as Warburg Asset Management. If the two bids were awarded in full, and if under Treasury rules these two entities were considered a single entity, the combined bid would have slightly exceeded the 35 percent limit. One of our staff members promptly called Salomon—at around 1:20 p.m. on the auction day—and was told that the customer name should have read Mercury Asset Management, an affiliate of S.G. Warburg. Immediately afterward we called the Treasury to alert them to a possible 35 percent problem.

As this action was occurring, it became evident that the bids in question would be at the so-called stop-out rate and get only a partial award, so that the 35 percent award limit would not be exceeded even if the two entities were combined. In those circumstances the Treasury indicated that it would accept both bids. It was understood that there would be a subsequent inquiry about the relationship of the Warburg entities with reference to future auctions, an inquiry free of the extreme time pressure of the immediate auction deadline.

In the following weeks, Treasury and Federal Reserve staff members reviewed that relationship, leading finally to the Treasury's April 17 letter to Mercury informing it that in the future the affiliated Warburg entities in question would be considered a single entity for purposes of the 35 percent rule. A copy of that letter was sent to Salomon.

As is well known now, of course, the so-called "Mercury" bid was not a customer bid at all but apparently a scheme designed by Mr. Mozer at Salomon to obtain more than 35 percent of the issue for Salomon's own account. (Salomon was also bidding for 35 percent in its own name and, as emerged later, for yet another 35 percent under still another fabricated customer name.)

Receipt of a copy of the Treasury's letter to Mercury apparently prompted Mr. Mozer to go to considerable lengths in requesting Mercury and Warburg officials not to embarrass Salomon by responding to the Treasury in a manner that revealed that Mercury was *not* in fact a Salomon customer in the auction. At the same time, receipt of the letter caused Mr. Mozer to disclose his wrongful "Mercury" bid to his superior at Salomon, who then went on to inform top management at the firm.

Inexplicably, top Salomon management did not come forward to reveal this wrongdoing until August. We surmise that the reason they came forward then was that the Salomon firm had in the meantime become aware of official investigations into still another matter involving government securities—the alleged squeeze on the supply of two-year notes auctioned on May 22. As that two-year note investigation became more intense, Salomon engaged an outside law firm to do an internal investigation at the firm, and apparently that investigation uncovered the earlier bidding irregularities.

I might add that the official investigation of the May two-year note situation followed a period of informal inquiry into market developments by the Federal Reserve Bank of New York and the Treasury immediately after the May 22 auction of those notes. Just a week later, on May 29, the Treasury alerted the SEC to the situation, and the Justice Department also was brought into the picture shortly afterward.

Turning back to the February auction, it is fair to ask whether a more rigorous investigation into the authenticity of bids at that time might have made a difference in regard to subsequent events. It probably *would* have made a difference. However, given the previous history of the auction process—which did not arouse suspicions about the basic authenticity of bids—it still seems reasonable, looking back, to say that the steps then taken by the Federal Reserve and the Treasury were appropriate and responsible. With the benefit of hindsight, we could have done more. Looking back, another thing that surely would have made a difference would have been the timely disclosure of those earlier events by the top management of Salomon when they learned about at least some of them in late April. And in terms of internal management, for the firm to have allowed an individual who had acknowledged such wrongdoing to remain in charge of a key area is questionable, to say the least.

At this time, as investigations of the past continue, our focus also has to be on the future, making sure that the integrity of the auction process and of the secondary market trading process are maintained at the highest levels. For the past month we have been undertaking spot checks of customer bids submitted through primary dealers, verifying the authenticity of those bids directly with the indicated customer. In addition, a more formal verification process for the very largest bids, with written confirmation, is being developed. We also are seeking to accelerate plans for automation of the Treasury auctions—but there should be no illusion that automation can solve all problems. An automated system would not, of itself, have been able to uncover fake bids. At best, it might help speed the review process to identify situations for follow-up inquiries, and it could speed the review process for compliance with rules such as the 35 percent rule. Automated bidder access might also make it more feasible for some larger investors to submit bids directly rather than enter the auctions as customers of dealers. Automation could also cut somewhat further the time required to process tenders before the announcement of results. Meantime, we understand that the Treasury is reviewing its auction rules.

As for the secondary market, we are moving ahead with plans for closer monitoring of day-to-day market developments and closer coordination of the results of such monitoring with other supervisory and regulatory agencies. We will also be reviewing, within ninety days after the last round of testimony, the possible need for additional legislative authority. Certainly, the problems that have come to light need to be addressed systematically and forcefully. At the same time, a high priority is to avoid a heavy panoply of regulation that could impair market efficiency and liquidity.

I think that with the cooperation of supervisory and regulatory agencies and with responsible private-sector leadership, a proper balance can be struck that permits a flourishing, liquid, and efficient market free of the taints that have been uncovered of late. □

Announcements

CHANGE IN THE DISCOUNT RATE

The Federal Reserve Board announced on September 13, 1991, a reduction in the discount rate from 5½ percent to 5 percent, effective immediately.

Action was taken in light of weakness in the money and credit aggregates, the improving inflation environment, and concerns about the ongoing strength of the economic expansion. The reduction, in part, realigns the discount rate with market interest rates.

In taking the action, the Board voted on requests submitted by the boards of directors of the Federal Reserve Banks of Boston, Philadelphia, Cleveland, Atlanta, Chicago, Minneapolis, and Dallas. The Board of Governors subsequently approved similar requests by the boards of directors of the Federal Reserve Banks of New York, Richmond, Kansas City, and San Francisco, also effective September 13, and by the board of directors of the Federal Reserve Bank of St. Louis, effective September 17. The discount rate is the interest rate that is charged depository institutions when they borrow from their District Federal Reserve Banks.

MEETING OF CONSUMER ADVISORY COUNCIL

The Federal Reserve Board announced that its Consumer Advisory Council met on October 10, 1991. The Council's function is to advise the Board on the exercise of its responsibilities under the Consumer Credit Protection Act and on other matters on which the Board seeks its advice.

PROPOSED ACTION

The Federal Reserve Board on September 19, 1991, requested public comment on proposed amendments for 1992 to the reporting form and instructions that accompany Regulation C (Home Mortgage Disclosures). Comments were to be submitted by October 23.

MEETINGS ON APPLICATION OF NCNB CORPORATION TO ACQUIRE C&S/SOVRAN CORPORATION

The Federal Reserve Board announced that public meetings were held in Charlotte, Richmond, Atlanta, and Dallas during the week of October 7 in connection with the application of NCNB Corporation to acquire C&S/Sovran Corporation.

The purpose of these meetings was to collect information concerning the convenience and needs of the communities to be served by the proposal, including the records of performance of the institutions under the Community Reinvestment Act. Persons wishing to appear at these meetings submitted a written request containing a brief statement of the nature of the expected testimony and the estimated time required for the presentation.

CHANGES IN BOARD STAFF

The Board of Governors announced a realignment in the structure of the Information Resources Management (IRM) organization, effective September 30, 1991. Under the new structure, the Office of the Director for IRM, the Division of Hardware and Software Systems, and the Division of Applications Development and Statistical Services are combined into a single Division of Information Resources Management under the direction of Stephen R. Malphrus. The realignment will streamline the management structure, reduce overhead costs, and improve the support levels IRM provides to the Board. The division will report to the Board through the Staff Director for Management.

William R. Jones has been transferred to the Division of Research and Statistics as Associate Director, reporting to the Division Director, with responsibility for the Automation and Research Computing function, directing all divisional computing activities.

Bruce M. Beardsley has been appointed to the new position of Deputy Director and will oversee the day-to-day operations of IRM. Robert J. Zemel has been designated Senior Adviser with responsibility for high-level technical projects. Marianne M. Emerson, Assistant Director for Planning, Support, and Systems Integration (PS&SI), has been promoted to Assistant Director for Banking Statistics Systems. Edward T. Mulrenin, Assistant Director for Special Projects, will oversee the PS&SI Branch in addition to his current responsibilities. □

Legal Developments

FINAL RULE — AMENDMENTS TO REGULATION G AND REGULATION T

The Board of Governors is amending 12 C.F.R. Parts 207 and 220, its Regulation G and Regulation T, to exclude from the limitations of the margin rules the deposit of margin securities with clearing agencies regulated by the Commodity Futures Trading Commission or the Securities and Exchange Commission, provided these deposits are made in connection with the issuance of, or guarantee of, or the clearance of transactions in, any security (including options on any security, certificate of deposit, securities index or foreign currency); or the guarantee of contracts for the purchase or sale of a commodity for future delivery or options on such contracts.

Effective October 11, 1991, 12 C.F.R. Parts 207 and 220 are amended as follows:

Part 207—Securities Credit by Persons Other Than Banks, Brokers, or Dealers

1. The authority citation for part 207 continues to read as follows:

Authority: Secs. 3, 7, 8, 17 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78c, 78g, 78h, 78q, and 78w).

2. Section 207.1 is amended by designating the text of paragraph (b) as paragraph (b)(1) and adding a new paragraph (b)(2) as follows:

Section 207.1—Authority, purpose, and scope.

* * * * *

(b) *Purpose and scope.** * *

(2) This part does not apply to clearing agencies regulated by the Securities and Exchange Commission or the Commodity Futures Trading Commission that accept deposits of margin stock in connection with:

(i) The issuance of, or guarantee of, or the clearance of transactions in, any security (including options on any security, certificate of deposit, securities index or foreign currency); or

(ii) The guarantee of contracts for the purchase or sale of a commodity for future delivery or options on such contracts.

Part 220—Credit by Brokers and Dealers

1. The authority citation for Part 220 continues to read as follows:

Authority: Secs. 3, 7, 8, 17 and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78c, 78g, 78h, 78q, and 78w).

2. In section 220.14, the section heading and paragraph (b) are revised to read as follows:

Section 220.14—Clearance of Securities, Options, and Futures.

* * * * *

(b) *Deposit of securities with a clearing agency.* The provisions of this part shall not apply to the deposit of securities with an options or futures clearing agency for the purpose of meeting the deposit requirements of the agency if:

(1) The clearing agency:

(i) Issues, guarantees performance on, or clears transactions in, any security (including options on any security, certificate of deposit, securities index or foreign currency); or

(ii) Guarantees performance of contracts for the purchase or sale of a commodity for future delivery or options on such contracts;

(2) The clearing agency is registered with the Securities and Exchange Commission or is the clearing agency for a contract market regulated by the Commodity Futures Trading Commission; and

(3) The deposit consists of any margin security and complies with the rules of the clearing agency that have been approved by the Securities and Exchange Commission or the Commodity Futures Trading Commission.

FINAL RULE — AMENDMENTS TO REGULATION G AND REGULATION U

The Board of Governors is amending 12 C.F.R. Parts 207 and 221, its Regulation G and Regulation U, to permit transfers of loans between lenders subject to Regulation G and lenders subject to Regulation U on the same basis as transfers between two lenders subject to the same regulation.

Effective October 11, 1991, 12 C.F.R. Parts 207 and 221 are amended as follows:

Part 207—Securities Credit by Persons Other Than Banks, Brokers, or Dealers

1. The authority citation for part 207 continues to read as follows:

Authority: Secs. 3, 7, 8, 17, and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78c, 78g, 78h, 78q, and 78w).

2. In section 207.3, paragraphs (l)(1)(i), (ii), and (3) are revised to read as follows:

Section 207.3—General Requirements.

* * * * *

(l) *Transfers of credit.*

(1) A transfer of a credit between customers or lenders or between a lender and a bank shall not be considered a new extension of credit if:

(i) The original credit was extended by a lender in compliance with this part or was extended by a bank in a manner that would have complied with this part;

(ii) The transfer is not made to evade this part or part 221 of this chapter;

* * * * *

(3) When a transfer is made between lenders or between a lender and a bank, the transferee shall obtain a copy of the Form FR G-3 or Form FR U-1 originally filed with the transferor lender and retain the copy with its records of the transferee account. If no form was originally filed with the transferor, the transferee may accept in good faith a statement from the transferor describing the purpose of the loan and the collateral securing it.

* * * * *

Part 221—Credit by Banks for the Purpose of Purchasing or Carrying Margin Stocks

1. The authority citation for part 221 continues to read as follows:

Authority: Secs. 3, 7, 8, and 23 of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78c, 78g, 78h, and 78w).

2. In section 221.3, paragraphs (i)(1)(i), (ii) and (3) are revised to read as follows:

Section 221.3—General requirements.

* * * * *

(i) *Transfers of credit.*

(1) A transfer of a credit between customers or banks or between a bank and a lender subject to part 207 of this chapter shall not be considered a new extension of credit if:

(i) The original credit was extended by a bank in compliance with this part or by a lender subject to part 207 of this chapter in a manner that would have complied with this part;

(ii) The transfer is not made to evade this part or part 207 of this chapter; * * *

(3) When a transfer is made between banks or between a bank and a lender subject to part 207 of this chapter, the transferee shall obtain a copy of the Form FR U-1 or Form FR G-3 originally filed with the transferor and retain the copy with its records of the transferee account. If no form was originally filed with the transferor, the transferee may accept in good faith a statement from the transferor describing the purpose of the loan and the collateral securing it.

Orders Issued Under Bank Holding Company Act

Orders Issued Under Section 3 of the Bank Holding Company Act

Summit Bancorp, Inc. Johnstown, Pennsylvania

Order Approving the Acquisition of Shares of a Bank Holding Company

Summit Bancorp, Inc., Johnstown, Pennsylvania ("Summit"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire 16.6 percent of the voting shares of First National Bank of Lilly, Lilly, Pennsylvania ("Lilly Bank").

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (56 *Federal Register* 31,640 (1991)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the factors set forth in section 3(c) of the BHC Act.

Summit is the 116th largest banking organization in Pennsylvania, controlling deposits of $90.8 million, representing less than 1 percent of the total deposits in commercial banking organizations in the state.[1] Lilly Bank is the 223rd largest commercial banking organization in Pennsylvania, controlling deposits of $8.5 million, representing less than 1 percent of the total deposits in commercial banking organizations in the state.

Summit and Lilly Bank compete directly in the Johnstown MSA market.[2] Summit is the eighth largest banking organization in the market, controlling deposits of $90.7 million, representing 3.4 percent of the total deposits in commercial banking organizations in the market. Lilly Bank is the 20th largest banking organization in the market, controlling deposits of $8.0 million, representing less than 1 percent of the total deposits in commercial banking organizations in the market.

Summit proposes to acquire the voting shares of Lilly Bank as a passive investment. As part of this proposal, Summit has made a number of commitments to address concerns that it would control Lilly Bank. In particular, Summit has committed that it will not, without the Board's prior approval:

(1) exercise or attempt to exercise a controlling influence over the management or policies of Lilly Bank;
(2) have or seek to have any employees or representative serve as an officer, agent or employee of Lilly Bank;
(3) take any action causing Lilly Bank to become a subsidiary of Summit;
(4) acquire or retain shares that would cause the combined interests of Summit and its officers, directors and affiliates to equal or exceed 25 percent of the outstanding voting shares of Lilly Bank;
(5) propose a director or slate of directors in opposition to a nominee or slate of nominees proposed by the management or board of directors of Lilly Bank;
(6) attempt to influence the dividend policies or practices of Lilly Bank;
(7) solicit or participate in soliciting proxies with respect to any matter presented to the shareholders of Lilly Bank;
(8) attempt to influence the loan and credit decisions or policies of Lilly Bank, the pricing of services, any personnel decision, the location of any offices, branching, the hours of operation, or similar activities of Lilly Bank;
(9) dispose or threaten to dispose of shares of Lilly Bank in any manner as a condition of specific action or nonaction by Lilly Bank;
(10) enter into any other banking or nonbanking transactions with Lilly Bank, except that Summit may establish and maintain deposit accounts with Lilly Bank, provided that the aggregate balances of all such accounts do not exceed $500,000 and that the accounts are maintained on substantially the same terms as those prevailing for comparable accounts of persons unaffiliated with Lilly Bank; or
(11) seek or accept representation on the board of directors of Lilly Bank.

Based on the facts of record and Summit's commitments, the Board has concluded that Summit would not acquire control or the ability to exercise a controlling influence over Lilly Bank upon consummation of this proposal.[3]

The Board's inquiry does not end, however, with its finding that Summit will not control Lilly Bank. The Board notes that noncontrolling interests in directly competing banks or bank holding companies may raise serious questions under the BHC Act. The Board has previously noted that one company need not acquire control of another in order to substantially lessen competition between them, and that the specific facts of each case will determine whether the minority investment in a company will be anticompetitive.[4] In this case, it is the Board's judgment, based upon careful analysis of the record, that no significant reduction in competition is likely to result from the acquisition. The record shows that there will be no officer or director interlocks between Summit and Lilly Bank, that Summit intends the acquisition to be a strictly passive investment, and that Summit is prohibited by the BHC Act and its commitments from acting in concert with any other entity for control of Lilly Bank without additional prior Board approval. Moreover, even if the Board were to conclude that Summit would control Lilly Bank, the elimination of competition between the two entities is not so substantial as to warrant denial of the application. The record shows that Summit and Lilly Bank each controls only a small percentage of the deposits in the Johnstown MSA market, a moderately

1. State banking data are as of December 31, 1990. Market share data are as of June 30, 1990.

2. The Johnstown MSA market includes Cambria and Somerset Counties in Pennsylvania.

3. In this regard, the Board has considered comments filed by the board of directors of Lilly Bank and several individuals ("Protestants") alleging that this proposal represents an initial step towards a big bank that will cause Lilly Bank to lose its small-town orientation and the personal nature of its current banking services. Summit states that its investment in Lilly Bank will be passive and has made the commitments noted above in order to ensure that Summit will not exercise control over Lilly Bank. There is no evidence of record to indicate that the operations of Lilly Bank will be altered by this proposal. In addition, prior Board approval is required if Summit intends to control Lilly Bank and Protestants would have an opportunity to present these concerns if any changes were proposed for the operations of Lilly Bank at that time. Under these circumstances, the Board believes that Protestants' comments do not raise issues that would warrant a denial of this application.

4. *See The Summit Bancorporation*, 75 *Federal Reserve Bulletin* 712 (1989); *United Counties Bancorporation*, 75 *Federal Reserve Bulletin* 714 (1989); *Sun Banks, Inc.*, 71 *Federal Reserve Bulletin* 243 (1985).

concentrated market with a Herfindahl-Hirschman Index ("HHI") of 1166, which would not change upon consummation of this proposal.[5]

The financial and managerial resources and future prospects of Summit, its subsidiary bank, and Lilly Bank are consistent with approval of this application. Considerations relating to the convenience and needs of the communities to be served also are consistent with approval of these applications.

Based on the foregoing and other facts of record, and in reliance upon commitments made by Summit, the Board has determined that the application should be, and hereby is, approved. The Board's approval is specifically conditioned on Summit's compliance with the commitments discussed in this Order and these commitments are considered conditions imposed in writing in connection with the Board's findings and decision. The transaction shall not be consummated before the thirtieth calendar day following the effective date of this Order, or later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Philadelphia, acting pursuant to delegated authority.

By order of the Board of Governors, effective September 9, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, and LaWare. Absent and not voting: Governor Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Orders Issued Under Section 4 of the Bank Holding Company Act

Synovus Financial Corp. Columbus, Georgia

TB&C Bancshares, Inc. Columbus, Georgia

Order Approving Application To Underwrite and Deal in Certain Securities to a Limited Extent, to Act as Agent in the Private Placement of Securities, and to Act as "Riskless Principal" in Buying and Selling Securities

Synovus Financial Corp. ("Synovus") and TB&C Bancshares, Inc. ("TB&C"), both of Columbus, Georgia ("Applicants"), bank holding companies within the meaning of the Bank Holding Company Act ("BHC Act"), have applied under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) and section 225.23(a) of the Board's Regulation Y (12 C.F.R. 225.23(a)) for their subsidiary, Synovus Securities, Inc., Columbus, Georgia ("Company"):[1]

(1) to underwrite and deal in, to a limited extent, municipal revenue bonds, including certain industrial revenue bonds ("ineligible securities");

(2) to act as agent in the private placement of all types of securities, including providing related advisory services; and

(3) to buy and sell all types of securities on the order of investors as a "riskless principal."

Notice of the application, affording interested persons an opportunity to submit comments, has been duly published (56 *Federal Register* 14,527 (1991)). The time for filing comments has expired, and the Board has considered the application and all comments received in light of the public interest factors set forth in section 4(c)(8) of the BHC Act.

Synovus, with approximately $3.1 billion in assets, is the sixth largest commercial banking organization in Georgia.[2] Synovus operates 22 subsidiary banks in Georgia and Florida. Applicants engage directly and through subsidiaries in a broad range of permissible nonbanking activities in the United States.

Company is currently authorized to engage in providing investment advice, securities brokerage, underwriting and dealing in government obligations and money market instruments, consumer financial counseling and employee benefits counseling pursuant to 12 C.F.R. 225.25(b)(4), (15), (16), and (20). Company is, and will continue to be, a broker-dealer registered with the Securities and Exchange Commission and subject to the record-keeping, reporting, fiduciary standards, and other requirements of the Securities Exchange Act of 1934 and the National Association of Securities Dealers.

Underwriting and Dealing In Municipal Revenue Bonds

The Board has determined that, subject to the prudential framework of limitations established in previous decisions to address the potential for conflicts of interests, unsound banking practices, or other adverse effects, the proposed underwriting and dealing

5. Under the revised Department of Justice Merger Guidelines, 49 *Federal Register* 26,823 (1984), a market in which the post-merger HHI is between 1000 and 1800 is considered moderately concentrated. The Department of Justice has informed the Board that, as a general matter, a bank merger or acquisition will not be challenged, in the absence of other factors indicating anticompetitive effects, unless the post-merger HHI is at least 1800 and the merger increases the HHI by 200 points. The Justice Department has stated that the higher-than-normal HHI thresholds for screening bank mergers for anticompetitive effects implicitly recognize the competitive effect of limited-purpose lenders and other non-depository financial entities.

1. Synovus owns 100 percent of Company. TB&C, which owns 8.5 percent of Synovus, also has joined in this application.

2. Asset data are as of March 31, 1991. Ranking, based on deposits, is as of March 31, 1991.

activities are so closely related to banking as to be proper incidents thereto within the meaning of section 4(c)(8) of the BHC Act. The Board also has determined that the conduct of these securities underwriting and dealing activities is consistent with section 20 of the Glass–Steagall Act, provided that the underwriting and dealing subsidiary derives no more than 10 percent of its total gross revenue from underwriting and dealing in bank-ineligible securities over any two year-period.[3] Applicants have committed that Company will conduct its underwriting and dealing activities with respect to bank-ineligible securities subject to the 10 percent revenue test and the prudential limitations established by the Board in previous orders.[4]

Private Placement and "Riskless Principal" Activities

Applicants also propose that Company act as agent in the private placement of debt and equity securities, including providing related advisory services, and buy and sell all types of securities on the order of investors as a "riskless principal." The Board previously has determined by order that, subject to certain prudential limitations that address the potential for conflicts of interests, unsound banking practices or other adverse effects, the proposed private placement and "riskless principal" activities are so closely related to banking as to be a proper incident thereto within the meaning of section 4(c)(8) of the BHC Act.[5] The Board also has previously determined that acting as agent in the private placement of securities, and purchasing and selling securities on the order of investors as a "riskless principal" do not constitute underwriting and dealing in securities for purposes of section 20 of the Glass–Steagall Act, and that revenue derived from these activities is not subject to the 10 percent revenue limitation on ineligible securities underwriting and dealing.[6] Applicants have committed that Company will conduct its private placement and "riskless principal" activities using the same methods and procedures, and subject to the same prudential limitations established by the Board in the *Banker's Trust II* and *J.P. Morgan* orders.

Director Interlocks

Applicants have requested that the Board permit director interlocks between Company and its affiliated banks. Applicants propose that two directors of its subsidiary banks be permitted to serve on Company's nine-member board of directors. These directors are not officers of the affiliated banks, nor do they have authority to conduct the day-to-day business of the banks or handle individual bank transactions. No officers of Company would be employed by the banks. Applicants maintain that these director interlocks would permit appropriate oversight and supervision of its subsidiaries and that disallowing the requested interlocks would impose a particular hardship on Applicants in seeking replacement directors.

The Board previously has permitted interlocks between a banking organization and its affiliated section 20 company.[7] In addition, the Board has requested comment on modifying the section 20 prudential framework to permit interlocks with affiliated banks so long as a majority of the board is not comprised of bank officers or directors. Applicants have agreed to abide by the results of the Board's review. Accordingly, the Board finds that these limited interlocks should be permitted, since it appears that Company would be operationally distinct from its affiliated banks. The Board expects that Applicants will ensure that the framework established pursuant to *Citicorp/*

3. *Citicorp, J.P. Morgan & Company Incorporated and Bankers Trust New York Corporation,* 73 *Federal Reserve Bulletin* 473 (1987) ("*Citicorp/Morgan/Bankers Trust*"), *aff'd sub. nom., Securities Industry Association v. Board of Governors of the Federal Reserve System,* 839 F.2d 47 (2d Cir. 1988), *cert. denied,* 486 U.S. 1059 (1988), as modified by Order Approving Modifications to Section 20 Orders, 75 *Federal Reserve Bulletin* 751 (1989) ("*Modification Order*"). The 10 percent gross revenue limit should be calculated in accordance with the method stated in *J.P. Morgan & Company, Incorporated, The Chase Manhattan Corporation, Bankers Trust New York Corporation, Citicorp, and Security Pacific Corporation,* 75 *Federal Reserve Bulletin* 192, 196 (1989).

4. The industrial development bonds approved for Applicants in this case are only those tax-exempt bonds in which the governmental issuer, or the governmental unit on behalf of which the bonds are issued, is the owner for federal income tax purposes of the financed facility (such as airports, mass commuting facilities, and water pollution control facilities). Without further approval from the Board, Company may underwrite and deal in only these types of industrial development bonds, except as permitted by this Order.

Company may also provide services that are necessary incidents to these approved activities. Any activity conducted as a necessary incident to the ineligible securities activity must be treated as part of the ineligible securities activity unless Company has received specific approval under section 4(c)(8) of the BHC Act to conduct the activity independently. Until such approval is obtained, any revenues from the incidental activity must be counted as ineligible revenue subject to the 10 percent gross revenue limit set forth in *Citicorp/Morgan/Bankers Trust* and the *Modification Order.*

5. *Bankers Trust New York Corporation,* 75 *Federal Reserve Bulletin* 829 (1989) ("*Bankers Trust II*).

6. *J.P. Morgan & Company, Incorporated,* 76 *Federal Reserve Bulletin* 26 (1990) ("*J.P. Morgan*"); *Bankers Trust II.*

7. *Banc One Corporation,* 76 *Federal Reserve Bulletin* 756, 758 (1990); *Canadian Imperial Bank of Commerce, The Royal Bank of Canada, Barclays PLC and Barclays Bank PLC,* 76 *Federal Reserve Bulletin* 158 (1990).

Morgan/Bankers Trust will be maintained in all other respects.[8]

Under the framework established in this and prior decisions, consummation of this proposal is not likely to result in any significant adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices. Consummation of the proposal would provide added convenience to Company's customers. In addition, the Board expects that the *de novo* entry of Company into the market for these services would increase the level of competition among providers of these services. Accordingly, based upon the facts of record and the commitments made by Applicants regarding the conduct of these activities, the Board has determined that the performance of the proposed activities by Company can reasonably be expected to produce public benefits which would outweigh adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Based on the foregoing, the Board has determined to, and hereby does, approve the application subject to the commitments made by Applicants, as well as all of the terms and conditions set forth in this order and in the above-noted Board orders that relate to these activities. The Board's determination also is subject to all of the conditions set forth in Regulation Y, including those in sections 225.4(d) and 225.23(b), and to the Board's authority to require modification or termination of the activities of a bank holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, and to prevent evasion of, the provisions of the BHC Act and the Board's regulations and orders issued thereunder. The commitments and conditions referred to above are conditions imposed in writing by the Board in connection with its findings and decision. This transaction shall not be consummated later than three months after the effective date of this Order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Atlanta, pursuant to delegated authority.

By order of the Board of Governors, effective September 23, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, and LaWare. Absent and not voting: Governor Mullins.

JENNIFER J. JOHNSON
Associate Secretary of the Board

8. The Board's approval of the proposed underwriting and dealing activities extends only to Company. The activities may not be conducted by Applicants in any other subsidiary without prior Board review. Pursuant to Regulation Y, no corporate reorganization of Company, such as the establishment of subsidiaries of Company to conduct the activities, may be consummated without prior Board approval.

Orders Issued Under Sections 3 and 4 of the Bank Holding Company Act

NCNB Corporation
Charlotte, North Carolina

Notice of Public Meeting
Richmond, Virginia

Background and Public Meeting Notice

On August 21, 1991, NCNB Corporation, Charlotte, North Carolina ("NCNB"), applied pursuant to sections 3 and 4 of the Bank Holding Company Act (12 U.S.C. §§ 1842, 1843)("BHC Act") to acquire C&S/Sovran Corporation, Atlanta, Georgia, and Norfolk, Virginia ("C&S/Sovran"), and thereby to acquire the bank and nonbank subsidiaries of C&S/Sovran. On September 19, 1991, the Board of Governors of the Federal Reserve System ("the Board") announced that public meetings would be held in Richmond, Charlotte, Atlanta, and Dallas during the week of October 7, 1991, to collect information on the convenience and needs of the communities to be served by this proposal, including the records of performance of these institutions under the Community Reinvestment Act ("CRA").

The public meeting in Richmond will be held on October 7, 1991, at the Federal Reserve Bank of Richmond Auditorium, 701 East Byrd Street, Richmond, Virginia, 23219. The meeting will begin at 9:00 a.m., E.D.T.

Purpose and Procedures

The purpose of the public meeting is to receive information regarding the convenience and needs of the communities to be served by this proposal, including the records of performance of NCNB and C&S/Sovran under the CRA. The CRA requires the appropriate federal financial supervisory agency to "assess [an] institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of [the] institution." 12 U.S.C. § 2903. The Board, as a federal financial supervisory agency, is required to take this record into account in its evaluation of an application under section 3 of the BHC Act.

The public meeting is to be convened under the Board's policy statement regarding informal meetings in section 262.25(d) of the Board's Rules (12 C.F.R.

225.25(d)). This policy statement provides that the purpose of a public meeting is to elicit information, to clarify factual issues related to an application, and to provide testimony. In contrast to a formal administrative hearing, the rules for taking evidence in an administrative proceeding will not apply to this public meeting. In conducting the public meeting, the Presiding Officer will have the authority and discretion to ensure that the meeting proceeds in a fair and orderly manner. Individuals or groups may be represented by counsel. The public meeting will be transcribed and information regarding procedures for obtaining a copy of the transcript will be announced at the public meeting.

The Board's announcement specified that all persons wishing to appear at the public meeting should submit a written request not later than September 27, 1991, containing a brief statement of the nature of the expected testimony and the estimated time required for the presentation, to William W. Wiles, Secretary of the Board, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, N.W., Washington, D.C. (telefax: (202)728-5850). On the basis of these requests, the Presiding Officer will prepare a schedule for persons wishing to appear at a later date. Persons not listed on the schedule may be permitted to speak at the public meeting at the discretion of the Presiding Officer if time permits at the conclusion of the schedule of witnesses.

Copies of testimony may, but need not, be filed with the Presiding Officer before a person's presentation. To the extent available, translators will be provided to persons wishing to present their views in a language other than English if they so request to the Presiding Officer not later than September 30, 1991.

Testimony at the public meeting will be presented to a panel consisting of the Presiding Officer, Glenn E. Loney, Assistant Director of the Division of Consumer and Community Affairs, Federal Reserve Board; Irene S. McNulty, Program Manager, Compliance, Division of Consumer and Community Affairs, Federal Reserve Board; Scott G. Alvarez, Associate General Counsel of the Legal Division, Federal Reserve Board; and Fred L. Bagwell, Vice President, Federal Reserve Bank of Richmond. These panel members may question witnesses, but no cross-examination of witnesses will be permitted.

By order of the Presiding Officer, effective September 24, 1991.

GLENN E. LONEY
Presiding Officer

NCNB Corporation
Charlotte, North Carolina

Notice of Public Meeting
Dallas, Texas

Background and Public Meeting Notice

On August 21, 1991, NCNB Corporation, Charlotte, North Carolina ("NCNB"), applied pursuant to sections 3 and 4 of the Bank Holding Company Act (12 U.S.C. §§ 1842, 1843)("BHC Act") to acquire C&S/Sovran Corporation, Atlanta, Georgia, and Norfolk, Virginia ("C&S/Sovran"), and thereby to acquire the bank and nonbank subsidiaries of C&S/Sovran. On September 19, 1991, the Board of Governors of the Federal Reserve System ("the Board") announced that public meetings would be held in Richmond, Charlotte, Atlanta, and Dallas during the week of October 7, 1991, to collect information on the convenience and needs of the communities to be served by this proposal, including the records of performance of these institutions under the Community Reinvestment Act ("CRA").

The public meeting in Dallas will be held on October 8, 1991, at the J. Erik Jonsson Central Public Library (Dallas Public Library) Auditorium, 1515 Young Street, Dallas, Texas, 75201. The meeting will begin at 9:00 a.m., C.D.T.

Purpose and Procedures

The purpose of the public meeting is to receive information regarding the convenience and needs of the communities to be served by this proposal, including the records of performance of NCNB and C&S/Sovran under the CRA. The CRA requires the appropriate federal financial supervisory agency to "assess [an] institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of [the] institution." 12 U.S.C. § 2903. The Board, as a federal financial supervisory agency, is required to take this record into account in its evaluation of an application under section 3 of the BHC Act.

The public meeting is to be convened under the Board's policy statement regarding informal meetings in section 262.25(d) of the Board's Rules (12 C.F.R. 225.25(d)). This policy statement provides that the purpose of a public meeting is to elicit information, to clarify factual issues related to an application, and to provide testimony. In contrast to a formal administrative hearing, the rules for taking evidence in an administrative proceeding will not apply to this public meeting. In conducting the public meeting, the Presiding Officer will have the authority and discretion to ensure that the meeting proceeds in a fair and orderly manner. Individuals or groups may be represented by counsel. The public meeting will be transcribed and information regarding procedures for obtaining a copy of the transcript will be announced at the public meeting.

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Testimony at the public meeting will be presented to a panel consisting of the Presiding Officer, Griffith L. Garwood, Director of the Division of Consumer and Community Affairs, Federal Reserve Board; Diane Jackins, Senior Review Examiner, Division of Consumer and Community Affairs, Federal Reserve Board; Robert deV. Frierson, Managing Senior Counsel, Legal Division, Federal Reserve Board; and Marion E. White, Vice President, Federal Reserve Bank of Dallas. These panel members may question witnesses, but no cross-examination of witnesses will be permitted.

By order of the Presiding Officer, effective September 24, 1991.

GRIFFITH L. GARWOOD
Presiding Officer

NCNB Corporation
Charlotte, North Carolina

Notice of Public Meeting
Atlanta, Georgia

Background and Public Meeting Notice

On August 21, 1991, NCNB Corporation, Charlotte, North Carolina ("NCNB"), applied pursuant to sections 3 and 4 of the Bank Holding Company Act (12 U.S.C. §§ 1842, 1843) ("BHC Act") to acquire C&S/Sovran Corporation, Atlanta, Georgia, and Norfolk, Virginia ("C&S/Sovran"), and thereby to acquire the bank and nonbank subsidiaries of C&S/Sovran. On September 19, 1991, the Board of Governors of the Federal Reserve System ("the Board") announced that public meetings would be held in Richmond, Charlotte, Atlanta, and Dallas during the week of October 7, 1991, to collect information on the convenience and needs of the communities to be served by this proposal, including the records of performance of these institutions under the Community Reinvestment Act ("CRA").

The public meeting in Atlanta will be held on October 9, 1991, at the Atlanta-Fulton Public Library Auditorium, 1 Margaret Mitchell Square, N.W., Atlanta, Georgia, 30303. The meeting will begin at 9:00 a.m., E.D.T.

Purpose and Procedures

The purpose of the public meeting is to receive information regarding the convenience and needs of the communities to be served by this proposal, including the records of performance of NCNB and C&S/Sovran under the CRA. The CRA requires the appropriate federal financial supervisory agency to "assess [an] institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of [the] institution." 12 U.S.C. § 2903. The Board, as a federal financial supervisory agency, is required to take this record into account in its evaluation of an application under section 3 of the BHC Act.

The public meeting is to be convened under the Board's policy statement regarding informal meetings in section 262.25(d) of the Board's Rules (12 C.F.R. 225.25(d)). This policy statement provides that the purpose of a public meeting is to elicit information, to clarify factual issues related to an application, and to provide testimony. In contrast to a formal administrative hearing, the rules for taking evidence in an administrative proceeding will not apply to this public meeting. In conducting the public meeting, the Presiding Officer will have the authority and discretion to ensure that the meeting proceeds in a fair and orderly manner. Individuals or groups may be represented by counsel. The public meeting will be transcribed and information regarding procedures for obtaining a copy of the transcript will be announced at the public meeting.

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By order of the Presiding Officer, effective September 24, 1991.

GRIFFITH L. GARWOOD
Presiding Officer

NCNB Corporation
Charlotte, North Carolina

Notice of Public Meeting
Charlotte, North Carolina

Background and Public Meeting Notice

On August 21, 1991, NCNB Corporation, Charlotte, North Carolina ("NCNB"), applied pursuant to sections 3 and 4 of the Bank Holding Company Act (12 U.S.C. §§ 1842, 1843) ("BHC Act") to acquire C&S/Sovran Corporation, Atlanta, Georgia, and Norfolk, Virginia ("C&S/Sovran"), and thereby to acquire the bank and nonbank subsidiaries of C&S/Sovran. On September 19, 1991, the Board of Governors of the Federal Reserve System ("the Board") announced that public meetings would be held in Richmond, Charlotte, Atlanta and Dallas during the week of October 7, 1991, to collect information on the convenience and needs of the communities to be served by this proposal, including the records of performance of these institutions under the Community Reinvestment Act ("CRA").

The public meeting in Charlotte will be held on October 9, 1991, at the Federal Reserve Charlotte Branch Conference Center, 530 East Trade Street, Charlotte, North Carolina, 28202. The meeting will begin at 9:00 a.m., E.D.T.

Purpose and Procedures

The purpose of the public meeting is to receive information regarding the convenience and needs of the communities to be served by this proposal, including the records of performance of NCNB and C&S/Sovran under the CRA. The CRA requires the appropriate federal financial supervisory agency to "assess [an] institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of [the] institution." 12 U.S.C. § 2903. The Board, as a federal financial supervisory agency, is required to take this record into account in its evaluation of an application under section 3 of the BHC Act.

The public meeting is to be convened under the Board's policy statement regarding informal meetings in section 262.25(d) of the Board's Rules (12 C.F.R. 225.25(d)). This policy statement provides that the purpose of a public meeting is to elicit information, to clarify factual issues related to an application, and to provide testimony. In contrast to a formal administrative hearing, the rules for taking evidence in an administrative proceeding will not apply to this public meeting. In conducting the public meeting, the Presiding Officer will have the authority and discretion to ensure that the meeting proceeds in a fair and orderly manner. Individuals or groups may be represented by counsel. The public meeting will be transcribed and information regarding procedures for obtaining a copy of the transcript will be announced at the public meeting.

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By order of the Presiding Officer, effective September 24, 1991.

GLENN E. LONEY
Presiding Officer

ORDERS ISSUED UNDER THE FINANCIAL INSTITUTIONS REFORM, RECOVERY, AND ENFORCEMENT ACT ("FIRREA ORDERS")

Recent orders have been issued by the Staff Director of the Division of Banking Supervision and Regulation and the General Counsel of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
BB&T Financial Corporation, Wilson, North Carolina	Gate City Bank, Greensboro, North Carolina Albemarle Bank, Elizabeth City, North Carolina	Branch Banking and Trust Company, Wilson, North Carolina	August 23, 1991
First Commercial Corporation, Little Rock, Arkansas	Savers Savings Association, FS&LA, Little Rock, Arkansas (Geyer Springs, Park Hill, Indian Hills, Benton and Conway Branches)	First Commercial Bank, N.A., Little Rock, Arkansas Benton State Bank, Benton, Arkansas First National Bank of Conway, Conway, Arkansas	September 20, 1991
First of America Bank Corporation, Kalamazoo, Michigan	Home Federal Savings Bank, F.A., Waukegan, Illinois	First America Bank-Northeast Illinois, N.A., Libertyville, Illinois	September 13, 1991
Simmons First National Corporation, Pine Bluff, Arkansas	Savers Savings Association, FS&LA, Little Rock, Arkansas (Pine Bluff Catalpa Branch)	Simmons First National Bank, Pine Bluff, Arkansas	September 20, 1991
Southern National Corporation, Lumberton, North Carolina	Preferred Savings Bank, F.S.B. High Point, North Carolina	Southern National Bank of North Carolina, Lumberton, North Carolina	September 27, 1991
Southern National Corporation, Lumberton, North Carolina	Southeastern Federal Savings Bank, Yadkinville, North Carolina	Southern National Bank of North Carolina, Lumberton, North Carolina	September 20, 1991

Applications Approved Under Bank Holding Company Act

By the Secretary of the Board

Recent applications have been approved by the Secretary of the Board as listed below. Copies are available upon request to the Freedom of Information Office, Office of the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

Section 3

Applicant(s)	Bank(s)	Effective Date
Michigan National Corporation, Farmington Hills, Michigan	Lockwood Banc Group, Inc., Houston, Texas	September 5, 1991

Section 4

Applicant(s)	Bank(s)	Effective Date
First Commercial Corporation, Little Rock, Arkansas	First Savers Oakar Thrift, F.A., Little Rock, Arkansas First Benton Thrift, F.A., Little Rock, Arkansas First Conway Thrift, F.A., Little Rock, Arkansas	September 20, 1991
First of America Bank Corporation, Kalamazoo, Michigan	First of America Federal Interim Savings Bank, Waukegan, Illinois	September 13, 1991
Simmons First National Corporation, Pine Bluff, Arkansas	Pine Bluff Federal Savings and Loan Association, Pine Bluff, Arkansas	September 20, 1991
Southern National Corporation, Lumberton, North Carolina	PSB Interim Federal Savings Bank, Lumberton, North Carolina	September 27, 1991
Southern National Corporation, Lumberton, North Carolina	SNC Interim Federal Savings Bank, Lumberton, North Carolina	September 20, 1991

Applications Approved Under Bank Holding Company Act

By Federal Reserve Banks

Recent applications have been approved by the Federal Reserve Banks as listed below. Copies are available upon request to the Reserve Banks.

Section 3

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
AmFirst Bancorporation, Everett, Washington	American First National Bank, Everett, Washington	San Francisco	September 3, 1991
Big Bend Bancshares Corp., Presidio, Texas	Rio Bancshares Corporation, Wilmington, Delaware First Presidio Bank, Presidio, Texas	Dallas	September 9, 1991
Bon, Inc., Moundridge, Kansas	The Hesston State Bank, Hesston, Kansas	Kansas City	September 6, 1991
Central Illinois Bancorp, Inc., Sidney, Illinois	Arrowsmith State Bank, Arrowsmith, Illinois	Chicago	August 30, 1991
Commercial BancShares, Incorporated, Parkersburg, West Virginia	The Dime Bank, Marietta, Ohio	Richmond	September 19, 1991
Community Bancshares, Inc., North Wilkesboro, North Carolina	Wilkes National Bank, North Wilkesboro, North Carolina	Richmond	September 9, 1991
Community First Bankshares, Inc., Fargo, North Dakota	Community First North Dakota Bankshares, Inc., Fargo, North Dakota	Minneapolis	September 18, 1991
Exchange Bankshares Corporation of Kansas, Atchison, Kansas	First Kansas Bancorp, Leavenworth, Kansas	Kansas City	September 9, 1991
First Bancorp, Inc., Huron, South Dakota	First Western Bancorp, Inc., Huron, South Dakota	Minneapolis	August 28, 1991
First Bentonville Bancshares, Inc., Bentonville, Arkansas	First National Bank, Bentonville, Arkansas	St. Louis	August 30, 1991
First Colonial Bankshares Corporation, Chicago, Illinois	First Colonial Bank of McHenry County, Crystal Lake, Illinois	Chicago	September 11, 1991
First Michigan Bank Corporation, Holland, Michigan	FMB-Trust and Financial Services, National Association, Holland, Michigan	Chicago	September 5, 1991
First Universal Bancorporation, Inc., Aurora, Colorado	Bank of the West, Parker, Colorado	Kansas City	September 4, 1991
The Fischer Corporation, Lewiston, Minnesota	Ostrander Bancshares, Inc., Ostrander, Minnesota	Minneapolis	September 16, 1991
Fulton Financial Corporation, Lancaster, Pennsylvania	Great Valley Savings Bank, Reading, Pennsylvania	Philadelphia	September 18, 1991

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Gifford Bancorp, Inc. Employee Stock Ownership Plan, Gifford, Illinois	Gifford Bancorp, Inc., Gifford, Illinois	Chicago	August 29, 1991
Henderson Citizens Bancshares, Inc., Henderson, Texas	Enterprise Bancshares, Inc., Mount Pleasant, Texas Merchants State Bank, Mount Enterprise, Texas Henderson Citizens Delaware Bancshares, Inc., Dover, Delaware Citizens National Bank of Henderson, Henderson, Texas	Dallas	August 26, 1991
Henderson Citizens Delaware Bancshares, Inc., Dover, Delaware	Citizens National Bank of Henderson, Henderson, Texas	Dallas	August 26, 1991
Miners National Bancorp, Inc., Pottsville, Pennsylvania	East Penn Bank, Emmaus, Pennsylvania	Philadelphia	September 10, 1991
National Banc of Commerce Company, Charleston, West Virginia	Wood County Bancorporation, Inc., Parkersburg, West Virginia	Richmond	September 19, 1991
National City Corporation, Cleveland, Ohio	Gem Bank, N.A., Dayton, Ohio	Cleveland	August 27, 1991
NBD Bancorp, Inc., Detroit, Michigan	FNW Bancorp, Inc., Mount Prospect, Illinois	Chicago	August 30, 1991
Peoples Bancholding Company, Inc., Moulton, Alabama	Peoples Bank of Lawrence County, Moulton, Alabama	Atlanta	August 28, 1991
Rio Bancshares Corporation, Wilmington, Delaware	First Presidio Bank, Presidio, Texas	Dallas	September 9, 1991
River Forest Bancorp, Inc., Chicago, Illinois	Aetna Bancorp, Inc., Chicago, Illinois	Chicago	August 26, 1991
Teutopolis Holding Co., Teutopolis, Illinois	Teutopolis State Bank, Teutopolis, Illinois	St. Louis	September 5, 1991
Timberline Bancshares, Inc., Yreka, California	Timberline Community Bank, Yreka, California	San Francisco	August 30, 1991
Widmer Oil Company, Inc., Salisbury, Missouri	Widmer Bancshares, Inc., Salisbury, Missouri	Kansas City	September 6, 1991
Wiregrass Bancorporation, Inc., Ashford, Alabama	Barbour County Bank, Clayton, Alabama	Atlanta	September 16, 1991

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
Citizens National Bancshares of Hope, Inc., Hope, Arkansas	Border Federal Savings and Loan Association, Hope, Arkansas	St. Louis	August 30, 1991
CNBC Bancorp, Inc., Chicago, Illinois	Fort Dearborn Federal Savings and Loan Association, Chicago, Illinois	Chicago	August 26, 1991
Liberty National Bancorp, Inc., Louisville, Kentucky	Liberty Investment Services, Inc., Louisville, Kentucky	St. Louis	August 28, 1991
NBD Bancorp, Inc., Detroit, Michigan	First Fidelity Trust, N.A., Boca Raton, Florida	Chicago	August 27, 1991
NBD Bancorp, Inc., Detroit, Michigan NBD Illinois, Inc., Park Ridge, Illinois	FNW Capital, Inc., Mount Prospect, Illinois	Chicago	August 30, 1991
Norwest Corporation, Minneapolis, Minnesota	Norwest Bank Wisconsin East Central, Sheboygan, Wisconsin	Minneapolis	August 23, 1991
Seaway Bancshares, Inc., Chicago, Illinois	Seaway Investment Management Company, Chicago, Illinois	Chicago	September 9, 1991
Terrapin Bancorp, Inc., Elizabeth, Illinois	general insurance activities	Chicago	August 27, 1991

Applications Approved Under Bank Merger Act

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Aliant National Corporation, Alexander City, Alabama	First National Bank of Alexander City, Alexander City, Alabama	Atlanta	August 30, 1991
Bank of Shawsville, Shawsville, Virginia	Bank of Speedwell, Incorporated, Wytheville, Virginia	Richmond	September 6, 1991
Trustco Bank New York, Schenectady, New York	Home & City Savings Bank, Albany, New York	New York	August 30, 1991

Pending Cases Involving the Board of Governors

This list of pending cases does not include suits against the Federal Reserve Banks in which the Board of Governors is not named a party.

Board of Governors v. Kemal Shoaib, No. CV 91–5152 (C.D. California, filed September 24, 1991). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On September 25, the court issued an order temporarily restraining the transfer or disposition of the individual's assets.

Board of Governors v. Ghaith R. Pharaon, No. 91-CIV-6250 (S.D. New York, filed September 17, 1991). Action to freeze assets of individual pending administrative adjudication of civil money penalty assessment by the Board. On September 17, the court issued an order temporarily restraining the transfer or disposition of the individual's assets.

In re Smouha, No. 91-B-13569 (Bkr. S.D. New York, filed August 2, 1991). Ancillary proceeding under the U.S. Bankruptcy Code brought by provisional liquidators of BCCI Holdings (Luxembourg) S.A. and affiliated companies. On August 15, 1991, the bankruptcy court issued a temporary restraining order staying certain judicial and administrative actions.

Hanson v. Greenspan, No. 91–1599 (D.D.C., filed June 28, 1991). Suit for return of funds and financial instruments allegedly owned by plaintiffs.

Fields v. Board of Governors, No. 3:91CV069 (N.D. Ohio, filed February 5, 1991). Appeal of denial of request for information under the Freedom of Information Act.

State of Illinois v. Board of Governors, No. 90–3824 (7th Circuit, appeal filed December 19, 1990). Appeal of injunction restraining the Board from providing state examination materials in response to a Congressional subpoena. On November 30, 1990, the U.S. District Court for the Northern District of Illinois issued a preliminary injunction preventing the Board and the Chicago Reserve Bank from providing documents relating to the state examination in response to the subpoena. The House Committee on Banking, Finance and Urban Affairs appealed the injunction. On July 25, 1991, the court of appeals dismissed the appeal as moot.

Citicorp v. Board of Governors, No. 90–4124 (2d Circuit, filed October 4, 1990). Petition for review of Board order requiring Citicorp to terminate certain insurance activities conducted pursuant to Delaware law by an indirect nonbank subsidiary. On June 10, 1991, the court of appeals granted the petition and vacated the Board's order.

Stanley v. Board of Governors, No. 90–3183 (7th Circuit, filed October 3, 1990). Petition for review of Board order imposing civil money penalties on five former bank holding company directors. On August 15, 1991, the court of appeals affirmed the Board's order.

Burke v. Board of Governors, No. 90–9509 (10th Circuit, filed February 27, 1990). Petition for review of Board orders assessing civil money penalties and issuing orders of prohibition. On July 31, 1991, the court of appeals affirmed the Board's orders.

Kaimowitz v. Board of Governors, No. 90–3067 (11th Circuit, filed January 23, 1990). Petition for review of Board order dated December 22, 1989, approving application by First Union Corporation to acquire Florida National Banks. On August 27, 1991, the court of appeals ruled that the petitioner lacked standing to bring the action.

Consumers Union of U.S., Inc. v. Board of Governors, No. 90–5186 (D.C. Circuit, filed June 29, 1990). Appeal of District Court decision upholding amendments to Regulation Z implementing the Home Equity Loan Consumer Protection Act. On July 12, 1991, the Court of Appeals affirmed the majority of district court decision upholding the Board's regulations, but remanded two issues to the Board for further action.

Synovus Financial Corp. v. Board of Governors, No. 89–1394 (D.C. Circuit, filed June 21, 1989). Petition for review of Board order permitting relocation of a bank holding company's national bank subsidiary from Alabama to Georgia. Awaiting decision.

MCorp v. Board of Governors, No. 89–2816 (5th Circuit, filed May 2, 1989). Appeal of preliminary injunction against the Board enjoining pending and future enforcement actions against a bank holding company now in bankruptcy. On May 15, 1990, the Fifth Circuit vacated the district court's order enjoining the Board from proceeding with enforcement actions based on section 23A of the Federal Reserve Act, but upheld the district court's order enjoining such actions based on the Board's source-of-strength doctrine. 900 F.2d 852 (5th Cir. 1990). On March 4, 1991, the Supreme Court granted the parties' cross-petitions for *certiorari*, Nos. 90–913, 90–914. Oral argument is scheduled for October 2, 1991.

MCorp v. Board of Governors, No. CA3–88–2693 (N.D. Texas, filed October 10, 1988). Application for injunction to set aside temporary cease and desist orders. Stayed pending outcome of *MCorp v. Board of Governors*, 900 F.2d 852 (5th Cir. 1990).

White v. Board of Governors, No. CU-S-88–623-RDF (D. Nevada, filed July 29, 1988). Age discrimination complaint. The case was dismissed on August 30, 1991.

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

First Exchange Corp.
Cape Girardeau, Missouri

The Federal Reserve Board announced on September 26, 1991, the issuance of Cease and Desist Orders against First Exchange Corp., Cape Girardeau, Missouri, and its five subsidiary banks. The five subsidiary banks are: the Jackson Exchange Bank and Trust Company, Jackson, Missouri; the First Exchange Bank of Cape Girardeau, Cape Girardeau, Missouri; the First Exchange Bank of Madison County, Fredericktown, Missouri; the First Exchange Bank of St. Louis, St. Louis, Missouri; and the First Exchange Bank of North St. Louis County, Florissant, Missouri.

First Potomac Bancorp, Inc.
Vienna, Virginia

The Federal Reserve Board announced on September 6, 1991, the issuance of Cease and Desist Orders against First Potomac Bancorp, Inc., Vienna, Virginia, and Sailors and Merchants Bank and Trust, Vienna, Virginia.

WRITTEN AGREEMENTS APPROVED BY FEDERAL RESERVE BANKS

Bank of Boston Corporation
Boston, Massachusetts

The Federal Reserve Board announced on September 11, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Boston and Bank of Boston Corporation, Boston, Massachusetts.

Collinsville Bancorp, Inc.
Collinsville, Oklahoma

The Federal Reserve Board announced on September 26, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Kansas City and Collinsville Bancorp, Inc., Collinsville, Oklahoma, and William S. Flanagan, Jr., President of Collinsville Bancorp, Inc.

First American Corporation
Washington, D.C.

The Federal Reserve Board announced on September 13, 1991, the execution of a Written Agreement by the Federal Reserve Bank of Richmond with First American Corporation, Washington, D.C., and First American Bankshares, Inc., Washington, D.C.

First Cumberland Bank
Madison, Tennessee

The Federal Reserve Board announced on September 17, 1991, the execution of a Written Agreement among the Federal Reserve Bank of Atlanta, the First Cumberland Bank, Madison, Tennessee, and the Commissioner of Financial Institutions of the State of Tennessee, Nashville, Tennessee.

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1.10 RESERVES, MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES

Percent annual rate of change, seasonally adjusted[1]

Monetary and credit aggregate	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1991 Apr.	1991 May	1991 June	1991 July	1991 Aug.
Reserves of depository institutions[2]									
1 Total	−.5	3.9	9.2	3.4	−4.1	16.4	8.6	1.9[r]	11.7
2 Required	−.5	1.7	4.7	9.3	−.6	16.7	9.4[r]	4.5	7.5
3 Nonborrowed	3.8	7.8	9.1	3.8	−3.9	14.7	7.8	−4.4	8.0
4 Monetary base[3]	9.1	9.9	14.5	3.9	−1.5	3.4	3.8	5.5	9.1
Concepts of money, liquid assets, and debt[4]									
5 M1	3.7	3.4	5.9	7.3	−1.3	13.5	9.6	1.8	9.1
6 M2	3.0	2.0	3.4	4.8[r]	3.0[r]	4.6[r]	1.7[r]	−3.9[r]	.0
7 M3	1.6	.9	4.0	1.9[r]	.7[r]	.7[r]	−2.0	−5.4[r]	−1.4
8 L	1.9	1.8[r]	3.2	−2.4[r]	−7.9[r]	−5.1[r]	6.0[r]	1.0	n.a.
9 Debt	7.0[r]	5.7[r]	4.5[r]	3.7[r]	1.5[r]	4.9[r]	5.1[r]	5.1	n.a.
Nontrgnsaction components									
10 In M2[5]	2.8[r]	1.6[r]	2.7[r]	3.9[r]	4.4[r]	1.6[r]	−.8[r]	−5.8[r]	−3.1
11 In M3 only[6]	−3.9[r]	−3.6[r]	6.5[r]	−10.5[r]	−9.2[r]	−15.7[r]	−18.1[r]	−12.4[r]	−7.9
Time and savings deposits									
Commercial banks									
12 Savings	5.9	5.2	10.2	16.3[r]	17.5[r]	14.9[r]	21.0	13.9	17.1
13 MMDAs	8.2	3.5	6.1	16.8	15.1	18.6	13.8	10.4	6.5
14 Small time[7]	15.5	11.5	8.8	−1.7	−7.3	−5.8	1.0	−1.6[r]	7.8
15 Large time[8,9]	−2.2	−8.5	12.0	.3	−4.2	2.4	−3.9[r]	−13.6[r]	−9.1
Thrift institutions									
16 Savings	−3.3	−7.3	−.5	16.6	20.7	18.1	11.4	7.5[r]	9.6
17 MMDAs	−7.7	−7.2	−.9	21.2	23.0	30.7	12.3	14.0	−8.6
18 Small time[7]	−11.0	−8.6	−9.8	−13.7	−9.6	−14.9	−26.5	−22.1	−28.3
19 Large time[8,9]	−27.3	−26.3	−31.9	−35.1	−30.1	−46.3	−42.4	−38.1	−47.9
Money market mutual funds									
20 General purpose and broker-dealer	10.0	9.8	18.2	6.7	2.3	3.0	−2.6	−16.1	−22.0
21 Institution-only	21.6	30.4	49.9	23.0	30.4	4.9	−23.8	−12.6	25.4
Debt components[4]									
22 Federal	14.4	11.6	12.0[r]	5.7[r]	−3.2[r]	10.5[r]	14.9	11.8	n.a.
23 Nonfederal	4.7[r]	3.8[r]	2.1[r]	3.0[r]	3.0[r]	3.1[r]	2.0[r]	2.8	n.a.

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding during preceding month or quarter.

2. Figures incorporate adjustments for discontinuities associated with regulatory changes in reserve requirements. (See also table 1.20.)

3. Seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

4. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the Treasury, Federal Reserve Banks, and the vaults of *depository institutions;* (2) *travelers checks of nonbank issuers;* (3) demand deposits at all commercial banks other than those due to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float; and (4) other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) overnight (and continuing-contract) repurchase agreements (RPs) issued by all depository institutions and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, (2) money market deposit accounts (MMDAs), (3) savings and small time deposits (time deposits—including retail repurchase agreements (RPs)—in amounts of less than $100,000), and (4) balances in both taxable and tax-exempt general- purpose and broker-dealer money market funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Also excludes all balances held by U.S. commercial banks, money market funds (general purpose and broker-dealer), foreign governments and commercial banks, and the U.S. government. Seasonally adjusted M2 is computed by adjusting its non-M1 component as a whole and then adding this result to seasonally adjusted M1.

M3: M2 plus (1) large time deposits and term RP liabilities (in amounts of $100,000 or more) issued by all depository institutions, (2) term Eurodollars held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada, and (3) balances in both taxable and tax-exempt, institution-only money market funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also excluded is the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. Seasonally adjusted M3 is computed by adjusting its non-M2 component as a whole and then adding this result to seasonally adjusted M2.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

Debt: Debt of domestic nonfinancial sectors consists of outstanding credit-market debt of the U.S. government, state and local governments, and private nonfinancial sectors. Private debt consists of corporate bonds, mortgages, consumer credit (including bank loans), other bank loans, commercial paper, bankers acceptances, and other debt instruments. Data are derived from the Federal Reserve Board's flow of funds accounts. Data on debt of domestic nonfinancial sectors are monthly averages, derived by averaging adjacent month-end levels. Growth rates for debt reflect adjustments for discontinuities over time in the levels of debt presented in other tables.

5. Sum of (1) overnight RPs and Eurodollars, (2) money market fund balances (general purpose and broker-dealer), (3) MMDAs, and (4) savings and small time deposits.

6. Sum of (1) large time deposits, (2) term RPs, (3) term Eurodollars of U.S. residents, and (4) money market fund balances (institution-only), less (5) a consolidation adjustment that represents the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. This sum is seasonally adjusted as a whole.

7. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRA and Keogh account balances at commercial banks and thrift institutions are subtracted from small time deposits.

8. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

9. Large time deposits at commercial banks less those held by money market funds, depository institutions, and foreign banks and official institutions.

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT [1]

Millions of dollars

Factor	Monthly averages of daily figures			Weekly averages of daily figures for week ending						
	1991			1991						
	June	July	Aug.	July 17	July 24	July 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	291,288	294,061	292,833	294,025	292,545	291,567	293,807	293,465	292,201	291,775
U.S. government securities[2]										
2 Bought outright-system account	247,135	249,075	251,794	249,038	250,830	249,318	249,765	251,684	251,495	252,922
3 Held under repurchase agreements	527	2,766	543	2,623	0	0	1,202	0	628	577
Federal agency obligations										
4 Bought outright	6,213	6,196	6,159	6,213	6,190	6,159	6,159	6,159	6,159	6,159
5 Held under repurchase agreements	98	241	17	190	0	0	19	0	29	28
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	201	88	205	145	146	32	673	11	127	53
8 Seasonal credit	222	320	332	300	339	362	340	322	337	337
9 Extended credit	7	45	297	3	4	186	190	269	293	369
10 Float	402	474	335	405	349	630	220	425	579	278
11 Other Federal Reserve assets	36,481	34,856	33,151	35,109	34,686	34,880	35,240	34,595	32,555	31,051
12 Gold stock	11,060	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062
13 Special drawing rights certificate account	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018
14 Treasury currency outstanding	20,723	20,769	20,810	20,767	20,775	20,783	20,793	20,803	20,813	20,823
ABSORBING RESERVE FUNDS										
15 Currency in circulation	290,896	293,560	293,864	294,311	292,888	292,278	293,357	294,248	294,004	293,428
16 Treasury cash holdings	623	615	610	621	613	606	614	611	612	608
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	6,428	6614	5,644	6,646	6,033	6,470	5,808	6,028	5,138	5,196
18 Foreign	228	242	233	229	221	239	198	218	265	245
19 Service-related balances and adjustments	3,194	3,239	3,307	3,144	3,316	3,260	3,314	3,301	3,278	3,294
20 Other	210	219	202	287	192	213	183	185	212	221
21 Other Federal Reserve liabilities and capital	8,288	7,812	8,282	7,912	7,909	8,006	8,498	8,230	8,100	8,154
22 Reserve balances with Federal Reserve Banks[3]	23,223	23,609	22,580	22,721	23,227	22,357	23,709	22,527	22,487	22,533

Factor	End-of-month figures			Wednesday figures						
	1991			1991						
	June	July	Aug.	July 17	July 24	July 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit outstanding	291,795	293,653	293,306	293,558	290,994	293,653	301,750	292,206	295,215	291,775
U.S. government securities[2]										
2 Bought outright-system account	247,484	250,978	254,959	250,225	249,177	250,978	249,574	249,630	254,317	252,922
3 Held under repurchase agreements	962	0	0	682	0	0	5,205	0	0	577
Federal agency obligations										
4 Bought outright	6,213	6,159	6,159	6,213	6,159	6,159	6,159	6,159	6,159	6,159
5 Held under repurchase agreements	477	0	0	150	0	0	74	0	0	28
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions										
7 Adjustment credit	1,182	85	97	33	81	85	4,443	7	797	53
8 Seasonal credit	290	359	305	316	357	359	327	328	348	337
9 Extended credit	7	130	443	2	6	130	124	236	226	369
10 Float	433	900	48	962	420	900	381	1,230	849	278
11 Other Federal Reserve assets	34,747	35,043	31,296	34,975	34,793	35,043	35,462	34,617	32,520	31,051
12 Gold stock	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062
13 Special drawing rights certificate account	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018
14 Treasury currency outstanding	20,752	20,783	20,833	20,767	20,775	20,783	20,793	20,803	20,813	20,823
ABSORBING RESERVE FUNDS										
15 Currency in circulation	291,563	292,596	294,884	293,659	292,497	292,596	293,898	294,305	293,864	293,428
16 Treasury cash holdings	613	605	605	621	606	605	610	612	608	608
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	11,822	5,831	6,745	7,111	4,644	5,831	7,435	4,964	5,164	5,196
18 Foreign	224	314	256	219	200	314	203	282	266	245
19 Service-related balances and adjustments	3,283	3,260	3,412	3,144	3,316	3,260	3,314	3,301	3,278	3,294
20 Other	213	212	219	232	174	212	185	190	199	221
21 Other Federal Reserve liabilities and capital	7,082	8165	8,729	7,633	7,758	8,165	8,057	8,072	7,900	8,154
22 Reserve balances with Federal Reserve Banks[3]	18,826	24,533	20,370	22,787	23,655	24,533	29,921	22,363	25,829	22,533

1. For amounts of cash held as reserves, see table 1.12. Components may not sum to totals because of rounding.

2. Includes securities loaned—fully guaranteed by U.S. government securities pledged with Federal Reserve Banks—and excludes any securities sold and scheduled to be bought back under matched sale-purchase transactions.

3. Excludes required clearing balances and adjustments to compensate for float.

1.12 RESERVES AND BORROWINGS Depository Institutions[1]

Millions of dollars

Reserve classification	Prorated monthly averages of biweekly averages									
	1988	1989	1990	1991						
	Dec.	Dec.	Dec.	Feb.	Mar.	Apr.	May	June	July[r]	Aug.
1 Reserve balances with Reserve Banks[2]	37,837	35,436	30,237	19,827	21,734	23,508	22,287	23,685	23,271	22,809
2 Total vault cash[3]	28,204	29,822	31,777	33,477	30,895[r]	30,556	30,720	30,524	31,322	31,779
3 Applied vault cash[4]	25,909	27,374	28,884	28,724	26,853	26,793	26,776	26,722	27,389	27,798
4 Surplus vault cash[5]	2,295	2,448	2,893	4,753	4,043	3,764[r]	3,944	3,801	3,933	3,981
5 Total reserves[6]	63,746	62,810	59,120	48,551	48,586	50,301	49,063	50,407	50,660	50,607
6 Required reserves	62,699	61,887[r]	57,456	46,743	47,407[r]	49,270[r]	48,033	49,399	49,754	49,522
7 Excess reserve balances at Reserve Banks[7]	1,047	923[r]	1,664[r]	1,808[r]	1,179	1,031[r]	1,030[r]	1,008	906	1,085
8 Total borrowings at Reserve Banks[8]	1,716	265	326	252	241	231	303	340	607	764
9 Seasonal borrowings	130	84	76	37	55	79	151	222	317	331
10 Extended credit[9]	1,244	20	23	34	53	86	88	8	46	300
	Biweekly averages of daily figures for weeks ending									
	1991									
	May 1	May 15	May 29	June 12	June 26	July 10	July 24	Aug 7[r]	Aug. 21	Sept. 4
1 Reserve balances with Reserve Banks[2]	23,061	22,907	21,363	24,027	23,344	23,853	22,977	23,029	22,508	23,074
2 Total vault cash[3]	30,706[r]	30,341[r]	31,234[r]	29,787	30,926	31,327	31,351	31,257	32,499	31,137
3 Applied vault cash[4]	26,781	26,532	27,114	26,115	27,048	27,404	27,456	27,234	28,469	27,254
4 Surplus vault cash[5]	3,925[r]	3,809	4,120[r]	3,672	3,878	3,923	3,895	4,023	4,030	3,883
5 Total reserves[6]	49,842	49,438	48,477	50,142	50,392	51,256	50,433	50,262	50,977	50,328
6 Required reserves	48,644[r]	48,469	47,357[r]	49,411	49,110	50,375[r]	49,492[r]	49,393	49,917	49,059
7 Excess reserve balances at Reserve Banks[7]	1,199[r]	970	1,121[r]	731	1,282	882[r]	941[r]	870	1,061	1,269
8 Total borrowings at Reserve Banks[8]	244	314	299	283	314	601	469	892	679	795
9 Seasonal borrowings	92	138	165	176	242	290	320	351	330	320
10 Extended credit[9]	103	128	59	9	8	5	4	188	281	406

1. Data in this table also appear in the Board's H.3 (502) weekly statistical release. For ordering address, see inside front cover. Components may not sum to totals because of rounding.
2. Excludes required clearing balances and adjustments to compensate for float and includes other off-balance-sheet "as-of" adjustments.
3. Total "lagged" vault cash held by depository institutions subject to reserve requirements. Dates refer to the maintenance periods during which the vault cash can be used to satisfy reserve requirements. Under contemporaneous reserve requirements, maintenance periods end thirty days after the lagged computation periods during which the balances are held.
4. All vault cash held during the lagged computation period by "bound" institutions (that is, those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (that is, those whose vault cash exceeds their required reserves) to satisfy current reserve requirements.
5. Total vault cash (line 2) less applied vault cash (line 3).
6. Reserve balances with Federal Reserve Banks (line 1) plus applied vault cash (line 3).
7. Total reserves (line 5) less required reserves (line 6).
8. Also includes adjustment credit.
9. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as there is with traditional short-term adjustment credit, the money market impact of extended credit is similar to that of nonborrowed reserves.

1.13 SELECTED BORROWINGS IN IMMEDIATELY AVAILABLE FUNDS Large Banks[1]

Millions of dollars, averages of daily figures

Source and maturity	1991, week ending Monday								
	Mar. 4	Mar. 11	Mar. 18	Mar. 25	Apr. 1	Apr. 8	Apr. 15	Apr. 22	Apr. 29
Federal funds purchased, repurchase agreements, and other selected borrowings									
From commercial banks in the United States									
1 For one day or under continuing contract	80,759	79,628	75,762	68,931	71,048	81,372	80,513	73,405	67,102
2 For all other maturities	15,491	16,159	17,951	17,530	17,436	16,378	15,935	15,363	15,092
From other depository institutions, foreign banks and official institutions, and U.S. government agencies									
3 For one day or under continuing contract	31,090	30,565	27,997	31,312	29,035	31,718	28,875	28,319	30,267
4 For all other maturities	20,826	20,988	21,676	21,386	20,783	20,730	21,869	20,716	20,308
Repurchase agreements on U.S. government and federal agency securities									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	10,522	10,881	10,781	11,007	8,015	12,995	10,730	10,097	9,754
6 For all other maturities	17,441	17,643	18,006	17,847	18,183	18,620	19,320	18,400	18,149
All other customers									
7 For one day or under continuing contract	24,972	23,766	24,677	24,147	22,908	25,150	24,029	23,555	23,289
8 For all other maturities	11,340	11,584	11,888	11,983	12,587	10,903	11,167	10,924	11,846
MEMO: Federal funds loans and resale agreements in immediately available funds in maturities of one day or under continuing contract									
9 To commercial banks in the United States	46,140	42,822	41,746	39,240	41,515	44,681	43,902	40,273	36,352
10 To all other specified customers[2]	21,409	17,879	20,324	17,401	15,289	17,841	20,559	17,148	15,832

1. Banks with assets of $4 billion or more as of Dec. 31, 1988.
Data in this table also appear in the Board's H.5 (507) weekly statistical release. For ordering address, see inside front cover.

2. Brokers and nonbank dealers in securities, other depository institutions, foreign banks and official institutions, and U.S. government agencies.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Current and previous levels

Federal Reserve Bank	Adjustment credit and seasonal credit[1]			Extended credit[2]						
				First 30 days of borrowing			After 30 days of borrowing[3]			
	On 9/27/91	Effective date	Previous rate	On 9/27/91	Effective date	Previous rate	On 9/27/91	Effective date	Previous rate	Effective date
Boston	5	9/13/91	5.5	5	9/13/91	5.5	6.0	9/19/91	6.10	9/5/91
New York		9/13/91			9/13/91			9/19/91		9/5/91
Philadelphia		9/13/91			9/13/91			9/19/91		9/5/91
Cleveland		9/13/91			9/13/91			9/19/91		9/5/91
Richmond		9/13/91			9/13/91			9/19/91		9/5/91
Atlanta		9/13/91			9/13/91			9/19/91		9/5/91
Chicago		9/13/91			9/13/91			9/19/91		9/5/91
St. Louis		9/17/91			9/17/91			9/19/91		9/5/91
Minneapolis		9/13/91			9/13/91			9/19/91		9/5/91
Kansas City		9/13/91			9/13/91			9/19/91		9/5/91
Dallas		9/13/91			9/13/91			9/19/91		9/5/91
San Francisco	5	9/13/91	5.5	5	9/13/91	5.5	6.0	9/19/91	6.10	9/5/91

Range of rates for adjustment credit in recent years[4]

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977	6	6
1978—Jan. 9	6–6.5	6.5
20	6.5	6.5
May 11	6.5–7	7
12	7	7
July 3	7–7.25	7.25
10	7.25	7.25
Aug. 21	7.75	7.75
Sept. 22	8	8
Oct. 16	8–8.5	8.5
20	8.5	8.5
Nov. 1	8.5–9.5	9.5
3	9.5	9.5
1979—July 20	10	10
Aug. 17	10–10.5	10.5
20	10.5	10.5
Sept. 19	10.5–11	11
21	11	11
Oct. 8	11–12	12
10	12	12
1980—Feb. 15	12–13	13
19	13	13
May 29	12–13	13
30	12	12
June 13	11–12	11
16	11	11
July 28	10–11	10
29	10	10
Sept. 26	11	11
Nov. 17	12	12
Dec. 5	12–13	13

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
1981—May 5	13–14	14
8	14	14
Nov. 2	13–14	13
6	13	13
Dec. 4	12	12
1982—July 20	11.5–12	11.5
23	11.5	11.5
Aug. 2	11–11.5	11
3	11	11
16	10.5	10.5
27	10–10.5	10
30	10	10
Oct. 12	9.5–10	9.5
13	9.5	9.5
Nov. 22	9–9.5	9
26	9	9
Dec. 14	8.5–9	9
15	8.5–9	8.5
17	8.5	8.5
1984—Apr. 9	8.5–9	9
13	9	9
Nov. 21	8.5–9	8.5
26	8.5	8.5
Dec. 24	8	8

Effective date	Range (or level)— All F.R. Banks	F.R. Bank of N.Y.
1985—May 20	7.5–8	7.5
24	7.5	7.5
1986—Mar. 7	7–7.5	7
10	7	7
Apr. 21	6.5–7	6.5
July 11	6	6
Aug. 21	5.5–6	5.5
22	5.5	5.5
1987—Sept. 4	5.5–6	6
11	6	6
1988—Aug. 9	6–6.5	6.5
11	6.5	6.5
1989—Feb. 24	6.5–7	7
27	7	7
1990—Dec. 19	6.5	6.5
1991—Feb. 1	6–6.5	6
4	6	6
Apr. 30	5.5–6	5.5
May 2	5.5	5.5
Sept. 13	5–5.5	5
Sept. 17	5	5
In effect Sept. 27, 1991	5	5

1. Adjustment credit is available on a short-term basis to help depository institutions meet temporary needs for funds that cannot be met through reasonable alternative sources. The highest rate established for loans to depository institutions may be charged on adjustment-credit loans of unusual size that result from a major operating problem at the borrower's facility.

Seasonal credit is available to help smaller depository institutions meet regular, seasonal needs for funds that cannot be met through special industry lenders and that arise from a combination of expected patterns of movement in their deposits and loans.

2. Extended credit is available to depository institutions when similar assistance is not reasonably available from other sources, when exceptional circumstances or practices involve only a particular institution, or when an institution is experiencing difficulties adjusting to changing market conditions over a longer period of time.

3. For extended-credit loans outstanding more than thirty days, a flexible rate somewhat above rates on market sources of funds ordinarily is charged, but in no case is the rate charged less than the basic discount rate plus 50 basis points. The flexible rate is reestablished on the first business day of each two-week reserve maintenance period. At the discretion of the Federal Reserve Bank, the time period for which the basic discount rate is applied may be shortened.

4. For earlier data, see the following publications of the Board of Governors: *Banking and Monetary Statistics, 1914–1941*, and *1941–1970*; and the *Annual Statistical Digest, 1970–1979*.

In 1980 and 1981, the Federal Reserve applied a surcharge to short-term adjustment-credit borrowings by institutions with deposits of $500 million or more that had borrowed in successive weeks or in more than four weeks in a calendar quarter. A 3 percent surcharge was in effect from Mar. 17, 1980, through May 7, 1980. There was no surcharge until Nov. 17, 1980, when a 2 percent surcharge was adopted; the surcharge was subsequently raised to 3 percent on Dec. 5, 1980, and to 4 percent on May 5, 1981. The surcharge was reduced to 3 percent effective Sept. 22, 1981, and to 2 percent effective Oct. 12, 1981. As of Oct. 1, 1981, the formula for applying the surcharge was changed from a calendar quarter to a moving thirteen week period. The surcharge was eliminated on Nov. 17, 1981.

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS[1]

Type of deposit[2]	Requirements	
	Percent of deposits	Effective date
Net transaction accounts[3]		
1 $0 million–$41.1 million	3	12/18/90
2 More than $41.1 million	12	12/18/90
3 Nonpersonal time deposits[4]	0	12/27/90
4 Eurocurrency liabilities[5]	0	12/27/90

1. Required reserves must be held in the form either of deposits with Federal Reserve Banks or vault cash. Nonmember institutions may maintain reserve balances with a Federal Reserve Bank indirectly on a pass-through basis with certain approved institutions. For previous reserve requirements, see earlier editions of the *Annual Report* or the *Federal Reserve Bulletin*. Under provisions of the Monetary Control Act, depository institutions include commercial banks, mutual savings banks, savings and loan associations, credit unions, agencies and branches of foreign banks, and Edge corporations.

2. The Garn–St Germain Depository Institutions Act of 1982 (Public Law 97-320) requires that $2 million of reservable liabilities of each depository institution be subject to a zero percent reserve requirement. The Board is to adjust the amount of reservable liabilities subject to this zero percent reserve requirement each year for the succeeding calendar year by 80 percent of the percentage increase in the total reservable liabilities of all depository institutions, measured on an annual basis as of June 30. No corresponding adjustment is to be made in the event of a decrease. On Dec. 20, 1988, the exemption was raised from $3.2 million to $3.4 million. In determining the reserve requirements of depository institutions, the exemption applies in the following order: (1) net negotiable order of withdrawal (NOW) accounts (NOW accounts less allowable deductions); and (2) net other transaction accounts. The exemption applies only to accounts that would be subject to a 3 percent reserve requirement.

3. Transaction accounts include all deposits against which the account holder is permitted to make withdrawals by negotiable or transferable instruments, payment orders of withdrawal, and telephone and preauthorized transfers in excess of three per month for the purpose of making payments to third persons or others. However, money market deposit accounts (MMDAs) and similar accounts subject to the rules that permit no more than six preauthorized, automatic, or other transfers per month, of which no more than three can be checks, are not transaction accounts (such accounts are savings deposits).

The Monetary Control Act of 1980 requires that the amount of transaction accounts against which the 3 percent reserve requirement applies be modified annually by 80 percent of the percentage change in transaction accounts held by all depository institutions, determined as of June 30 each year. Effective Dec. 18, 1990, for institutions reporting quarterly and Dec. 25, 1990, for institutions reporting weekly, the amount was increased from $40.4 million to $41.1 million.

4. For institutions that report weekly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to 1½ percent for the maintenance period that began Dec. 13, 1990, and to zero for the maintenance period that began Dec. 27, 1990, the reserve requirement on nonpersonal time deposits with an original maturity of 1½ years or more has been zero since Oct. 6, 1983.

For institutions that report quarterly, the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years was reduced from 3 percent to zero on Jan. 17, 1991.

5. The reserve requirement on Eurocurrency liabilities was reduced from 3 percent to zero in the same manner and on the same dates as were the reserve requirement on nonpersonal time deposits with an original maturity of less than 1½ years (see note 4).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS[1]

Millions of dollars

Type of transaction	1988	1989	1990	1991						
				Jan.	Feb.	Mar.	Apr.	May	June	July
U.S. TREASURY SECURITIES										
Outright transactions (excluding matched transactions)										
Treasury bills										
1 Gross purchases	8,223	14,284	24,739	0	1,967	313	908	3,411	37	1,359
2 Gross sales	587	12,818	7,291	120	0	0	0	0	0	0
3 Exchanges	241,876	231,211	241,086	23,702	21,381	18,808	21,981	27,548	19,680	22,280
4 Redemptions	2,200	12,730	4,400	1,000	0	0	0	0	0	0
Others within one year										
5 Gross purchases	2,176	327	425	0	100	700	700[r]	200	0	625
6 Gross sales	0	0	0	0	0	0	0	0	0	0
7 Maturity shifts	23,854	28,848	25,638	989	2,292	413	4,324	5,175	0	1,478
8 Exchanges	−24,588	−25,783	−27,424	−1,326	−3,045	−1,877	−993	−4,887	0	−3,136
9 Redemptions	0	500	0	0	0	0	0	0	0	0
One to five years										
10 Gross purchases	5,485	1,436	250	0	0	2,950	550[r]	0	0	0
11 Gross sales	800	490	200	0	0	0	0	0	0	0
12 Maturity shifts	−17,720	−25,534	−21,770	−778	−1,909	−213	−4,214	−3,410	0	−1,192
13 Exchanges	22,515	23,250	25,410	929	2,545	1,877	777	4,287	0	2,601
Five to ten years										
14 Gross purchases	1,579	287	0	0	350	50	0	0	0	0
15 Gross sales	175	29	100	0	0	0	0	0	0	0
16 Maturity shifts	−5,946	−2,231	−2,186	−212	−23	−200	−110	−1,605	0	−286
17 Exchanges	1,797	1,934	789	397	400	0	216	400	0	534
More than ten years										
18 Gross purchases	1,398	284	0	0	0	0	0	0	0	0
19 Gross sales	0	0	0	0	0	0	0	0	0	0
20 Maturity shifts	−188	−1,086	−1,681	0	−361	0	0	−160	0	0
21 Exchanges	275	600	1,226	0	100	0	0	200	0	0
All maturities										
22 Gross purchases	18,863	16,617	25,414	0	2,417	4,013	2,158[r]	3,611	37	1,984
23 Gross sales	1,562	13,337	7,591	120	0	0	0	0	0	0
24 Redemptions	2,200	13,230	4,400	1,000	0	0	0	0	0	0
Matched transactions										
25 Gross sales	1,168,484	1,323,480	1,369,052	130,751	127,589	151,096	185,662	147,796	118,903	120,292
26 Gross purchases	1,168,142	1,326,542	1,363,434	131,087	127,502	151,412	187,032	147,803	118,239	121,803
Repurchase agreements[2]										
27 Gross purchases	152,613	129,518	219,632	36,337	44,688	23,821	16,173	9,241	9,440	35,149
28 Gross sales	151,497	132,688	202,551	38,462	44,809	38,589	16,173	9,241	8,478	36,111
29 Net change in U.S. government securities	15,872	−10,055	24,886	−2,909	2,209	−10,439	3,528[r]	3,618	335	2,532
FEDERAL AGENCY OBLIGATIONS										
Outright transactions										
30 Gross purchases	0	0	0	0	0	0	0	0	0	0
31 Gross sales	0	0	0	0	0	0	0	0	0	0
32 Redemptions	587	442	183	0	0	0	91	0	0	55
Repurchase agreements[2]										
33 Gross purchases	57,259	38,835	41,836	4,416	3,546	2,518	640	885	1,225	3,245
34 Gross sales	56,471	40,411	40,461	3,571	4,466	3,784	640	885	748	3,722
35 Net change in federal agency obligations	198	−2,018	1,192	845	−920	−1,266	−91	0	477	−532
36 Total net change in System Open Market Account	**16,070**	**−12,073**	**26,078**	**−2,064**	**1,290**	**−11,705**	**3,437[r]**	**3,618**	**812**	**2,000**

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Details may not sum to totals because of rounding.

2. In July 1984 the Open Market Trading Desk discontinued accepting bankers acceptances in repurchase agreements.

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements[1]

Millions of dollars

Account	Wednesday 1991 July 31	Wednesday 1991 Aug. 7	Wednesday 1991 Aug. 14	Wednesday 1991 Aug. 21	Wednesday 1991 Aug. 28	End of month 1991 June 30	End of month 1991 July 31	End of month 1991 Aug. 30
	Consolidated condition statement							
ASSETS								
1 Gold certificate account	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062
2 Special drawing rights certificate account	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018
3 Coin	544	544	554	565	559	575	544	555
Loans								
4 To depository institutions	574	4,894	570	1,371	727	1,479	574	844
5 Other	0	0	0	0	0	0	0	0
6 Acceptances held under repurchase agreements	0	0	0	0	0	0	0	0
Federal agency obligations								
7 Bought outright	6,159	6,159	6,159	6,159	6,159	6,213	6,159	6,159
8 Held under repurchase agreements	0	74	0	0	0	477	0	0
9 **Total U.S. Treasury securities**	**258,502**	**254,779**	**249,630**	**254,317**	**253,044**	**248,446**	**250,978**	**254,959**
10 Bought outright[2]	250,978	249,574	249,630	254,317	253,044	247,484	250,978	254,959
11 Bills	122,183	120,630	120,596	125,182	123,909	119,314	122,183	125,824
12 Notes	97,332	97,482	97,572	97,522	97,522	96,707	97,332	97,522
13 Bonds	31,463	31,463	31,463	31,613	31,613	31,463	31,463	31,613
14 Held under repurchase agreements	0	5,205	0	0	0	962	0	0
15 **Total loans and securities**	257,710	265,906	256,359	261,846	259,930	256,615	257,710	261,962
16 Items in process of collection	5,547	5,596	4,958	5,381	4,723	4,859	5,547	4,832
17 Bank premises	940	940	941	946	950	931	940	950
Other assets								
18 Denominated in foreign currencies[3]	28,497	28,520	27,574	27,134	25,376	28,682	28,497	25,661
19 All other[4]	5,577	6,121	6,125	4,409	4,636	5,379	5,577	4,723
20 **Total assets**	319,896	328,707	317,592	321,361	317,255	318,121	319,896	319,763
LIABILITIES								
21 Federal Reserve notes	272,962	274,260	274,668	274,224	274,237	272,000	272,962	275,210
22 **Total deposits**	**34,228**	**41,307**	**30,307**	**34,540**	**30,686**	**34,460**	**34,228**	**31,200**
23 Depository institutions	27,871	33,484	24,872	28,911	25,394	22,202	27,871	23,962
24 U.S. Treasury—General account	5,831	7,435	4,964	5,164	4,758	11,822	5,831	6,745
25 Foreign—Official accounts	314	203	282	266	302	224	314	256
26 Other	212	185	190	199	233	213	212	236
27 Deferred credit items	4,541	5,083	4,545	4,698	4,325	4,579	4,541	4,624
28 Other liabilities and accrued dividends[5]	2,370	2,583	2,553	2,406	2,468	2,392	2,370	2,977
29 **Total liabilities**	314,102	323,233	312,073	315,867	311,716	313,431	314,102	314,012
CAPITAL ACCOUNTS								
30 Capital paid in	2,556	2,557	2,563	2,567	2,569	2,546	2,556	2,569
31 Surplus	2,423	2,423	2,423	2,423	2,423	2,114	2,423	2,423
32 Other capital accounts	815	494	533	504	547	31	815	759
33 **Total liabilities and capital accounts**	319,896	328,707	317,592	321,361	317,255	318,121	319,896	319,763
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international accounts	244,682	240,712	245,251	245,818	247,031	243,233	244,682	250,866
	Federal Reserve note statement							
35 Federal Reserve notes outstanding (issued to Bank)	342,614	345,502	347,717	349,245	351,976	325,417	342,614	353,213
36 LESS: Held by Federal Reserve Bank	69,652	71,242	73,049	75,021	77,738	53,450	69,652	78,003
37 Federal Reserve notes, net	272,962	274,260	274,668	274,224	274,237	271,967	272,962	275,210
Collateral held against notes, net:								
38 Gold certificate account	11,062	11,062	11,062	11,062	11,062	11,062	11,062	11,062
39 Special drawing rights certificate account	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018
40 Other eligible assets	0	0	0	0	0	0	0	0
41 U.S. Treasury and agency securities	251,882	253,180	253,588	253,143	253,157	250,887	251,882	254,130
42 **Total collateral**	272,962	274,260	274,668	274,224	274,237	271,967	272,962	275,210

1. Some of the data in this table also appear in the Board's H.4.1 (503) weekly statistical release. For ordering address, see inside front cover. Components may not sum to totals because of rounding.
2. Includes securities loaned—fully guaranteed by U.S. Treasury securities pledged with Federal Reserve Banks—and excludes securities sold and scheduled to be bought back under matched sale-purchase transactions.
3. Valued monthly at market exchange rates.
4. Includes special investment account at the Federal Reserve Bank of Chicago in Treasury bills maturing within ninety days.
5. Includes exchange-translation account reflecting the monthly revaluation at market exchange rates of foreign-exchange commitments.

1.19 FEDERAL RESERVE BANKS Maturity Distribution of Loan and Security Holding[1]

Millions of dollars

Type and maturity grouping	Wednesday					End of month		
	1991					1991		
	July 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28	June 28	July 31	Aug. 30
1 **Total loans**	**574**	**4,894**	**570**	**1,371**	**727**	**1,479**	**574**	**844**
2 Within fifteen days	393	4,671	353	1,312	645	1,336	393	659
3 Sixteen days to ninety days	181	223	217	59	82	143	181	185
4 Ninety-one days to one year	0	0	0	0	0	0	0	0
5 **Total acceptances**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
6 Within fifteen days	0	0	0	0	0	0	0	0
7 Sixteen days to ninety days	0	0	0	0	0	0	0	0
8 Ninety-one days to one year	0	0	0	0	0	0	0	0
9 **Total U.S. Treasury securities**	**250,978**	**254,779**	**254,779**	**254,317**	**253,044**	**247,484**	**250,978**	**254,959**
10 Within fifteen days[2]	15,726	17,030	17,030	15,611	13,230	8,107	15,726	3,393
11 Sixteen days to ninety days	54,238	55,183	55,183	54,934	59,121	62,898	54,238	59,957
12 Ninety-one days to one year	81,426	82,829	82,829	84,926	81,846	76,727	81,426	92,762
13 One year to five years	62,040	62,190	62,190	60,848	60,848	62,453	62,040	60,848
14 Five years to ten years	12,832	12,832	12,832	13,820	13,820	12,584	12,832	13,820
15 More than ten years	24,716	24,716	24,716	24,178	24,178	24,716	24,716	24,178
16 **Total Federal agency obligations**	**6,159**	**6,233**	**6,233**	**6,159**	**6,159**	**6,213**	**6,159**	**6,159**
17 Within fifteen days[2]	170	134	134	510	328	205	170	328
18 Sixteen days to ninety days	956	1,055	1,055	603	660	888	956	660
19 Ninety-one days to one year	1,384	1,377	1,377	1,319	1,401	1,423	1,384	1,401
20 One year to five years	2,487	2,505	2,505	2,510	2,553	2,499	2,487	2,553
21 Five years to ten years	974	974	974	1,029	1,029	1,010	974	1,029
22 More than ten years	188	188	188	188	188	188	188	188

1. Components may not sum to totals because of rounding.
2. Holdings under repurchase agreements are classified as maturing within fifteen days in accordance with the maximum possible maturity of the agreements.

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE[1]

Billions of dollars, averages of daily figures

Item	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.	1991 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
					Seasonally adjusted							
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[2]												
1 Total reserves[3]	45.81	47.60	47.73	49.10	49.47	49.61	49.57	49.39	50.07	50.43	50.51	51.00
2 Nonborrowed reserves[4]	45.03	45.88	47.46	48.78	48.93	49.36	49.32	49.16	49.77	50.09	49.90r	50.24
3 Nonborrowed reserves plus extended credit[5]	45.52	47.12	47.48	48.80	48.96	49.39	49.38	49.25	49.85	50.10	49.95	50.54
4 Required reserves	44.77	46.55	46.81	47.44	47.30	47.80	48.39	48.36	49.04	49.42	49.60	49.92
5 Monetary base[6]	246.28	263.46	274.17	299.78r	305.15	309.44	310.98	310.60	311.48	312.47	313.91	316.30
					Not seasonally adjusted							
6 Total reserves[7]	47.04	49.00	49.18	50.58	50.76	48.55	48.59	50.30	49.06	50.41	50.66	50.61
7 Nonborrowed reserves	46.26	47.29	48.91	50.25	50.22	48.30	48.34	50.07	48.76	50.07	50.05r	49.84
8 Nonborrowed reserves plus extended credit[5]	46.75	48.53	48.93	50.28	50.25	48.33	48.40	50.16	48.85	50.07	50.10	50.14
9 Required reserves[8]	46.00	47.96	48.26	48.91	48.59	46.74	47.41	49.27	48.03	49.40	49.75	49.52
10 Monetary base[9]	249.93	267.46	278.30	304.04	306.03	305.74	308.19	310.86	311.02	314.06	316.21	316.75
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS[10]												
11 Total reserves[11]	62.14	63.75	62.81	59.12	50.99	48.55	48.59	50.30	49.06	50.41	50.66	50.61
12 Nonborrowed reserves	61.36	62.03	62.54	58.79	50.46	48.30	48.35	50.07	48.76	50.07	50.05r	49.84
13 Nonborrowed reserves plus extended credit[5]	61.85	63.27	62.56	58.82	50.48	48.33	48.40	50.16	48.85	50.08	50.10	50.14
14 Required reserves	61.09	62.70	61.89	57.46	48.82	46.74	47.41	49.27	48.03	49.40	49.75	49.52
15 Monetary base[12]	266.06	283.00	292.55	313.70	309.30	308.53	311.04	313.95	314.25	317.25	319.46	320.06
16 Excess reserves[13]	1.05	1.05	.92	1.66	2.17	1.81	1.18	1.03	1.03	1.01	.91	1.08
17 Borrowings from the Federal Reserve	.78	1.72	.27	.33	.53	.25	.24	.23	.30	.34	.61	.76

1. Latest monthly and biweekly figures are available from the Board's H.3 (502) weekly statistical release. Historical data and estimates of the impact on required reserves of changes in reserve requirements are available from the Monetary and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

2. Figures reflect adjustments for discontinuities, or "breaks," associated with regulatory changes in reserve requirements.

3. Seasonally adjusted, break-adjusted total reserves equal seasonally adjusted, break-adjusted required reserves (line 4) plus excess reserves (line 16).

4. Seasonally adjusted, break-adjusted nonborrowed reserves equal seasonally adjusted, break-adjusted total reserves (line 1) less total borrowings of depository institutions from the Federal Reserve (line 17).

5. Extended credit consists of borrowing at the discount window under the terms and conditions established for the extended credit program to help depository institutions deal with sustained liquidity pressures. Because there is not the same need to repay such borrowing promptly as there is with traditional short-term adjustment credit, the money market impact of extended credit is similar to that of nonborrowed reserves.

6. The seasonally adjusted, break-adjusted monetary base consists of (1) seasonally adjusted, break-adjusted total reserves (line 1), plus (2) the seasonally adjusted currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the seasonally adjusted, break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

7. Break-adjusted total reserves equal break-adjusted required reserves (line 9) plus excess reserves (line 16).

8. To adjust required reserves for discontinuities that are due to regulatory changes in reserve requirements, a multiplicative procedure is used to estimate what required reserves would have been in past periods had current reserve requirements been in effect. Break-adjusted required reserves include required reserves against transactions deposits and nonpersonal time and savings deposits (but not reservable nondeposit liabilities).

9. The break-adjusted monetary base equals (1) break-adjusted total reserves (line 6), plus (2) the (unadjusted) currency component of the money stock, plus (3) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all weekly reporters whose vault cash exceeds their required reserves) the break-adjusted difference between current vault cash and the amount applied to satisfy current reserve requirements.

10. Reflects actual reserve requirements, including those on nondeposit liabilities, with no adjustments to eliminate the effects of discontinuities associated with changes in reserve requirements.

11. Reserve balances with Federal Reserve Banks plus vault cash used to satisfy reserve requirements.

12. The monetary base, not break-adjusted and not seasonally adjusted, consists of (1) total reserves (line 11), plus (2) required clearing balances and adjustments to compensate for float at Federal Reserve Banks, plus (3) the currency component of the money stock, plus (4) (for all quarterly reporters on the "Report of Transaction Accounts, Other Deposits and Vault Cash" and for all those weekly reporters whose vault cash exceeds their required reserves) the difference between current vault cash and the amount applied to satisfy current reserve requirements. Since the introduction of changes in reserve requirements (CRR), currency and vault cash figures have been measured over the computation periods ending on Mondays.

13. Unadjusted total reserves (line 11) less unadjusted required reserves (line 14).

1.21 MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES[1]

Billions of dollars, averages of daily figures

Item	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.	1991 May	1991 June	1991 July[r]	1991 Aug.
	Seasonally adjusted							
Measures[2]								
1 M1	749.7	786.4	793.6	825.4	851.6	858.4	859.7	866.2
2 M2	2,910.1	3,069.9	3,223.1	3,328.2[r]	3,397.2[r]	3,402.1[r]	3,391.1	3,391.2
3 M3	3,677.4	3,919.1	4,055.2	4,111.8[r]	4,173.9[r]	4,167.1[r]	4,148.2	4,143.3
4 L	4,337.0	4,676.0	4,889.9	4,965.8[r]	4,953.9[r]	4,978.5[r]	4,982.5	n.a.
5 Debt	8,345.1	9,107.6	9,790.4	10,434.0[r]	10,603.1[r]	10,648.6[r]	10,693.6	n.a.
M1 components								
6 Currency[3]	196.8	212.0	222.2	246.4	256.8	257.6	258.9	260.7
7 Travelers checks[4]	7.0	7.5	7.4	8.4	8.0	7.8	7.7	7.7
8 Demand deposits[5]	286.5	286.3	278.7	276.9	278.7	281.0	279.0	279.9
9 Other checkable deposits[6]	259.3	280.7	285.2	293.8	308.1	312.0	314.1	317.9
Nontransaction components								
10 In M2[7]	2,160.4	2,283.5	2,429.5	2,502.8[r]	2,545.5[r]	2,543.7[r]	2,531.5	2,524.9
11 In M3[8]	767.3	849.3	832.1	783.5[r]	776.7[r]	765.0[r]	757.1	752.1
Commercial banks								
12 Savings deposits	178.3	192.1	187.7	199.4	211.4	215.1	217.6	220.7
13 Money market deposit accounts	356.4	350.2	353.0	378.4	399.9	404.5	408.0	410.2
14 Small time deposits[9]	388.0	447.5	531.4	598.1	601.2	601.7	600.9	604.8
15 Large time deposits[10, 11]	326.6	368.0	401.9	386.1	399.3	398.0[r]	393.5	390.5
Thrift institutions								
16 Savings deposits	233.7	232.3	216.4	211.4	221.7	223.8	225.2	227.0
17 Money market deposit accounts	168.5	151.2	133.1	127.6	136.2	137.6	139.2	138.2
18 Small time deposits[9]	529.7	584.3	614.5	566.1	539.3	527.4	517.7	505.5
19 Large time deposits[10]	162.6	174.3	161.6	121.0	104.6	100.9	97.7	93.8
Money market mutual funds								
20 General purpose and broker-dealer	221.7	241.1	313.6	345.4	365.1	364.3	359.4	352.8
21 Institution-only	88.9	86.9	101.9	125.7	146.2	143.3	141.8	144.8
Debt components								
22 Federal debt	1,957.9	2,114.2	2,268.1	2,534.3	2,613.7[r]	2,646.1[r]	2,672.1	n.a.
23 Nonfederal debt	6,387.2	6,993.4	7,522.3	7,899.7[r]	7,989.4[r]	8,002.6[r]	8,021.5	n.a.
	Not seasonally adjusted							
Measures[2]								
24 M1	766.2	804.2	811.9	844.3	841.6	857.7	861.9	864.2
25 M2	2,923.0	3,083.3	3,236.6	3,342.3[r]	3,376.6[r]	3,395.1[r]	3,394.4	3,392.0
26 M3	3,690.3	3,931.5	4,067.0	4,123.8	4,155.1[r]	4,161.7[r]	4,151.1	4,148.4
27 L	4,352.8	4,691.8	4,907.4	4,984.4[r]	4,938.8[r]	4,968.9[r]	4,975.5	n.a.
28 Debt	8,329.1	9,093.2	9,775.9	10,421.2[r]	10,556.9[r]	10,605.1[r]	10,652.2	n.a.
M1 components								
29 Currency[3]	199.3	214.8	225.3	249.6	257.4	259.1	260.8	261.9
30 Travelers checks[4]	6.5	6.9	6.9	7.8	7.8	8.1	8.5	8.6
31 Demand deposits[5]	298.6	298.9	291.5	289.9	271.5	279.6	280.7	278.7
32 Other checkable deposits[6]	261.8	283.5	288.2	297.0	304.9	310.8	311.9	314.9
Nontransaction components								
33 In M2[7]	2,156.8	2,279.1	2,424.7	2,498.0[r]	2,535.1[r]	2,537.4[r]	2,532.5	2,527.8
34 In M3[8]	767.3	848.2	830.4	781.6[r]	778.5[r]	766.6[r]	756.7	756.4
Commercial banks								
35 Savings deposits	176.8	190.6	186.4	197.7	211.9	216.5	219.7	221.3
36 Money market deposit accounts	359.0	353.2	356.5	381.6	395.8	401.9	404.8	408.8
37 Small time deposits[9]	387.2	446.0	529.2	596.1	601.0	602.1	602.8	605.9
38 Large time deposits[10, 11]	325.8	366.8	400.4	386.1	398.9	397.5[r]	392.2	391.5
Thrift institutions								
39 Savings deposits	231.4	229.9	214.2	209.6	222.2	225.2	227.5	227.6
40 Money market deposit accounts	168.6	151.6	133.7	128.7	134.9	136.7	138.0	137.7
41 Small time deposits[9]	529.5	583.8	613.8	564.1	539.1	527.7	519.3	506.5
42 Large time deposits[10]	163.3	175.2	162.6	121.1	104.5	100.8	97.4	94.1
Money market mutual funds								
43 General purpose and broker-dealer	221.1	240.7	313.5	345.5	360.5	358.0	354.5	351.6
44 Institution-only	89.6	87.6	102.8	127.0	145.2	141.0	139.7	143.9
Repurchase agreements and eurodollars								
45 Overnight	83.2	83.4	77.3	74.7[r]	69.7[r]	69.3[r]	65.8	68.4
46 Term	197.1	227.7	179.8	160.9[r]	145.2[r]	142.3[r]	143.0	141.9
Debt components								
47 Federal debt	1,955.6	2,111.8	2,265.9	2,532.1	2,609.1	2,635.3	2,657.9	n.a.
48 Nonfederal debt	6,373.5	6,981.4	7,509.9	7,889.1[r]	7,947.9[r]	7,969.8[r]	7,994.3	n.a.

For notes see following page.

NOTES TO TABLE 1.21

1. Latest monthly and weekly figures are available from the Board's H.6 (508) weekly statistical release. Historical data are available from the Money and Reserves Projection Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

2. Composition of the money stock measures and debt is as follows:

M1: (1) currency outside the Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) travelers checks of nonbank issuers; (3) demand deposits at all commercial banks other than those due to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float; and (4), other checkable deposits (OCDs), consisting of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions. Seasonally adjusted M1 is computed by summing currency, travelers checks, demand deposits, and OCDs, each seasonally adjusted separately.

M2: M1 plus (1) overnight (and continuing-contract) repurchase agreements (RPs) issued by all depository institutions and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, (2) money market deposit accounts (MMDAs), (3) savings and small time deposits (time deposits—including retail RPs—in amounts of less than $100,000), and (4) balances in both *taxable and tax-exempt general purpose and broker–dealer* money market funds. Excludes individual retirement accounts (IRAs) and Keogh balances at depository institutions and money market funds. Also excludes all balances held by U.S. commercial banks, money market funds (general purpose and broker–dealer), foreign governments and commercial banks, and the U.S. government. Seasonally adjusted M2 is computed by adjusting its non-M1 component as a whole and then adding this result to seasonally adjusted M1.

M3: M2 plus (1) large time deposits and term RP liabilities (in amounts of $100,000 or more) issued by all depository institutions, (2) term Eurodollars held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada, and (3) balances in both taxable and tax-exempt, institution-only money market funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also excluded is the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds. Seasonally adjusted M3 is computed by adjusting its non-M2 component as a whole and then adding this result to seasonally adjusted M2.

L: M3 plus the nonbank public holdings of U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, net of money market fund holdings of these assets. Seasonally adjusted L is computed by summing U.S. savings bonds, short-term Treasury securities, commercial paper, and bankers acceptances, each seasonally adjusted separately, and then adding this result to M3.

Debt: Debt of domestic nonfinancial sectors consists of outstanding credit market debt of the U.S. government, state and local governments, and private nonfinancial sectors. Private debt consists of corporate bonds, mortgages, consumer credit (including bank loans), other bank loans, commercial paper, bankers acceptances, and other debt instruments. Data are derived from the Federal Reserve Board's flow of funds accounts. Debt data are based on monthly averages. This sum is seasonally adjusted as a whole.

3. Currency outside the U.S. Treasury, Federal Reserve Banks, and vaults of depository institutions.

4. Outstanding amount of U.S. dollar-denominated travelers checks of nonbank issuers. Travelers checks issued by depository institutions are included in demand deposits.

5. Demand deposits at commercial banks and foreign-related institutions other than those due to depository institutions, the U.S. government, and foreign banks and official institutions, less cash items in the process of collection and Federal Reserve float.

6. Consists of NOW and ATS account balances at all depository institutions, credit union share draft account balances, and demand deposits at thrift institutions.

7. Sum of (1) overnight RPs and overnight Eurodollars, (2) money market fund balances (general purpose and broker-dealer), (3) MMDAs, and (4) savings and small time deposits.

8. Sum of (1) large time deposits, (2) term RPs, (3) term Eurodollars of U.S. residents, and (4) money market fund balances (institution-only), less a consolidation adjustment that represents the estimated amount of overnight RPs and Eurodollars held by institution-only money market funds.

9. Small time deposits—including retail RPs—are those issued in amounts of less than $100,000. All IRAs and Keogh accounts at commercial banks and thrift institutions are subtracted from small time deposits.

10. Large time deposits are those issued in amounts of $100,000 or more, excluding those booked at international banking facilities.

11. Large time deposits at commercial banks less those held by money market funds, depository institutions, and foreign banks and official institutions.

1.22 BANK DEBITS AND DEPOSIT TURNOVER[1]

Debits are in billions of dollars; turnover is ratio of debits to deposits; monthly data are at annual rates

Bank group, or type of customer	1988[2]	1989[2]	1990[2]	1991 Jan.	Feb.	Mar.	Apr.	May	June
DEBITS TO	Seasonally adjusted								
Demand deposits[3]									
1 All insured banks	219,795.7	256,150.4	277,916.3	279,437.8	280,494.1	269,834.9	294,433.5	295,559.0	267,338.8
2 Major New York City banks	115,475.6	129,319.9	131,784.0	138,638.1	138,037.7	133,302.7	146,499.3	148,074.9	134,512.6
3 Other banks	104,320.2	126,830.5	146,132.3	140,799.7	142,456.4	136,532.2	147,934.2	147,484.1	132,826.2
4 ATS–NOW accounts[4]	2,478.1	2,910.5	3,349.6	3,559.1	3,533.7	3,240.3	3,820.3	3,620.2	3,442.4
5 Savings deposits[5]	537.0	547.5	558.8	572.9	551.4	523.7	577.1	548.6	522.3
DEPOSIT TURNOVER									
Demand deposits[3]									
6 All insured banks	622.9	735.1	800.6	828.3	817.8	792.0	870.3	867.0	773.3
7 Major New York City banks	2,897.2	3,421.5	3,804.1	4,259.7	4,125.7	4,101.4	4,533.4	4,702.8	4,166.3
8 Other banks	333.3	408.3	467.7	461.9	460.2	443.0	483.4	476.6	423.8
9 ATS–NOW accounts[4]	13.2	15.2	16.5	17.0	16.7	15.1	17.8	16.4	15.4
10 Savings deposits[5]	2.9	3.0	2.9	2.9	2.7	2.6	2.8	2.6	2.4
DEBITS TO	Not seasonally adjusted								
Demand deposits[3]									
11 All insured banks	219,790.4	256,133.2	277,400.0	283,545.5	259,372.9	275,015.8	294,492.4	292,012.3	269,958.7
12 Major New York City banks	115,460.7	129,400.1	131,784.7	136,578.8	127,287.3	134,974.7	145,700.2	145,073.9	133,851.7
13 Other banks	104,329.7	126,733.0	145,615.3	146,966.7	132,085.5	140,041.0	148,792.2	146,938.4	136,107.0
14 ATS–NOW accounts[4]	2,477.3	2,910.7	3,342.2	3,923.1	3,237.8	3,317.4	3,967.1	3,549.9	3,442.1
15 MMDAs[6]	2,342.7	2,677.1	2,923.8	3,106.8	2,512.7	2,767.2	2,994.5	2,978.6	2,718.8
16 Savings deposits[5]	536.3	546.9	557.9	589.2	494.9	520.4	623.9	545.5	518.8
DEPOSIT TURNOVER									
Demand deposits[3]									
17 All insured banks	622.8	735.4	799.6	820.3	778.7	831.9	864.8	875.5	784.0
18 Major New York City banks	2,896.7	3,426.2	3,810.0	3,993.4	3,899.0	4,378.4	4,565.4	4,742.5	4,154.4
19 Other banks	333.2	408.0	466.3	471.9	439.7	467.2	482.1	485.0	436.1
20 ATS–NOW accounts[4]	13.2	15.2	16.4	18.4	15.3	15.4	17.8	16.3	15.5
21 MMDAs[6]	6.6	7.9	8.0	8.2	6.6	7.1	7.7	7.6	6.8
22 Savings deposits[5]	2.9	2.9	2.9	3.0	2.5	2.5	3.0	2.6	2.4

1. Historical tables containing revised data for earlier periods can be obtained from the Banking and Money Market Statistics Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.
Data in this table also appear on the Board's G.6 (406) monthly statistical release. For ordering address, see inside front cover.
2. Annual averages of monthly figures.
3. Represents accounts of individuals, partnerships, and corporations and of states and political subdivisions.
4. Accounts authorized for negotiable orders of withdrawal (NOWs) and accounts authorized for automatic transfer to demand deposits (ATSs).
5. Excludes MMDA, ATS, and NOW accounts.
6. Money market deposit accounts.

1.23 LOANS AND SECURITIES All Commercial Banks[1]

Billions of dollars, averages of Wednesday figures

Item	1990				1991							
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June[r]	July[r]	Aug.
	Seasonally adjusted											
1 **Total loans and securities[2]**	**2,708.0**	**2,713.6**	**2,716.6**	**2,723.6**	**2,721.2**	**2,735.1**	**2,751.0[r]**	**2,751.8[r]**	**2,750.5[r]**	**2,763.2**	**2,763.3**	**2,761.6**
2 U.S. government securities	450.1	453.1	454.0	454.2	454.1	458.0	471.4	479.2	485.1[r]	495.2	505.3	512.6
3 Other securities	178.8	177.8	175.9	175.6	177.7	177.6	177.6	175.7	173.9	173.1	172.0	169.9
4 Total loans and leases[2]	2,079.0	2,082.7	2,086.7	2,093.8	2,089.4	2,099.5	2,102.0	2,096.9[r]	2,091.5[r]	2,094.8	2,086.0	2,079.1
5 Commercial and industrial	644.7	643.7	646.5	648.1	644.3	643.9	646.0	640.0	633.2	630.4	626.7	620.5
6 Bankers acceptances held[3]	7.5	7.3	7.4	7.5	7.7	6.9	6.7	6.8[r]	6.9[r]	6.6	6.6	7.1
7 Other commercial and industrial	637.1	636.4	639.1	640.5	636.6	637.0[r]	639.3[r]	633.2[r]	626.4	623.8	620.0	613.4
8 U.S. addressees[4]	632.6	631.7	634.0	635.3	631.1	631.5	633.6[r]	627.7[r]	620.6	617.9	614.3	607.7
9 Non-U.S. addressees[4]	4.5	4.7	5.1	5.3	5.5	5.5	5.7	5.5	5.8	5.9	5.7	5.7
10 Real estate	822.5	827.7	832.0	836.5	837.3	842.6	846.3	850.9[r]	855.1[r]	859.5	857.0	853.9
11 Individual	378.6	379.7	378.7	378.9	375.9	377.7	375.5	374.1	373.5[r]	372.0	369.6	368.9
12 Security	41.3	40.5	39.6	40.6	43.1	43.2	38.9[r]	39.8	39.8	38.3	41.6	42.6
13 Nonbank financial institutions	35.2	34.8	34.6	34.8[r]	34.8[r]	35.9[r]	36.7[r]	35.9[r]	36.9[r]	37.1	37.0	36.2
14 Agricultural	31.8	32.2	32.5	33.0	33.5	33.5	34.0	33.9	33.6	33.0	32.5	32.3
15 State and political subdivisions	35.2	35.1	34.8	34.3	33.3[r]	33.2[r]	32.8[r]	32.2[r]	31.8[r]	31.1	30.6	30.1
16 Foreign banks	8.1	9.0	8.1	7.2	6.0	6.1	7.2	6.8	6.4	6.0	6.2	6.2
17 Foreign official institutions	3.3	3.2	3.2	3.2	3.0	3.1	3.2	3.0	3.0	3.0	3.1	3.1
18 Lease-financing receivables	32.8	33.3	32.9	32.7	32.4	32.8	33.0	32.7	32.7	32.8	32.0	31.4
19 All other loans	45.5	43.6	43.7	44.6[r]	45.8[r]	47.5[r]	48.5[r]	47.6[r]	45.6[r]	51.7	49.7	53.9
	Not seasonally adjusted											
20 **Total loans and securities[2]**	**2,707.0**	**2,715.5**	**2,720.1**	**2,730.5**	**2,721.0**	**2,737.3**	**2,748.4[r]**	**2,751.5[r]**	**2,749.7[r]**	**2,763.8**	**2,757.2**	**2,756.6**
21 U.S. government securities	448.2	450.8	454.1	451.5	455.8	463.9	475.8	480.5	485.2[r]	493.7	501.8	510.4
22 Other securities	179.0	178.0	176.6	176.3	177.9	177.3	176.9	175.1	173.8	173.2	171.3	170.1
23 Total loans and leases[2]	2,079.8	2,086.7	2,089.3	2,102.7	2,087.3	2,096.1	2,095.7	2,095.9[r]	2,090.6[r]	2,096.9	2,084.1	2,076.0
24 Commercial and industrial	640.9	641.2	644.5	648.0	641.1	643.0	648.3	644.7	637.1	632.7	627.0	619.2
25 Bankers acceptances held[3]	7.5	7.4	7.6	7.7	7.6	7.0	6.7[r]	6.7[r]	6.8[r]	6.7	6.4	6.9
26 Other commercial and industrial	633.4	633.8	636.9	640.3	633.4	636.0[r]	641.6	638.1	630.3[r]	626.0	620.6	612.3
27 U.S. addressees[4]	628.8	629.1	631.9	635.1	628.2	630.5[r]	636.1[r]	632.2	624.5	620.0	614.8	606.4
28 Non-U.S. addressees[4]	4.6	4.7	5.0	5.2	5.3	5.5	5.4	5.9	5.9	6.0	5.8	5.9
29 Real estate	824.2	830.3	834.0	837.9	837.1	839.5	842.6	848.3[r]	854.2[r]	859.6	857.5	855.9
30 Individual	380.4	380.6	379.8	383.8	380.1	377.1	372.8	371.5	371.8	369.9	367.4	368.1
31 Security	40.3	39.5	38.5	40.0	41.0[r]	44.7	40.2[r]	41.3	39.0	40.5	41.3	42.0
32 Nonbank financial institutions	34.9	34.7	35.0	36.2[r]	35.3[r]	35.5[r]	35.9[r]	35.5[r]	36.4[r]	37.2	36.8	36.1
33 Agricultural	32.9	33.1	32.9	32.9	32.8	32.6	32.6	32.8	33.1	33.3	33.4	33.3
34 State and political subdivisions	35.2	35.1	34.7	34.0	33.9	33.3	32.8[r]	32.1	31.8[r]	31.0	30.4	30.0
35 Foreign banks	8.2	9.3	8.3	7.4	6.0	6.0	6.8	6.7	6.3	6.1	6.2	6.2
36 Foreign official institutions	3.3	3.2	3.2	3.2	3.0	3.1	3.2	3.0	3.0	3.0	3.1	3.1
37 Lease-financing receivables	32.8	33.3	33.1	32.8	32.8	32.9	32.9	32.7	32.6	32.6	31.8	31.3
38 All other loans	46.8	46.3	45.4	46.6[r]	44.0[r]	48.3[r]	47.7[r]	47.3[r]	45.3[r]	51.0	49.2	51.0

1. Components may not sum to totals because of rounding.
2. Adjusted to exclude loans to commercial banks in the United States.
3. Includes nonfinancial commercial paper held.
4. United States includes the fifty states and the District of Columbia.

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS[1]

Billions of dollars, monthly averages

Source of funds	1990				1991							
	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.[r]	May[r]	June[r]	July[r]	Aug.
Seasonally adjusted												
1 Total nondeposit funds[2]	283.6[r]	292.7[r]	293.4[r]	289.2[r]	278.7[r]	266.8[r]	266.1[r]	266.0	263.8	255.1	255.5	250.5
2 Net balances due to related foreign offices[3]	21.5	29.9	30.1	34.6	33.5	24.9	30.2	30.8	26.1	19.2	19.2	16.6
3 Borrowings from other than commercial banks in United States[4]	262.1[r]	262.8[r]	263.3[r]	254.6[r]	245.2[r]	241.9[r]	235.9[r]	235.2	237.8	235.9	236.3	233.8
4 Domestically chartered banks	199.4[r]	197.7[r]	196.0[r]	188.4[r]	183.7[r]	178.8[r]	173.4[r]	173.4	172.9	171.8	171.1	165.8
5 Foreign-related banks	62.7	65.0	67.3	66.2	61.5	63.1	62.6	61.8	64.9	64.1	65.2	68.1
Not seasonally adjusted												
6 Total nondeposit funds[2]	279.2[r]	289.5[r]	294.6[r]	283.6[r]	274.0[r]	269.8[r]	271.4[r]	266.7	271.9	258.1	252.2	248.9
7 Net balances due to related foreign offices[3]	21.6	29.6	30.8	37.2	33.2	24.8	29.6[r]	28.9	28.6	19.5	16.8	16.0
8 Domestically chartered banks	−4.2	−1.0	.6	−4.1	−15.2	−15.2	−6.0	−3.5	−.7	−3.5	−7.2	−7.4
9 Foreign-related banks	25.8	30.6	30.2	41.3	48.4	40.0	35.6	32.5	29.2	23.0	24.0	23.4
10 Borrowings from other than commercial banks in United States[4]	257.6[r]	260.0[r]	263.8[r]	246.4[r]	240.9[r]	245.0[r]	241.7[r]	237.8	243.3	238.6	235.4	232.9
11 Domestically chartered banks	196.2[r]	195.8[r]	198.6[r]	184.1[r]	179.2[r]	181.1[r]	177.8[r]	174.2	177.7	172.7	169.0	165.3
12 Federal funds and security RP borrowings[5]	192.2[r]	192.5[r]	195.7[r]	181.3[r]	175.9[r]	178.3[r]	174.5[r]	171.3	174.9	169.9	165.8	161.6
13 Other[6]	4.0	3.2	2.9	2.8	3.2	2.8	3.2	2.9	2.8	2.8	3.2	3.7
14 Foreign-related banks[6]	61.5	64.2	65.1	62.3	61.7	63.9	64.0	63.6	65.6	65.9	66.4	67.6
MEMO												
Gross large time deposits[7]												
15 Seasonally adjusted	443.6	438.0	435.2	431.8	441.0	450.6	451.0	451.3	453.0	451.9	447.5	447.0
16 Not seasonally adjusted	445.4	440.4	437.8	431.8	439.3	449.2	450.5	449.0	452.6	451.4	446.3	448.0
U.S. Treasury demand balances at commercial banks[8]												
17 Seasonally adjusted	26.0	22.3	25.2	24.4	25.7	33.4	33.8	21.7	15.1	23.2	20.5	23.8
18 Not seasonally adjusted	31.0	20.9	19.2	23.0	29.4	39.3	28.4	20.4	19.8	23.6	20.7	17.2

1. Commercial banks are nationally and state-chartered banks in the fifty states and the District of Columbia, agencies and branches of foreign banks, New York investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks.

Data in this table also appear in the Board's G.10 (411) release. For ordering address, see inside front cover.

2. Includes federal funds, repurchase agreements (RPs), and other borrowing from nonbanks and net balances due to related foreign offices.

3. Reflects net positions of U.S. chartered banks, Edge act corporations, and U.S. branches and agencies of foreign banks with related foreign offices plus net positions with own International Banking Facilities (IBFs).

4. Borrowings through any instrument, such as a promissory note or due bill, given for the purpose of borrowing money for the banking business. This includes borrowings from Federal Reserve Banks and from foreign banks, term federal funds, loan RPs, and sales of participations in pooled loans.

5. Figures are based on averages of daily data reported weekly by approximately 120 large banks and quarterly or annual data reported by other banks.

6. Figures are partly averages of daily data and partly averages of Wednesday data.

7. Time deposits in denominations of $100,000 or more. Estimated averages of daily data.

8. U.S. Treasury demand deposits and Treasury tax-and-loan notes at commercial banks. Averages of daily data.

1.25 ASSETS AND LIABILITIES OF COMMERCIAL BANKS Last-Wednesday-of-Month Series[1]

Billions of dollars

Account	1990			1991							
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
ALL COMMERCIAL BANKING INSTITUTIONS[2]											
Assets											
1 Loans and securities	2,931.3	2,925.1	2,936.9	2,908.7	2,924.9	2,910.9	2,907.1	2,921.5	2,937.9	2,937.7	2,921.0
2 Investment securities	604.9	603.3	605.6	612.8	614.0	628.3	628.5	634.1	641.1	648.7	650.9
3 U.S. government securities	438.0	437.6	439.6	447.6	449.5	463.3	465.1	471.8	480.4	489.9	492.8
4 Other	166.8	165.7	166.0	165.2	164.5	165.1	163.4	162.2	160.7	158.8	158.1
5 Trading account assets	27.4	25.0	22.0	24.1	26.9	23.5	24.9	24.3	27.5	30.2	28.5
6 Total loans	2,299.0	2,296.9	2,309.3	2,271.8	2,283.9	2,259.1	2,253.6	2,263.2	2,269.3	2,258.8	2,241.5
7 Interbank loans	207.9	207.0	204.0	193.3	185.0	171.8	160.7	172.5	166.8	175.9	167.5
8 Loans excluding interbank	2,091.2	2,089.8	2,105.3	2,078.6	2,099.0	2,087.3	2,092.9	2,090.6	2,102.5	2,082.9	2,074.1
9 Commercial and industrial	643.4	644.4	650.8	637.2	645.1	648.5	643.6	635.1	632.7	624.2	617.8
10 Real estate	831.5	833.7	838.3	836.9	840.1	842.5	849.0	855.2	859.4	856.0	854.8
11 Individual	380.8	380.5	384.7	378.6	376.4	371.5	372.0	370.7	370.5	368.3	368.2
12 All other	235.5	231.2	231.5	225.9	237.4	224.8	228.3	229.6	239.8	234.3	233.3
13 Total cash assets	220.8	216.7	217.9	199.2	204.5	206.1	201.0	224.3	212.3	214.1	200.1
14 Reserves with Federal Reserve Banks	29.7	33.0	23.4	16.5	18.1	25.0	23.1	26.2	29.1	24.8	23.0
15 Cash in vault	29.4	32.8	32.0	30.4	29.8	28.9	29.1	31.1	29.8	29.7	31.1
16 Cash items in process of collection	85.4	78.4	86.0	74.7	79.9	76.9	74.3	87.2	78.3	87.8	71.7
17 Demand balances at U.S. depository institutions	28.5	28.4	29.6	28.1	27.7	27.6	26.4	30.8	28.3	26.9	27.7
18 Other cash assets	47.8	44.2	46.8	49.6	49.0	47.7	48.1	49.0	46.8	45.0	46.5
19 Other assets	230.1	226.6	245.1	249.9	259.6	263.1	260.4	264.4	259.0	286.7	276.2
20 **Total assets**	**3,382.2**	**3,368.5**	**3,399.9**	**3,357.8**	**3,388.9**	**3,380.1**	**3,368.5**	**3,410.3**	**3,409.2**	**3,438.5**	**3,397.3**
Liabilities											
21 Total deposits	2,332.0	2,319.9	2,363.4	2,334.6	2,365.0	2,382.5	2,381.9	2,413.3	2,406.1	2,448.8	2,430.9
22 Transaction accounts	612.1	598.1	637.1	587.9	594.1	602.8	601.3	617.6	611.2	639.4	612.0
23 Savings deposits (excluding checkable)	570.5	573.1	573.3	573.9	583.5	594.1	595.4	606.2	610.7	619.9	624.1
24 Time deposits	1,149.4	1,148.8	1,152.9	1,172.8	1,187.3	1,185.6	1,185.3	1,189.5	1,184.2	1,189.5	1,194.7
25 Borrowings	591.0	570.6	548.7	529.8	515.4	492.3	494.6	499.8	510.4	503.5	480.9
26 Other liabilities	236.0	255.3	264.4	268.8	282.3	278.2	263.9	267.6	263.8	258.4	257.1
27 Residual (assets less liabilities)[3]	223.3	222.7	223.5	224.6	226.2	227.0	228.1	229.6	228.9	227.9	228.4
DOMESTICALLY CHARTERED COMMERCIAL BANKS[4]											
Assets											
28 Loans and securities	2,658.4	2,645.1	2,654.2	2,628.0	2,642.3	2,635.6	2,628.9	2,637.8	2,647.4	2,653.4	2,637.8
29 Investment securities	571.5	569.8	570.5	575.3	577.4	588.6	592.3	595.7	603.0	611.0	612.1
30 U.S. government securities	420.9	420.8	421.7	426.5	429.3	440.2	445.5	449.2	458.0	467.9	470.2
31 Other	150.6	149.1	148.8	148.7	148.2	148.5	146.8	146.5	144.9	143.0	141.9
32 Trading account assets	27.4	25.0	22.0	24.1	26.9	23.5	24.9	24.3	27.5	30.2	28.5
33 Total loans	2,059.5	2,050.3	2,061.7	2,028.6	2,038.0	2,023.5	2,011.7	2,017.8	2,016.9	2,012.3	1,997.1
34 Interbank loans	164.0	157.4	160.0	151.7	150.9	148.3	134.2	144.5	139.0	150.4	146.4
35 Loans excluding interbank	1,895.5	1,892.9	1,901.7	1,876.9	1,887.0	1,875.2	1,877.5	1,873.3	1,877.9	1,861.8	1,850.7
36 Commercial and industrial	515.4	513.4	512.7	504.2	508.4	506.3	502.4	495.0	491.6	482.6	475.3
37 Real estate	789.8	791.6	796.4	794.0	797.1	799.7	804.7	808.7	812.2	808.2	806.9
38 Revolving home equity	60.6	61.1	61.7	62.9	63.3	63.6	64.4	65.7	66.6	67.0	67.6
39 Other real estate	729.2	730.5	734.7	731.1	733.8	736.1	740.3	743.0	743.7	741.2	739.4
40 Individual	189.3	187.7	188.3	166.6	172.7	177.0	171.6	193.6	184.3	187.6	172.3
41 All other	28.5	31.5	23.0	15.3	17.0	24.0	21.9	25.8	28.3	23.9	22.1
42 Total cash assets	29.4	32.8	32.0	30.3	29.8	28.8	29.1	31.1	29.8	29.7	31.0
43 Reserves with Federal Reserve Banks	83.6	76.4	83.9	72.9	78.2	74.9	72.6	85.5	76.2	86.1	70.1
44 Cash in vault	26.6	26.2	27.6	26.2	25.8	25.8	24.8	28.8	26.5	25.2	25.9
45 Cash items in process of collection	21.2	20.9	21.8	22.0	21.9	23.4	23.2	22.4	23.6	22.8	23.2
46 Demand balances at U.S. depository institutions	153.6	155.0	167.8	166.9	171.3	167.9	161.9	162.3	157.7	168.9	163.4
47 Other cash assets	3,001.3	2,987.8	3,010.3	2,961.4	2,986.3	2,980.4	2,962.4	2,993.7	2,989.4	3,009.9	2,973.4
48 Other assets	2,253.8	2,243.3	2,283.5	2,236.2	2,255.2	2,266.2	2,258.8	2,280.8	2,271.3	2,308.6	2,284.9
49 **Total assets**	**601.5**	**587.7**	**626.1**	**577.4**	**583.8**	**592.2**	**591.4**	**607.5**	**600.9**	**629.3**	**602.1**
Liabilities											
50 Deposits	567.4	569.8	570.0	570.6	580.2	590.6	591.9	602.5	607.1	616.2	620.4
51 Transaction accounts	1,085.0	1,085.8	1,087.4	1,088.1	1,091.2	1,083.4	1,075.6	1,070.8	1,063.4	1,063.1	1,062.5
52 Savings deposits (excluding checkable)	400.4	394.1	375.6	380.1	371.8	354.9	346.5	355.1	364.4	352.2	338.8
53 Time deposits	127.5	131.5	131.4	124.2	136.8	136.0	132.6	131.9	128.4	124.9	125.0
54 Borrowings	219.6	219.0	219.8	220.9	222.6	223.4	224.5	226.0	225.3	224.2	224.8
55 Other liabilities											
56 Residual (assets less liabilities)[3]											

1. Back data are available from the Banking and Monetary Statistics Section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. Data in this table also appear in the Board's H.8 (510) weekly statistical release.
Data are partly estimated. They include all bank-premises subsidiaries and other significant majority-owned domestic subsidiaries. Components may not sum to totals because of rounding.
2. Includes insured domestically chartered commercial banks, agencies and branches of foreign banks, Edge act and agreement corporations, and New York State foreign investment corporations. Data are estimates for the last Wednesday of the month based on a sample of weekly-reporting foreign-related institutions and quarter-end condition reports.
3. This balancing item is not intended as a measure of equity capital for use in capital adequacy analysis.
4. Includes all member banks and insured nonmember banks. Loans and securities data are estimates for the last Wednesday of the month based on a sample of weekly-reporting banks and quarter-end condition reports.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY-REPORTING COMMERCIAL BANKS[1]

Millions of dollars, Wednesday figures

Account	1991								
	July 3[r]	July 10[r]	July 17[r]	July 24[r]	July 31[r]	Aug. 7	Aug. 14	Aug. 21	Aug. 28
ASSETS									
1 Cash and balances due from depository institutions	107,678	101,384	97,984	94,796	106,079	101,762	98,373	99,885	96,820
2 U.S. Treasury and government securities	196,271	195,247	197,507	196,921	202,554	201,116	202,132	204,655	203,339
3 *Trading account*	*16,249*	*15,567*	*16,637*	*14,911*	*17,943*	*16,403*	*17,806*	*19,016*	*16,389*
4 Investment account	180,022	179,679	180,871	182,010	184,611	184,713	184,325	185,639	186,950
5 Mortgage-backed securities[2]	78,664	78,292	77,055	77,056	77,709	77,536	77,553	76,703	77,585
All others, by maturity									
6 One year or less	22,239	22,375	22,595	22,853	22,730	23,842	23,185	23,526	23,586
7 One year through five years	42,860	42,621	44,475	45,279	44,809	44,002	44,213	46,184	46,320
8 More than five years	36,259	36,391	36,745	36,823	39,364	39,333	39,374	39,225	39,459
9 Other securities	56,469	56,233	56,025	55,939	56,449	56,277	55,945	55,969	56,407
10 Trading account	*1,903*	*1,839*	*1,831*	*1,712*	*1,745*	*1,710*	*1,666*	*1,741*	*1,738*
11 Investment account	54,566	54,393	54,193	54,227	54,704	54,567	54,278	54,228	54,669
12 State and political subdivisions, by maturity	25,502	25,428	25,326	25,263	25,179	25,033	25,000	24,797	24,940
13 One year or less	3,150	3,130	3,085	3,095	3,109	3,091	3,099	3,048	3,052
14 More than one year	22,352	22,298	22,241	22,168	22,070	21,942	21,901	21,749	21,887
15 Other bonds, corporate stocks, and securities	29,064	28,965	28,867	28,965	29,525	29,535	29,278	29,431	29,729
16 Other trading account assets	*10,051*	*10,493*	*10,330*	*10,735*	*10,531*	*10,763*	*10,187*	*10,021*	*10,416*
17 Federal funds sold[3]	82,427	80,318	76,237	73,930	83,262	82,073	81,525	80,673	76,347
18 To commercial banks in the United States	56,829	55,301	52,264	49,722	57,748	56,463	56,380	54,776	51,536
19 To nonbank brokers and dealers	21,256	21,196	19,793	19,632	21,799	20,843	19,863	20,597	20,013
20 To others[4]	4,341	3,822	4,180	4,576	3,715	4,766	5,282	5,300	4,798
21 Other loans and leases, gross	1,031,813	1,026,504	1,020,383	1,017,269	1,020,791	1,017,077	1,015,653	1,016,181	1,011,793
22 Commercial and industrial	308,456	306,462	304,265	302,552	303,660	301,921	299,965	299,809	298,948
23 Bankers acceptances and commercial paper	1,695	1,735	1,750	1,763	1,884	2,014	1,977	1,950	1,813
24 All other	306,761	304,727	302,515	300,789	301,775	299,907	297,988	297,859	297,135
25 U.S. addressees	305,319	303,309	301,110	299,382	300,152	298,359	296,515	296,359	295,676
26 Non-U.S. addressees	1,442	1,418	1,405	1,407	1,623	1,548	1,474	1,501	1,460
27 Real estate loans	404,337	404,172	400,841	400,397	399,111	399,812	400,428	398,967	397,702
28 Revolving, home equity	37,917	37,965	38,062	38,111	38,233	38,279	38,366	38,487	38,613
29 All other	366,420	366,208	362,779	362,287	360,879	361,533	362,062	360,480	359,090
30 To individuals for personal expenditures	185,040	184,179	184,316	184,688	185,050	184,231	184,839	185,457	183,980
31 To financial institutions	46,123	45,070	45,542	45,199	46,061	45,155	44,988	44,596	44,411
32 Commercial banks in the United States	19,681	18,808	19,765	20,790	20,563	19,917	20,217	20,489	20,685
33 Banks in foreign countries	2,367	2,352	2,577	1,798	2,109	1,800	1,836	1,973	1,740
34 Nonbank financial institutions	24,075	23,910	23,199	22,611	23,390	23,438	22,934	22,135	21,987
35 For purchasing and carrying securities	11,734	12,008	11,466	11,344	13,701	12,931	12,763	13,948	14,315
36 To finance agricultural production	6,290	6,291	6,324	6,252	6,269	6,259	6,295	6,248	6,229
37 To states and political subdivisions	18,996	18,944	18,911	18,829	18,848	18,697	18,691	18,639	18,577
38 To foreign governments and official institutions	1,260	1,097	1,107	1,063	988	1,004	1,000	990	1,019
39 All other loans[5]	22,591	21,400	21,849	21,225	21,358	21,425	21,100	21,968	21,044
40 Lease-financing receivables	26,985	26,881	25,762	25,720	25,745	25,644	25,583	25,560	25,566
41 LESS: Unearned income	3,861	3,869	3,877	3,864	3,820	3,811	3,805	3,796	3,718
42 Loan and lease reserve[6]	36,315	36,647	36,691	36,767	37,079	37,254	37,223	37,203	37,184
43 Other loans and leases, net	991,637	985,988	979,815	976,638	979,892	976,012	974,626	975,183	970,891
44 Other assets	158,895	154,999	150,005	150,866	155,309	154,557	152,327	147,489	151,560
45 **Total assets**	**1,603,427**	**1,584,661**	**1,567,903**	**1,559,825**	**1,594,076**	**1,582,560**	**1,575,113**	**1,573,874**	**1,565,780**

Footnotes appear on the following page.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS—Continued

Millions of dollars, Wednesday figures

Account	1991								
	July 3[r]	July 10[r]	July 17[r]	July 24[r]	July 31[r]	Aug. 7	Aug. 14	Aug. 21	Aug. 28
LIABILITIES									
46 Deposits	1,125,763	1,106,821	1,103,787	1,092,295	1,113,759	1,108,583	1,110,554	1,099,508	1,097,438
47 Demand deposits	238,786	221,183	221,286	211,609	232,019	218,513	222,316	214,941	216,014
48 Individuals, partnerships, and corporations	191,009	179,576	180,199	171,703	185,966	177,627	181,620	172,953	174,740
49 Other holders	47,778	41,606	41,086	39,907	46,054	40,886	40,696	41,988	41,273
50 States and political subdivisions	6,929	6,128	7,023	6,633	7,384	6,633	6,270	6,774	6,598
51 U.S. government	2,362	1,614	1,337	1,712	3,189	1,331	1,657	1,091	1,297
52 Depository institutions in the United States	22,584	19,546	19,086	18,022	19,843	18,044	18,160	18,589	18,894
53 Banks in foreign countries	5,504	5,183	4,856	4,705	5,085	5,347	5,125	4,904	4,792
54 Foreign governments and official institutions	537	517	604	811	591	593	602	644	567
55 Certified and officers' checks	9,862	8,618	8,180	8,023	9,962	8,937	8,883	9,986	9,124
56 Transaction balances other than demand deposits[5]	92,746	90,635	89,776	88,420	90,489	92,740	91,048	90,661	89,992
57 Nontransaction balances	794,231	795,004	792,725	792,265	791,250	797,331	797,191	793,906	791,432
58 Individuals, partnerships, and corporations	758,954	759,761	757,471	756,854	755,825	762,401	762,477	759,101	756,826
59 Other holders	35,277	35,242	35,254	35,412	35,425	34,930	34,714	34,805	34,607
60 States and political subdivisions	28,870	28,766	28,845	29,028	29,043	28,577	28,413	28,625	28,353
61 U.S. government	1,177	1,188	1,191	1,194	1,112	1,094	1,114	1,095	1,089
62 Depository institutions in the United States	4,797	4,854	4,790	4,754	4,838	4,836	4,767	4,669	4,723
63 Foreign governments, official institutions, and banks	432	435	429	435	431	423	420	417	441
64 Liabilities for borrowed money[6]	265,867	265,313	255,891	257,257	269,392	265,347	255,061	265,005	258,334
65 Borrowings from Federal Reserve Banks	0	0	0	35	125	4,215	230	1,010	392
66 Treasury tax and loan notes	12,330	10,737	10,333	14,136	25,758	9,782	10,380	10,499	10,970
67 Other liabilities for borrowed money[7]	253,537	254,577	245,559	243,086	243,508	251,350	244,451	253,496	246,972
68 Other liabilities (including subordinated notes and debentures)	97,615	97,281	94,484	95,906	97,291	94,675	95,063	94,909	96,028
69 **Total liabilities**	**1,489,245**	**1,469,415**	**1,454,163**	**1,445,458**	**1,480,442**	**1,468,605**	**1,460,678**	**1,459,422**	**1,451,801**
70 Residual (total assets less total liabilities)[8]	114,182	115,246	113,741	114,367	113,634	113,955	114,435	114,453	113,980
MEMO									
71 Total loans and leases, gross, adjusted, plus securities[9]	1,300,521	1,294,686	1,288,453	1,284,283	1,295,276	1,290,926	1,288,844	1,292,234	1,286,081
72 Time deposits in amounts of $100,000 or more	189,830	189,218	189,201	188,889	187,871	188,435	187,072	186,509	185,238
73 Loans sold outright to affiliates[10]	1,272	1,271	1,267	1,264	1,296	1,286	1,271	1,254	1,263
74 Commercial and industrial	668	666	675	673	693	686	677	667	678
75 Other	604	604	593	591	603	600	594	587	585
76 Foreign branch credit extended to U.S. residents[11]	23,469	23,129	23,172	23,253	23,246	23,352	23,489	23,278	23,326
77 Net due to related institutions abroad	−9,381	−5,645	−7,327	−5,139	−6,153	−7,840	−9,735	−4,952	−6,263

1. Components may not sum to totals because of rounding.
2. Includes certificates of participation, issued or guaranteed by agencies of the U.S. government, in pools of residential mortgages.
3. Includes securities purchased under agreements to resell.
4. Includes allocated transfer risk reserve.
5. Includes negotiable order of withdrawal (NOW), automatic transfer service (ATS), and telephone and preauthorized transfer savings deposits.
6. Includes borrowings only from other-than-directly-related institutions.
7. Includes federal funds purchased and securities sold under agreements to repurchase.
8. This balancing item is not intended as a measure of equity capital for use in capital-adequacy analysis.
9. Excludes loans to and federal funds transactions with commercial banks in the United States.
10. Affiliates include a bank's own foreign branches, nonconsolidated nonbank affiliates of the bank, the bank's holding company (if not a bank), and nonconsolidated nonbank subsidiaries of the holding company.
11. Credit extended by foreign branches of domestically chartered weekly-reporting banks to nonbank U.S. residents. Consists mainly of commercial and industrial loans, but includes an unknown amount of credit extended to other than nonfinancial businesses.

NOTE. Data that formerly appeared in table 1.28, Assets and Liabilities of Large Weekly Reporting Commercial Banks in New York City, can be obtained from the Board's H.4.2 (504) weekly statistical release. For ordering address see inside front cover.

1.30 LARGE WEEKLY-REPORTING U.S. BRANCHES AND AGENCIES OF FOREIGN BANKS Assets and Liabilities[1]

Millions of dollars, Wednesday figures

Account	1991								
	July 3	July 10	July 17	July 24	July 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28
1 Cash and balances due from depository institutions	15,743	14,800	14,429	15,134	14,878	14,859	14,987	15,547	15,659
2 U.S. Treasury and government agency securities	14,144	14,360	14,372	14,674	14,327	15,252	15,895	15,349	14,702
3 Other securities	7,334	7,347	7,259	7,257	7,304	7,348	7,371	7,442	7,517
4 Federal funds sold[1]	7,125	9,591r	6,714r	8,569r	9,545r	7,251	6,730	9,881	9,143
5 To commercial banks in the United States	3,375	4,556	2,873	3,927	4,797	3,546	1,690	5,188	3,405
6 To others[2]	3,750	5,035r	3,841r	4,642r	4,748r	3,705	5,040	4,693	5,737
7 Other loans and leases, gross	137,297	137,328	137,515	138,145	138,835	138,217	138,709	137,471	138,839
8 Commercial and industrial	83,157r	82,833r	83,364r	83,759r	83,641r	83,563	83,787	83,219	84,305
9 Bankers acceptances and commercial paper	2,026	1,833	1,719	1,711	1,741	2,028	2,132	1,918	1,970
10 All other	81,131r	80,999r	81,645r	82,048r	81,899r	81,535	81,655	81,301	82,336
11 U.S. addressees	78,951r	78,889r	79,480r	79,949r	79,758r	79,365	79,503	79,165	80,151
12 Non-U.S. addressees	2,180r	2,111	2,165	2,100	2,141	2,170	2,152	2,135	2,185
13 Loans secured by real estate	32,400r	32,529r	32,701r	32,617r	32,527r	32,612	32,722	32,700	32,730
14 To financial institutions	16,672r	16,377r	16,396r	16,919r	17,356r	17,253	17,272	16,620	17,196
15 Commercial banks in the United States	7,719	7,960	7,864	7,848	8,284	7,913	7,975	8,028	8,105
16 Banks in foreign countries	1,813	1,516	1,669	1,830	1,742	1,910	1,723	1,751	2,214
17 Nonbank financial institutions	7,140r	6,901r	6,863r	7,241r	7,330r	7,429	7,575	6,841	6,876
18 For purchasing and carrying securities	2,936	3,396	2,931	2,644	3,213	2,614	2,846	2,766	2,500
19 To foreign governments and official institutions	299	306	296	299	325	330	343	343	354
20 All other	1,832	1,888	1,828	1,907	1,773	1,845	1,739	1,823	1,753
21 Other assets (claims on nonrelated parties)	27,906r	27,833r	28,187r	28,599	28,901	28,419	28,384	28,839	28,234
22 **Total assets**[3]	**246,093r**	**248,194r**	**244,440r**	**247,766r**	**254,828r**	**252,069**	**251,639**	**250,262**	**252,418**
23 Deposits or credit balances due to other than directly related institutions	87,001	87,315	88,746	90,834	91,904	90,573	89,818	92,497	95,382
24 Demand deposits[4]	4,125	3,662	3,875	3,956	4,001	3,508	3,573	3,438	3,546
25 Individuals, partnerships, and corporations	2,339	2,294	2,399	2,370	2,379	2,063	2,112	1,958	2,089
26 Other	1,786	1,367	1,476	1,586	1,622	1,445	1,461	1,480	1,456
27 Nontransaction accounts	82,876	83,653	84,871	86,878	87,903	87,066	86,245	89,059	91,836
28 Individuals, partnerships, and corporations	62,308r	62,441r	63,413r	64,577r	65,247r	63,996	63,209	65,869	66,976
29 Other	20,568r	21,212r	21,458r	22,300r	22,656r	23,070	23,036	23,190	24,860
30 Borrowings from other than directly related institutions	92,404	93,697	88,552	86,834	93,268	92,355	94,987	90,455	86,969
31 Federal funds purchased[5]	45,399	47,251	44,405	40,755	47,707	46,688	49,236	48,029	42,183
32 From commercial banks in the United States	21,067	20,712	19,744r	15,961	21,485	19,346	20,586	20,211	18,775
33 From others	24,332	26,539	24,661r	24,794	26,222	27,342	28,650	27,818	23,408
34 Other liabilities for borrowed money	47,005	46,446	44,147	46,078	45,561	45,668	45,751	42,426	44,785
35 To commercial banks in the United States	14,562	14,484	14,594	14,017	14,824	14,355	14,693	14,134	14,378
36 To others	32,444	31,962	29,553	32,062	30,737	31,312	31,058	28,291	30,407
37 Other liabilities to nonrelated parties	26,209	26,042	26,124	26,519	27,023	26,358	26,874	26,523	26,569
38 **Total liabilities**[6]	**246,093r**	**248,194r**	**244,440r**	**247,766r**	**254,828r**	**252,069**	**251,639**	**250,262**	**252,418**
MEMO									
39 Total loans (gross) and securities, adjusted[7]	154,805	156,111r	155,123r	156,870r	156,931r	156,608	159,040	156,927	158,691
40 Net due to related institutions abroad	3,934r	4,206r	5,054r	8,192r	1,595r	2,060	396	5,055	5,174

1. Includes securities purchased under agreements to resell.
2. Includes transactions with nonbank brokers and dealers in securities.
3. Includes net due from related institutions abroad for U.S. branches and agencies of foreign banks having a net "due from" position.
4. Includes other transaction deposits.
5. Includes securities sold under agreements to repurchase.
6. Includes net to related institutions abroad for U.S. branches and agencies of foreign banks having a net "due to" position.
7. Excludes loans to and federal funds transactions with commercial banks in the United States.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING[1]

Millions of dollars, end of period

Item	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June	1991 July
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 **All issuers**	**331,316**	**358,997**	**458,464**	**530,123**	**566,688**	**561,406**	**565,734**	**541,648**	**533,091**	**533,659**	**543,043**
Financial companies[2]											
Dealer-placed paper[3]											
2 Total	101,707	102,742	159,777	186,343	218,953	217,812	224,865	212,337	206,507	203,229	205,032
3 Bank-related (not seasonally adjusted)[4]	2,265	1,428	1,248	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Directly placed paper[5]											
4 Total	151,897	174,332	194,931	212,640	201,862	197,799	190,285	184,703	183,383	189,512	193,699
5 Bank-related (not seasonally adjusted)[3]	40,860	43,173	43,155	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6 Nonfinancial companies[6]	77,712	81,923	103,756	131,140	145,873	145,795	150,584	144,608	143,201	140,918	144,312
	Bankers dollar acceptances (not seasonally adjusted)[7]										
7 **Total**	**64,974**	**70,565**	**66,631**	**62,972**	**54,771**	**52,831**	**48,795**	**47,086**	**46,438**	**45,539**	**44,707**
Holder											
8 Accepting banks	13,423	10,943	9,086	9,433	9,017	10,240	9,237	8,593	10,138	10,028	9,070
9 Own bills	11,707	9,464	8,022	8,510	7,930	8,391	7,569	7,599	8,179	8,414	7,895
10 Bills bought	1,716	1,479	1,064	924	1,087	1,849	1,668	994	1,959	1,613	1,175
Federal Reserve Banks											
11 Own account	0	0	0	0	0	0	0	0	0	0	0
12 Foreign correspondents	1,317	965	1,493	1,066	918	892	872	934	1,053	1,203	1,274
13 Others	50,234	58,658	56,052	52,473	44,836	41,699	38,686	37,559	35,247	34,308	34,363
Basis											
14 Imports into United States	14,670	16,483	14,984	15,651	13,096	13,799	12,509	12,511	12,821	13,431	12,715
15 Exports from United States	12,960	15,227	14,410	13,683	12,703	12,082	11,500	11,219	11,511	11,416	11,433
16 All other	37,344	38,855	37,237	33,638	28,973	26,950	24,786	23,356	22,106	20,691	20,559

1. Components may not sum to totals because of rounding.
2. Institutions engaged primarily in commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.
3. Includes all financial-company paper sold by dealers in the open market.
4. Bank-related series were discontinued in January 1989.
5. As reported by financial companies that place their paper directly with investors.
6. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.
7. Data on bankers acceptances are gathered from institutions whose acceptances total $100 million or more annually. The reporting group is revised every January. In January 1988, the group was reduced from 155 to 111 institutions. The current group, totaling approximately 100 institutions, accounts for more than 90 percent of total acceptances activity.

1.33 PRIME RATE CHARGED BY BANKS on Short-Term Business Loans

Percent per year

Date of change	Rate	Period	Average rate	Period	Average rate	Period	Average rate
1988— Jan. 1	8.75	1988	9.32	1989— Jan.	10.50	1990— Apr.	10.00
Feb. 2	8.50	1989	10.87	Feb.	10.93	May	10.00
May 11	9.00	1990	10.01	Mar.	11.50	June	10.00
July 14	9.50			Apr.	11.50	July	10.00
Aug. 11	10.00	1988— Jan.	8.75	May	11.50	Aug.	10.00
Nov. 28	10.50	Feb.	8.51	June	11.07	Sept.	10.00
		Mar.	8.50	July	10.98	Oct.	10.00
1989— Feb. 10	11.00	Apr.	8.50	Aug.	10.50	Nov.	10.00
24	11.50	May	8.84	Sept.	10.50	Dec.	10.00
June 5	11.00	June	9.00	Oct.	10.50		
July 31	10.50	July	9.29	Nov.	10.50	1991— Jan.	9.52
		Aug.	9.84	Dec.	10.50	Feb.	9.05
1990— Jan. 8	10.00	Sept.	10.00			Mar.	9.00
		Oct.	10.00	1990— Jan.	10.11	Apr.	9.00
1991— Jan. 2	9.50	Nov.	10.05	Feb.	10.00	May	8.50
Feb. 4	9.00	Dec.	10.50	Mar.	10.00	June	8.50
May 1	8.50					July	8.50
Sept. 13	8.00					Aug.	8.50
						Sept.	8.20

1. Data in this table also appear in the Board's H.15 (519) weekly and G.13 (415) monthly statistical releases. For ordering address, see inside front cover.

1.35 INTEREST RATES Money and Capital Markets

Averages, percent per year; weekly, monthly and annual figures are averages of business day data unless otherwise noted.

Item	1988	1989	1990	1991				1991, week ending				
				May	June	July	Aug.	Aug. 2	Aug. 9	Aug. 16	Aug. 23	Aug. 30
MONEY MARKET INSTRUMENTS												
1 Federal funds[1,2,3]	7.57	9.21	8.10	5.78	5.90	5.82	5.66	5.79	5.83	5.62	5.68	5.58
2 Discount window borrowing[2,4]	6.20	6.93	6.98	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Commercial paper[3,5,6]												
3 1-month	7.58	9.11	8.15	5.91	6.06	5.98	5.72	5.92	5.73	5.69	5.64	5.72
4 3-month	7.66	8.99	8.06	5.92	6.11	6.05	5.72	5.95	5.74	5.68	5.64	5.72
5 6-month	7.68	8.80	7.95	5.94	6.16	6.14	5.76	6.04	5.81	5.71	5.66	5.76
Finance paper, directly placed[3,5,7]												
6 1-month	7.44	8.99	8.00	5.76	5.93	5.86	5.58	5.80	5.62	5.58	5.48	5.56
7 3-month	7.38	8.72	7.87	5.81	5.96	5.89	5.56	5.83	5.59	5.53	5.45	5.54
8 6-month	7.14	8.16	7.53	5.72	5.75	5.81	5.50	5.73	5.56	5.50	5.41	5.44
Bankers acceptances[3,5,8]												
9 3-month	7.56	8.87	7.93	5.75	5.94	5.89	5.54	5.80	5.56	5.50	5.49	5.54
10 6-month	7.60	8.67	7.80	5.77	6.00	5.97	5.55	5.88	5.58	5.51	5.47	5.54
Certificates of deposit, secondary market[3,9]												
11 1-month	7.59	9.11	8.15	5.86	6.00	5.92	5.64	5.84	5.66	5.62	5.57	5.63
12 3-month	7.73	9.09	8.15	5.91	6.07	5.98	5.65	5.90	5.69	5.62	5.58	5.63
13 6-month	7.91	9.08	8.17	6.03	6.26	6.25	5.79	6.14	5.87	5.78	5.68	5.72
14 Eurodollar deposits, 3-month[3,10]	7.85	9.16	8.16	5.94	6.08	6.01	5.65	5.94	5.78	5.61	5.59	5.63
U.S. Treasury bills												
Secondary market[3,5]												
15 3-month	6.67	8.11	7.50	5.46	5.57	5.58	5.33	5.53	5.40	5.29	5.24	5.34
16 6-month	6.91	8.03	7.46	5.61	5.75	5.70	5.39	5.65	5.46	5.36	5.28	5.37
17 1-year	7.13	7.92	7.35	5.76	5.96	5.91	5.45	5.81	5.54	5.40	5.30	5.41
Auction average[3,5,11]												
18 3-month	6.68	8.12	7.51	5.51	5.60	5.58	5.39	5.58	5.51	5.30	5.17	5.40
19 6-month	6.92	8.04	7.47	5.65	5.76	5.71	5.47	5.69	5.59	5.39	5.23	5.47
20 1-year	7.17	7.91	7.36	5.71	5.73	6.00	5.62	5.88	n.a.	n.a.	n.a.	5.36
U.S. TREASURY NOTES AND BONDS												
Constant maturities[12]												
21 1-year	7.65	8.53	7.89	6.13	6.36	6.31	5.78	6.18	5.88	5.72	5.62	5.74
22 2-year	8.10	8.57	8.16	6.78	6.96	6.92	6.43	6.80	6.56	6.40	6.28	6.36
23 3-year	8.26	8.55	8.26	7.12	7.39	7.38	6.80	7.21	6.92	6.77	6.66	6.70
24 5-year	8.47	8.50	8.37	7.70	7.94	7.91	7.43	7.76	7.54	7.40	7.29	7.35
25 7-year	8.71	8.52	8.52	7.94	8.17	8.15	7.74	8.02	7.83	7.71	7.64	7.68
26 10-year	8.85	8.49	8.55	8.07	8.28	8.27	7.90	8.17	7.98	7.87	7.82	7.84
27 30-year	8.96	8.45	8.61	8.27	8.47	8.45	8.14	8.35	8.21	8.13	8.09	8.08
Composite[13]												
28 Over 10 years (long-term)	8.98	8.58	8.74	8.33	8.54	8.50	8.17	8.39	8.24	8.16	8.12	8.11
STATE AND LOCAL NOTES AND BONDS												
Moody's series[14]												
29 Aaa	7.36	7.00	6.96	6.70	6.83	6.82	6.62	6.65	6.69	6.59	6.56	6.63
30 Baa	7.83	7.40	7.29	7.10	7.21	7.18	6.96	7.01	7.02	6.91	6.90	6.97
31 *Bond Buyer* series[15]	7.68	7.23	7.27	6.95	7.13	7.05	6.90	6.99	6.94	6.88	6.86	6.85
CORPORATE BONDS												
32 Seasoned issues, all industries[16]	10.18	9.66	9.77	9.32	9.45	9.42	9.16	9.33	9.22	9.14	9.10	9.11
Rating group												
33 Aaa	9.71	9.26	9.32	8.86	9.01	9.00	8.75	8.93	8.82	8.73	8.69	8.70
34 Aa	9.94	9.46	9.56	9.15	9.28	9.25	8.99	9.17	9.06	8.98	8.93	8.94
35 A	10.24	9.74	9.82	9.41	9.55	9.51	9.26	9.43	9.33	9.24	9.18	9.20
36 Baa	10.83	10.18	10.36	9.86	9.96	9.89	9.65	9.80	9.68	9.62	9.62	9.60
37 A-rated, recently offered utility bonds[17]	10.20	9.79	10.01	9.45	9.53	9.55	9.25	9.35	9.30	9.18	9.24	9.17
MEMO: *Dividend–price ratio*[18]												
38 Preferred stocks	9.23	9.05	n.a.	8.21	8.26	8.21	8.04	8.15	8.08	8.04	7.99	8.03
39 Common stocks	3.64	3.45	n.a.	3.23	3.23	3.20	3.10	3.13	3.12	3.12	3.10	3.05

1. The daily effective federal funds rate is a weighted average of rates on trades through N.Y. brokers.
2. Weekly figures are averages of 7 calendar days ending on Wednesday of the current week; monthly figures include each calendar day in the month.
3. Annualized using a 360-day year or bank interest.
4. Rate for the Federal Reserve Bank of New York.
5. Quoted on a discount basis.
6. An average of offering rates on commercial paper placed by several leading dealers for firms whose bond rating is AA or the equivalent.
7. An average of offering rates on paper directly placed by finance companies.
8. Representative closing yields for acceptances of the highest rated money center banks.
9. An average of dealer offering rates on nationally traded certificates of deposit.
10. Bid rates for Eurodollar deposits at 11 a.m. London time. Data are for indication purposes only.
11. Auction date for daily data; weekly and monthly averages computed on an issue-date basis.
12. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Treasury.
13. Unweighted average of rates on all outstanding bonds neither due nor callable in less than 10 years, including one very low yielding "flower" bond.
14. General obligation based on Thursday figures; Moody's Investors Service.
15. General obligations only, with 20 years to maturity, issued by 20 state and local governmental units of mixed quality. Based on figures for Thursday.
16. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.
17. Compilation of the Federal Reserve. This series is an estimate of the yield on recently-offered, A-rated utility bonds with a 30-year maturity and 5 years of call protection. Weekly data are based on Friday quotations.
18. Standard and Poor's corporate series. Preferred stock ratio based on a sample of ten issues: four public utilities, four industrials, one financial, and one transportation. Common stock ratios on the 500 stocks in the price index.

NOTE. These data also appear in the Board's H.15 (519) and G.13 (415) releases. For address, see inside front cover.

1.36 STOCK MARKET Selected Statistics

Indicator	1988	1989	1990	1990 Dec.	1991 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
	Prices and trading (averages of daily figures)											
Common stock prices (indexes)												
1 New York Stock Exchange (Dec. 31, 1965 = 50)	149.96	180.13	183.58	179.57	177.95	197.75	203.56	207.71	207.07	207.32	208.29	213.33
2 Industrial	180.83	228.04	225.89	221.86	220.69	246.74	255.36	260.16	260.13	261.16	262.69	268.34
3 Transportation	134.07	174.90	158.88	141.31	145.89	166.06	166.26	166.90	170.77	177.05	177.27	178.38
4 Utility	72.22	94.33	90.71	91.56	88.59	92.08	92.29	92.92	90.73	89.01	90.08	92.44
5 Finance	127.41	162.01	133.36	122.18	121.39	141.03	145.41	152.64	151.32	152.30	151.69	157.86
6 Standard & Poor's Corporation (1941–43 = 10)[1]	265.86	323.05	334.83	328.75	325.49	362.26	372.28	379.68	378.27	378.29	380.23	389.40
7 American Stock Exchange (Aug. 31, 1973 = 50)[2]	295.06	356.67	338.58	305.54	304.08	338.11	353.98	365.02	362.67	366.06	364.33	367.41
Volume of trading (thousands of shares)												
8 New York Stock Exchange	161,509	165,568	156,777	155,836	166,323	226,635	196,343	182,510	170,337	162,154	162,065	173,666
9 American Stock Exchange	9,955	13,124	13,155	11,620	10,870	16,649	15,326	13,140	10,995	11,477	10,883	12,667
	Customer financing (millions of dollars, end-of-period balances)											
10 **Margin credit at broker-dealers**[3]	**32,740**	**34,320**	**28,210**	**28,210**	**27,390**	**28,860**	**29,660**	**30,020**	**29,980**	**31,280**	**30,600**	**32,260**
Free credit balances at brokers[4]												
11 Margin-account[5]	5,660	7,040	8,050	8,050	7,435	7,190	7,320	6,975	7,200	6,690	6,545	7,060
12 Cash-account	16,595	18,505	19,285	19,285	18,825	19,435	19,555	17,830	16,650	18,110	16,945	17,060
	Margin requirements (percent of market value and effective date)[6]											
	Mar. 11, 1968		June 8, 1968		May 6, 1970		Dec. 6, 1971		Nov. 24, 1972		Jan. 3, 1974	
13 Margin stocks	70		80		65		55		65		50	
14 Convertible bonds	50		60		50		50		50		50	
15 Short sales	70		80		65		55		65		50	

1. Effective July 1976, includes a new financial group, banks and insurance companies. With this change the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial.
2. Beginning July 5, 1983, the American Stock Exchange rebased its index effectively cutting previous readings in half.
3. Beginning July 1983, under the revised Regulation T, margin credit at broker-dealers includes credit extended against stocks, convertible bonds, stocks acquired through exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984.
4. Free credit balances are in accounts with no unfulfilled commitments to the brokers and are subject to withdrawal by customers on demand.
5. New series beginning June 1984.
6. These regulations, adopted by the Board of Governors pursuant to the Securities Exchange Act of 1934, limit the amount of credit to purchase and carry "margin securities" (as defined in the regulations) when such credit is collateralized by securities. Margin requirements on securities other than options are the difference between the market value (100 percent) and the maximum loan value of collateral as prescribed by the Board. Regulation T was adopted effective Oct. 15, 1934; Regulation U, effective May 1, 1936; Regulation G, effective Mar. 11, 1968; and Regulation X, effective Nov. 1, 1971.

On Jan. 1, 1977, the Board of Governors for the first time established in Regulation T the initial margin required for writing options on securities, setting it at 30 percent of the current market-value of the stock underlying the option. On Sept. 30, 1985, the Board changed the required initial margin, allowing it to be the same as the option maintenance margin required by the appropriate exchange or self-regulatory organization; such maintenance margin rules must be approved by the Securities and Exchange Commission. Effective Jan. 31, 1986, the SEC approved new maintenance margin rules, permitting margins to be the price of the option plus 15 percent of the market value of the stock underlying the option.

Effective June 8, 1988, margins were set to be the price option plus 20 percent of the market value of the stock underlying the option (or 15 percent in the case of stock-index options).

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1988	1989	1990 Sept.	1990 Oct.	1990 Nov.	1990 Dec.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June
	SAIF-insured institutions											
1 Assets	**1,350,500**	**1,249,055**	**1,156,789**	**1,125,653**	**1,116,354[r]**	**1,109,055[r]**	**1,084,821[r]**	**1,066,015[r]**	**1,054,800[r]**	**1,042,161[r]**	**1,027,608[r]**	**1,020,745**
2 Mortgages	764,513	733,729	684,936	665,655	662,309	653,508[r]	633,385[r]	624,691[r]	619,622[r]	610,644[r]	608,864[r]	605,896
3 Mortgage-backed securities	214,587	170,532	156,398	154,197	153,469	155,616	155,228[r]	151,414[r]	149,329[r]	147,539[r]	143,976[r]	141,590
4 Contra-assets to mortgage assets[1]	37,950	25,457	19,453	18,550	17,139	17,076[r]	16,897[r]	15,185[r]	14,673[r]	14,494[r]	14,312[r]	14,359
5 Commercial loans	33,889	32,150	27,868	26,762	26,051[r]	25,261[r]	24,125[r]	23,668	23,207[r]	22,306[r]	21,913[r]	21,736
6 Consumer loans	61,922	58,685	53,387	51,874	50,746	50,177	48,753[r]	48,131[r]	47,731[r]	47,634[r]	46,702[r]	45,826
7 *Contra-assets to nonmortgage loans*[2]	3,056	3,592	2,034	1,982	1,769	1,692	1,936	1,701[r]	1,854[r]	1,819[r]	1,739[r]	1,737
8 Cash and investment securities	186,986	166,053	153,061	148,058	145,286	145,998	146,644[r]	140,523[r]	138,885[r]	138,993[r]	132,876[r]	134,021
9 Other[3]	129,610	116,955	102,627	99,640	97,579[r]	97,262[r]	95,522[r]	94,474[r]	92,553[r]	91,358[r]	89,328[r]	87,773
10 Liabilities and net worth	**1,350,500**	**1,249,055**	**1,156,789**	**1,125,653**	**1,116,354[r]**	**1,109,055[r]**	**1,084,821[r]**	**1,066,015[r]**	**1,054,800[r]**	**1,042,161[r]**	**1,027,608[r]**	**1,020,745**
11 Savings capital	971,700	945,656	878,736	857,688	851,810	846,822	835,496	823,514[r]	816,493[r]	816,993[r]	806,272[r]	801,685
12 Borrowed money	299,400	252,230	221,872	213,563	208,105	203,855	197,353	188,914[r]	183,672	169,422[r]	164,274[r]	159,636
13 FHLBB	134,168	124,577	105,882	101,731	100,574	100,493	100,391	95,819[r]	94,658	90,555	86,779	82,312
14 Other	165,232	127,653	115,990	111,832	107,531	103,362	96,962	93,095	89,014	78,867[r]	77,495[r]	77,324
15 Other	24,216	27,556	28,293	23,874	25,654[r]	26,152[r]	21,332[r]	22,167[r]	23,328[r]	20,323[r]	21,726[r]	23,640
16 Net worth	n.a.	23,612	27,889	30,526	30,793[r]	32,225[r]	30,640[r]	31,419[r]	31,308[r]	35,423[r]	35,336[r]	35,783
	SAIF-insured federal savings banks											
17 Assets	**425,966**	**498,522**	**584,632**	**591,136**	**588,880**	**585,847**	**576,531**	**567,373**	**556,708**	**552,520**	**549,319**	**552,240**
18 Mortgages	230,734	283,844	328,895	332,927	332,431	328,122	320,233	316,889	313,880	309,618	311,932	312,230
19 Mortgage-backed securities	64,957	70,499	80,994	82,418	82,219	84,190	81,205	79,451	78,290	77,684	75,147	75,075
20 Contra-assets to mortgage assets[1]	13,140	13,548	9,339	9,964	9,578	9,305	9,591	8,222	7,777	7,975	7,638	7,932
21 Commercial loans	16,731	18,143	18,662	18,767	18,458	18,197	17,674	17,299	17,008	16,556	16,215	16,340
22 Consumer loans	24,222	28,212	31,183	30,750	30,682	30,421	29,933	31,179	29,292	30,586	30,433	30,283
23 Contra-assets to nonmortgage loans[2]	889	1,193	813	980	572	809	990	770	895	966	951	1,031
24 Finance leases plus interest	880	1,101	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
25 Cash and investment securities	61,029	64,538	73,756	73,602	75,117	72,454	75,940	71,066	67,721	68,157	65,786	68,847
26 Other	35,412	39,981	44,129	46,043	45,287	45,319	45,008	44,768	44,210	43,714	43,292	43,377
27 Liabilities and net worth	**425,966**	**498,522**	**584,632**	**591,136**	**588,880**	**585,847**	**576,531**	**567,373**	**556,708**	**552,520**	**549,319**	**552,240**
28 Savings capital	298,197	360,547	424,260	434,705	436,080	436,903	434,297	428,822	422,745	425,720	422,955	424,158
29 Borrowed money	99,286	108,448	120,592	119,991	115,472	111,270	107,270	102,313	97,089	90,692	89,310	90,089
30 FHLBB	46,265	57,032	62,209	61,605	60,256	60,265	59,949	57,703	56,078	53,134	51,736	50,726
31 Other	53,021	51,416	58,383	58,386	55,216	51,005	47,321	44,610	41,011	37,558	37,574	39,363
32 Other	8,075	9,041	10,128	8,253	9,063	9,824	8,193	8,356	8,721	7,700	8,211	9,098
33 Net worth												

1. Contra-assets are credit-balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels. Contra-assets to mortgage loans, contracts, and pass-through securities include loans in process, unearned discounts and deferred loan fees, valuation allowances for mortgages "held for sale," and specific reserves and other valuation allowances.

2. Contra-assets are credit-balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels. Contra-assets to nonmortgage loans include loans in process, unearned discounts and deferred loan fees, and specific reserves and valuation allowances.

3. Includes holding of stock in Federal Home Loan Bank and finance leases plus interest.

NOTE. Components do not sum to totals because of rounding. Data for credit unions and life insurance companies have been deleted from this table. They will be shown in a separate table which will appear quarterly, starting in the December issue.

SOURCE. *Savings Association Insurance Fund (SAIF)-insured institutions:* Estimates by the Office of Thrift Supervision (OTS) for all institutions insured by the SAIF and based on the OTS thrift institution Financial Report.

SAIF-insured federal savings banks: Estimates by the OTS for federal savings banks insured by the SAIF and based on the OTS thrift institution Financial Report.

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS[1]

Millions of dollars

Type of account or operation	Fiscal year 1988	Fiscal year 1989	Fiscal year 1990	Calendar year 1991 Mar.	Apr.	May	June	July	Aug.
U.S. budget[2]									
1 Receipts, total	908,166	990,701	1,031,308	64,805	140,380	63,560	103,389	78,593	76,426
2 On-budget	666,675	727,035	749,654	39,011	108,746	41,958	76,322	56,327	54,651
3 Off-budget	241,491	263,666	281,654	25,794	31,634	21,602	27,067	22,266	21,775
4 Outlays, total	1,063,318	1,144,020	1,251,766	105,876	110,249	116,906	105,849	119,384	119,080
5 On-budget	860,627	933,107	1,026,701	83,340	90,362	95,903	90,901	99,532	96,255
6 Off-budget	202,691	210,911	225,065	22,536	19,887	21,003	14,948	19,852	22,824
7 Surplus or deficit (−), total	−155,151	−153,319	−220,458	−41,071	30,131	−53,346	−2,460	−40,791	−42,653
8 On-budget	−193,952	−206,072	−277,047	−44,329	18,384	−53,945	−14,579	−43,205	−41,604
9 Off-budget	38,800	52,753	56,590	3,258	11,747	599	12,119	2,414	−1,049
Source of financing (total)									
10 Borrowing from the public	166,139	141,806	264,453	−9,913	−9,399	41,742	10,715	34,434	32,574
11 Operating cash (decrease, or increase (−))	−7,962	3,425	818	28,473	−16,214	20,362	−15,730	6,728	18,504
12 Other[3]	−3,026	8,088	−44,813	22,511	−4,518	−8,758	7,475	−371	−8,425
MEMO									
13 Treasury operating balance (level, end of period)	44,398	40,973	40,155	32,001	48,215	27,853	43,538	36,855	18,351
14 Federal Reserve Banks	13,023	13,452	7,638	10,922	13,682	6,619	11,822	5,831	6,745
15 Tax and loan accounts	31,375	27,521	32,517	21,078	34,533	21,234	31,761	31,024	11,606

1. Components may not sum to totals because of rounding.
2. In accordance with the Balanced Budget and Emergency Deficit Control Act of 1985, all former off-budget entries are now presented on-budget. Federal Financing Bank (FFB) activities are now shown as separate accounts under the agencies that use the FFB to finance their programs. The act also moved two social security trust funds (federal old-age survivors insurance and federal disability insurance trust fund) off-budget. The Postal Service is included as an off-budget item in the *Monthly Treasury Statement* beginning in 1990.
3. Includes special drawing rights (SDRs); reserve position on the U.S. quota in the International Monetary Fund (IMF); loans to the IMF; other cash and monetary assets; accrued interest payable to the public; allocations of SDRs; deposit funds; miscellaneous liability (including checks outstanding) and asset accounts; seigniorage; increment on gold; net gain or loss for U.S. currency valuation adjustment; net gain or loss for IMF loan-valuation adjustment; and profit on sale of gold.

SOURCES. *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government* (MTS) and the *Budget of the U.S. Government*.

1.39 U.S. BUDGET RECEIPTS AND OUTLAYS[1]

Millions of dollars

Source or type	Fiscal year 1989	Fiscal year 1990	Calendar year						
			1989	1990		1991			
			H2	H1	H2	H1	June	July	Aug.
RECEIPTS									
1 **All sources**	**990,701**	**1,031,308**	**470,276**	**548,861**	**503,123**	**540,504**	**103,389**	**78,593**	**76,426**
2 Individual income taxes, net	445,690	466,884	218,706	243,087	230,745	232,389	44,517	38,403	34,560
3 Withheld	361,386	390,480	193,296	190,219	207,469	193,440	27,449	37,119	32,993
4 Presidential Election Campaign Fund	32	32	3	30	3	31	6	0	1
5 Nonwithheld	154,839	149,189	33,303	117,675	31,728	109,405	18,681	2,971	3,098
6 Refunds	70,567	72,817	7,898	64,838	8,455	70,487	1,618	1,687	1,532
Corporation income taxes									
7 Gross receipts	117,015	110,017	52,269	58,830	54,044	58,903	17,472	3,039	2,893
8 Refunds	13,723	16,510	6,842	8,326	7,603	7,904	932	1,270	1,588
9 Social insurance taxes and contributions, net	359,416	380,047	162,574	210,476	178,468	214,303	34,758	30,360	31,504
10 Employment taxes and contributions[2]	332,859	353,891	152,407	195,269	167,224	199,727	34,152	28,424	27,664
11 Self-employment taxes and contributions[3]	18,504	21,795	1,947	19,017	2,638	22,150	3,136	0	187
12 Unemployment insurance	22,011	21,635	7,909	12,929	8,996	12,296	251	1,578	3,417
13 Other net receipts[4]	4,546	4,522	2,260	2,278	2,249	2,279	355	358	422
14 Excise taxes	34,386	35,345	16,799	18,153	17,535	20,703	3,534	4,274	4,626
15 Customs deposits	16,334	16,707	8,667	8,096	8,568	7,488	1,215	1,464	1,484
16 Estate and gift taxes	8,745	11,500	4,451	6,442	5,333	5,631	708	1,065	853
17 Miscellaneous receipts[5]	22,839	27,316	13,651	12,106	16,032	8,991	2,117	1,258	2,093
OUTLAYS									
18 **All types**	**1,144,020**	**1,251,766**	**587,394**	**640,867**	**647,218**	**631,737**	**105,849**	**119,384**	**119,080**
19 National defense	303,559	299,335	149,613	152,733	149,497	122,089	21,934	23,910	27,968
20 International affairs	9,574	13,760	5,971	6,770	8,943	7,592	725	860	835
21 General science, space, and technology	12,838	14,420	7,091	6,974	8,081	7,496	1,199	1,312	1,440
22 Energy	3,702	2,470	1,449	1,216	979	816	180	175	−624
23 Natural resources and environment	16,182	17,009	9,183	7,343	9,933	8,324	1,518	1,566	1,470
24 Agriculture	16,948	11,998	4,132	7,450	6,878	7,684	597	664	129
25 Commerce and housing credit	29,091	67,495	22,295	38,672	37,491	17,992	6,424	15,199	5,805
26 Transportation	27,608	29,495	14,982	13,754	16,218	14,748	2,562	2,721	3,105
27 Community and regional development	5,361	8,466	4,879	3,987	3,939	3,552	503	542	614
28 Education, training, employment, and social services	36,694	37,479	18,663	19,537	18,988	21,234	3,175	2,967	3,550
29 Health	48,390	58,101	25,339	29,488	31,424	35,608	6,917	6,220	6,401
30 Social security and medicare	317,506	346,383	162,322	175,997	176,353	190,247	33,907	32,246	32,505
31 Income security	136,031	148,299	67,950	78,475	75,948	88,778	9,827	14,803	15,367
32 Veterans benefits and services	30,066	29,112	14,864	15,217	15,479	14,326	1,168	2,654	3,666
33 Administration of justice	9,422	10,076	4,909	4,868	5,265	6,187	930	1,072	1,153
34 General government	9,124	10,822	4,760	4,916	6,976	5,212	1,592	−64	1,032
35 Net interest[6]	169,317	183,790	87,927	91,155	94,650	98,556	15,746	15,994	17,605
36 Undistributed offsetting receipts[7]	−37,212	−36,615	−18,935	−17,688	−19,829	−18,702	−3,051	−3,454	−2,942

1. Functional details do not sum to total outlays for calendar year data because revisions to monthly totals have not been distributed among functions. Fiscal year total for outlays does not correspond to calendar year data because revisions from the *Budget* have not been fully distributed across months.
2. Old-age, disability, and hospital insurance, and railroad retirement accounts.
3. Old-age, disability, and hospital insurance.
4. Federal employee retirement contributions and civil service retirement and disability fund.
5. Deposits of earnings by Federal Reserve Banks and other miscellaneous receipts.
6. Net interest function includes interest received by trust funds.
7. Consists of rents and royalties on the outer continental shelf, U.S. government contributions for employee retirement.

SOURCES. U.S. Department of the Treasury, *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government*, and the U.S. Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 1990*.

1.40 FEDERAL DEBT SUBJECT TO STATUTORY LIMITATION[1]

Billions of dollars, end of month

Item	1989			1990				1991	
	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30
1 **Federal debt outstanding**	**2,824.0**	**2,881.1**	**2,975.5**	**3,081.9**	**3,175.5**	**3,266.1**	**3,397.3**	**3,491.7**	**3,562.9**
2 Public debt securities	2,799.9	2,857.4	2,953.0	3,052.0	3,143.8	3,233.3	3,364.8	3,465.2	3,538.0
3 Held by public	2,142.1	2,180.7	2,245.2	2,329.3	2,368.8	2,437.6	2,536.6	2,598.4	n.a.
4 Held by agencies	657.8	676.7	707.8	722.7	775.0	795.8	828.3	866.8	n.a.
5 Agency securities	24.0	23.7	22.5	29.9	31.7	32.8	32.5	26.5	n.a.
6 Held by public	23.6	23.5	22.4	29.8	31.6	32.6	32.4	26.4	n.a.
7 Held by agencies	.5	.1	.1	.2	.2	.2	.1	.1	n.a.
8 **Debt subject to statutory limit**	**2,784.6**	**2,829.8**	**2,921.7**	**2,988.9**	**3,077.0**	**3,161.2**	**3,281.7**	**3,377.1**	**3,450.3**
9 Public debt securities	2,784.3	2,829.5	2,921.4	2,988.6	3,076.6	3,160.9	3,281.3	3,376.7	3,449.8
10 Other debt[2]	.2	.3	.3	.3	.4	.4	.4	.4	.4
11 MEMO: Statutory debt limit	2,800.0	2,870.0	3,122.7	3,122.7	3,122.7	3,195.0	4,145.0	4,145.0	4,145.0

1. Components may not sum to totals because of rounding.
2. Consists of guaranteed debt of Treasury and other federal agencies, specified participation certificates, notes to international lending organizations, and District of Columbia stadium bonds.

SOURCES. *Treasury Bulletin* and *Monthly Statement of the Public Debt of the United States.*

1.41 GROSS PUBLIC DEBT OF U.S. TREASURY Types and Ownership[1]

Billions of dollars, end of period

Type and holder	1987	1988	1989	1990	1990		1991	
					Q3	Q4	Q1	Q2
1 **Total gross public debt**	**2,431.7**	**2,684.4**	**2,953.0**	**3,364.8**	**3,233.3**	**3,364.8**	**3,465.2**	**3,538.0**
By type								
2 Interest-bearing	2,428.9	2,663.1	2,931.8	3,362.0	3,210.9	3,362.0	3,441.4	3,516.1
3 Marketable	1,724.7	1,821.3	1,945.4	2,195.8	2,092.8	2,195.8	2,227.9	2,268.1
4 Bills	389.5	414.0	430.6	527.4	482.5	527.4	533.3	521.5
5 Notes	1,037.9	1,083.6	1,151.5	1,265.2	1,218.1	1,265.2	1,280.4	1,320.3
6 Bonds	282.5	308.9	348.2	388.2	377.2	388.2	399.3	411.2
7 Nonmarketable[2]	704.2	841.8	986.4	1,166.2	1,118.2	1,166.2	1,213.5	1,248.0
8 State and local government series	139.3	151.5	163.3	160.8	161.3	160.8	159.4	161.0
9 Foreign issues[3]	4.0	6.6	6.8	43.5	36.0	43.5	42.8	42.1
10 Government	4.0	6.6	6.8	43.5	36.0	43.5	42.8	42.1
11 Public	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	99.2	107.6	115.7	124.1	122.2	124.1	127.7	131.3
13 Government account series[4]	461.3	575.6	695.6	813.8	779.4	813.8	853.1	883.2
14 Non-interest-bearing	2.8	21.3	21.2	2.8	22.4	2.8	23.8	21.9
By holder[5]								
15 U.S. Treasury and other federal agencies and trust funds	477.6	589.2	707.8	828.3	795.8	828.3	866.8	
16 Federal Reserve Banks	222.6	238.4	228.4	259.8	232.5	259.8	247.3	
17 Private investors	1,731.4	1,858.5	2,015.8	2,288.3	2,207.3	2,288.3	2,360.6	
18 Commercial banks	201.5	193.8	174.8	188.2	188.0	188.2	182.0	
19 Money market funds	14.6	11.8	14.9	45.4	34.0[r]	45.4	46.0	
20 Insurance companies	104.9	107.3	130.1	149.7	142.7[r]	149.7	152.0	n.a.
21 Other companies	84.6	87.1	93.4	108.9	102.0	108.9	114.9	
22 State and local treasuries	284.6	313.6	338.7	329.6	330.8[r]	329.6	329.0	
Individuals								
23 Savings bonds	101.1	109.6	117.7	126.2	123.9	126.2	129.7	
24 Other securities	71.3	79.2	98.7[r]	107.6	108.6[r]	107.6	108.6	
25 Foreign and international[6]	299.7	362.2	392.9	425.1	404.8[r]	425.1	432.2	
26 Other miscellaneous investors[7]	569.1	593.4	654.6[r]	807.6	772.5	807.6	866.2	

1. Components may not sum to totals because of rounding.
2. Includes (not shown separately) securities issued to the Rural Electrification Administration, depository bonds, retirement plan bonds, and individual retirement bonds.
3. Nonmarketable series denominated in dollars, and series denominated in foreign currency held by foreigners.
4. Held almost entirely by U.S. Treasury and other federal agencies and trust funds.
5. Data for Federal Reserve Banks and U.S. government agencies and trust funds are actual holdings; data for other groups are Treasury estimates.
6. Consists of investments of foreign balances and international accounts in the United States.
7. Includes savings and loan associations, nonprofit institutions, credit unions, mutual savings banks, corporate pension trust funds, dealers and brokers, certain U.S. Treasury deposit accounts, and federally-sponsored agencies.

SOURCES. Data by type of security, U.S. Treasury Department, *Monthly Statement of the Public Debt of the United States;* data by holder, the *Treasury Bulletin.*

1.42 U.S. GOVERNMENT SECURITIES DEALERS Transactions[1]

Millions of dollars, daily averages, par value

Item	1991			1991, week ending								
	May	June	July	July 3	July 10	July 17	July 24	July 31	Aug. 7	Aug. 14	Aug. 21	Aug. 28
IMMEDIATE TRANSACTIONS[2]												
By type of security												
U.S. Treasury securities												
1 Bills	30,745	30,281	28,081	35,068	27,527	27,252	23,224	30,130	34,608	32,317	35,343	33,710
Coupon securities, by maturity												
2 Less than 3.5 years	43,429	32,941	32,862	38,197	30,539	32,948	32,346	32,414	51,083	42,382	48,175	39,036
3 3.5 to 7.5 years	24,695	23,422	23,516	23,217	20,200	26,830	24,943	22,270	32,294	32,764	36,920	29,678
4 7.5 to 15 years	14,556	10,805	8,933	10,523	7,112	8,949	7,971	10,746	23,030	19,519	17,594	11,974
5 15 years or more	13,550	11,497	10,831	9,787	9,682	10,782	9,653	13,834	21,159	21,040	17,041	10,954
Federal agency securities												
Debt, maturing in												
6 Less than 3.5 years	4,284	4,028	4,517	5,269	4,485	3,944	4,347	4,842	4,230	3,530	4,632	4,737
7 3.5 to 7.5 years	642	554	415	639	354	362	360	448	1,006	777	506	519
8 7.5 years or more	712	662	621	519	693	583	844	425	1,020	768	463	492
Mortgage-backed securities												
9 Pass-throughs	9,607	10,706	9,332	8,930	10,813	9,468	8,293	8,994	9,695	8,246	11,105	12,252
10 All others[3]	1,364	1,867	1,806	2,218	1,489	1,775	1,742	1,972	2,470	1,631	2,225	2,146
By type of counterparty												
Primary dealers and brokers												
11 U.S. Treasury and federal agency securities	76,948	67,404	63,741	71,442	57,979	65,997	61,049	65,320	100,087	92,355	94,487	76,384
Federal agency securities												
12 Debt	1,621	1,365	1,461	1,576	1,416	1,324	1,516	1,517	1,678	1,515	1,223	1,339
13 Mortgage-backed	5,011	6,053	4,991	4,992	5,989	5,085	4,517	4,372	5,494	4,153	5,435	6,741
Customers												
14 U.S. Treasury and federal agency securities	50,027	41,542	40,482	45,350	37,082	40,764	37,087	44,075	62,087	55,666	60,585	48,968
Federal agency securities												
15 Debt	4,017	3,879	4,092	4,850	4,116	3,565	4,036	4,198	4,578	3,559	4,378	4,409
16 Mortgage-backed	5,960	6,520	6,147	6,155	6,313	6,157	5,518	6,594	6,671	5,724	7,895	7,658
FUTURE AND FORWARD TRANSACTIONS[4]												
By type of deliverable security												
U.S. Treasury securities												
17 Bills	4,201	5,531	3,490	6,286	3,306	3,187	3,072	2,721	5,647	4,403	6,868	3,980
Coupon securities, by maturity												
18 Less than 3.5 years	1,292	1,285	951	1,442	967	1,015	768	760	2,186	1,459	1,229	937
19 3.5 to 7.5 years	569	607	493	714	224	621	580	416	577	528	468	642
20 7.5 to 15 years	938	1,346	720	1,172	554	721	675	658	1,052	941	1,344	1,277
21 15 years or more	8,030	9,082	7,038	6,801	6,956	7,664	6,768	6,904	10,233	9,861	10,347	7,677
Federal agency securities												
Debt, maturing in												
22 Less than 3.5 years	57	68	83	106	7	227	80	4	7	6	52	79
23 3.5 to 7.5 years	11	47	38	91	4	5	8	104	12	14	189	5
24 7.5 years or more	26	20	20	18	22	10	22	30	10	14	12	15
Mortgage-backed												
25 Pass-throughs	9,536	9,604	10,561	9,575	10,999	12,779	10,403	8,656	8,491	15,810	14,889	10,192
26 All others[3]	1,684	1,697	1,653	1,737	1,658	1,752	1,900	1,252	1,489	2,387	1,847	1,547
OPTION TRANSACTIONS[5]												
By type of underlying security												
U.S. Treasury, coupon securities, by maturity												
27 Less than 3.5 years	1,056	2,104	4,311	1,928	650	4,723	6,717	6,586	6,940	4,183	3,111	5,463
28 3.5 to 7.5 years	138	243	194	458	176	174	47	222	209	113	150	180
29 7.5 to 15 years	245	284	256	340	83	290	309	291	631	511	424	460
30 15 years or more	2,205	2,048	1,991	2,048	1,672	1,544	2,302	2,412	3,509	2,638	2,437	2,829
Federal agency, mortgage-backed securities												
31 Pass-throughs	202	275	280	103	237	412	146	432	446	526	261	257

1. Transactions are market purchases and sales of securities as reported to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Averages for transactions are based on the number of trading days in the period. Immediate, forward, and future transactions are reported at principal value, which does not include accrued interest; option transactions are reported at the face value of the underlying securities.

Dealers report cumulative transactions for each week ending Wednesday.

2. Transactions for immediate delivery include purchases or sales of securities (other than mortgage-backed agency securities) for which delivery is scheduled in five business days or less and "when-issued" securities that settle on the issue date of offering. Transactions for immediate delivery of mortgage-backed securities include purchases and sales for which delivery is scheduled in thirty days or less. Stripped securities are reported at market value by maturity of coupon or corpus.

3. Includes such securities as collateralized mortgage obligations (CMOs), real estate mortgage investment conduits (REMICs), interest only securities (IOs), and principal only securities (POs).

4. Futures transactions are standardized agreements arranged on an exchange. Forward transactions are agreements made in the over-the-counter market that specify delayed delivery. All futures transactions are included regardless of time to delivery. Forward contracts for U.S. Treasury securities and federal agency debt securities are included when the time to delivery is more than five days. Forward contracts for mortgage-backed securities are included when the time to delivery is more than thirty days.

5. Options transactions are purchases or sales of put-and-call options, whether arranged on an organized exchange or in the over-the-counter market, and include options on futures contracts on U.S. Treasury and federal agency securities.

NOTE. In tables 1.42 and 1.43, the term "n.a." refers to data that are not published because of insufficient activity.

Data formerly shown under option transactions for U.S. Treasury securities, bills; Federal agency securities, debt; and mortgage-backed securities, other than pass-throughs are no longer available because of insufficient activity.

1.43 U.S. GOVERNMENT SECURITIES DEALERS Positions and Financing[1]

Millions of dollars

Item	1991			1991, week ending								
	May	June	July	June 26	July 3	July 10	July 17	July 24	July 31	Aug. 7	Aug. 14	Aug. 21
	Positions[2]											
NET IMMEDIATE TRANSACTIONS[3]												
By type of security												
U.S. Treasury securities												
1 Bills	2,907	10,964	17,206	9,231	14,569	15,197	16,019	18,545	20,191	19,627	16,312	17,804
Coupon securities, by maturity												
2 Less than 3.5 years	−1,704	−1,976	−3,059	−942	−2,802	−4,455	−6,513	−3,238	1,862	3,493	118	−704
3 3.5 to 7.5 years	1,808	1,677	7,128	3,083	4,083	7,356	7,192	9,515	5,755	5,016	2,691	130
4 7.5 to 15 years	−4,408	−4,972	−4,725	−4,560	−5,284	−5,347	−5,591	−3,841	−3,880	−2,181	−2,402	−5,501
5 15 years or more	−13,156	−15,092	−17,183	−15,128	−15,186	−15,698	−17,357	−18,307	−18,227	−16,856	−12,601	−12,518
Federal agency securities												
Debt, maturing in												
6 Less than 3.5 years	4,960	6,230	5,673	6,835	6,077	6,274	5,863	5,286	5,095	4,615	6,132	6,663
7 3.5 to 7.5 years	2,484	2,192	1,823	2,054	2,142	2,057	1,810	1,621	1,667	1,988	1,807	1,736
8 7.5 years or more	4,836	4,636	4,707	4,723	4,862	4,717	4,618	4,734	4,693	5,057	5,117	5,040
Mortgage-backed securities												
9 Pass-throughs	26,165	24,425	26,067	23,575	19,485	23,848	31,463	28,856	22,920	24,173	32,668	36,026
10 All others[4]	10,184	10,940	12,096	10,863	12,693	12,647	12,569	11,432	11,479	11,789	11,461	11,339
Other money market instruments												
11 Certificates of deposit	2,439	3,071	3,686	3,305	3,019	3,870	3,436	3,856	3,870	4,306	3,243	2,474
12 Commercial paper	5,982	5,008	5,546	5,129	4,613	4,471	5,145	5,534	7,432	6,105	6,396	6,717
13 Bankers acceptances	1,515	1,400	1,228	1,375	1,312	1,339	1,035	1,315	1,189	1,154	1,398	1,349
FUTURE AND FORWARD TRANSACTIONS[5]												
By type of deliverable security												
U.S. Treasury securities												
14 Bills	−18,953	−13,075	−12,116	−12,801	−15,953	−16,984	−11,065	−8,782	−9,990	−12,061	−15,211	−15,240
Coupon securities, by maturity												
15 Less than 3.5 years	520	530	1,329	466	598	1,173	1,303	2,059	1,094	1,307	995	747
16 3.5 to 7.5 years	−1,254	1,000	1,511	1,827	1,107	1,028	2,010	1,833	1,347	−986	−1,666	−748
17 7.5 to 15 years	−433	703	51	716	917	379	704	−341	−908	−1,661	−3,043	−2,264
18 15 years or more	−4,116	−2,160	−3,222	−3,083	−3,869	−2,734	−2,198	−4,744	−2,935	−3,728	−5,944	−4,738
Federal agency securities												
Debt, maturing in												
19 Less than 3.5 years	187	312	15	284	105	69	−97	52	−1	−84	11	−30
20 3.5 to 7.5 years	11	−138	−9	−159	−112	−104	−30	−57	201	130	74	84
21 7.5 years or more	−6	−54	−15	−17	−11	−65	−13	1	16	3	51	61
Mortgage-backed securities												
22 Pass-throughs	−13,711	−15,368	−14,870	−15,565	−9,245	−14,066	−20,373	−17,132	−10,318	−14,492	−21,361	−24,499
23 All others[4]	752	1,309	17	2,377	689	425	−348	−69	−227	1,392	903	2,375
24 Certificates of deposit	−18,609	−46,070	−42,864	−37,646	−34,927	−28,104	−35,063	−41,109	−70,580	−90,639	−105,534	−102,471
	Financing[6]											
Reverse repurchase agreements												
25 Overnight and continuing	190,522	182,725	180,538	175,447	168,763	188,649	181,852	172,000	184,697	190,895	197,455	204,559
26 Term	230,051	243,720	226,217	226,886	231,646	225,374	228,704	234,743	213,722	244,619	239,078	245,071
Repurchase agreements												
27 Overnight and continuing	274,319	279,426	285,305	270,154	230,426	292,787	296,801	287,693	287,457	299,083	302,631	323,099
28 Term	213,240	221,285	201,256	211,854	241,730	194,144	199,269	206,740	187,525	220,677	216,829	226,976
Securities borrowed												
29 Overnight and continuing	60,038	64,626	64,442	64,064	63,390	64,309	64,193	63,933	65,786	60,396	60,756	64,588
30 Term	19,025	23,069	23,187	26,064	24,564	23,917	23,078	22,534	22,627	22,256	21,732	23,999
Securities loaned												
31 Overnight and continuing	7,062	7,096	7,196	7,525	6,478	7,038	7,807	7,619	6,629	7,332	7,627	8,420
32 Term	724	1,297	937	2,926	881	828	1,464	873	608	684	586	630
Collateralized loans												
33 Overnight and continuing	4,503	5,962	6,770	6,324	6,614	6,871	6,262	6,344	7,668	7,319	7,872	6,810
MEMO: Matched book[7]												
Reverse repurchases												
34 Overnight and continuing	122,990	113,023	118,316	107,558	108,214	121,684	118,766	114,146	122,998	124,388	131,618	135,490
35 Term	189,072	203,627	186,782	191,150	191,511	191,736	187,696	190,618	175,051	200,977	192,688	195,922
Repurchases												
36 Overnight and continuing	152,094	154,997	158,617	148,692	138,122	163,393	165,528	153,894	160,436	156,451	157,714	168,329
37 Term	163,869	164,351	150,534	158,046	163,427	145,982	147,563	157,906	145,160	164,021	163,496	167,011

1. Data for positions and financing are obtained from reports submitted to the Federal Reserve Bank of New York by the U.S. government securities dealers on its published list of primary dealers. Weekly figures are close-of-business Wednesday data; monthly figures are averages of weekly data. Data for positions and financing are averages of close-of-business Wednesday data.

2. Securities positions are reported at market value.

3. Net immediate positions include securities purchased or sold (other than mortgage-backed agency securities) that have been delivered or are scheduled to be delivered in five business days or less and "when-issued" securities settle on the issue date of offering. Net immediate positions of mortgage-backed securities include securities purchased or sold that have been delivered or are scheduled to be delivered in thirty days or less.

4. Includes securities such as collateralized mortgage obligations (CMOs), real estate mortgage investment conduits (REMICs), interest only (IOs), and principal only (POs).

5. Futures positions are standardized contracts arranged on an exchange. Forward positions reflect agreements made in the over-the-counter market that specify delayed delivery. All futures positions are included regardless of time to delivery. Forward contracts for U.S. Treasury securities and for federal agency debt securities are included when the time to delivery is more than five business days. Forward contracts for mortgage-backed securities are included when the time to delivery is more than thirty days.

6. Overnight financing refers to agreements made on one business day that mature on the next business day; continuing contracts are agreements that remain in effect for more than one business day but have no specific maturity and can be terminated without advance notice by either party; term agreements have a fixed maturity of more than one business day.

7. Matched-book data reflect financial intermediation activity in which the borrowing and lending transactions are matched. Matched-book data are included in the financing breakdowns given above. The reverse repurchase and repurchase numbers are not always equal because of the "matching" of securities of different values or types of collateralization.

NOTE. Data for future and forward commercial paper and bankers' acceptances and term financing of collateralized loans are no longer available because of insufficient activity.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1987	1988	1989	1990	1991				
					Feb.	Mar.	Apr.	May	June
1 **Federal and federally sponsored agencies**	**341,386**	**381,498**	**411,805**	**434,668**	**441,440**	**437,847**	**432,348**	**432,306**	**429,179**
2 Federal agencies	37,981	35,668	35,664	42,159	42,191	41,149	41,107	41,031	40,591
3 Defense Department[1]	13	8	7	7	7	7	7	7	7
4 Export-Import Bank[2,3]	11,978	11,033	10,985	11,376	11,376	11,186	11,186	11,186	11,244
5 Federal Housing Administration[4]	183	150	328	393	361	370	365	407	428
6 Government National Mortgage Association participation certificates[5]	1,615	0	0	0	0	0	0	0	0
7 Postal Service[6]	6,103	6,142	6,445	6,948	6,948	6,948	6,948	6,651	6,651
8 Tennessee Valley Authority	18,089	18,335	17,899	23,435	23,499	22,638	22,601	22,780	22,261
9 United States Railway Association[6]	0	0	0	0	0	0	0	0	0
10 Federally sponsored agencies[7]	303,405	345,830	375,407	392,509	399,249	396,698	391,241	391,275	388,588
11 Federal Home Loan Banks	115,727	135,836	136,108	117,895	112,874	113,311	110,691	108,981	105,775
12 Federal Home Loan Mortgage Corporation	17,645	22,797	26,148	30,941	32,640	31,425	29,768	29,016	28,836
13 Federal National Mortgage Association	97,057	105,459	116,064	123,403	125,974	124,885	124,189	126,806	126,606
14 Farm Credit Banks[8]	55,275	53,127	54,864	53,590	52,480	51,890	52,049	51,485	51,712
15 Student Loan Marketing Association[9]	16,503	22,073	28,705	34,194	35,854	35,761	35,117	35,560	36,232
16 Financing Corporation[10]	1,200	5,850	8,170	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation[11]	0	690	847	1,261	1,261	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation[12]	0	0	4,522	23,055	29,996	29,996	29,996	29,996	29,996
MEMO									
19 **Federal Financing Bank debt[13]**	**152,417**	**142,850**	**134,873**	**179,083**	**181,714**	**181,907**	**182,708**	**182,582**	**185,129**
Lending to federal and federally sponsored agencies									
20 Export-Import Bank[3]	11,972	11,027	10,979	11,370	11,370	11,180	11,180	11,180	11,238
21 Postal Service[6]	5,853	5,892	6,195	6,698	6,698	6,698	6,698	6,401	6,401
22 Student Loan Marketing Association	4,940	4,910	4,880	4,850	4,850	4,850	4,850	4,850	4,850
23 Tennessee Valley Authority	16,709	16,955	16,519	14,055	14,119	13,258	13,221	13,400	12,881
24 United States Railway Association[6]	0	0	0	0	0	0	0	0	0
Other Lending[14]									
25 Farmers Home Administration	59,674	58,496	53,311	52,324	52,544	52,669	52,669	52,669	52,254
26 Rural Electrification Administration	21,191	19,246	19,265	18,890	18,906	18,904	18,850	18,878	18,894
27 Other	32,078	26,324	23,724	70,896	73,227	74,348	75,240	75,204	78,611

1. Consists of mortgages assumed by the Defense Department between 1957 and 1963 under family housing and homeowners assistance programs.
2. Includes participation certificates reclassified as debt beginning Oct. 1, 1976.
3. On-budget after Sept. 30, 1976.
4. Consists of debentures issued in payment of Federal Housing Administration insurance claims. Once issued, these securities may be sold privately on the securities market.
5. Certificates of participation issued before fiscal 1969 by the Government National Mortgage Association acting as trustee for the Farmers Home Administration; Department of Health, Education, and Welfare; Department of Housing and Urban Development; Small Business Administration; and the Veterans Administration.
6. Off-budget.
7. Includes outstanding noncontingent liabilities: notes, bonds, and debentures. Some data are estimated.
8. Excludes borrowing by the Farm Credit Financial Assistance Corporation, shown in line 17.
9. Before late 1982, the Association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 22.
10. The Financing Corporation, established in August 1987 to recapitalize the Federal Savings and Loan Insurance Corporation, undertook its first borrowing in October 1987.
11. The Farm Credit Financial Assistance Corporation, established in January 1988 to provide assistance to the Farm Credit System, undertook its first borrowing in July 1988.
12. The Resolution Funding Corporation, established by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, undertook its first borrowing in October 1989.
13. The FFB, which began operations in 1974, is authorized to purchase or sell obligations issued, sold, or guaranteed by other federal agencies. Since FFB incurs debt solely for the purpose of lending to other agencies, its debt is not included in the main portion of the table in order to avoid double counting.
14. Includes FFB purchases of agency assets and guaranteed loans; the latter contain loans guaranteed by numerous agencies with the guarantees of any particular agency being generally small. The Farmers Home Administration item consists exclusively of agency assets, while the Rural Electrification Administration entry contains both agency assets and guaranteed loans.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1988	1989	1990	1991 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1 **All issues, new and refunding**[1]	**114,522**	**113,646**	**120,339**	**7,230**	**11,335**	**10,864**	**10,916**	**14,753**	**13,804**	**11,629**	**15,746**
Type of issue											
2 General obligation	30,312	35,774	39,610	2,343	4,838	4,219	3,771	4,946	4,442	3,900	5,919
3 Revenue	84,210	77,873	81,295	4,887	6,497	6,645	7,145	9,807	9,362	7,729	9,825
Type of issuer											
4 State	8,830	11,819	15,149	713	2,027	1,195	1,199	1,890	1,529	690	2,328
5 Special district and statutory authority[2]	74,409	71,022	72,661	4,563	4,903	6,599	6,604	9,549	5,057	7,320	8,890
6 Municipality, county, and township	31,193	30,805	32,510	1,954	4,405	3,070	3,113	3,314	7,218	3,659	4,526
7 **Issues for new capital, total**	**79,665**	**84,062**	**103,235**	**6,977**	**10,403**	**9,675**	**10,156**	**13,924**	**13,347**	**11,414**	**15,177**
Use of proceeds											
8 Education	15,021	15,133	17,042	1,079	1,579	2,583	2,001	2,462	2,684	2,214	1,826
9 Transportation	6,825	6,870	11,650	711	146	421	1,305	1,642	1,829	621	1,498
10 Utilities and conservation	8,496	11,427	11,739	1,196	2,046	1,886	2,171	1,815	2,830	2,077	1,977
11 Social welfare	19,027	16,703	23,099	891	698	2,140	921	3,373	2,455	2,287	5,291
12 Industrial aid	5,624	5,036	6,117	607	768	554	319	743	1,040	425	565
13 Other purposes	24,672	28,894	34,607	2,493	4,775	2,091	3,439	3,889	2,509	3,790	4,019

1. Par amounts of long-term issues based on date of sale.
2. Includes school districts beginning 1986.

SOURCES. *Investment Dealer's Digest* beginning April 1990. Securities Data/Bond Buyer Municipal Data Base beginning 1986. Public Securities Association for earlier data.

1.46 NEW SECURITY ISSUES U.S. Corporations

Millions of dollars

Type of issue or issuer, or use	1988	1989	1990	1990 Dec.	1991 Jan.	Feb.	Mar.	Apr.	May	June	July
1 **All issues**[1]	**410,898**	**379,535**	**339,551**	**21,150**	**17,393**	**30,873**	**36,255**	**33,933[r]**	**37,453[r]**	**31,370[r]**	**21,682**
2 **Bonds**[2]	**353,097**	**321,664**	**299,313**	**19,361**	**16,497**	**29,071**	**32,306**	**28,620[r]**	**30,035[r]**	**25,752[r]**	**19,000**
Type of offering											
3 Public, domestic	202,215	181,393	189,271	18,685	15,838	25,902	29,927	24,763[r]	27,205[r]	23,331[r]	17,500
4 Private placement, domestic[3]	127,704	117,420	86,988	15,177	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5. Sold abroad	23,178	22,851	23,054	676	659	3,169	2,379	3,857	2,830	2,421[r]	1,500
Industry group											
6 Manufacturing	70,306	76,656	53,110	2,887	3,390	8,116	7,240	7,613	6,604	4,078[r]	3,180
7 Commercial and miscellaneous	62,794	49,744	40,019	1,061	1,408	1,921	1,739	2,936	1,190	1,743[r]	1,299
8 Transportation	10,275	10,032	12,706	351	711	563	985	502	665	567	661
9 Public utility	20,834	18,688	17,521	2,082	689	1,399	506	2,115	2,682	1,616[r]	1,205
10 Communication	5,593	8,461	6,664	1,380	97	669	988	845	337	1,838	616
11 Real estate and financial	183,294	158,083	169,287	11,601	10,203	16,404	20,849	14,610[r]	18,558[r]	15,910[r]	12,040
12 **Stocks**[2]	**57,802**	**57,870**	n.a.	**1,789**	**896**	**1,802**	**3,949**	**5,313**	**7,418**	**5,618**	**2,682**
Type of offering											
13 Public preferred	6,544	6,194	3,998	175	0	150	1,233	543	1,392	203	203
14 Common	35,911	26,030	19,443	1,614	896	1,652	2,716	4,771	6,027	3,887	2,479
15 Private placement[3]	15,346	25,647	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Industry group											
16 Manufacturing	7,608	9,308	n.a.	46	60	183	564	1,796	2,291	1,909	685
17 Commercial and miscellaneous	8,449	7,446	5,026	110	18	546	1,096	1,521	1,563	851	1,427
18 Transportation	1,535	1,929	126	5	242	0	249	416	277	0	18
19 Public utility	1,898	3,090	4,229	288	218	335	354	71	573	471	143
20 Communication	515	1,904	416	6	n.a.	0	0	0	0	295	46
21 Real estate and financial	37,798	34,028	11,055	1,327	359	737	1,686	1,510	2,714	2,091	350

1. Figures which represent gross proceeds of issues maturing in more than one year, are the principal amount or number of units multiplied by offering price. Excludes secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, equities sold abroad, and Yankee bonds. Stock data include ownership securities issued by limited partnerships.
2. Monthly data include only public offerings.
3. Data are not available on a monthly basis. Before 1987, annual totals include underwritten issues only.

SOURCES. IDD Information Services, Inc., the Board of Governors of the Federal Reserve System, and before 1989, the U.S. Securities and Exchange Commission.

1.47 OPEN-END INVESTMENT COMPANIES Net Sales and Asset Position

Millions of dollars

Investment Companies[1]	1989	1990	1990 Dec.	1991 Jan.	Feb.	Mar.	Apr.	May	June[r]	July
1 **Sales of own shares[2]**	**306,445**	**345,780**	**34,553**	**38,012**	**30,605**	**31,597**	**40,356**	**36,719**	**33,922**	**39,075**
2 Redemptions of own shares[3]	272,165	289,573	29,484	27,648	23,390	25,372	32,895	26,972	27,629	28,761
3 Net sales	34,280	56,207	5,069	10,364	7,215	6,226	7,461	9,747	6,293	10,314
4 **Assets[4]**	**553,871**	**570,744**	**570,744**	**590,296**	**616,472**	**632,052**	**647,053**	**671,852**	**661,643**	**689,604**
5 Cash position[5]	44,780	48,638	48,638	53,549	53,899	52,895	52,982	55,450	55,057	55,376
6 Other	509,091	522,106	522,106	536,747	562,573	579,154	594,071	616,402	606,586	634,228

1. Data on sales and redemptions exclude money market mutual funds but include limited maturity municipal bond funds. Data on asset positions exclude both money market mutual funds and limited maturity municipal bond funds.
2. Includes reinvestment of investment income dividends. Excludes reinvestment of capital gains distributions and share issue of conversions from one fund to another in the same group.
3. Excludes share redemptions resulting from conversions from one fund to another in the same group.
4. Market value at end of period, less current liabilities.
5. Also includes all U.S. Treasury securities and other short-term debt securities.

SOURCE. Investment Company Institute. Data based on reports of members, which comprise substantially all open-end investment companies registered with the Securities and Exchange Commission. Data reflect newly formed companies after their initial offering of securities.

1.48 CORPORATE PROFITS AND THEIR DISTRIBUTION

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Account	1988	1989	1990	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2
1 Corporate profits with inventory valuation and capital consumption adjustment	337.6	311.6	298.3	306.7	290.9	296.8	306.6	300.7	288.9	286.2	287.9
2 Profits before tax	316.7	307.7	304.7	291.4	289.8	296.9	299.3	318.5	304.1	281.5	283.6
3 Profits tax liability	136.2	135.1	132.1	127.8	123.5	129.9	133.1	139.1	126.5	115.1	119.9
4 Profits after tax	180.5	172.6	172.5	163.6	166.3	167.1	166.1	179.4	177.6	166.4	163.7
5 Dividends	110.0	123.5	133.9	125.0	127.7	130.3	133.0	135.1	137.2	137.5	136.4
6 Undistributed profits	70.5	49.1	38.7	38.6	38.6	36.8	33.2	44.3	40.4	29.0	27.3
7 Inventory valuation	-27.0	-21.7	-11.4	-6.1	-14.5	-11.4	-.5	-19.8	-13.8	8.1	4.1[r]
8 Capital consumption adjustment	47.8	25.5	4.9	21.4	15.6	11.3	7.7	2.0	-1.4	-3.5	.3[r]

SOURCE. *Survey of Current Business* (Department of Commerce).

1.50 TOTAL NONFARM BUSINESS EXPENDITURES on New Plant and Equipment

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Industry	1989	1990	1991[1]	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1991[1] Q3	1991[1] Q4
1 **Total nonfarm business**	**507.40**	**532.61**	**535.13**	**532.50**	**534.55**	**534.11**	**530.13**	**535.50**	**524.57**	**539.53**	**540.91**
Manufacturing											
2 Durable goods industries	82.56	82.58	78.22	86.03	84.15	82.48	79.03	81.24	79.69	77.54	74.43
3 Nondurable goods industries	101.24	110.04	107.97	106.14	110.87	111.57	110.69	109.90	107.66	107.01	107.33
Nonmanufacturing											
4 Mining	9.21	9.88	9.66	9.62	9.77	9.97	10.12	9.89	10.09	9.70	8.96
Transportation											
5 Railroad	6.26	6.40	6.00	6.44	6.67	5.66	6.81	5.59	6.27	6.28	5.85
6 Air	6.73	8.87	9.90	9.27	9.37	9.55	7.54	11.18	10.10	9.53	8.78
7 Other	5.85	6.20	6.64	6.12	5.90	5.87	6.82	6.48	6.68	6.28	7.12
Public utilities											
8 Electric	44.81	44.10	44.24	43.48	42.83	43.80	45.88	43.36	42.87	45.46	45.25
9 Gas and other	21.47	23.11	22.90	21.93	21.80	23.88	24.36	23.68	21.71	23.00	23.20
10 Commercial and other[2]	229.28	241.43	249.60	243.46	243.18	241.32	238.87	244.19	239.50	254.73	259.98

1. Anticipated by business.
2. "Other" consists of construction; wholesale and retail trade; finance and insurance; personal and business services; and communication.

SOURCE. *Survey of Current Business* (Department of Commerce).

1.51 DOMESTIC FINANCE COMPANIES Assets and Liabilities[1]

Billions of dollars, end of period; not seasonally adjusted

Account	1987	1988	1989	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
ASSETS										
Accounts receivable, gross[2]										
1 Consumer	141.1	146.2	140.8	146.3	140.8	137.9	138.6	140.9	136.0	131.6
2 Business	207.4	236.5	256.0	246.8	256.0	262.9	274.8	275.4	290.8	290.0
3 Real estate	39.5	43.5	48.9	48.7	48.9	52.1	55.4	57.7	59.9	57.3
4 Total	388.1	426.2	445.8	441.8	445.8	452.8	468.8	474.0	486.7	478.9
Less:										
5 Reserves for unearned income	45.3	50.0	52.0	52.9	52.0	51.9	54.3	55.1	56.6	57.0
6 Reserves for losses	6.8	7.3	7.7	7.7	7.7	7.9	8.2	8.6	9.2	10.3
7 Accounts receivable, net	336.0	368.9	386.1	381.3	386.1	393.0	406.3	410.3	420.9[r]	411.6[r]
8 All other	58.3	72.4	91.6	85.2	91.6	92.5	95.5	102.8	99.6[r]	103.4[r]
9 Total assets	**394.2**	**441.3**	**477.6**	**466.4**	**477.6**	**485.5**	**501.9**	**513.1**	**520.6**	**515.0**
LIABILITIES AND CAPITAL										
10 Bank loans	16.4	15.4	14.5	12.2	14.5	13.9	15.8	15.6	19.4	22.0
11 Commercial paper	128.4	142.0	149.5	147.2	149.5	152.9	152.4	148.6	152.7	141.2
Debt										
12 Other short-term	28.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Long-term	137.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Due to parent	n.a.	50.6	63.8	60.3	63.8	70.5	72.8	82.0	82.7	77.8
15 Not elsewhere classified	n.a.	137.9	147.8	145.1	147.8	145.7	153.0	156.6	157.0	162.4
16 All other liabilities	52.8	59.8	62.6	61.8	62.6	61.7	66.1	68.7	66.0	68.0
17 Capital, surplus, and undivided profits	31.5	35.6	39.4	39.8	39.4	40.7	41.8	41.6	42.8	43.7
18 Total liabilities and capital	**394.2**	**441.3**	**477.6**	**466.4**	**477.6**	**485.5**	**501.9**	**513.1**	**520.6**	**515.0**

1. Components may not sum to totals because of rounding.
2. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Business Credit Outstanding and Net Change[1]

Millions of dollars, end of period, seasonally adjusted

Type	1988	1989	1990	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June	1991 July
1 Total	**234,891**	**258,957**	**292,638**	**294,284**	**294,225**	**294,569**	**297,171**	**298,228[r]**	**300,161**
Retail financing of installment sales									
2 Automotive	37,210	39,479	38,110	37,548	36,649	36,652	36,005	35,390	35,491
3 Equipment	28,185	29,627	31,784	32,058	32,332	32,034	32,690	32,189	32,194
4 Pools of securitized assets[2]	n.a.	698	951	879	828	777	737	707	793
Wholesale									
5 Automotive	32,953	33,814	32,283	31,428	30,329	30,066	30,055	29,305	29,454
6 Equipment	5,971	6,928	11,569	11,108	10,880	10,937	11,000	10,427	11,344
7 All other	9,357	9,985	9,126	9,142	8,868	8,666	8,620	8,851	8,807
8 Pools of securitized assets[2]	n.a.	0	2,950	3,353	3,354	2,905	2,855	2,805	2,843
Leasing									
9 Automotive	24,693	26,804	39,129	38,922	39,279	39,707	40,738	41,603	43,024
10 Equipment	57,658	68,240	75,626	79,052	80,969	82,750	84,126	83,961	84,311
11 Pools of securitized assets[2]	n.a.	1,247	1,849	1,810	1,868	1,765	1,700	1,725	1,750
12 Loans on commercial accounts receivable and factored commercial accounts receivable	17,687	18,511	22,475	22,084	21,666	21,265	21,772	24,040	23,125
13 All other business credit	21,176	23,623	26,784	26,899	27,204	27,045	26,873	27,225	27,025
	Net change (during period)								
14 Total	**28,900**	**24,065[r]**	**33,681**	**901**	**−59**	**345**	**2,601[r]**	**1,057**	**1,933**
Retail financing of installment sales									
15 Automotive	1,071[r]	2,269[r]	−1,369	−468	−900	4	−647	−615	100
16 Equipment	3,111[r]	1,442	2,157	103	274	−298	656	−501	4
17 Pools of securitized assets[2]	n.a.	−26	253	−32	−51	−51	−40	−30	86
Wholesale									
18 Automotive	2,883	861[r]	−1,532[r]	−975	−1,100	−263	−11	−750	149
19 Equipment	393	957[r]	4,641	−192	−228	57	63	−573	917
20 All other	1,028[r]	628	−859[r]	−224	−275	−201	−47[r]	231	−44
21 Pools of securitized assets[2]	n.a.	0	2,950	517	1	−449	−50	−50[r]	38
Leasing									
22 Automotive	2,596	2,111[r]	12,325[r]	1	358	428	1,031	865	1,421
23 Equipment	14,166	10,581	7,386[r]	2,211	1,917	1,781	1,377[r]	−165	350
24 Pools of securitized assets[2]	n.a.	526	602	−44	58	−103	−65	25	25
25 Loans on commercial accounts receivable and factored commercial accounts receivable	−483[r]	825[r]	3,964	194	−418	−401	506[r]	2,268	−914
26 All other business credit	4,135[r]	2,446[r]	3,161[r]	−190	305	−158	−173[r]	352	−199

1. These data also appear in the Board's G.20 (422) release. For address, see inside front cover.
2. Data on pools of securitized assets are not seasonally adjusted.

1.53 MORTGAGE MARKETS Conventional Mortgages on New Homes

Millions of dollars; exceptions noted.

Item	1988	1989	1990	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June	1991 July	1991 Aug.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Terms[1]										
1 Purchase price (thousands of dollars)	150.0	159.6	153.2	153.2	136.7	151.4	146.8	166.7	165.1	159.0
2 Amount of loan (thousands of dollars)	110.5	117.0	112.4	113.8	100.4	114.5	109.2	121.9	121.6	115.7
3 Loan-price ratio (percent)	75.5	74.5	74.8	76.3	74.6	76.4	75.2	74.2	75.0	74.6
4 Maturity (years)	28.0	28.1	27.3	28.3	25.7	26.8	26.1	26.8	27.0	27.1
5 Fees and charges (percent of loan amount)[2]	2.19	2.06	1.93	1.73	1.59	2.12	1.54	1.69	1.85	1.74
6 Contract rate (percent per year)	8.81	9.76	9.68	9.28	9.16	9.24	9.26	9.18	9.12	9.19
Yield (percent per year)										
7 OTS series[3]	9.18	10.11	10.01	9.57	9.43	9.60	9.52	9.46	9.43	9.48
8 HUD series[4]	10.30	10.21	10.08	9.49	9.49	9.51	9.46	9.60	9.46	9.22
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series)[5]	10.49	10.24	10.17	9.57	9.61	9.61	9.62	9.71	9.59	9.14
10 GNMA securities[6]	9.83	9.71	9.51	8.66	8.78	8.62	8.65	9.04	8.93	8.69
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total	101,329	104,974	113,329	118,284	119,196	120,074	121,798	122,806	123,770	124,230
12 FHA/VA-insured	19,762	19,640	21,028	21,947	21,976	21,972	21,609	21,474	21,511	21,529
13 Conventional	81,567	85,335	92,302	96,337	97,220	98,102	100,189	101,332	102,259	102,701
Mortgage transactions (during period)										
14 Purchases	23,110	22,518	23,959	1,792	1,987	2,942	4,450	3,145	3,183	3,069
Mortgage commitments (during period)[7]										
15 Issued[8]	n.a.	n.a.	n.a.	1,779	3,087	3,880	3,506	3,032	2,975	3,453
16 To sell[9]	n.a.	n.a.	n.a.	0	109	839	1,066	841	1,374	1,051
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period)[9]										
17 Total	15,105	20,105	20,419	22,855	23,221	23,870	24,525	23,649	24,061	n.a.
18 FHA/VA-insured	620	590	547	503	499	504	491	486	481	n.a.
19 Conventional	14,485	19,516	19,871	22,352	22,722	21,188	21,843	23,164	23,581	n.a.
Mortgage transactions (during period)										
20 Purchases	44,077	78,588	75,517	5,217	4,549	7,045	8,562	10,052	8,649	n.a.
21 Sales	39,780	73,446	73,817	4,549	6,183	6,226	7,692	10,694r	8,057r	8,800
Mortgage commitments[10]										
22 Contracted (during period)	66,026	88,519	102,401	5,579	5,936	10,036	11,334	9,008	8,890	n.a.

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups; compiled by the Federal Housing Finance Board in cooperation with the Federal Deposit Insurance Corporation.
2. Includes all fees, commissions, discounts, and "points" paid (by the borrower or the seller) to obtain a loan.
3. Average effective interest rates on loans closed, assuming prepayment at the end of 10 years.
4. Average contract rates on new commitments for conventional first mortgages; from U.S. Department of Housing and Urban Development.
5. Average gross yields on thirty-year, minimum-downpayment, first mortgages, insured by the Federal Housing Administration for immediate delivery in the private secondary market. Based on transactions on first day of subsequent month. Large monthly movements in average yields may reflect market adjustments to changes in maximum permissable contract rates.
6. Average net yields to investors on fully modified pass-through securities backed by mortgages and guaranteed by the Government National Mortgage Association, assuming prepayment in twelve years on pools of thirty-year mortgages insured by the Federal Housing Administration or guaranteed by the Department of Veterans Affairs carrying the prevailing ceiling rate. Monthly figures are averages of Friday figures from the *Wall Street Journal*.
7. Includes some multifamily and nonprofit hospital loan commitments in addition to one- to four-family loan commitments accepted in FNMA's free market auction system, and through the FNMA-GNMA tandem plans.
8. Does not include standby commitments issued, but includes standby commitments converted.
9. Includes participation as well as whole loans.
10. Includes conventional and government-underwritten loans. Federal Home Loan Mortgage Corporation (FHLMC's) mortgage commitments and mortgage transactions include activity under mortgage securities swap programs, while the corresponding data for FNMA exclude swap activity.

1.54 MORTGAGE DEBT OUTSTANDING[1]

Millions of dollars, end of period

Type of holder and of property	1987	1988	1989	1990				1991
				Q1	Q2	Q3	Q4	Q1[p]
1 **All holders**	**2,986,425**	**3,270,118**	**3,556,370**	**3,696,882**	**3,760,480**	**3,815,220**	**3,856,205**	**3,883,700**
2 One- to four-family	1,962,958	2,201,231	2,429,689	2,554,496	2,619,522	2,669,613	2,708,951	2,740,122
3 Multifamily	278,899	291,405	303,416	305,838	301,789	302,993	304,004	303,543
4 Commercial	657,036	692,236	739,240	752,688	755,212	758,362	759,306	756,349
5 Farm	87,532	85,247	84,025	83,861	83,957	84,252	83,943	83,686
6 Major financial institutions	1,665,291	1,831,472	1,931,537	1,939,005	1,940,366	1,932,978	1,912,099	1,890,344
7 Commercial banks[2]	592,449	674,003	767,069	786,802	814,598	830,868	843,136	855,256
8 One- to four-family	275,613	334,367	389,632	405,009	431,115	445,218	454,851	462,975
9 Multifamily	32,756	33,912	38,876	37,913	38,420	37,898	37,116	38,021
10 Commercial	269,648	290,254	321,906	327,110	327,930	330,426	333,943	336,803
11 Farm	14,432	15,470	16,656	16,771	17,133	17,326	17,225	17,457
12 Savings institutions[3]	860,467	924,606	910,254	891,921	860,903	836,047	801,628	771,948
13 One- to four-family	602,408	671,722	669,220	658,405	642,110	626,297	600,154	584,639
14 Multifamily	106,359	110,775	106,014	103,841	97,359	94,790	91,806	85,654
15 Commercial	150,943	141,433	134,370	129,056	120,866	114,430	109,168	101,187
16 Farm	757	676	650	619	568	530	500	468
17 Life insurance companies	212,375	232,863	254,214	260,282	264,865	266,063	267,335	263,139
18 One- to four-family	13,226	11,164	12,231	12,525	12,740	12,773	12,052	11,514
19 Multifamily	22,524	24,560	26,907	27,555	28,027	28,100	29,406	28,847
20 Commercial	166,722	187,549	205,472	210,422	214,024	214,585	215,121	212,018
21 Farm	9,903	9,590	9,604	9,780	10,075	10,605	10,756	10,760
22 Finance companies[4]	29,716	37,846	45,476	45,808	47,104	49,784	48,777	49,658
23 Federal and related agencies	192,721	200,570	209,498	216,146	227,818	242,695	250,762	262,167
24 Government National Mortgage Association	444	26	23	22	21	21	21	20
25 One- to four-family	25	26	23	22	21	21	21	20
26 Multifamily	419	0	0	0	0	0	0	0
27 Farmers Home Administration[5]	43,051	42,018	41,176	41,125	41,175	41,269	41,439	41,545
28 One- to four-family	18,169	18,347	18,422	18,419	18,434	18,476	18,527	18,578
29 Multifamily	8,044	8,513	9,054	9,199	9,361	9,477	9,640	9,792
30 Commercial	6,603	5,343	4,443	4,510	4,545	4,608	4,690	4,754
31 Farm	10,235	9,815	9,257	8,997	8,835	8,708	8,582	8,421
32 Federal Housing and Veterans Administration	5,574	5,973	6,087	6,355	6,792	7,938	8,801	9,492
33 One- to four-family	2,557	2,672	2,875	3,027	3,054	3,248	3,593	3,600
34 Multifamily	3,017	3,301	3,212	3,328	3,738	4,690	5,208	5,891
35 Federal National Mortgage Association	96,649	103,013	110,721	112,353	112,855	113,718	116,628	118,210
36 One- to four-family	89,666	95,833	102,295	103,300	103,431	103,722	106,081	107,053
37 Multifamily	6,983	7,180	8,426	9,053	9,424	9,996	10,547	11,157
38 Federal Land Banks	34,131	32,115	29,640	29,325	29,595	29,441	29,416	29,253
39 One- to four-family	2,008	1,890	1,210	1,197	1,741	1,766	1,838	1,884
40 Farm	32,123	30,225	28,430	28,128	27,854	27,675	27,577	27,368
41 Federal Home Loan Mortgage Corporation	12,872	17,425	21,851	19,823	19,979	20,508	21,857	21,947
42 One- to four-family	11,430	15,077	18,248	16,772	17,316	17,810	19,185	19,460
43 Multifamily	1,442	2,348	3,603	3,051	2,663	2,697	2,672	2,487
44 Mortgage pools or trusts[6]	718,297	811,847	946,766	984,811	1,024,893	1,060,640	1,103,950	1,138,889
45 Government National Mortgage Association	317,555	340,527	368,367	376,962	385,456	394,859	403,613	412,982
46 One- to four-family	309,806	331,257	358,142	366,300	374,960	384,474	391,505	400,322
47 Multifamily	7,749	9,270	10,225	10,662	10,496	10,385	12,108	12,660
48 Federal Home Loan Mortgage Corporation	212,634	226,406	272,870	281,736	295,340	301,797	316,359	328,305
49 One- to four-family	205,977	219,988	266,060	274,084	287,232	293,721	308,369	319,978
50 Multifamily	6,657	6,418	6,810	7,652	8,108	8,077	7,990	8,327
51 Federal National Mortgage Association	139,960	178,250	228,232	246,391	263,330	281,806	299,833	312,101
52 One- to four-family	137,988	172,331	219,577	237,916	254,811	273,335	291,194	303,554
53 Multifamily	1,972	5,919	8,655	8,475	8,519	8,471	8,639	8,547
54 Farmers Home Administration[5]	245	104	80	76	72	70	66	63
55 One- to four-family	121	26	21	20	19	18	17	16
56 Multifamily	0	0	0	0	0	0	0	0
57 Commercial	63	38	26	25	24	24	24	23
58 Farm	61	40	33	31	30	29	26	24
59 Individuals and others[7]	410,116	426,229	468,569	556,920	567,403	578,908	589,395	592,301
60 One- to four-family	246,061	259,971	294,517	374,143	382,343	393,027	401,685	403,791
61 Multifamily	80,977	79,209	81,634	83,666	82,040	80,636	80,808	80,448
62 Commercial	63,057	67,618	73,023	79,576	83,557	85,865	87,624	88,875
63 Farm	20,021	19,431	19,395	19,536	19,463	19,379	19,278	19,187

1. Based on data from various institutional and governmental sources, with figures for some quarters estimated in part by the Federal Reserve. Multifamily debt refers to loans on structures of five or more units.
2. Includes loans held by nondeposit trust companies but not bank trust departments.
3. Includes savings banks and savings and loan associations. Beginning 1987:1, data reported by FSLIC-insured institutions include loans in process and other contra assets (credit balance accounts that must be subtracted from the corresponding gross asset categories to yield net asset levels).
4. Assumed to be entirely one- to four-family loans.
5. Securities guaranteed by the Farmers Home Administration sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986:4, because of accounting changes by the Farmers Home Administration.
6. Outstanding principal balances of mortgage-backed securities insured or guaranteed by the agency indicated. Includes private pools which are not shown as a separate line item.
7. Other holders include mortgage companies, real estate investment trusts, state and local credit agencies, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies.

1.55 CONSUMER INSTALLMENT CREDIT[1] Total Outstanding and Net Change

Millions of dollars, amounts outstanding, end of period

Holder and type of credit	1989	1990	1990 Nov.	1990 Dec.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June[r]	1991 July
	Seasonally adjusted										
1 **Total**	**718,863**	**735,102**	**736,411**	**735,102**	**732,962**	**732,762**	**732,442**	**733,621**	**732,289**	**730,591**	**729,753**
2 Automobile	290,676	284,585	284,412	284,585	283,746	282,626	280,689	279,746	276,494	274,496	273,616
3 Revolving	199,082	220,110	221,690	220,110	219,588	221,556	224,817	225,994	227,301	227,737	228,211
4 Mobile home	22,471	20,919	20,492	20,919	20,459	20,200	20,123	20,098	19,796	19,907	19,647
5 Other	206,633	209,487	209,817	209,487	209,170	208,379	206,813	207,782	208,697	208,451	208,278
	Not seasonally adjusted										
6 **Total**	**730,901**	**748,300**	**738,626**	**748,300**	**736,399**	**729,264**	**725,462**	**727,907**	**727,717**	**728,023**	**727,546**
By major holder											
7 Commercial banks	342,770	347,466	342,882	347,466	341,426	339,282	335,754	336,425	334,746	333,442	333,776
8 Finance companies	140,832	137,450	139,195	137,450	134,965	133,021	131,552	133,462	134,045	133,903	134,120
9 Credit unions	93,114	92,911	92,918	92,911	91,991	91,131	90,772	91,413	91,549	91,924	92,296
10 Retailers	44,154	43,552	39,095	43,552	40,945	38,864	38,497	37,817	36,782	36,702	36,392
11 Savings institutions	57,253	45,616	47,121	45,616	44,939	43,875	42,491	41,707	40,764	39,827	39,012
12 Gasoline companies	3,935	4,822	4,753	4,822	4,766	4,404	4,296	4,357	4,507	4,591	4,712
13 Pools of securitized assets[2]	48,843	76,483	72,662	76,483	77,367	78,687	82,100	82,726	85,324	87,634	87,238
By major type of credit[3]											
14 Automobile	290,705	284,813	285,379	284,813	282,214	279,913	277,798	277,508	275,582	275,018	274,273
15 Commercial banks	126,288	126,259	126,544	126,259	126,235	124,745	123,411	122,710	121,631	121,605	121,221
16 Finance companies	82,721	74,396	75,224	74,396	72,015	70,287	69,233	70,500	69,689	70,304	70,444
17 Pools of securitized assets[2]	18,235	24,537	23,475	24,537	25,123	26,872	27,755	26,875	27,085	26,039	25,609
18 Revolving	210,310	232,370	222,643	232,370	223,606	220,714	221,400	222,627	224,301	225,596	226,157
19 Commercial banks	130,811	132,433	129,117	132,433	125,814	125,673	124,619	126,009	126,047	124,106	124,641
20 Retailers	39,583	39,029	34,657	39,029	36,510	34,509	34,179	33,513	32,458	32,381	32,076
21 Gasoline companies	3,935	4,822	4,753	4,822	4,766	4,404	4,296	4,357	4,507	4,591	4,712
22 Pools of securitized assets[2]	23,477	44,335	42,297	44,335	44,773	44,451	46,722	47,116	49,667	52,897	53,094
23 Mobile home	22,240	20,666	20,472	20,666	20,614	20,362	20,030	20,052	19,721	19,875	19,671
24 Commercial banks	9,112	9,763	9,199	9,763	9,748	9,730	9,632	9,565	9,386	9,652	9,584
25 Finance companies	4,716	5,252	5,364	5,252	5,367	5,330	5,328	5,573	5,595	5,652	5,669
26 Other	207,646	210,451	210,132	210,451	209,965	208,275	206,234	207,720	208,113	207,534	207,445
27 Commercial banks	76,559	79,011	78,022	79,011	79,629	79,134	78,092	78,141	77,682	78,079	78,330
28 Finance companies	53,395	57,801	58,607	57,801	57,583	57,404	56,991	57,388	58,761	57,947	58,007
29 Retailers	4,571	4,523	4,438	4,523	4,435	4,355	4,318	4,304	4,324	4,321	4,316
30 Pools of securitized assets[2]	7,131	7,611	6,890	7,611	7,471	7,364	7,603	8,735	8,572	8,698	8,535

1. The Board's series on amounts of credit covers most short- and intermediate-term credit extended to individuals that is scheduled to be repaid (or has the option of repayment) in two or more installments.

These data also appear in the Board's G.19 (421) release. For address, see inside front cover.

2. Outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originator.

3. Totals include estimates for certain holders for which only consumer credit totals are available.

1.56 TERMS OF CONSUMER INSTALLMENT CREDIT[1]

Percent per year unless noted otherwise

Item	1988	1989	1990	1991						
				Jan.	Feb.	Mar.	Apr.	May	June	July
INTEREST RATES										
Commercial banks[2]										
1 48-month new car[3]	10.85	12.07	11.78	n.a.	11.60	n.a.	n.a.	11.28	n.a.	n.a.
2 24-month personal	14.68	15.44	15.46	n.a.	15.42	n.a.	n.a.	15.16	n.a.	n.a.
3 120-month mobile home[3]	13.54	14.11	14.02	n.a.	13.88	n.a.	n.a.	13.80	n.a.	n.a.
4 Credit card	17.78	18.02	18.17	n.a.	18.28	n.a.	n.a.	18.22	n.a.	n.a.
Auto finance companies										
5 New car	12.60	12.62	12.54	12.99	13.16	13.14	13.14	12.95	12.77	12.55
6 Used car	15.11	16.18	15.99	15.70	15.90	15.82	15.82	15.85	15.74	15.66
OTHER TERMS[4]										
Maturity (months)										
7 New car	56.2	54.2	54.6	54.9	55.2	55.2	55.4	55.5	55.5	55.5
8 Used car	46.7	46.6	46.1	47.4	47.1	47.2	47.3	47.3	47.3	47.4
Loan-to-value ratio										
9 New car	94	91	87	88	88	87	87	87	88	88
10 Used car	98	97	95	96	96	97	97	96	97	96
Amount financed (dollars)										
11 New car	11,663	12,001	12,071	12,229	12,081	12,121	11,993	12,204	12,343	12,572
12 Used car	7,824	7,954	8,289	8,600	8,605	8,763	8,751	8,873	8,916	8,989

1. These data also appear in the Board's G.19 (421) release. For address, see inside front cover.
2. Data for second month of quarter only.
3. Before 1983 the maturity for new car loans was 36 months, and for mobile home loans was 84 months.
4. At auto finance companies.

1.57 FUNDS RAISED IN U.S. CREDIT MARKETS

Billions of dollars; quarterly data are at seasonally adjusted annual rates.

Transaction category or sector	1986	1987	1988	1989	1990r	1989 Q4	1990r Q1	1990r Q2	1990r Q3	1990r Q4	1991 Q1r	1991 Q2
						Nonfinancial sectors						
1 **Total net borrowing by domestic nonfinancial sectors**	**836.9**	**687.0**	**760.8**	**678.2**	**639.3**	**620.2**	**803.4**	**596.9**	**657.7**	**499.3**	**411.4**	**462.6**
By sector and instrument												
2 U.S. government	215.0	144.9	157.5	151.6	272.5	185.0	247.3	228.2	286.1	328.4	204.7	241.8
3 Treasury securities	214.7	143.4	140.0	150.0	264.4	189.6	217.8	222.9	287.5	329.4	228.7	248.0
4 Agency issues and mortgages	.4	1.5	17.4	1.6	8.2	−4.6	29.6	5.4	−1.3	−1.0	−24.0	−6.2
5 Private	621.9	542.1	603.3	526.6	366.8	435.2	556.1	368.7	371.6	170.9	206.7	220.9
By instrument												
6 Debt capital instruments	465.8	453.2	459.2	379.8	298.2	347.0	391.0	309.3	275.5	216.8	230.5	292.7
7 Tax-exempt obligations	22.7	49.3	49.8	30.4	20.1	19.1	12.4	24.5	30.0	13.5	11.3	27.5
8 Corporate bonds	126.8	79.4	102.9	73.7	49.7	87.4	30.2	68.8	32.8	67.1	80.6	95.3
9 Mortgages	316.3	324.5	306.5	275.7	228.3	240.5	348.4	216.0	212.7	136.3	138.6	169.9
10 Home mortgages	218.7	234.9	231.0	218.0	212.6	214.3	298.7	220.0	184.7	147.1	136.8	176.6
11 Multifamily residential	33.5	24.4	16.7	16.4	6.5	9.5	22.7	−15.5	16.2	2.7	4.6	2.9
12 Commercial	73.6	71.6	60.8	42.7	9.3	19.9	26.5	13.4	9.9	−12.8	−3.0	−8.0
13 Farm	−9.5	−6.4	−2.1	−1.5	.0	−3.2	.5	−1.9	2.0	−.7	.2	−1.6
14 Other debt instruments	156.1	88.9	144.1	146.8	68.7	88.2	165.1	59.4	96.0	−45.9	−23.8	−71.9
15 Consumer credit	58.0	33.5	50.2	39.1	14.3	44.1	30.4	2.8	21.3	2.5	−23.6	−20.4
16 Bank loans n.e.c.	66.9	10.0	39.8	39.9	1.3	7.7	16.3	15.4	−2.5	−24.2	14.2	−51.6
17 Open market paper	−9.3	2.3	11.9	20.4	9.7	−6.9	69.6	−6.2	17.3	−41.7	5.1	−22.6
18 Other	40.5	43.2	42.2	47.4	43.4	43.3	48.8	47.4	60.0	17.5	−19.5	22.6
By borrowing sector												
19 State and local government	36.2	48.8	45.6	29.6	17.2	16.5	16.0	17.2	28.1	7.6	12.2	16.8
20 Household	293.0	302.2	314.9	285.0	254.0	291.8	377.2	257.5	227.3	154.0	162.6	199.7
21 Nonfinancial business	292.7	191.0	242.8	211.9	95.6	126.9	162.9	94.0	116.2	9.4	32.0	4.3
22 Farm	−16.3	−10.6	−7.5	1.6	2.6	8.9	6.2	−10.8	11.7	3.1	4.7	−1.6
23 Nonfarm noncorporate	99.2	77.9	65.7	50.8	13.7	35.0	45.5	3.5	19.6	−14.0	−18.7	−3.6
24 Corporate	209.7	123.7	184.6	159.5	79.4	83.1	111.2	101.3	84.8	20.2	46.0	9.5
25 Foreign net borrowing in United States	9.7	4.5	6.3	10.9	23.5	16.9	2.0	41.2	29.7	21.1	50.6	−53.0
26 Bonds	3.1	7.4	6.9	5.3	21.6	−1.0	32.7	25.8	1.2	26.5	8.9	22.0
27 Bank loans n.e.c.	−1.0	−3.6	−1.8	−.1	−2.9	−4.3	−6.9	−1.8	1.9	−4.7	10.3	−7.1
28 Open market paper	11.5	2.1	8.7	13.3	12.3	22.2	−16.4	23.1	27.3	15.3	45.5	−52.0
29 U.S. government loans	−3.9	−1.4	−7.5	−7.5	−7.5	.1	−7.3	−5.9	−.8	−16.0	−14.1	−15.8
30 **Total domestic plus foreign**	**846.6**	**691.5**	**767.1**	**689.1**	**662.8**	**637.1**	**805.5**	**638.1**	**687.3**	**520.4**	**462.0**	**409.7**
						Financial sectors						
31 **Total net borrowing by financial sectors**	**285.1**	**300.2**	**247.6**	**205.5**	**202.1**	**187.3**	**190.2**	**170.4**	**180.0**	**267.7**	**102.6**	**95.4**
By instrument												
32 U.S. government related	154.1	171.8	119.8	151.0	167.4	156.4	171.7	184.0	139.2	174.6	155.8	150.6
33 Sponsored credit agency securities	15.2	30.2	44.9	25.2	17.1	−4.7	9.7	17.1	22.3	19.5	14.5	−22.4
34 Mortgage pool securities	139.2	142.3	74.9	125.8	150.3	161.1	162.0	166.8	116.9	155.5	141.3	173.0
35 Loans from U.S. government	−.4	−.8	.0	.0	−.1	.0	.0	.0	.0	−.5	.0	.0
36 Private	131.0	128.4	127.8	54.5	34.7	30.9	18.5	−13.5	40.8	93.1	−53.2	−55.2
37 Corporate bonds	82.9	78.9	51.7	36.8	49.8	39.6	33.5	71.2	18.0	76.7	39.5	63.2
38 Mortgages	.1	.4	.3	.0	.3	−.4	.1	.2	.3	.5	.1	−.1
39 Bank loans n.e.c.	4.0	−3.2	1.4	1.8	.7	4.2	−2.3	−.6	2.0	3.8	1.0	−5.8
40 Open market paper	24.2	27.9	54.8	26.9	8.6	36.3	9.2	−53.4	51.0	27.6	−65.9	−59.7
41 Loans from Federal Home Loan Banks	19.8	24.4	19.7	−11.0	−24.7	−48.8	−22.0	−30.9	−30.5	−15.5	−27.9	−52.9
By borrowing sector												
42 Sponsored credit agencies	14.9	29.5	44.9	25.2	17.0	−4.7	9.7	17.1	22.3	19.0	14.5	−22.4
43 Mortgage pools	139.2	142.3	74.9	125.8	150.3	161.1	162.0	166.8	116.9	155.5	141.3	173.0
44 Private	131.0	128.4	127.8	54.5	34.7	30.9	18.5	−13.5	40.8	93.1	−53.2	−55.2
45 Commercial banks	−3.6	6.2	−3.0	−1.4	−1.1	−.7	−5.7	−13.9	−5.6	20.9	−22.0	−16.6
46 Bank affiliates	15.2	14.3	5.2	6.2	−27.7	−3.9	−8.0	−32.1	−40.4	−30.2	−18.5	−7.1
47 Savings and loan associations	20.9	19.6	19.9	−14.1	−31.2	−56.2	−15.8	−53.5	−31.9	−23.4	−29.5	−55.6
48 Mutual savings banks	4.2	8.1	1.9	−1.4	−.5	.7	−8.3	6.5	−4.2	4.0	−2.2	−1.4
49 Finance companies	54.7	40.8	67.7	46.3	57.1	52.6	28.2	27.0	97.3	75.7	−9.2	−11.7
50 Real estate investment trusts (REITs)	.8	.3	3.5	−1.9	−1.9	.1	−3.8	−2.7	−1.8	.6	−.7	−.2
51 Securitized credit obligations (SCO)	39.0	39.1	32.5	20.8	40.1	38.2	32.1	55.1	27.5	45.6	28.9	37.3

1.57—Continued

Transaction category or sector	1986	1987	1988	1989	1990[r]	1989	1990[r]				1991	
						Q4	Q1	Q2	Q3	Q4	Q1[r]	Q2
	All sectors											
54 **Total net borrowing**	**1,131.7**	**991.7**	**1,014.7**	**894.5**	**864.9**	**824.4**	**995.7**	**808.5**	**867.3**	**788.1**	**564.7**	**505.1**
55 U.S. government securities	369.5	317.5	277.2	302.6	440.0	341.4	419.0	412.2	425.4	503.4	360.5	392.4
56 State and local obligations	22.7	49.3	49.8	30.4	20.1	19.1	12.4	24.5	30.0	13.5	11.3	27.5
57 Corporate and foreign bonds	212.8	165.7	161.5	115.8	121.1	125.9	96.4	165.8	52.0	170.3	129.0	180.5
58 Mortgages	316.4	324.9	306.7	275.7	228.6	240.1	348.5	216.2	213.0	136.7	138.7	169.8
59 Consumer credit	58.0	33.5	50.2	39.1	14.3	44.1	30.4	2.8	21.3	2.5	−23.6	−20.4
60 Bank loans n.e.c.	69.9	3.2	39.4	41.5	−.9	7.5	7.1	13.0	1.4	−25.1	25.6	−64.5
61 Open market paper	26.4	32.3	75.4	60.6	30.7	51.6	62.3	−36.6	95.7	1.2	−15.2	−134.3
62 Other loans	56.1	65.5	54.4	28.9	11.1	−5.4	19.5	10.6	28.6	−14.5	−61.6	−46.0
63 MEMO: U.S. government, cash balance	.0	−7.9	10.4	−5.9	8.3	−7.3	22.9	−38.1	21.1	27.4	51.6	−64.3
Totals net of changes in U.S. government cash balances												
64 Net borrowing by domestic nonfinancial	836.9	694.9	750.4	684.1	631.0	627.6	780.5	635.0	636.6	471.9	359.8	526.9
65 Net borrowing by U.S. government	215.0	152.8	147.1	157.5	264.2	192.4	224.4	266.3	265.1	301.0	153.1	306.1
	External corporate equity funds raised in United States											
66 **Total net share issues**	**86.8**	**10.9**	**−124.2**	**−63.7**	**9.6**	**14.9**	**−9.2**	**48.0**	**−24.1**	**23.6**	**108.0**	**173.9**
67 Mutual funds	159.0	73.9	1.1	41.3	61.4	72.4	47.8	71.0	46.1	80.6	87.8	122.2
68 All other	−72.2	−63.0	−125.3	−105.1	−51.7	−57.6	−57.0	−22.9	−70.2	−56.9	20.2	51.7
69 Nonfinancial corporations	−85.0	−75.5	−129.5	−124.2	−63.0	−79.3	−69.0	−48.0	−74.0	−61.0	−12.0	11.0
70 Financial corporations	11.6	14.6	3.3	2.4	4.3	4.5	10.3	1.3	4.8	.9	3.4	4.3
71 Foreign shares purchased in United States	1.2	−2.1	.9	16.7	6.9	17.2	1.7	23.8	−1.0	3.2	28.8	36.4

1.58 DIRECT AND INDIRECT SOURCES OF FUNDS TO CREDIT MARKETS

Billions of dollars, except as noted; quarterly data are at seasonally adjusted annual rates.

Transaction category or sector	1986	1987	1988	1989	1990r	1989	1990				1991	
						Q4	Q1r	Q2r	Q3r	Q4r	Q1r	Q2
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**836.9**	**687.0**	**760.8**	**678.2**	**639.3**	**620.2**	**803.4**	**596.9**	**657.7**	**499.3**	**411.4**	**462.6**
2 **Total net advances by federal agencies and foreign sectors**	**280.2**	**248.8**	**210.7**	**187.6**	**261.7**	**203.8**	**221.8**	**299.4**	**325.6**	**200.0**	**274.7**	**251.0**
By instrument												
3 U.S. government securities	69.4	70.1	85.2	30.7	74.4	27.1	4.4	111.9	139.1	42.1	122.6	74.4
4 Residential mortgages	136.3	139.1	86.3	137.9	184.1	178.3	197.5	191.5	160.8	186.7	176.0	211.4
5 Federal Home Loan Bank advances to thrifts	19.8	24.4	19.7	-11.0	-24.7	-48.8	-22.0	-30.9	-30.5	-15.5	-27.9	-52.9
6 Other loans and securities	54.7	15.1	19.4	30.0	27.8	47.1	41.8	26.8	56.1	-13.3	4.0	18.1
By lender												
7 U.S. government	9.7	-7.9	-9.4	-2.4	33.6	5.7	37.7	36.2	63.3	-2.7	30.3	32.1
8 Sponsored credit agencies and mortgage pools	153.3	169.3	112.0	125.3	166.7	158.4	187.4	163.1	165.6	150.8	158.7	149.0
9 Monetary authority	19.4	24.7	10.5	-7.3	8.1	-4.6	-6.3	40.4	24.4	-25.9	53.3	12.2
10 Foreign	97.8	62.7	97.6	72.1	53.2	44.2	3.0	59.8	72.3	77.9	32.4	57.7
Agency and foreign borrowing not in line 1												
11 Sponsored credit agencies and mortgage pools	154.1	171.8	119.8	151.0	167.4	156.4	171.7	184.0	139.2	174.6	155.8	150.6
12 Foreign	9.7	4.5	6.3	10.9	23.5	16.9	2.0	41.2	29.7	21.1	50.6	-53.0
13 **Total private domestic funds advanced**	**720.5**	**614.5**	**676.2**	**652.5**	**568.5**	**589.7**	**755.3**	**522.7**	**501.0**	**495.0**	**343.2**	**309.2**
14 U.S. government securities	300.1	247.4	192.1	271.9	365.6	314.3	414.6	300.3	286.2	461.4	237.8	317.9
15 State and local obligations	22.7	49.3	49.8	30.4	20.1	19.1	12.4	24.5	30.0	13.5	11.3	27.5
16 Corporate and foreign bonds	89.7	66.9	91.3	66.1	65.4	70.6	53.4	82.6	31.8	93.8	66.0	94.1
17 Residential mortgages	115.9	120.2	161.3	96.5	35.0	45.5	123.8	13.0	40.0	-37.0	-34.5	-32.0
18 Other mortgages and loans	212.0	155.2	201.4	176.6	57.7	91.5	129.2	71.4	82.4	-52.2	34.6	-151.2
19 LESS: Federal Home Loan Bank advances	19.8	24.4	19.7	-11.0	-24.7	-48.8	-22.0	-30.9	-30.5	-15.5	-27.9	-52.9
20 **Total credit market funds advanced by private financial institutions**	**730.0**	**528.4**	**562.3**	**511.1**	**394.6**	**561.9**	**444.8**	**266.4**	**366.7**	**500.4**	**185.8**	**91.6**
By lending institutions												
21 Commercial banking	198.1	135.4	156.3	177.3	118.7	184.3	184.1	132.1	101.7	56.9	134.2	15.7
22 Savings institutions	107.6	136.8	120.4	-90.9	-153.4	-201.9	-56.6	-210.4	-168.6	-178.0	-154.8	-147.6
23 Insurance and pension funds	160.1	179.7	198.7	177.9	182.4	205.1	160.0	231.6	187.5	150.6	125.4	134.9
24 Other finance	264.2	76.6	86.9	246.8	246.9	374.5	157.3	113.1	246.1	470.9	80.9	88.6
By sources of funds												
25 Private domestic deposits and repurchase agreements	277.1	162.8	229.2	225.2	60.5	208.0	120.2	28.4	60.1	33.2	216.7	-74.0
26 Credit market borrowing	131.0	128.4	127.8	54.5	34.7	30.9	18.5	-13.5	40.8	93.1	-53.2	-55.2
27 Other sources	321.8	237.1	205.3	231.4	299.4	323.1	306.1	251.6	265.9	374.1	22.3	220.8
28 Foreign funds	12.9	43.7	9.3	-9.9	24.0	-20.6	39.9	7.8	103.5	-55.1	43.8	-124.7
29 Treasury balances	1.7	-5.8	7.3	-3.4	5.3	5.0	13.1	-13.4	18.2	3.4	30.1	-39.2
30 Insurance and pension reserves	119.9	135.4	177.6	140.5	159.9	193.9	137.9	211.9	144.2	145.6	60.1	118.8
31 Other, net	187.3	63.9	11.0	104.2	110.2	144.7	115.2	45.3	.0	280.2	-111.7	265.8
Private domestic nonfinancial investors												
32 Direct lending in credit markets	121.5	214.6	241.7	195.9	208.6	58.7	329.0	242.8	175.0	87.7	104.2	162.4
33 U.S. government securities	27.0	86.0	129.0	134.3	148.1	65.8	198.0	154.0	165.2	75.3	85.2	156.4
34 State and local obligations	-19.9	61.8	53.5	28.4	-1.0	12.8	-1.5	10.0	15.6	-27.9	1.8	13.2
35 Corporate and foreign bonds	52.9	23.3	-9.4	.7	17.5	14.6	38.9	19.7	-74.7	86.1	9.1	57.4
36 Open market paper	9.9	15.8	36.4	5.4	18.2	-64.6	60.6	33.8	16.8	-38.4	-7.7	-67.8
37 Other loans and mortgages	51.7	27.6	32.2	27.1	25.7	30.1	33.0	25.2	52.1	-7.4	15.9	3.3
38 Deposits and currency	297.5	179.3	232.8	241.3	90.1	230.6	137.3	64.3	95.9	62.9	236.2	-41.8
39 Currency	14.4	19.0	14.7	11.7	22.6	10.1	26.1	23.0	32.2	9.1	46.1	5.7
40 Checkable deposits	96.4	-.9	12.9	1.5	.6	65.8	1.4	-18.9	13.4	6.4	31.9	-7.3
41 Small time and savings accounts	120.6	76.0	122.4	100.5	59.4	109.1	107.7	21.5	59.6	48.9	101.0	16.7
42 Money market fund shares	43.2	28.9	20.2	85.2	61.8	65.6	72.2	4.7	110.9	59.3	128.5	-29.8
43 Large time deposits	-3.2	37.2	40.8	23.1	-46.8	-13.4	-26.4	-1.8	-97.9	-61.2	-2.3	-52.5
44 Security repurchase agreements	20.2	21.6	32.9	14.9	-14.5	-19.2	-34.7	22.8	-25.8	-20.1	-42.4	-1.1
45 Deposits in foreign countries	5.9	-2.5	-11.2	4.4	7.0	12.4	-8.9	12.8	3.6	20.6	-26.6	26.5
46 **Total of credit market instruments, deposits, and currency**	**419.0**	**393.9**	**474.5**	**437.2**	**298.7**	**289.3**	**466.3**	**307.0**	**270.9**	**150.6**	**340.4**	**120.6**
MEMO												
47 Public holdings as percent of total	33.1	36.0	27.5	27.2	39.5	32.0	27.5	46.9	47.4	38.4	59.4	61.3
48 Private financial intermediation (percent)	101.3	86.0	83.2	78.3	69.4	95.3	58.9	51.0	73.2	101.1	54.1	29.6
49 Total foreign funds	110.7	106.4	106.9	62.2	77.2	23.6	42.9	67.5	175.8	22.8	76.2	-66.9
Corporate equities not included above												
50 **Total net issues**	**86.8**	**10.9**	**-124.2**	**-63.7**	**9.6**	**14.9**	**-9.2**	**48.0**	**-24.1**	**23.6**	**108.0**	**173.9**
51 Mutual fund shares	159.0	73.9	1.1	41.3	61.4	72.4	47.8	71.0	46.1	80.6	87.8	122.2
52 Other equities	-72.2	-63.0	-125.3	-105.1	-51.7	-57.6	-57.0	-22.9	-70.2	-56.9	20.2	51.7
53 Acquisitions by financial institutions	50.9	32.0	-2.9	17.2	31.9	76.9	41.1	72.8	-48.2	61.9	44.0	73.4
54 Other net purchases	35.9	-21.2	-121.4	-80.9	-22.3	-62.1	-50.3	-24.8	24.1	-38.3	64.1	100.6

NOTES BY LINE NUMBER.
1. Line 1 of table 1.57.
2. Sum of lines 3–6 or 7–10.
6. Includes farm and commercial mortgages.
11. Credit market funds raised by federally sponsored credit agencies, and net issues of federally related mortgage pool securities.
13. Line 1 less line 2 plus line 11 and 12. Also line 20 less line 26 plus line 32. Also sum of lines 28 and 47 less lines 40 and 46.
18. Includes farm and commercial mortgages.
25. Line 38 less lines 39 and 45.
26. Excludes equity issues and investment company shares. Includes line 19.
28. Foreign deposits at commercial banks, bank borrowings from foreign branches, and liabilities of foreign banking agencies to foreign affiliates, less claims on foreign affiliates and deposits by banking institutions in foreign banks.
29. Demand deposits and note balances at commercial banks.
30. Excludes net investment of these reserves in corporate equities.
31. Mainly retained earnings and net miscellaneous liabilities.
32. Line 13 less line 20 plus line 26.
33–37. Lines 14–18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 37 includes mortgages.
39. Mainly an offset to line 9.
46. Sum of lines 32 plus 38, or line 13 less line 27 plus lines 39 and 45.
47. Line 2 divided by line 1.
48. Line 20 divided by line 13.
49. Sum of lines 10 and 28.
50, 52. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1.59 SUMMARY OF CREDIT MARKET DEBT OUTSTANDING

Billions of dollars; period-end levels.

Transaction category or sector	1986	1987	1988	1989	1989	1990[r]				1991	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2
	Nonfinancial sectors										
1 **Total credit market debt owed by domestic nonfinancial sectors**	**7,646.3**	**8,343.9**	**9,096.0**	**9,805.2**	**9,805.2**	**10,073.3**	**10,226.8**	**10,386.9**	**10,557.3**	**10,615.5**	**10,735.3**
By sector and instrument											
2 U.S. government	1,815.4	1,960.3	2,117.8	2,269.4	2,269.4	2,360.9	2,401.7	2,470.2	2,568.9	2,624.7	2,667.7
3 Treasury securities	1,811.7	1,955.2	2,095.2	2,245.2	2,245.2	2,329.3	2,368.8	2,437.6	2,536.5	2,598.4	2,642.9
4 Agency issues and mortgages	3.6	5.2	22.6	24.2	24.2	31.6	32.9	32.6	32.4	26.4	24.8
By instrument											
5 Private	5,831.0	6,383.6	6,978.2	7,535.8	7,535.8	7,712.5	7,825.1	7,916.7	7,988.4	7,990.8	8,067.7
6 Debt capital instruments	3,962.7	4,427.9	4,886.4	5,283.3	5,283.3	5,451.9	5,533.8	5,608.8	5,669.9	5,709.8	5,787.5
7 Tax-exempt obligations	679.1	728.4	790.8	821.2	821.2	822.2	827.2	837.9	841.3	842.2	847.6
8 Corporate bonds	669.4	748.8	851.7	925.4	925.4	933.0	950.2	958.4	975.1	995.3	1,019.1
9 Mortgages	2,614.2	2,950.7	3,243.8	3,536.6	3,536.6	3,696.7	3,756.4	3,812.6	3,853.4	3,872.3	3,920.9
10 Home mortgages	1,720.8	1,943.1	2,173.9	2,404.3	2,404.3	2,558.3	2,619.5	2,670.0	2,710.0	2,730.1	2,781.0
11 Multifamily residential	246.2	270.0	286.7	304.4	304.4	304.5	300.5	304.5	306.0	306.5	307.1
12 Commercial	551.4	648.7	696.4	742.6	742.6	750.0	752.5	753.8	753.5	752.0	748.9
13 Farm	95.8	88.9	86.8	85.3	85.3	83.9	84.0	84.3	84.0	83.6	83.9
14 Other debt instruments	1,868.2	1,955.7	2,091.9	2,252.6	2,252.6	2,260.6	2,291.3	2,307.9	2,318.5	2,281.0	2,280.1
15 Consumer credit	659.8	693.2	743.5	790.6	790.6	782.3	789.4	798.7	808.9	782.3	784.2
16 Bank loans n.e.c.	666.0	673.3	713.1	763.0	763.0	748.5	756.1	753.6	757.4	749.0	740.3
17 Open market paper	62.9	73.8	85.7	107.1	107.1	126.0	128.7	131.8	116.9	119.9	118.4
18 Other	479.6	515.3	549.6	591.9	591.9	603.7	617.1	623.8	635.4	629.9	637.3
By borrowing sector											
19 State and local government	510.1	558.9	604.5	634.1	634.1	633.8	636.9	647.1	649.1	650.2	652.8
20 Household	2,596.1	2,879.1	3,191.5	3,501.8	3,501.8	3,654.8	3,726.5	3,790.3	3,847.2	3,853.3	3,911.3
21 Nonfinancial business	2,724.8	2,945.6	3,182.2	3,400.0	3,400.0	3,423.9	3,461.7	3,479.4	3,492.2	3,487.3	3,503.6
22 Farm	156.6	145.5	137.6	139.2	139.2	137.3	138.7	141.6	140.5	139.3	143.0
23 Nonfarm noncorporate	997.6	1,075.4	1,145.1	1,195.9	1,195.9	1,208.3	1,208.7	1,209.0	1,209.6	1,205.9	1,204.6
24 Corporate	1,570.6	1,724.6	1,899.5	2,064.8	2,064.8	2,078.3	2,114.3	2,128.7	2,142.1	2,142.1	2,155.9
25 **Foreign credit market debt held in United States**	**238.3**	**244.6**	**253.9**	**261.5**	**261.5**	**261.7**	**273.0**	**279.4**	**284.9**	**297.2**	**285.1**
26 Bonds	74.9	82.3	89.2	94.5	94.5	103.3	108.4	108.9	116.1	118.9	123.0
27 Bank loans n.e.c.	26.9	23.3	21.5	21.4	21.4	18.9	19.3	19.8	18.5	20.4	19.5
28 Open market paper	37.4	41.2	49.9	63.0	63.0	59.3	65.1	71.5	75.3	87.0	74.0
29 U.S. government loans	99.1	97.7	93.2	82.6	82.6	80.2	80.2	79.3	75.0	70.9	68.6
30 **Total credit market debt owed by nonfinancial sectors, domestic and foreign**	**7,884.7**	**8,588.5**	**9,349.9**	**10,066.8**	**10,066.8**	**10,335.0**	**10,499.8**	**10,666.3**	**10,842.2**	**10,912.8**	**11,020.5**
	Financial sectors										
31 **Total credit market debt owed by financial sectors**	**1,529.8**	**1,836.8**	**2,084.4**	**2,322.4**	**2,322.4**	**2,359.0**	**2,405.5**	**2,448.8**	**2,527.7**	**2,540.1**	**2,567.3**
By instrument											
32 U.S. government related	810.3	978.6	1,098.4	1,249.3	1,249.3	1,288.2	1,330.1	1,367.9	1,418.4	1,452.2	1,485.1
33 Sponsored credit agency securities	273.0	303.2	348.1	373.3	373.3	378.1	381.0	384.4	393.7	397.0	389.6
34 Mortgage pool securities	531.6	670.4	745.3	871.0	871.0	905.2	944.2	978.5	1,019.9	1,050.4	1,090.7
35 Loans from U.S. government	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.9
36 Private	719.5	858.2	986.1	1,073.0	1,073.0	1,070.8	1,075.4	1,080.9	1,109.3	1,087.9	1,082.2
37 Corporate bonds	287.4	366.3	418.0	482.7	482.7	491.7	510.0	514.4	533.6	543.0	559.5
38 Mortgages	2.7	3.1	3.4	3.4	3.4	4.0	4.0	4.1	4.2	4.2	4.2
39 Bank loans n.e.c.	36.1	32.8	34.2	36.0	36.0	33.2	34.8	34.9	36.7	34.8	35.2
40 Open market paper	284.6	322.9	377.7	409.1	409.1	409.1	400.3	409.6	417.7	398.8	388.6
41 Loans from Federal Home Loan Banks	108.6	133.1	152.8	141.8	141.8	132.9	126.3	117.9	117.1	107.0	94.7
By borrowing sector											
42 Sponsored credit agencies	278.7	308.2	353.1	378.3	378.3	383.0	385.9	389.4	398.5	401.8	394.4
43 Mortgage pools	531.6	670.4	745.3	871.0	871.0	905.2	944.2	978.5	1,019.9	1,050.4	1,090.7
44 Private financial sectors	719.5	858.2	986.1	1,073.0	1,073.0	1,070.8	1,075.4	1,080.9	1,109.3	1,087.9	1,082.2
45 Commercial banks	75.6	81.8	78.8	77.4	77.4	73.2	71.6	70.7	76.3	68.1	65.9
46 Bank affiliates	116.8	131.1	136.2	142.5	142.5	142.0	134.3	122.9	114.8	111.7	110.3
47 Savings and loan associations	119.8	139.4	159.3	145.2	145.2	137.1	125.6	116.2	114.0	102.8	90.8
48 Mutual savings banks	8.6	16.7	18.6	17.2	17.2	15.4	16.7	16.2	16.7	16.4	15.8
49 Finance companies	328.1	378.8	446.1	496.2	496.2	499.2	509.7	530.9	551.8	545.9	547.0
50 Real estate investment trusts (REITs)	6.5	7.3	11.4	10.1	10.1	10.9	10.4	10.2	10.6	10.6	10.8
51 Securitized credit obligations issuers (SCO)	64.0	103.1	135.7	184.4	184.4	193.1	206.9	213.8	225.2	232.4	241.7
	All sectors										
52 **Total credit market debt**	**9,414.4**	**10,425.3**	**11,434.3**	**12,389.1**	**12,389.1**	**12,694.0**	**12,905.3**	**13,115.1**	**13,369.9**	**13,452.9**	**13,587.7**
53 U.S. government securities	2,620.0	2,933.9	3,211.1	3,513.7	3,513.7	3,644.1	3,726.9	3,833.1	3,982.5	4,072.1	4,147.9
54 State and local obligations	679.1	728.4	790.8	821.2	821.2	822.2	827.2	837.9	841.3	842.2	847.6
55 Corporate and foreign bonds	1,031.7	1,197.4	1,358.9	1,502.6	1,502.6	1,527.9	1,568.6	1,581.6	1,624.8	1,657.3	1,701.6
56 Mortgages	2,617.0	2,953.8	3,247.2	3,540.1	3,540.1	3,700.7	3,760.5	3,816.7	3,857.7	3,876.5	3,925.1
57 Consumer credit	659.8	693.2	743.5	790.6	790.6	782.3	789.4	798.7	808.9	782.3	784.2
58 Bank loans n.e.c.	729.0	729.5	768.9	820.3	820.3	800.7	810.2	808.3	812.6	804.1	794.9
59 Open market paper	384.9	437.9	513.4	579.2	579.2	594.4	594.0	612.9	609.9	605.7	581.1
60 Other loans	693.1	751.1	800.5	821.4	821.4	821.7	828.5	826.0	832.3	812.7	805.5

1.60 SUMMARY OF CREDIT MARKET CLAIMS, BY HOLDER

Billions of dollars, except as noted; period-end levels.

Transaction category, or sector	1986	1987	1988	1989	1989	1990				1991	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2
1 **Total funds advanced in credit markets to domestic nonfinancial sectors**	**7,646.3**	**8,343.9**	**9,096.0**	**9,805.2**	**9,805.2**	**10,073.3**	**10,226.8**	**10,386.9**	**10,557.3**	**10,615.5**	**10,735.3**
2 **Total held by federal agencies and foreign sector**	**1,779.4**	**2,006.6**	**2,199.7**	**2,379.3**	**2,379.3**	**2,423.3**	**2,502.6**	**2,584.1**	**2,645.8**	**2,698.2**	**2,765.3**
By instrument											
3 U.S. government securities	509.8	570.9	651.5	682.1	682.1	682.7	714.1	745.6	763.0	786.3	808.3
4 Residential mortgages	678.5	814.1	900.4	1,038.4	1,038.4	1,081.5	1,126.5	1,171.8	1,221.0	1,260.3	1,310.0
5 Federal Home Loan Bank advances to thrifts	108.6	133.1	152.8	141.8	141.8	132.9	126.3	117.9	117.1	107.0	94.7
6 Other loans and securities	482.4	488.6	495.1	517.0	517.0	526.3	535.8	548.8	544.7	544.6	552.2
By type of lender											
7 U.S. government	1,779.4	2,006.6	2,199.7	2,379.3	2,379.3	2,423.3	2,502.6	2,584.1	2,645.8	2,698.2	2,765.3
8 Sponsored credit agencies and mortgage pools	255.3	240.0	217.6	207.1	207.1	217.1	227.4	242.7	240.6	248.9	258.2
9 Monetary authority	835.9	1,001.0	1,113.0	1,238.2	1,238.2	1,274.8	1,315.0	1,360.5	1,403.4	1,434.8	1,471.0
10 Foreign	205.5	230.1	240.6	233.3	233.3	224.4	237.8	240.8	241.4	247.3	253.7
Agency and foreign debt not in line 1											
11 Sponsored credit agencies and mortgage pools	482.8	535.5	628.5	700.6	700.6	707.0	722.5	740.2	760.4	767.2	782.4
12 Foreign	810.3	978.6	1,098.4	1,249.3	1,249.3	1,288.2	1,330.1	1,367.9	1,418.4	1,452.2	1,485.1
13 **Total private domestic holdings**	**238.3**	**244.6**	**253.9**	**261.5**	**261.5**	**261.7**	**273.0**	**279.4**	**284.9**	**297.2**	**285.1**
14 U.S. government securities	6,915.6	7,560.4	8,248.5	8,936.8	8,936.8	9,199.9	9,327.3	9,450.1	9,614.8	9,666.8	9,740.3
15 State and local obligations	2,110.1	2,363.0	2,559.7	2,831.6	2,831.6	2,961.4	3,012.8	3,087.5	3,219.4	3,285.8	3,339.6
16 Corporate and foreign bonds	679.1	728.4	790.8	821.2	821.2	822.2	827.2	837.9	841.3	842.2	847.6
17 Residential mortgages	606.6	674.3	765.6	831.6	831.6	846.7	865.5	874.0	897.1	915.5	936.8
18 Other mortgages and loans	1,288.5	1,399.0	1,560.2	1,670.4	1,670.4	1,781.4	1,793.5	1,802.8	1,795.0	1,776.3	1,778.0
19 LESS: Federal Home Loan Bank advances	2,339.8	2,528.7	2,724.9	2,923.8	2,923.8	2,921.0	2,954.5	2,965.9	2,979.1	2,954.0	2,933.0
20 **Total credit market claims held by private financial institutions**	**108.6**	**133.1**	**152.8**	**141.8**	**141.8**	**132.9**	**126.3**	**117.9**	**117.1**	**107.0**	**94.7**
By holding institutions											
21 Commercial banking	6,018.0	6,564.5	7,128.6	7,662.7	7,662.7	7,852.1	7,913.4	7,987.2	8,127.7	8,173.1	8,199.4
22 Savings institutions	2,187.6	2,323.0	2,479.3	2,656.6	2,656.6	2,679.4	2,721.2	2,750.9	2,775.3	2,785.4	2,799.3
23 Insurance and pension funds	1,297.9	1,445.5	1,567.7	1,480.7	1,480.7	1,461.3	1,409.5	1,371.2	1,330.3	1,289.2	1,253.0
24 Other finance	1,525.4	1,705.1	1,903.8	2,081.6	2,081.6	2,150.3	2,194.4	2,227.6	2,264.1	2,308.1	2,335.6
By sources of funds											
25 Private domestic deposits and repurchase agreements	3,199.0	3,354.2	3,599.1	3,824.3	3,824.3	3,848.4	3,837.2	3,844.6	3,884.6	3,933.6	3,895.0
26 Credit market debt	719.5	858.2	986.1	1,073.0	1,073.0	1,070.8	1,075.4	1,080.9	1,109.3	1,087.9	1,082.2
27 Other sources	2,099.5	2,352.1	2,543.5	2,765.5	2,765.5	2,932.9	3,000.8	3,061.8	3,133.7	3,151.7	3,222.2
28 Foreign funds	18.6	62.3	71.5	61.6	61.6	61.7	63.1	86.2	85.6	85.2	54.4
29 Treasury balances	27.5	21.6	29.0	25.6	25.6	16.7	32.1	36.6	30.9	26.3	36.0
30 Insurance and pension reserves	1,398.5	1,527.8	1,692.5	1,826.0	1,826.0	1,859.8	1,903.6	1,921.1	1,950.7	1,968.6	2,003.2
31 Other, net	655.0	740.3	750.5	852.3	852.3	994.7	1,002.1	1,017.9	1,066.4	1,071.5	1,128.6
Private domestic nonfinancial investors											
32 Credit market claims	1,617.0	1,854.1	2,106.0	2,347.1	2,347.1	2,418.6	2,489.2	2,543.8	2,596.5	2,581.6	2,623.0
33 U.S. government securities	848.7	936.7	1,072.2	1,206.4	1,206.4	1,254.9	1,280.1	1,322.8	1,360.8	1,370.1	1,395.4
34 State and local obligations	212.6	274.4	340.9	369.3	369.3	362.0	367.3	371.1	368.4	361.1	366.5
35 Corporate and foreign bonds	90.5	114.0	100.4	130.5	130.5	153.4	169.2	166.8	180.6	180.3	195.1
36 Open market paper	145.1	178.5	218.0	228.7	228.7	233.9	249.6	251.0	247.0	235.3	227.5
37 Other loans and mortgages	320.1	350.4	374.4	412.1	412.1	414.4	423.0	432.1	439.7	434.8	438.5
38 Deposits and currency	3,410.1	3,583.9	3,832.3	4,073.6	4,073.6	4,094.7	4,097.4	4,108.5	4,163.6	4,209.8	4,184.2
39 Currency	186.3	205.4	220.1	231.8	231.8	234.4	242.7	247.2	254.4	262.0	265.9
40 Checkable deposits	516.6	515.4	527.2	528.7	528.7	504.3	510.1	499.7	529.2	512.2	520.8
41 Small time and savings accounts	1,948.3	2,017.1	2,156.2	2,256.7	2,256.7	2,285.6	2,286.6	2,295.8	2,313.2	2,343.0	2,342.7
42 Money market fund shares	268.9	297.8	318.0	403.3	403.3	436.7	426.3	454.5	465.0	513.3	493.2
43 Large time deposits	336.7	373.9	414.7	437.8	437.8	433.4	421.6	408.1	393.8	393.2	367.8
44 Security repurchase agreements	128.5	150.1	182.9	197.9	197.9	188.4	192.7	186.6	183.4	171.9	170.4
45 Deposits in foreign countries	24.8	24.3	13.1	17.6	17.6	11.9	17.5	16.8	24.6	14.3	23.4
46 **Total of credit market instruments, deposits, and currency**	**5,027.2**	**5,438.0**	**5,938.2**	**6,420.7**	**6,420.7**	**6,513.3**	**6,586.6**	**6,652.3**	**6,760.1**	**6,791.4**	**6,807.3**
MEMO											
47 Public holdings as percent of total	22.6	23.4	23.5	23.6	23.6	23.4	23.8	24.2	24.4	24.7	25.1
48 Private financial intermediation (percent)	87.0	86.8	86.4	85.7	85.7	85.3	84.8	84.5	84.5	84.5	84.2
49 Total foreign funds	501.3	597.8	700.1	762.3	762.3	768.7	785.6	826.4	846.0	852.4	836.8
Corporate equities not included above											
50 Total market value	3,360.6	3,325.0	3,619.8	4,378.9	4,378.9	4,166.6	4,333.1	3,765.3	3,982.7	4,562.4	4,596.2
51 Mutual fund shares	413.5	460.1	478.3	555.1	555.1	550.3	587.9	547.3	579.9	643.0	681.3
52 Other equities	2,947.1	2,864.9	3,141.6	3,823.8	3,823.8	3,616.3	3,745.2	3,218.0	3,402.8	3,919.3	3,914.9
53 Holdings by financial institutions	974.6	1,039.5	1,176.1	1,492.3	1,492.3	1,434.8	1,542.1	1,301.6	1,417.4	1,663.8	1,677.1
54 Other holdings	2,385.9	2,285.5	2,443.7	2,886.6	2,886.6	2,731.8	2,791.0	2,463.6	2,565.3	2,898.6	2,919.1

NOTES BY LINE NUMBER.
1. Line 1 of table 1.59.
2. Sum of lines 3–6 or 8–11.
6. Includes farm and commercial mortgages.
11. Credit market debt of federally sponsored agencies, and net issues of federally related mortgage pool securities.
13. Line 1 less line 2 plus line 11 and 12. Also line 20 less line 26 plus line 32. Also sum of lines 27 and 46 less lines 39 and 45.
18. Includes farm and commercial mortgages.
25. Line 38 less lines 39 and 45.
26. Excludes equity issues and investment company shares. Includes line 19.
28. Foreign deposits at commercial banks plus bank borrowings from foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
29. Demand deposits and note balances at commercial banks.
30. Excludes net investment of these reserves in corporate equities.
31. Mainly retained earnings and net miscellaneous liabilities.
32. Line 13 less line 20 plus line 26.
33–37. Lines 14–18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 37 includes mortgages.
39. Mainly an offset to line 9.
46. Sum of lines 32 plus 38, or line 13 less line 27 plus 39 and 45.
47. Line 2 divided by line 1.
48. Line 20 divided by line 13.
49. Sum of lines 10 and 28.
50–52. Includes issues by financial institutions.

NOTE. Full statements for sectors and transaction types in flows and in amounts outstanding may be obtained from Flow of Funds Section, Stop 95, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

2.10 NONFINANCIAL BUSINESS ACTIVITY Selected Measures

Monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1988	1989	1990	1990	1991							
				Dec.	Jan.	Feb.	Mar.	Apr.	May^r	June^r	July^r	Aug.
1 **Industrial production[1] (1987=100)**	**105.4**	**108.1**	**109.2**	**107.2**	**106.6**	**105.7**	**105.0**	**105.5**	**106.4**	**107.3**	**108.0**	**108.2**
Market groupings (1987=100)												
2 Products, total	105.3	108.6	110.1	108.4	107.8	106.9	106.5	106.9	107.7	108.6	108.8	108.9
3 Final, total	105.6	109.1	110.9	109.2	109.1	108.3	108.1	108.7	109.3	110.1	110.1	110.1
4 Consumer goods	104.0	106.7	107.3	105.7	105.6	104.7	104.7	105.5	106.6	107.9	107.9	108.4
5 Equipment	107.6	112.3	115.5	113.6	113.6	112.9	112.5	112.8	112.7	112.9	112.9	112.3
6 Intermediate	104.4	106.8	107.7	106.0	103.8	102.6	101.3	101.2	102.7	103.9	104.6	105.1
7 Materials	105.6	107.4	107.8	105.3	104.8	103.9	102.6	103.4	104.5	105.4	106.7	107.2
Industry groupings												
8 Manufacturing (1987=100)	105.8	108.9	109.9	107.5	107.0	106.1	105.2	105.9	106.6	107.4	108.2	108.5
Capacity utilization (percent)[2]												
9 Manufacturing	83.9	83.9	82.3	79.4	78.9	78.0	77.2	77.5	77.8	78.3	78.6	78.7
10 Construction contracts (1982 = 100)[3]	166.7	172.9	154.7^r	130.0	132.0	133.0	128.0	145.0	138.0	133.0	144.0	150.0
11 Nonagricultural employment, total[4]	128.0	131.5	133.8	132.9	132.7	132.4	132.1	131.9	132.0	132.0	131.9	132.0
12 Goods-producing, total	103.4	104.0	102.7	100.1	99.3	98.7	98.1	97.7	98.0	97.7	97.7	97.8
13 Manufacturing, total	98.3	98.7	96.8	95.2	94.8	94.1	93.7	93.4	93.6	93.4	93.5	93.7
14 Manufacturing, production worker	93.5	93.8	91.5	89.6	89.1	88.3	87.9	87.7	87.9	87.8	88.0	88.3
15 Service-producing	138.3	142.9	146.8	146.7	146.6	146.4	146.3	146.1	146.3	146.4	146.3	146.3
16 Personal income, total	253.2	272.7	289.0	295.1	293.9	294.5	295.5	295.9^r	297.9	299.4	299.1	n.a.
17 Wages and salary disbursements	244.6	258.9	272.2	277.1	275.8	275.9	276.2	276.7	279.0	281.6	280.9	n.a.
18 Manufacturing	196.5	203.1	205.0	205.4	202.5	200.9	200.2	201.3	202.9	204.6	205.2	n.a.
19 Disposable personal income[5]	252.2	270.1	286.1	291.6	290.6	291.4	292.6	293.0^r	295.3	296.9	296.8	n.a.
20 Retail sales[6]	228.2	241.7	250.9^r	249.4	246.2	251.6	252.3	251.4	254.3	254.2	255.5	253.6
Prices[7]												
21 Consumer (1982–84 = 100)	118.3	124.0	130.7	133.8	134.6	134.8	135.0	135.2	135.6	136.0	136.2	136.6
22 Producer finished goods (1982 = 100)	108.0	113.6	119.2	122.0	122.3	121.4	120.9	121.1^r	121.7	121.9	121.6	121.7

1. A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision" in the *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.
2. Ratios of indexes of production to indexes of capacity. Based on data from the Federal Reserve, DRI McGraw-Hill Economics Department, U.S. Department of Commerce, and other sources.
3. Index of dollar value of total construction contracts, including residential, nonresidential and heavy engineering, from McGraw-Hill Information Systems Company, F.W. Dodge Division.
4. Based on data in *Employment and Earnings* (U.S. Department of Labor). Series covers employees only, excluding personnel in the Armed Forces.
5. Based on data in *Survey of Current Business* (U.S. Department of Commerce).
6. Based on U.S. Bureau of Census data published in *Survey of Current Business*.
7. Data without seasonal adjustment, as published in *Monthly Labor Review*. Seasonally adjusted data for changes in the price indexes may be obtained from the Bureau of Labor Statistics, U.S. Department of Labor.

NOTE. Basic data (not index numbers) for series mentioned in notes 4, 5,and 6, and indexes for series mentioned in notes 3 and 7 may also be found in the *Survey of Current Business*.

Figures for industrial production for the latest month are preliminary and the earlier three months have been revised. See "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pp. 411–35.

2.11 LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Thousands of persons; monthly data are seasonally adjusted; exceptions noted.

Category	1988	1989	1990	1991							
				Jan.	Feb.	Mar.	Apr.	May	June	July[r]	Aug.
HOUSEHOLD SURVEY DATA											
1 **Noninstitutional population**[1]	**186,837**	**188,601**	**190,216**	**191,116**	**191,248**	**191,384**	**191,525**	**191,664**	**191,805**	**191,955**	**192,095**
2 Labor force (including Armed Forces)[1]	123,893	126,077	126,954	126,777	127,209	127,467	127,817	127,374	127,766	127,330	127,026
3 Civilian labor force	121,669	123,869	124,787	124,638	125,076	125,326	125,672	125,232	125,629	125,214	124,904
Employment											
4 Nonagricultural industries[2]	111,800	114,142	114,728	113,759	113,696	113,656	114,243	113,319	113,576	113,474	113,150
5 Agriculture	3,169	3,199	3,186	3,163	3,222	3,098	3,156	3,272	3,308	3,239	3,266
Unemployment											
6 Number	6,701	6,528	6,874	7,715	8,158	8,572	8,274	8,640	8,745	8,501	8,488
7 Rate (percent of civilian labor force)	5.5	5.3	5.5	6.2	6.5	6.8	6.6	6.9	7.0	6.8	6.8
8 Not in labor force	62,944	62,524	63,262	64,339	64,039	63,917	63,708	64,290	64,039	64,625	65,069
ESTABLISHMENT SURVEY DATA											
9 **Nonagricultural payroll employment**[3]	**105,536**	**108,413**	**110,330**	**109,418**	**109,160**	**108,902**	**108,736**	**108,887**	**108,885**[r]	**108,812**	**108,846**
10 Manufacturing	19,350	19,426	19,064	18,671	18,532	18,443	18,396	18,426	18,378[r]	18,403	18,445
11 Mining	713	700	735	713	715	714	710	706	704	700	694
12 Contract construction	5,110	5,200	5,205	4,797	4,792	4,720	4,688	4,715	4,710[r]	4,689	4,677
13 Transportation and public utilities	5,527	5,648	5,838	5,866	5,834	5,824	5,814	5,819	5,809[r]	5,805	5,817
14 Trade	25,132	25,851	26,151	25,680	25,583	25,483	25,410	25,424	25,413[r]	25,408	25,375
15 Finance	6,649	6,724	6,833	6,736	6,732	6,735	6,718	6,712	6,703[r]	6,691	6,696
16 Service	25,669	27,096	28,209	28,590	28,583	28,576	28,576	28,645	28,712[r]	28,729	28,786
17 Government	17,386	17,769	18,295	18,365	18,389	18,407	18,424	18,440	18,456[r]	18,387	18,356

1. Persons sixteen years of age and over. Monthly figures, which are based on sample data, relate to the calendar week that contains the twelfth day; annual data are averages of monthly figures. By definition, seasonality does not exist in population figures. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2. Includes self-employed, unpaid family, and domestic service workers.

3. Data include all full- and part-time employees who worked during, or received pay for, the pay period that includes the twelfth day of the month, and exclude proprietors, self-employed persons, domestic servants, unpaid family workers, and members of the Armed Forces. Data are adjusted to the March 1984 benchmark and only seasonally adjusted data are available at this time. Based on data from *Employment and Earnings* (U.S. Department of Labor).

2.12 OUTPUT, CAPACITY, AND CAPACITY UTILIZATION[1]

Seasonally adjusted

Series	1990 Q3	1990 Q4	1991 Q1	1991 Q2[r]	1990 Q3	1990 Q4	1991 Q1	1991 Q2	1990 Q3	1990 Q4	1991 Q1	1991 Q2[r]
	Output (1987 = 100)				Capacity (percent of 1987 output)				Utilization rate (percent)			
1 **Total industry**	**110.5**	**108.5**	**105.8**	**106.4**	**131.9**	**132.8**	**133.6**	**134.5**	**83.7**	**81.7**	**79.2**	**79.1**
2 Manufacturing	111.1	109.0	106.1	106.6	134.0	135.0	136.0	136.9	82.9	80.8	78.0	77.9
3 Primary processing	107.6	104.7	100.6	100.8	125.5	126.1	126.8	127.5	85.8	83.0	79.4	79.1
4 Advanced processing	112.8	111.0	108.6	109.4	138.0	139.1	140.2	141.3	81.7	79.8	77.5	77.4
5 Durable	113.6	110.0	106.1	106.7	138.0	139.0	139.9	140.9	82.3	79.1	75.8	75.7
6 Lumber and products	101.5	95.7	92.3	93.9	124.0	124.6	125.0	125.2	81.8	76.8	73.9	75.0
7 Primary metals	112.2	107.3	97.9	96.0	127.7	127.9	128.2	128.6	87.9	83.9	76.4	74.7
8 Iron and steel	114.3	110.0	96.3	92.9	132.5	132.7	133.0	133.5	86.3	82.9	72.4	69.5
9 Nonferrous	109.2	103.4	100.2	100.4	120.9	121.1	121.3	121.5	90.3	85.3	82.6	82.6
10 Nonelectrical machinery	128.5	126.4	124.4	123.5	154.7	156.3	157.9	159.5	83.1	80.8	78.8	77.4
11 Electrical machinery	112.4	109.9	108.1	110.6	140.0	141.4	142.7	144.0	80.3	77.8	75.8	76.8
12 Motor vehicles and parts	103.7	89.4	80.8	89.5	132.7	132.9	133.4	134.2	78.2	67.2	60.5	66.7
13 Aerospace and miscellaneous transportation equipment	114.5	113.3	109.9	106.4	135.2	136.1	137.0	137.9	84.7	83.3	80.2	77.2
14 Nondurable	108.1	107.8	106.1	106.6	128.9	129.9	130.9	131.9	83.8	83.0	81.0	80.8
15 Textile mill products	101.3	98.2	94.6	99.4	116.6	117.0	117.3	117.7	86.9	84.0	80.6	84.4
16 Paper and products	107.2	105.8	102.6	102.7	115.1	115.7	116.4	117.1	93.2	91.4	88.2	87.7
17 Chemicals and products	110.8	110.2	109.1	109.3	135.9	137.1	138.4	139.7	81.5	80.4	78.8	78.2
18 Plastics materials	117.2	118.1	113.2	115.6	130.6	132.9	135.7	139.2	89.7	88.9	83.4	83.0
19 Petroleum products	110.0	107.4	107.3	107.6	121.3	121.4	121.4	121.4	90.7	88.5	88.4	88.6
20 Mining	103.4	103.1	102.0	101.1	114.5	114.0	113.8	114.3	90.3	90.4	89.6	88.4
21 Utilities	110.5	108.3	106.2	109.6	127.1	127.6	128.1	128.4	86.9	84.8	82.9	85.3
22 Electric	112.9	111.2	109.3	114.6	122.6	123.2	123.8	124.3	92.1	90.2	88.3	92.2

Series	Previous cycle High	Previous cycle Low	Latest cycle High	Latest cycle Low	1990 Aug.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May[r]	1991 June[r]	1991 July[r]	1991 Aug.[p]
	Capacity utilization rate (percent)												
23 **Total industry**	**89.2**	**72.6**	**87.3**	**71.8**	**83.7**	**80.0**	**79.1**	**78.4**	**78.6**	**79.1**	**79.6**	**79.9**	**80.0**
24 Manufacturing	88.9	70.8	87.3	70.0	82.9	78.9	78.0	77.2	77.5	77.8	78.3	78.6	78.7
25 Primary processing	92.2	68.9	89.7	66.8	86.1	80.6	79.5	77.9	78.2	79.0	79.9	80.9	81.2
26 Advanced processing	87.5	72.0	86.3	71.4	81.6	78.2	77.4	76.8	77.3	77.3	77.6	77.7	77.6
27 Durable	88.8	68.5	86.9	65.0	82.3	76.8	75.8	74.9	75.4	75.7	76.0	76.4	76.3
28 Lumber and products	90.1	62.2	87.6	60.9	81.0	75.4	73.2	72.9	74.1	73.9	77.1	77.0	76.5
29 Primary metals	100.6	66.2	102.4	46.8	89.8	77.8	77.6	73.8	73.6	75.3	75.1	77.8	78.6
30 Iron and steel	105.8	66.6	110.4	38.3	89.3	74.5	73.7	69.1	68.7	70.4	69.5	74.4	74.8
31 Nonferrous	92.9	61.3	90.5	62.2	90.5	83.0	83.7	81.1	81.1	83.1	83.6	83.1	84.5
32 Nonelectrical machinery	96.4	74.5	92.1	64.9	83.2	79.8	78.8	77.7	77.7	77.4	77.1	77.1	77.4
33 Electrical machinery	87.8	63.8	89.4	71.1	80.4	75.7	75.8	75.9	76.4	76.8	77.2	76.8	77.0
34 Motor vehicles and parts	93.4	51.1	93.0	44.5	76.1	62.3	59.5	59.7	64.3	66.9	68.9	71.8	68.1
35 Aerospace and miscellaneous transportation equipment	77.0	66.6	81.1	66.9	84.4	81.1	80.3	79.3	78.0	76.7	76.8	76.1	76.0
36 Nondurable	87.9	71.8	87.0	76.9	83.8	81.8	81.0	80.3	80.5	80.7	81.3	81.6	81.9
37 Textile mill products	92.0	60.4	91.7	73.8	86.1	80.2	80.4	81.3	82.7	84.3	86.3	88.3	89.1
38 Paper and products	96.9	69.0	94.2	82.0	92.5	89.8	87.9	86.8	86.7	86.5	89.7	91.7	91.7
39 Chemicals and products	87.9	69.9	85.1	70.1	81.8	79.8	78.8	77.9	78.3	78.2	78.2	78.1	78.5
40 Plastics materials	102.0	50.6	90.9	63.4	89.7	86.2	85.0	79.0	80.5	84.5	84.1	......	......
41 Petroleum products	96.7	81.1	89.5	68.2	90.8	86.2	89.6	89.4	87.1	88.6	90.2	89.2	90.0
42 Mining	94.4	88.4	96.6	80.6	89.4	89.5	90.4	89.0	88.3	87.6	89.2	90.0	89.0
43 Utilities	95.6	82.5	88.3	76.2	87.6	84.1	81.6	83.0	82.6	86.7	86.7	85.8	86.4
44 Electric	99.0	82.7	88.3	78.7	92.7	89.3	87.0	88.6	88.5	93.7	94.5	93.3	94.1

1. These data also appear in the Board's G.17 (419) release. For address, see inside front cover. For a detailed description of the series, see "Recent Developments in Industrial Capacity and Utilization," *Federal Reserve Bulletin*, vol. 76 (June 1990), pages 411–35.

2. Monthly high 1973; monthly low 1975.

3. Monthly highs 1978 through 1980; monthly lows 1982.

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value[1]

Monthly data are seasonally adjusted

Groups	1987 proportion	1990 avg.	1990 Aug.	1990 Sept.	1990 Oct.	1990 Nov.	1990 Dec.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May[r]	1991 June[r]	1991 July[r]	1991 Aug.[p]
			Index (1987 = 100)												
MAJOR MARKET															
1 **Total index**	**100.0**	**109.2**	**110.5**	**110.6**	**109.9**	**108.3**	**107.2**	**106.6**	**105.7**	**105.0**	**105.5**	**106.4**	**107.3**	**108.0**	**108.2**
2 Products	60.8	110.1	110.9	111.4	111.0	109.3	108.4	107.8	106.9	106.5	106.9	107.7	108.6	108.8	108.9
3 Final products	46.0	110.9	111.9	112.6	112.3	110.2	109.2	109.1	108.3	108.1	108.7	109.3	110.1	110.1	110.1
4 Consumer goods, total	26.0	107.3	107.8	108.7	108.6	106.5	105.7	105.6	104.7	104.7	105.5	106.6	107.9	107.9	108.4
5 Durable consumer goods	5.6	106.2	107.4	110.4	106.9	99.4	96.0	97.6	95.2	95.9	99.3	101.1	104.2	106.2	105.2
6 Automotive products	2.5	102.3	104.6	111.8	107.1	93.5	86.7	90.6	88.1	88.9	94.2	97.4	100.5	103.4	99.7
7 Autos and trucks	1.5	97.4	101.5	113.0	107.5	84.2	74.6	79.6	74.7	76.7	85.0	89.2	92.5	98.1	90.2
8 Autos, consumer	.9	92.2	97.2	111.5	104.6	80.7	77.2	83.2	78.6	76.3	78.3	81.9	83.8	92.8	83.0
9 Trucks, consumer	.6	106.1	108.8	115.4	112.2	90.2	70.2	73.6	68.1	77.4	96.3	101.6	107.1	106.9	102.2
10 Auto parts and allied goods	1.0	109.6	109.3	110.0	106.4	107.3	104.8	107.1	108.3	107.3	108.0	109.5	112.6	111.4	113.9
11 Other	3.1	109.4	109.6	109.3	106.8	104.1	103.4	103.2	100.7	101.4	103.4	104.1	107.1	108.4	109.6
12 Appliances, A/C, and TV	.8	102.0	101.9	101.0	94.6	90.8	89.9	92.8	94.5	96.2	97.3	96.8	104.8	100.6	104.1
13 Carpeting and furniture	.9	104.9	104.9	106.0	103.8	99.2	100.9	100.3	92.0	93.9	97.0	96.9	98.8	102.4	102.0
14 Miscellaneous home goods	1.4	116.4	116.8	116.1	115.5	114.6	112.5	110.8	109.8	109.2	110.8	112.8	113.6	116.6	117.6
15 Nondurable consumer goods	20.4	107.6	107.9	108.2	109.1	108.5	108.4	107.8	107.3	107.1	107.2	108.1	109.0	108.4	109.3
16 Foods and tobacco	9.1	105.9	105.7	105.3	106.7	107.8	107.5	106.3	105.9	105.4	105.3	106.2	106.8	106.2	106.8
17 Clothing	2.6	95.7	94.6	95.3	94.2	91.7	92.1	90.6	90.8	90.4	90.6	92.0	93.9	94.9	95.8
18 Chemical products	3.5	113.3	114.3	115.1	115.9	113.5	113.5	114.7	114.8	114.2	115.0	113.9	114.5	114.3	115.6
19 Paper products	2.5	119.7	119.3	121.9	123.4	122.8	122.7	122.1	121.0	122.2	122.7	121.8	122.7	121.6	123.0
20 Energy	2.7	105.9	109.0	108.0	108.8	106.4	106.6	106.5	105.2	105.5	104.4	109.0	110.4	108.5	109.5
21 Fuels	.7	102.9	106.0	105.6	104.0	101.1	98.1	99.8	103.4	104.3	101.4	103.6	104.9	103.4	104.6
22 Residential utilities	2.0	107.0	110.0	108.9	110.6	108.4	109.7	109.0	105.9	105.9	105.5	111.0	112.4	110.3	111.4
23 Equipment, total	20.0	115.5	117.2	117.8	117.0	115.1	113.6	113.6	112.9	112.5	112.8	112.7	112.9	112.9	112.3
24 Business equipment	13.9	123.1	125.4	126.4	125.4	122.9	121.2	121.6	120.6	120.3	121.3	121.7	122.1	122.7	122.3
25 Information processing and related	5.6	127.2	128.5	129.5	130.1	128.8	127.5	130.1	131.6	131.2	131.5	131.8	130.9	131.2	131.4
26 Office and computing	1.9	149.8	152.2	153.6	155.3	149.8	148.9	155.0	157.3	155.1	155.6	155.6	154.0	156.0	155.0
27 Industrial	4.0	115.3	117.9	117.4	115.4	115.3	112.3	111.5	109.1	109.5	109.3	109.3	109.1	109.2	109.6
28 Transit	2.5	129.9	135.4	140.5	137.5	126.3	123.4	124.0	120.3	120.4	124.1	125.9	128.0	131.3	126.6
29 Autos and trucks	1.2	96.8	101.5	111.0	106.5	83.9	75.3	79.8	75.0	76.7	84.4	87.9	90.8	96.6	86.2
30 Other	1.9	118.5	119.8	118.5	117.0	117.6	118.5	115.0	112.5	110.8	112.7	113.0	115.9	115.0	117.0
31 *Defense and space equipment*	5.4	97.3	97.7	97.3	97.3	96.2	95.8	94.4	94.5	93.9	92.5	91.5	91.0	89.9	89.8
32 Oil and gas well drilling	.6	109.0	106.9	107.4	107.1	109.7	107.3	106.4	108.2	107.7	105.1	101.3	103.0	97.8	86.7
33 Manufactured homes	.2	90.8	93.4	91.8	89.0	87.3	83.4	83.1	77.3	79.3	83.1	86.6	90.8	86.5	86.0
34 *Intermediate products, total*	14.7	107.7	107.9	107.4	107.0	106.2	106.0	103.8	102.6	101.3	101.2	102.7	103.9	104.6	105.1
35 Construction supplies	6.0	105.2	105.3	103.8	103.1	101.8	101.0	97.7	96.4	94.0	94.9	95.8	97.4	97.9	98.4
36 Business supplies	8.7	109.4	109.7	109.9	109.7	109.2	109.4	108.1	106.8	106.4	105.6	107.5	108.3	109.3	109.7
37 Materials, total	39.2	107.8	109.7	109.4	108.3	106.8	105.3	104.8	103.9	102.6	103.4	104.5	105.4	106.7	107.2
38 Durable goods materials	19.4	111.8	114.9	114.1	112.5	110.4	107.5	106.8	105.5	103.3	104.9	106.2	106.7	108.1	109.1
39 Durable consumer parts	4.2	104.0	110.4	109.0	106.0	98.5	91.1	94.2	90.4	87.5	92.1	95.5	97.2	100.1	101.2
40 Equipment parts	7.3	118.1	119.4	119.8	118.6	117.4	116.9	115.9	116.2	114.8	114.6	114.8	113.6	113.7	114.1
41 Other	7.9	110.2	113.1	111.6	110.4	110.2	107.4	105.2	103.8	101.0	102.6	103.8	105.3	107.1	108.6
42 Basic metal materials	2.8	111.9	116.3	115.8	112.0	112.7	109.6	104.6	104.8	101.2	101.6	103.0	105.3	107.6	109.2
43 Nondurable goods materials	9.0	106.0	106.8	106.9	106.5	105.6	104.9	104.9	103.6	102.8	103.1	103.7	104.9	106.4	106.6
44 Textile materials	1.2	96.7	97.8	98.1	97.9	95.1	91.4	89.1	91.5	92.7	94.7	96.8	97.9	99.9	101.2
45 Pulp and paper materials	1.9	106.4	106.9	109.4	108.6	107.2	108.5	106.0	104.1	102.4	102.0	101.5	106.9	110.3	110.1
46 Chemical materials	3.8	106.8	108.0	106.6	105.6	105.8	105.7	106.7	104.1	102.7	102.9	103.9	103.9	104.3	104.6
47 Other	2.1	109.5	109.3	110.1	110.8	109.4	107.6	109.3	108.8	108.8	109.0	109.2	108.6	110.2	110.0
48 Energy materials	10.9	102.1	103.0	103.0	102.3	101.6	102.0	101.1	101.1	101.3	101.1	102.4	103.5	104.5	104.5
49 Primary energy	7.2	101.3	102.1	101.0	100.7	101.4	101.9	101.3	102.1	101.5	100.5	101.2	104.8	106.1	105.4
50 Converted fuel materials	3.7	103.5	104.9	107.0	105.3	102.0	102.1	100.9	99.2	100.8	102.4	104.7	101.1	101.4	102.6
SPECIAL AGGREGATES															
51 Total excluding autos and trucks	97.3	109.5	110.7	110.6	110.0	109.0	108.1	107.4	106.6	105.7	106.1	106.9	107.8	108.3	108.8
52 Total excluding motor vehicles and parts	95.3	109.8	110.9	110.7	110.2	109.4	108.6	107.8	107.0	106.2	106.5	107.3	108.1	108.5	109.0
53 Total excluding office and computing machines	97.5	108.2	109.4	109.5	108.8	107.3	106.1	105.4	104.4	103.7	104.2	105.2	106.2	106.7	107.1
54 Consumer goods excluding autos and trucks	24.5	107.9	108.2	108.4	108.7	107.9	107.6	107.2	106.5	106.4	106.7	107.6	108.9	108.5	109.5
55 Consumer goods excluding energy	23.3	107.5	107.7	108.7	108.6	106.5	105.6	105.5	104.7	104.6	105.6	106.3	107.7	107.9	108.3
56 Business equipment excluding autos and trucks	12.7	125.6	127.8	128.0	127.2	126.8	125.6	125.7	125.0	124.5	124.9	125.0	125.1	125.2	125.8
57 Business equipment excluding office and computing equipment	12.0	118.7	121.1	122.0	120.6	118.6	116.7	116.2	114.6	114.6	115.7	116.3	116.9	117.3	117.0
58 Materials excluding energy	28.4	110.0	112.3	111.8	110.6	108.9	106.6	106.2	104.9	103.1	104.3	105.4	106.1	107.5	108.3

2.13—Continued

Groups	SIC code	1987 proportion	1990 avg.	1990 Aug.	1990 Sept.	1990 Oct.	1990 Nov.	1990 Dec.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May[r]	1991 June[r]	1991 July[r]	1991 Aug.[p]
				Index (1987 = 100)												
MAJOR INDUSTRY																
1 **Total index**	....	**100.0**	**109.2**	**110.5**	**110.6**	**109.9**	**108.3**	**107.2**	**106.6**	**105.7**	**105.0**	**105.5**	**106.4**	**107.3**	**108.0**	**108.2**
2 Manufacturing	....	84.4	109.9	111.1	111.2	110.7	108.9	107.5	107.0	106.1	105.2	105.9	106.6	107.4	108.2	108.5
3 Primary processing	....	26.7	106.3	108.0	106.9	106.2	104.9	102.9	102.0	100.8	99.0	99.6	100.7	102.1	103.4	104.1
4 Advanced processing	....	57.7	111.6	112.5	113.2	112.8	110.8	109.5	109.3	108.5	108.0	108.9	109.3	109.9	110.4	110.6
5 Durable	....	47.3	111.6	113.5	113.8	112.5	109.9	107.5	107.2	106.1	105.0	106.0	106.7	107.4	108.2	108.3
6 Lumber and products	24	2.0	101.6	100.5	100.3	98.2	95.5	93.5	94.2	91.5	91.2	92.7	92.5	96.6	96.6	95.9
7 Furniture and fixtures	25	1.4	105.9	106.7	106.9	104.4	102.3	102.0	99.0	94.9	95.4	98.3	98.5	100.2	101.0	101.5
8 Clay, glass, and stone products	32	2.5	105.7	106.6	104.5	104.4	103.8	100.7	97.2	98.9	94.4	94.2	95.1	95.1	96.1	96.5
9 Primary metals	33	3.3	108.4	114.6	111.6	108.6	109.1	104.2	99.7	99.5	94.7	94.5	96.9	96.6	100.3	101.4
10 Iron and steel	331,2	1.9	109.9	118.3	113.9	110.3	112.6	107.3	99.0	98.0	92.0	91.6	94.0	93.0	99.7	100.3
11 Raw steel	....	.1	109.6	118.5	111.6	112.8	109.5	100.6	104.7	97.9	89.8	91.0	88.9	94.0	102.6	100.7
12 Nonferrous	333–6,9	1.4	106.2	109.4	108.4	106.2	104.1	99.8	100.6	101.6	98.4	98.5	101.0	101.7	101.1	102.9
13 Fabricated metal products	34	5.4	105.9	107.9	106.8	106.4	104.3	101.9	101.7	99.1	97.8	98.0	99.1	99.8	100.6	101.8
14 Nonelectrical machinery	35	8.6	126.5	128.8	128.5	128.1	126.3	124.7	125.5	124.5	123.1	123.5	123.6	123.5	123.9	124.8
15 Office and computing machines	357	2.5	149.8	152.2	153.6	155.3	149.8	148.9	155.0	157.3	155.1	155.6	155.6	154.0	156.0	155.0
16 Electrical machinery	36	8.6	111.4	112.5	112.5	110.8	110.4	108.7	107.6	108.2	108.6	109.7	110.6	111.5	111.3	111.9
17 Transportation equipment	37	9.8	105.5	107.9	111.1	109.2	100.1	96.6	97.6	95.5	95.0	97.2	98.2	99.7	101.2	99.0
18 Motor vehicles and parts	371	4.7	96.8	101.0	107.5	103.8	85.8	78.5	83.0	79.4	79.8	86.2	89.8	92.5	96.6	91.8
19 Autos and light trucks	....	2.3	96.6	100.9	112.8	107.1	83.7	74.9	80.1	75.3	76.6	84.0	88.2	91.2	97.3	89.1
20 Aerospace and miscellaneous transportation equipment	372–6,9	5.1	113.3	114.1	114.2	114.0	113.1	112.9	110.8	110.0	108.8	107.2	105.8	106.1	105.3	105.4
21 Instruments	38	3.3	116.8	117.5	118.4	118.1	118.1	117.3	119.0	119.3	118.4	118.6	118.2	117.3	116.7	117.4
22 Miscellaneous manufacturers	39	1.2	120.0	121.8	121.3	121.5	122.5	119.1	116.1	114.6	115.3	117.5	118.7	119.4	122.9	123.5
23 Nondurable	....	37.2	107.8	108.1	108.0	108.4	107.7	107.4	106.8	106.0	105.4	105.9	106.5	107.5	108.2	108.9
24 Foods	20	8.8	107.6	107.7	107.6	108.8	109.6	109.1	108.3	107.6	107.4	107.6	107.8	108.5	107.8	108.3
25 Tobacco products	21	1.0	98.6	96.3	96.4	97.8	99.0	101.1	100.0	100.1	98.2	97.6	98.7	99.6	100.6	102.0
26 Textile mill products	22	1.8	100.8	100.4	100.7	101.2	97.4	96.1	94.0	94.3	95.4	97.2	99.2	101.6	104.1	105.2
27 Apparel products	23	2.4	98.8	98.8	98.4	97.2	95.5	94.9	92.9	93.1	92.5	93.2	95.2	96.2	97.9	99.0
28 Paper and products	26	3.6	105.3	106.5	107.5	106.8	105.1	105.4	104.2	102.2	101.3	101.3	101.3	105.3	107.9	108.1
29 Printing and publishing	27	6.4	111.9	110.9	111.6	112.9	112.4	112.8	112.1	110.9	110.4	110.7	110.6	110.7	112.0	112.1
30 Chemicals and products	28	8.6	110.3	111.1	110.9	110.7	110.0	109.9	110.1	109.1	108.2	109.0	109.2	109.7	109.8	110.7
31 Petroleum products	29	1.3	108.2	110.2	109.3	108.6	107.8	105.6	104.7	108.8	108.5	105.7	107.5	109.6	108.3	109.2
32 Rubber and plastic products	30	3.0	110.2	112.0	110.3	110.6	109.6	106.9	108.8	106.1	104.4	106.6	109.2	110.5	112.0	113.2
33 Leather and products	31	.3	100.0	99.6	100.3	95.3	89.9	92.6	89.6	90.8	91.5	90.0	89.5	90.9	92.3	91.8
34 Mining	....	7.9	102.6	102.4	103.9	102.6	103.3	103.4	101.7	102.9	101.5	100.9	100.2	102.1	103.1	102.0
35 Metal	10	.3	153.1	155.7	163.6	146.8	153.4	162.0	143.1	148.0	147.6	145.7	148.0	154.2	149.2	155.5
36 Coal	11,12	1.2	113.2	110.2	116.8	114.7	112.9	110.6	108.4	112.8	109.9	105.9	103.4	110.2	116.0	112.7
37 Oil and gas extraction	13	5.7	95.5	95.8	95.8	95.8	97.3	96.7	96.0	97.2	96.4	96.6	96.0	96.9	97.2	96.0
38 Stone and earth minerals	14	.7	119.5	120.1	121.7	118.0	113.5	118.9	119.2	112.0	108.0	107.0	107.5	107.6	108.1	108.6
39 Utilities	....	7.6	108.0	111.4	110.3	109.2	106.9	108.8	107.6	104.6	106.4	105.9	111.4	111.5	110.4	111.4
40 Electric	491,3PT	6.0	110.8	113.6	112.9	112.1	109.6	111.8	110.4	107.8	109.8	109.8	116.4	117.5	116.2	117.3
41 Gas	492,3PT	1.6	97.3	103.3	100.9	98.1	97.0	97.6	97.5	92.8	93.6	91.6	92.8	89.2	89.1	89.3
SPECIAL AGGREGATES																
42 Manufacturing excluding motor vehicles and parts	....	79.8	110.7	111.7	111.4	111.1	110.3	109.1	108.4	107.6	106.7	107.1	107.6	108.3	108.9	109.5
43 Manufacturing excluding office and computing machines	....	82.0	108.7	109.9	110.0	109.4	107.7	106.2	105.6	104.5	103.7	104.4	105.1	106.0	106.7	107.1
		Gross value (billions of 1982 dollars, annual rates)														
MAJOR MARKET																
44 **Products, total**	....	**1734.8**	**1,911.4**	**1,929.5**	**1,941.6**	**1,939.6**	**1,882.8**	**1,859.4**	**1,860.4**	**1,848.4**	**1,845.4**	**1,853.3**	**1,875.7**	**1,895.6**	**1,899.4**	**1,899.7**
45 Final	....	1350.9	1,497.7	1,516.3	1,529.1	1,523.7	1,470.8	1,450.8	1,459.6	1,452.8	1,455.6	1,464.6	1,478.1	1,492.9	1,495.8	1,493.7
46 Consumer goods	....	833.4	882.9	885.9	895.2	892.7	865.2	857.6	857.9	852.7	857.4	862.9	874.4	884.5	884.7	885.5
47 Equipment	....	517.5	614.8	630.4	633.9	631.0	605.6	593.2	601.7	600.1	598.2	601.7	603.7	608.3	611.0	608.2
48 Intermediate	....	384.0	413.7	413.1	412.5	415.9	412.0	408.7	400.8	395.6	389.8	388.7	397.6	402.7	403.6	406.1

1. These data also appear in the Board's G.17 (419) release. For requests see address inside front cover.

A major revision of the industrial production index and the capacity utilization rates was released in April 1990. See "Industrial Production: 1989 Developments and Historical Revision," *Federal Reserve Bulletin*, vol. 76 (April 1990), pp. 187–204.

2.14 HOUSING AND CONSTRUCTION

Monthly figures are at seasonally adjusted annual rates, except as noted.

Item	1988	1989	1990	1990 Oct.	1990 Nov.	1990 Dec.	1991 Jan.	1991 Feb.	1991 Mar.	1991 Apr.	1991 May	1991 June	1991 July
	Private residential real estate activity (thousands of units)												
New Units													
1 Permits authorized	1,456	1,339	1,111	925	916	854	802	876	892	913	966	999	1,005
2 One-family	994	932	794	703	668	645	611	695	689	742	760	780	794
3 Two-or-more-family	462	407	317	222	248	209	191	181	203	171	206	219	211
4 Started	1,488	1,376	1,193	1,026	1,130	971	847	992	907	977	983	1,034	1,059
5 One-family	1,081	1,003	895	839	769	751	648	788	742	801	831	869	887
6 Two-or-more-family	407	373	298	187	361	220	199	204	165	176	152	165	172
7 Under construction, end of period[1]	919	850	711	766	756	744	717	709	680	674	665	655	655
8 One-family	570	535	449	497	486	478	461	457	442	443	443	446	454
9 Two-or-more-family	350	315	262	269	270	266	256	252	238	231	222	209	201
10 Completed	1,530	1,423	1,308	1,275	1,246	1,155	1,125	1,096	1,190	1,089	1,070	1,098	1,049
11 One-family	1,085	1,026	966	930	922	878	841	838	881	821	800	808	791
12 Two-or-more-family	445	396	342	345	324	277	284	258	309	268	270	290	258
13 Mobile homes shipped	218	198	188	186	181	167	168	157	157	175	174	173	175
Merchant builder activity in one-family units													
14 Number sold	675	650	535	465	480	464	414	488	495	506[r]	496	516	472
15 Number for sale, end of period[1]	368	363	318	334	327	318	315	313	308	303[r]	300	296	296
Price of units sold (thousands of dollars)[2]													
16 Median	113.3	120.4	122.3	120.0	118.9	127.0	117.9	119.9	122.5	121.0[r]	118.0	120.1	120.2
17 Average	139.0	148.3	149.0	153.0	143.3	153.4	148.6	147.8	156.4	150.8[r]	147.4	147.0	151.0
Existing Units (one-family)													
18 Number sold	3,594	3,439	3,316	3,070	3,150	3,130	2,900	3,160	3,220	3,310	3,540	3,590	3,320
Price of units sold (thousands of dollars)[2]													
19 Median	89.2	92.9	95.2	92.9	92.0	91.7	95.6	94.0	98.2	100.3	101.1	102.0	103.0
20 Average	112.5	118.0	118.3	115.9	115.6	114.1	123.0	119.7	125.2	128.9	130.6	130.5	132.2
	Value of new construction[3] (millions of dollars)												
Construction													
21 Total put in place	**432,222**	**443,720**	**446,433**	**434,559**	**431,407**	**421,346**	**406,502**	**410,072**	**401,883**	**405,905**	**399,024**	**398,673**	**404,947**
22 Private	337,440	345,416	337,776	324,054	317,190	311,349	303,932	300,495	293,262	298,019	291,027	290,832	295,015
23 Residential	198,101	196,551	182,856	172,120	168,031	165,014	161,793	155,622	152,447	151,236	154,737	158,369	161,920
24 Nonresidential, total	139,339	148,865	154,920	151,934	149,159	146,335	142,139	144,873	140,815	146,783	136,290	132,463	133,095
Buildings													
25 Industrial	16,451	20,412	23,849	22,847	22,481	22,999	22,433	23,249	23,089	24,402	20,663	21,068	22,089
26 Commercial	64,025	65,496	62,866	60,208	57,764	56,913	53,848	54,023	51,766	54,707	50,402	47,507	47,365
27 Other	19,038	19,683	21,591	22,300	22,121	20,953	20,621	20,850	20,628	21,885	20,854	20,504	20,718
28 Public utilities and other	39,825	43,274	46,614	46,579	46,793	45,470	45,237	46,751	45,332	45,789	44,371	43,384	42,923
29 Public	94,783	98,303	108,655	110,505	114,218	109,997	102,570	109,577	108,621	107,886	107,997	107,841	109,931
30 Military	3,579	3,520	2,734	1,958	2,960	1,868	1,868	1,723	1,866	1,828	1,918	1,864	1,766
31 Highway	29,227	28,171	30,595	31,639	34,304	33,185	25,560	30,699	29,996	28,626	29,113	28,519	27,504
32 Conservation and development	4,739	4,989	4,718	4,700	4,901	5,374	6,434	5,529	4,586	5,825	5,204	6,161	8,164
33 Other	57,238	61,623	70,608	72,208	72,053	69,570	68,708	71,626	72,173	71,607	71,762	71,297	72,497

1. Not at annual rates.
2. Not seasonally adjusted.
3. Value of new construction data in recent periods may not be strictly comparable with data in previous periods because of changes by the Bureau of the Census in its estimating techniques. For a description of these changes see *Construction Reports* (C-30-76-5), issued by the Bureau in July 1976.

Source. Census Bureau estimates for all series except (1) mobile homes, which are private, domestic shipments as reported by the Manufactured Housing Institute and seasonally adjusted by the Census Bureau, and (2) sales and prices of existing units, which are published by the National Association of Realtors. All back and current figures are available from the originating agency. Permit authorizations are those reported to the Census Bureau from 16,000 jurisdictions from 1978 to 1983, and 17,000 jurisdictions beginning in 1984.

2.15 CONSUMER AND PRODUCER PRICES

Percentage changes based on seasonally adjusted data, except as noted

Item	Change from 12 months earlier		Change from 3 months earlier (at annual rate)				Change from 1 month earlier					Index level Aug. 1991
	1990 Aug.	1991 Aug.	1990		1991		1991					
			Sept.	Dec.	Mar.	June	Apr.	May	June	July	Aug.	
CONSUMER PRICES[2] (1982–84=100)												
1 **All items**	**5.6**	**3.8**	**8.2**	**4.9**	**2.4**	**3.0**	**.2**	**.3**	**.2**	**.2**	**.2**	**136.6**
2 **Food**	5.6	2.3	4.6	3.9	2.4	5.1	.7	.0	.5	−.6	−.3	136.0
3 Energy items	6.8	−.7	44.2	18.0	−30.7	−1.2	−.7	1.4	−1.0	−.4	−.2	102.9
4 All items less food and energy	5.5	4.6	6.0	3.8	6.8	3.2	.2	.2	.4	.4	.4	142.7
5 Commodities	3.7	4.5	3.3	2.3	7.9	3.2	.2	.3	.2	.4	.5	128.7
6 Services	6.4	4.7	7.2	4.8	6.4	3.0	.1	.2	.4	.3	.3	150.7
PRODUCER PRICES (1982=100)												
7 Finished goods	5.2	2.0	11.3	5.1	−3.5	.7	.1^{r}	.4^{r}	−.3	−.2	.2	121.7
8 Consumer foods	5.2	−1.2	2.3	1.3	1.0	−.3	.3	.2	−.6	−.8	−.4	123.4
9 Consumer energy	16.7	6.2	118.7	21.1	−35.5	.0	−.1^{r}	1.6^{r}	−1.4	−1.3	1.8	78.8
10 Other consumer goods	3.5	3.7	3.5	3.4	5.9	.9	.2	.2	−.2	.4	.3	133.7
11 **Capital equipment**	3.4	2.8	3.6	3.3	4.6	1.3	−.1^{r}	.1^{r}	.3	.1	.1	126.5
12 Intermediate materials[3]	2.1	.0	13.4	4.2	−9.8	−1.0	−.4^{r}	.2^{r}	.0	−.3	.4	114.4
13 Excluding energy	.7	.2	4.0	2.3	−2.3	−1.0	−.2	−.1	.0	−.1	.0	121.0
Crude materials												
14 Foods	2.9	−9.5	−7.8	−7.3	.0	−12.5	−.7	−3.2	.7	−1.7	−1.8	102.5
15 Energy	18.6	−9.2	305.8	−18.8	−54.0	−1.5	−.4^{r}	3.7^{r}	−3.5	2.0	1.3	79.2
16 Other	2.8	−10.3	5.9	−18.1	−4.7	−13.0	.1^{r}	−.9^{r}	−2.6	−.7	.5	126.0

1. Not seasonally adjusted.
2. Figures for consumer prices are those for all urban consumers and reflect a rental equivalence measure of homeownership after 1982.
3. Excludes intermediate materials for food manufacturing and manufactured animal feeds.

SOURCE. Bureau of Labor Statistics.

2.16 GROSS NATIONAL PRODUCT AND INCOME

Billions of current dollars except as noted; quarterly data are at seasonally adjusted annual rates.

Account	1988	1989	1990	1990				1991
				Q1	Q2	Q3	Q4	Q1
GROSS NATIONAL PRODUCT								
1 **Total**	**4,873.7**	**5,200.8**	**5,465.1**	**5,375.4**	**5,443.3**	**5,514.6**	**5,527.3**	**5,557.7**
By source								
2 Personal consumption expenditures	3,238.2	3,450.1	3,657.3	3,588.1	3,622.7	3,693.4	3,724.9	3,742.8
3 Durable goods	457.5	474.6	480.3	492.1	478.4	482.3	468.5	455.3
4 Nondurable goods	1,060.0	1,130.0	1,193.7	1,174.7	1,179.0	1,205.0	1,216.0	1,212.7
5 Services	1,720.7	1,845.5	1,983.3	1,921.3	1,965.3	2,006.2	2,040.4	2,074.8
6 Gross private domestic investment	747.1	771.2	741.0	747.2	759.0	759.7	698.3	660.0
7 Fixed investment	720.8	742.9	746.1	758.9	745.6	750.7	729.2	694.1
8 Nonresidential	488.4	511.9	524.1	523.1	516.5	532.8	524.0	503.6
9 Structures	139.9	146.2	147.0	148.8	147.2	149.8	142.1	139.5
10 Producers' durable equipment	348.4	365.7	377.1	374.3	369.3	383.0	381.9	364.1
11 Residential structures	232.5	231.0	222.0	235.9	229.1	217.9	205.2	190.5
12 Change in business inventories	26.2	28.3	−5.0	−11.8	13.4	9.0	−30.8	−34.2
13 Nonfarm	29.8	23.3	−7.4	−17.0	13.0	6.8	−32.4	−37.1
14 Net exports of goods and services	−74.1	−46.1	−31.2	−30.0	−24.9	−41.3	−28.8	13.5
15 Exports	552.0	626.2	672.8	661.3	659.7	672.7	697.4	694.5
16 Imports	626.1	672.3	704.0	691.3	684.6	714.1	726.2	681.0
17 Government purchases of goods and services	962.5	1,025.6	1,098.1	1,070.1	1,086.4	1,102.8	1,132.9	1,141.5
18 Federal	380.3	400.0	424.0	410.6	421.9	425.8	437.6	443.8
19 State and local	582.3	625.6	674.1	659.6	664.6	677.0	695.3	697.7
By major type of product								
20 Final sales, total	4,847.5	5,172.5	5,470.2	5,387.2	5,429.9	5,505.6	5,558.2	5,591.9
21 Goods	1,908.9	2,044.4	2,148.3	2,122.8	2,133.1	2,161.4	2,175.9	2,170.2
22 Durable	840.3	894.7	939.0	941.4	930.1	943.4	941.2	918.5
23 Nondurable	1,068.6	1,149.7	1,209.3	1,181.4	1,203.0	1,218.0	1,234.7	1,251.7
24 Services	2,488.6	2,671.2	2,864.5	2,791.3	2,834.2	2,889.6	2,943.0	3,004.0
25 Structures	450.0	456.9	457.4	473.0	462.5	454.6	439.3	417.7
26 Change in business inventories	26.2	28.3	−5.0	−11.8	13.4	9.0	−30.8	−34.2
27 Durable goods	19.9	11.9	−11.1	−21.6	.0	9.8	−32.5	−42.2
28 Nondurable goods	6.4	16.4	6.0	9.8	13.4	−.8	1.7	8.0
MEMO								
29 **Total GNP in 1982 dollars**	**4,016.9**	**4,117.7**	**4,157.3**	**4,150.6**	**4,155.1**	**4,170.0**	**4,153.4**	**4,124.1**
NATIONAL INCOME								
30 **Total**	**3,984.9**	**4,223.3**	**4,418.4**	**4,350.3**	**4,411.3**	**4,452.4**	**4,459.7**	**4,456.4**
31 Compensation of employees	2,905.1	3,079.0	3,244.2	3,180.4	3,232.5	3,276.9	3,286.9	3,299.3
32 Wages and salaries	2,431.1	2,573.2	2,705.3	2,651.6	2,696.3	2,734.2	2,738.9	2,742.8
33 Government and government enterprises	446.6	476.6	508.0	497.1	505.7	511.3	518.1	529.8
34 Other	1,984.5	2,096.6	2,197.2	2,154.5	2,190.6	2,222.9	2,220.8	2,213.0
35 Supplement to wages and salaries	474.0	505.8	538.9	528.8	536.1	542.7	548.0	556.5
36 Employer contributions for social insurance	248.5	263.9	280.8	276.0	279.7	282.7	284.8	290.3
37 Other labor income	225.5	241.9	258.1	252.8	256.4	260.0	263.2	266.2
38 Proprietors' income[1]	354.2	379.3	402.5	404.0	401.7	397.9	406.2	404.4
39 Business and professional[1]	310.5	330.7	352.6	346.6	350.8	355.6	357.4	355.8
40 Farm[1]	43.7	48.6	49.9	57.4	51.0	42.4	48.8	48.5
41 Rental income of persons[2]	16.3	8.2	6.9	5.5	4.3	8.4	9.3	5.6
42 Corporate profits[1]	337.6	311.6	298.3	296.8	306.6	300.7	288.9	286.2
43 Profits before tax[3]	316.7	307.7	304.7	296.9	299.3	318.5	304.1	281.5
44 Inventory valuation adjustment	−27.0	−21.7	−11.4	−11.4	−.5	−19.8	−13.8	8.1
45 Capital consumption adjustment	47.8	25.5	4.9	11.3	7.7	2.0	−1.4	−3.5
46 Net interest	371.8	445.1	466.7	463.6	466.2	468.3	468.4	460.9

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.
3. For after-tax profits, dividends, and the like, see table 1.48.

SOURCE. *Survey of Current Business* (Department of Commerce).

2.17 PERSONAL INCOME AND SAVING

Billions of current dollars; quarterly data are at seasonally adjusted annual rates. Exceptions noted.

Account	1988	1989	1990	1990				1991
				Q1	Q2	Q3	Q4	Q1
PERSONAL INCOME AND SAVING								
1 **Total personal income**	**4,070.8**	**4,384.3**	**4,645.5**	**4,562.8**	**4,622.2**	**4,678.5**	**4,718.5**	**4,735.8**
2 Wage and salary disbursements	2,431.1	2,573.2	2,705.3	2,651.6	2,696.3	2,734.2	2,738.9	2,742.8
3 Commodity-producing industries	696.4	720.6	729.3	724.6	731.1	735.3	726.0	713.0
4 Manufacturing	524.0	541.8	546.8	541.2	548.1	551.8	546.1	536.7
5 Distributive industries	572.0	604.7	637.2	627.0	637.3	642.7	641.9	639.7
6 Service industries	716.2	771.4	830.8	802.9	822.2	844.9	853.0	860.3
7 Government and government enterprises	446.6	476.6	508.0	497.1	505.7	511.3	518.1	529.8
8 Other labor income	225.5	241.9	258.1	252.8	256.4	260.0	263.2	266.2
9 Proprietors' income[1]	354.2	379.3	402.5	404.0	401.7	397.9	406.2	404.4
10 Business and professional[1]	310.5	330.7	352.6	346.6	350.8	355.6	357.4	355.8
11 Farm[1]	43.7	48.6	49.9	57.4	51.0	42.4	48.8	48.5
12 Rental income of persons[2]	16.3	8.2	6.9	5.5	4.3	8.4	9.3	5.6
13 Dividends	102.2	114.4	123.8	120.5	122.9	124.9	126.7	126.7
14 Personal interest income	547.9	643.2	680.4	670.5	678.0	685.3	687.9	682.0
15 Transfer payments	587.7	636.9	694.8	680.9	686.7	696.4	715.1	745.4
16 Old-age survivors, disability, and health insurance benefits	300.5	325.3	350.7	347.2	347.6	351.1	356.8	372.1
17 LESS: Personal contributions for social insurance	194.1	212.8	226.2	222.9	224.1	228.6	228.9	237.3
18 EQUALS: Personal income	4,070.8	4,384.3	4,645.5	4,562.8	4,622.2	4,678.5	4,718.5	4,735.8
19 LESS: Personal tax and nontax payments	591.6	658.8	699.4	675.1	696.5	709.5	716.6	714.6
20 EQUALS: Disposable personal income	3,479.2	3,725.5	3,946.1	3,887.7	3,925.7	3,969.1	4,001.9	4,021.3
21 LESS: Personal outlays	3,333.6	3,553.7	3,766.0	3,696.4	3,730.6	3,802.6	3,834.4	3,852.5
22 EQUALS: Personal saving	145.6	171.8	180.1	191.3	195.1	166.5	167.5	168.7
MEMO								
Per capita (1982 dollars)								
23 Gross national product	16,302.4	16,549.6	16,535.3	16,576.4	16,552.5	16,562.9	16,449.4	16,293.4
24 Personal consumption expenditures	10,578.3	10,678.0	10,665.8	10,692.4	10,671.4	10,711.5	10,588.7	10,523.7
25 Disposable personal income	11,368.0	11,531.0	11,509.0	11,586.0	11,564.0	11,511.0	11,376.0	11,307.0
26 Saving rate (percent)	4.2	4.6	4.6	4.9	5.0	4.2	4.2	4.2
GROSS SAVING								
27 **Gross saving**	**656.1**	**691.5**	**657.3**	**664.8**	**679.3**	**665.9**	**619.2**	**697.1**
28 Gross private saving	751.3	779.3	787.9	795.0	806.7	772.2	777.8	793.9
29 Personal saving	145.6	171.8	180.1	191.3	195.1	166.5	167.5	168.7
30 Undistributed corporate profits[1]	91.4	53.0	32.2	36.7	40.5	26.5	25.2	33.6
31 Corporate inventory valuation adjustment	-27.0	-21.7	-11.4	-11.4	-.5	-19.8	-13.8	8.1
Capital consumption allowances								
32 Corporate	322.1	346.4	363.0	356.7	359.7	365.5	370.3	375.6
33 Noncorporate	192.2	208.0	212.6	210.3	211.4	213.8	214.8	216.0
34 Government surplus, or deficit (−), national income and product accounts	-95.3	-87.8	-130.6	-130.2	-127.3	-106.4	-158.6	-96.8
35 Federal	-141.7	-134.3	-166.0	-168.3	-166.0	-145.7	-184.3	-126.9
36 State and local	46.5	46.4	35.4	38.1	38.6	39.3	25.7	30.0
37 **Gross investment**	**627.8**	**674.4**	**655.6**	**665.6**	**676.1**	**661.0**	**619.6**	**705.3**
38 Gross private domestic	747.1	771.2	741.0	747.2	759.0	759.7	698.3	660.0
39 Net foreign	-119.2	-96.8	-85.5	-81.6	-82.9	-98.7	-78.7	45.3
40 **Statistical discrepancy**	**-28.2**	**-17.0**	**-1.7**	**.7**	**-3.2**	**-4.9**	**.4**	**8.2**

1. With inventory valuation and capital consumption adjustments.
2. With capital consumption adjustment.

SOURCE. *Survey of Current Business* (Department of Commerce).

3.10 U.S. INTERNATIONAL TRANSACTIONS Summary

Millions of dollars; quarterly data are seasonally adjusted except as noted.[1]

Item credits or debits	1988	1989	1990	1990 Q2	1990 Q3	1990 Q4	1991 Q1[r]	1991 Q2[p]
1 Balance on current account	−126,267	−106,305	−92,123	−22,178	−23,881	−23,402	10,501	2,965
2 Not seasonally adjusted	....	....	....	−20,653	−29,112	−25,136	15,507	4,508
3 Merchandise trade balance[2]	−126,986	−115,917	−108,115	−24,090	−28,760	−27,728	−18,394	−15,624
4 Merchandise exports	320,337	361,451	389,550	97,088	96,638	100,580	100,900	104,108
5 Merchandise imports	−447,323	−477,368	−497,665	−121,178	−125,398	−128,308	−119,294	−119,732
6 Military transactions, net	−5,743	−6,203	−7,219	−1,558	−1,683	−2,243	−2,329	−1,675
7 Investment income, net	5,353	2,688	11,945	7	2,802	6,133	4,883	2,464
8 Other service transactions, net	16,082	28,618	33,595	8,156	8,086	9,716	9,402	9,640
9 Remittances, pensions, and other transfers	−4,437	−4,420	−4,843	−1,123	−1,302	−1,201	−1,316	−1,300
10 U.S. government grants (excluding military)	−10,506	−11,071	−17,486	−3,570	−3,024	−8,079	18,255	9,460
11 Change in U.S. government assets, other than official reserve assets, net (increase, −)	2,966	1,320	2,976	−800	−314	4,759	1,422	−560
12 Change in U.S. official reserve assets (increase, −)	−3,912	−25,293	−2,158	371	1,739	−1,091	−353	1,014
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	127	−535	−192	−216	363	−93	31	−190
15 Reserve position in International Monetary Fund	1,025	471	731	493	8	−4	−341	72
16 Foreign currencies	−5,064	−25,229	−2,697	94	1,368	−995	−43	1,132
17 Change in U.S. private assets abroad (increase, −)	−85,111	−104,637	−58,524	−33,033	−28,114	−38,370	−1,992	−27,125
18 Bank-reported claims[3]	−56,322	−51,255	5,333	−17,255	−9,984	−24,513	20,598	−11,248
19 Nonbank-reported claims	−3,064	2,581	−1,944	−1,760	676	−2,509	−1,308	....
20 U.S. purchase of foreign securities, net	−7,846	−22,575	−28,476	−11,160	−1,014	−7,546	−9,430	−13,235
21 U.S. direct investments abroad, net	−17,880	−33,388	−33,437	−2,858	−17,792	−3,802	−11,852	−2,642
22 Change in foreign official assets in United States (increase, +)	39,657	8,624	32,425	5,805	13,341	20,301	6,631	−3,650
23 U.S. Treasury securities	41,741	149	28,643	2,461	11,849	20,119	2,381	−1,888
24 Other U.S. government obligations	1,309	1,383	667	346	134	708	−29	−219
25 Other U.S. government liabilities[4]	−568	281	1,703	1,141	−248	1,102	1,012	196
26 Other U.S. liabilities reported by U.S. banks[3]	−319	4,976	2,998	2,131	1,871	−707	2,501	−1,881
27 Other foreign official assets[5]	−2,506	1,835	−1,586	−274	−265	−921	766	142
28 Change in foreign private assets in United States (increase, +)	181,877	207,925	53,879	25,452	35,754	18,732	−7,361	5,806
29 U.S. bank-reported liabilities[3]	70,235	63,382	9,975	8,980	26,968	17,261	−18,795	−26,687
30 U.S. nonbank-reported liabilities	5,626	5,454	3,779	699	4,260	−1,840	−1,616	....
31 Foreign private purchases of U.S. Treasury securities, net	20,239	29,618	1,131	4,287	24	−2,029	3,409	13,905
32 Foreign purchases of other U.S. securities, net	26,353	38,920	1,781	2,140	−2,558	802	5,306	15,312
33 Foreign direct investments in United States, net	59,424	70,551	37,213	9,346	7,060	4,538	4,336	3,276
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	−9,240	18,366	63,526	24,383	1,475	19,072	−8,849	21,550
36 Owing to seasonal adjustments	....	....	....	105	−6,473	2,007	3,995	193
37 Statistical discrepancy in recorded data before seasonal adjustment	−9,240	18,366	63,526	24,278	7,948	17,066	−12,844	21,357
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, −)	−3,912	−25,293	−2,158	371	1,739	−1,091	−353	1,014
39 Foreign official assets in United States excluding line 25 (increase, +)	40,225	8,343	30,722	4,664	13,589	19,199	5,619	−3,846
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22)	−2,996	10,738	2,163	193	−1,699	575	988	−2,680

1. Seasonal factors are not calculated for lines 6, 10, 12–16, 18–20, 22–34, and 38–40.

2. Data are on an international accounts (IA) basis. The data differ from the Census basis data, shown in table 3.11, for reasons of coverage and timing. Military exports are excluded from merchandise data and are included in line 6.

3. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.

4. Associated primarily with military sales contracts and other transactions arranged with or through foreign official agencies.

5. Consists of investments in U.S. corporate stocks and in debt securities of private corporations and state and local governments.

SOURCE. Data are from Bureau of Economic Analysis, *Survey of Current Business* (Department of Commerce).

3.11 U.S. FOREIGN TRADE[1]

Millions of dollars; exports, F.A.S. value; imports, Customs value; monthly data are seasonally adjusted.

Item	1988	1989	1990	1991						
				Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1 Exports of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value	322,426	363,812	393,592	34,144	33,599	34,031	35,632	35,271	34,975	35,266
2 General imports including merchandise for immediate consumption plus entries into bonded warehouses	440,952	473,211	495,311	41,520	39,103	38,100	40,139	40,062	38,764	41,162
3 **Trade balance**	**−118,526**	**−109,399**	**−101,718**	**−7,376**	**−5,504**	**−4,070**	**−4,507**	**−4,790**	**−3,789**	**−5,896**

1. The Census basis data differ from merchandise trade data shown in table 3.10, U.S. International Transactions Summary, because of coverage and timing. On the *export side*, the largest adjustment is the exclusion of military sales (which are combined with other military transactions and reported separately in the "service account" in table 3.10, line 6). On the *import side*, additions are made for gold, ship purchases, imports of electricity from Canada, and other transactions; military payments are excluded and shown separately as indicated above. As of Jan. 1, 1987 census data are released forty-five days after the end of the month; the previous month is revised to reflect late documents. Total exports and the trade balance reflect adjustments for undocumented exports to Canada.

SOURCE. FT900, *Summary of U.S. Export and Import Merchandise Trade* (Department of Commerce, Bureau of the Census).

3.12 U.S. RESERVE ASSETS

Millions of dollars, end of period

Type	1988	1989	1990	1991						
				Feb.	Mar.	Apr.	May	June	July	Aug.[p]
1 **Total**	**47,802**	**74,609**	**83,316**	**82,797**	**78,297**	**78,297**	**78,263**	**74,940**	**74,816**	**73,514**
2 Gold stock, including Exchange Stabilization Fund[1]	11,057	11,059	11,058	11,058	11,058	11,058	11,057	11,062	11,062	11,062
3 Special drawing rights[2,3]	9,637	9,951	10,989	10,958	10,368	10,325	10,515	10,309	10,360	10,479
4 Reserve position in International Monetary Fund[2]	9,745	9,048	9,076	9,556	8,910	8,806	8,854	8,629	8,730	8,726
5 Foreign currencies[4]	17,363	44,551	52,193	51,225	47,666	48,108	47,837	44,940	44,664	43,247

1. Gold held under earmark at Federal Reserve Banks for foreign and international accounts is not included in the gold stock of the United States; see table 3.13. Gold stock is valued at $42.22 per fine troy ounce.
2. Beginning July 1974, the International Monetary Fund (IMF) adopted a technique for valuing the special drawing right (SDR) based on a weighted average of exchange rates for the currencies of member countries. From July 1974 through December 1980, 16 currencies were used; from January 1981, 5 currencies have been used. The U.S. SDR holdings and reserve positions in the IMF also are valued on this basis beginning July 1974.
3. Includes allocations by the International Monetary Fund of SDRs as follows: $867 million on Jan. 1, 1970; $717 million on Jan. 1, 1971; $710 million on Jan. 1, 1972; $1,139 million on Jan. 1, 1979; $1,152 million on Jan. 1, 1980; and $1,093 million on Jan. 1, 1981; plus transactions in SDRs.
4. Valued at current market exchange rates.

3.13 FOREIGN OFFICIAL ASSETS HELD AT FEDERAL RESERVE BANKS[1]

Millions of dollars, end of period

Assets	1988	1989	1990	1991						
				Feb.	Mar.	Apr.	May	June	July	Aug.[p]
1 Deposits	347	589	369	329	228	292	196	223	314	256
Assets held in custody										
2 U.S. Treasury securities[2]	232,547	224,911	278,499	286,471	272,505	271,779	279,695	273,893	274,514	279,394
3 Earmarked gold[3]	13,636	13,456	13,387	13,382	13,374	13,363	13,358	13,354	13,330	13,330

1. Excludes deposits and U.S. Treasury securities held for international and regional organizations.
2. Marketable U.S. Treasury bills, notes, and bonds; and nonmarketable U.S. Treasury securities payable in dollars and in foreign currencies at face value.
3. Earmarked gold and the gold stock are valued at $42.22 per fine troy ounce. Earmarked gold is gold held for foreign and international accounts and is not included in the gold stock of the United States.

3.14 FOREIGN BRANCHES OF U.S. BANKS Balance Sheet Data[1]

Millions of dollars, end of period

Asset account	1988	1989	1990	1990 Jan.	Feb.	Mar.	Apr.	May	June[r]	July
				All foreign countries						
1 **Total, all currencies**	**505,595**	**545,366**	**556,925**	**563,388r**	**560,775r**	**547,031r**	**537,854r**	**529,624r**	**531,918**	**528,309**
2 Claims on United States	169,111	198,835	188,496	183,305	187,874r	183,990	180,658	172,655r	180,666	174,329
3 Parent bank	129,856	157,092	148,837	140,812	145,667r	143,795	141,580	135,484r	141,893	136,786
4 Other banks in United States	14,918	17,042	13,296	14,541	12,887	12,268	12,085	10,412	11,871	11,000
5 Nonbanks	24,337	24,701	26,363	27,952	29,320	27,927	26,993	26,759	26,902	26,543
6 Claims on foreigners	299,728	300,575	312,449	321,390	313,730r	307,305	300,646	297,903r	293,795	294,299
7 Other branches of parent bank	107,179	113,810	135,003	132,299	124,719r	129,732	122,151	118,465r	115,534	112,314
8 Banks	96,932	90,703	72,602	81,219	80,030	72,757	72,549	74,290r	74,766	77,323
9 Public borrowers	17,163	16,456	17,555	18,261	17,893	17,915	17,825	18,208	17,420	18,608
10 Nonbank foreigners	78,454	79,606	87,289	89,611	91,088	86,901	88,121	86,940r	86,075	86,054
11 Other assets	36,756	45,956	55,980	58,693r	59,171r	55,736r	56,550r	59,066r	57,457	59,681
12 **Total payable in U.S. dollars**	**357,573**	**382,498**	**379,479**	**379,507r**	**379,987r**	**382,329r**	**371,911r**	**362,542r**	**372,613**	**364,219**
13 Claims on United States	163,456	191,184	180,174	175,223	180,301r	176,903	173,964	166,563r	174,306	167,880
14 Parent bank	126,929	152,294	142,962	135,107	140,489r	138,850	137,343	131,293r	137,933	132,510
15 Other banks in United States	14,167	16,386	12,513	13,739	12,266	11,757	11,624	10,020	11,362	10,505
16 Nonbanks	22,360	22,504	24,699	26,377	27,546	26,296	24,997	25,250	25,011	24,865
17 Claims on foreigners	177,685	169,690	174,451	179,905	173,662r	180,415	173,044	171,898r	171,397	169,182
18 Other branches of parent bank	80,736	82,949	95,298	93,989	87,529r	95,106	87,895	85,365	84,231	79,001
19 Banks	54,884	48,396	36,440	41,134	40,785	40,451	40,407	42,340r	43,370	45,439
20 Public borrowers	12,131	10,961	12,298	13,137	12,944	13,206	12,996	13,137	12,485	13,569
21 Nonbank foreigners	29,934	27,384	30,415	31,645	32,404	31,652	31,746	31,056	31,311	31,173
22 Other assets	16,432	21,624	24,854	24,379r	26,024r	25,011r	24,903r	24,081r	26,910	27,157
				United Kingdom						
23 **Total, all currencies**	**156,835**	**161,947**	**184,818**	**184,208r**	**180,018r**	**175,565r**	**168,880r**	**169,032r**	**165,397**	**161,773**
24 Claims on United States	40,089	39,212	45,560	39,511	40,978r	42,529	38,136	38,338	37,574	32,475
25 Parent bank	34,243	35,847	42,413	35,847	37,362r	39,372	34,930	34,830	34,534	29,241
26 Other banks in United States	1,123	1,058	792	1,095	924	848	1,179	1,104	711	860
27 Nonbanks	4,723	2,307	2,355	2,569	2,692	2,309	2,027	2,404	2,329	2,374
28 Claims on foreigners	106,388	107,657	115,536	121,220	115,496r	110,329	107,031	105,893	103,471	102,971
29 Other branches of parent bank	35,625	37,728	46,367	47,999	41,788r	44,341	40,730	39,060r	38,333	36,588
30 Banks	36,765	36,159	31,604	34,050	34,518	30,660	30,608	32,048r	31,019	31,866
31 Public borrowers	4,019	3,293	3,860	3,954	4,029	3,943	3,711	3,657	3,584	3,676
32 Nonbank foreigners	29,979	30,477	33,705	35,217	35,161	31,385	31,982	31,128r	30,535	30,841
33 Other assets	10,358	15,078	23,722	23,477r	23,544r	22,707r	23,713r	24,801r	24,352	26,327
34 **Total payable in U.S. dollars**	**103,503**	**103,208**	**116,762**	**113,804r**	**113,480r**	**114,887r**	**108,563r**	**105,585r**	**106,532**	**101,036**
35 Claims on United States	38,012	36,404	41,259	35,434	37,344r	39,052	35,058	35,274	34,726	29,352
36 Parent bank	33,252	34,329	39,609	33,068	35,045r	37,149	32,973	32,771	32,790	27,085
37 Other banks in United States	964	843	334	771	615	562	976	970	555	759
38 Nonbanks	3,796	1,232	1,316	1,595	1,684	1,341	1,109	1,533	1,381	1,508
39 Claims on foreigners	60,472	59,062	63,701	68,139	64,817r	65,034	62,183	60,122r	58,561	57,857
40 Other branches of parent bank	28,474	29,872	37,142	38,262	33,271r	36,150	32,842	31,297	30,108	29,111
41 Banks	18,494	16,579	13,135	14,905	15,840	15,097	15,460	16,118r	14,983	15,723
42 Public borrowers	2,840	2,371	3,143	3,243	3,290	3,220	3,193	3,152	3,082	3,032
43 Nonbank foreigners	10,664	10,240	10,281	11,729	12,416	10,567	10,688	9,555	10,388	9,991
44 Other assets	5,019	7,742	11,802	10,231r	11,319r	10,801r	11,322r	10,691r	13,245	13,827
				Bahamas and Caymans						
45 **Total, all currencies**	**170,639**	**176,006**	**162,316**	**167,306**	**168,209**	**163,315**	**164,565**	**158,506**	**168,389**	**169,271**
46 Claims on United States	105,320	124,205	112,989	115,806	118,783	110,808	113,563	107,750	114,669	114,401
47 Parent bank	73,409	87,882	77,873	78,350	81,888	75,516	79,818	75,472	80,644	81,605
48 Other banks in United States	13,145	15,071	11,869	12,877	11,380	10,753	10,063	8,748	10,578	9,583
49 Nonbanks	18,766	21,252	23,247	24,579	25,515	24,539	23,682	23,530	23,447	23,213
50 Claims on foreigners	58,393	44,168	41,356	42,801	40,363	43,868	42,067	42,039	45,004	46,396
51 Other branches of parent bank	17,954	11,309	13,416	12,292	11,477	13,861	12,554	12,393	12,801	10,767
52 Banks	28,268	22,611	16,310	18,343	16,863	17,571	17,458	17,284	20,707	21,688
53 Public borrowers	5,830	5,217	5,807	6,528	6,484	6,846	6,556	6,520	5,883	7,103
54 Nonbank foreigners	6,341	5,031	5,823	5,638	5,539	5,590	5,499	5,842	5,613	6,838
55 Other assets	6,926	7,633	7,971	8,699	9,063	8,639	8,935	8,717	8,716	8,474
56 **Total payable in U.S. dollars**	**163,518**	**170,780**	**158,390**	**162,458**	**163,533**	**159,167**	**160,526**	**154,720**	**164,485**	**165,342**

1. Beginning in June 1984 reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from $50 million to $150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3.14—Continued

Liability account	1988	1989	1990	1991 Jan.	Feb.	Mar.	Apr.	May	June r	July
					All foreign countries					
57 **Total, all currencies**	**505,595**	**545,366**	**556,925**	**563,388r**	**560,775r**	**547,031r**	**537,854r**	**529,624r**	**531,918**	**528,309**
58 Negotiable certificates of deposit (CDs)	28,511	23,500	18,060	19,107	18,595	19,920	19,484	17,753r	16,503	19,692
59 To United States	185,577	197,239	189,412	185,768	187,479r	185,999	180,279	172,246r	187,200	181,497
60 Parent bank	114,720	138,412	138,748	133,574	132,061r	128,690	123,883	117,537r	127,568	126,538
61 Other banks in United States	14,737	11,704	7,463	9,341	10,580	10,962	9,927	8,996	11,758	10,079
62 Nonbanks	56,120	47,123	43,201	42,853	44,838	46,347	46,469	45,713	47,874	44,880
63 To foreigners	270,923	296,850	311,668	319,821	316,523r	306,047	300,907	301,366r	290,155	287,762
64 Other branches of parent bank	111,267	119,591	139,113	132,214	124,437	129,201	122,789	119,765	116,226	112,506
65 Banks	72,842	76,452	58,986	70,189	73,773	63,262	63,908	66,140r	57,256	59,975
66 Official institutions	15,183	16,750	14,791	17,343	16,665	15,864	18,398	19,803	20,394	17,245
67 Nonbank foreigners	71,631	84,057	98,778	100,075	101,648r	97,720	95,812	95,658r	96,279	98,036
68 Other liabilities	20,584	27,777	37,785	38,692r	38,178r	35,065r	37,184r	38,259r	38,060	39,358
69 **Total payable in U.S. dollars**	**367,483**	**396,613**	**383,522**	**383,793**	**380,376r**	**381,365**	**372,610**	**359,437**	**372,062**	**363,092**
70 Negotiable CDs	24,045	19,619	14,094	15,142	14,446	15,335	14,882	13,258r	12,620	14,538
71 To United States	173,190	187,286	175,654	171,586	174,436r	173,620	168,808	159,922	175,057	169,837
72 Parent bank	107,150	132,563	130,510	125,464	124,797r	121,505	117,297	110,303	120,334	119,812
73 Other banks in United States	13,468	10,519	6,052	7,627	8,715	9,416	8,509	7,666	10,616	8,804
74 Nonbanks	52,572	44,204	39,092	38,495	40,924	42,699	43,002	41,953	44,107	41,221
75 To foreigners	160,766	176,460	179,002	182,131	175,761	177,902	173,589	171,160r	170,354	163,451
76 Other branches of parent bank	84,021	87,636	98,128	94,765	87,288	93,910	88,299	85,857	84,952	79,909
77 Banks	28,493	30,537	20,251	23,661	25,536	23,769	22,892	21,639r	21,162	21,470
78 Official institutions	8,224	9,873	7,921	10,585	10,021	9,205	11,568	12,339	13,972	11,563
79 Nonbank foreigners	40,028	48,414	52,702	53,120	52,916	51,018	50,830	51,325	50,268	50,509
80 Other liabilities	9,482	13,248	14,772	14,934	15,733	14,508	15,331	15,097	14,031	15,266
					United Kingdom					
81 **Total, all currencies**	**156,835**	**161,947**	**184,818**	**184,208r**	**180,018r**	**175,565r**	**168,880r**	**169,032r**	**165,397**	**161,773**
82 Negotiable CDs	24,528	20,056	14,256	14,873	14,363	15,820	15,162	13,486r	12,196	14,889
83 To United States	36,784	36,036	39,928	33,845	33,904r	35,066	28,450	28,618	31,084	26,599
84 Parent bank	27,849	29,726	31,806	25,004	25,504r	26,826	21,676	19,951	23,238	19,545
85 Other banks in United States	2,037	1,256	1,505	1,861	1,401	1,230	1,175	1,413	1,092	1,490
86 Nonbanks	6,898	5,054	6,617	6,980	6,999	7,010	5,599	7,254	6,754	5,564
87 To foreigners	86,026	92,307	108,531	113,754	110,455r	105,090	103,976	104,322r	99,756	97,263
88 Other branches of parent bank	26,812	27,397	36,709	34,547	30,978	33,084	31,860	30,155	29,371	28,591
89 Banks	30,609	29,780	25,126	31,765	32,784	26,609	27,001	28,459r	22,994	24,310
90 Official institutions	7,873	8,551	8,361	10,368	9,745	8,969	11,300	12,342	13,062	10,010
91 Nonbank foreigners	20,732	26,579	38,335	37,074	36,948r	36,428	33,815	33,366r	34,329	34,352
92 Other liabilities	9,497	13,548	22,103	21,736r	21,296r	19,589r	21,292r	22,606r	22,361	23,022
93 **Total payable in U.S. dollars**	**105,907**	**108,178**	**116,094**	**113,765**	**112,118r**	**112,981**	**106,568**	**104,074**	**104,519**	**99,752**
94 Negotiable CDs	22,063	18,143	12,710	13,388	12,790	13,816	13,291	11,610r	10,833	12,758
95 To United States	32,588	33,056	34,697	28,511	29,480r	30,779	24,690	24,245	27,106	22,355
96 Parent bank	26,404	28,812	29,955	23,342	24,164r	25,450	20,391	18,457	21,848	17,924
97 Other banks in United States	1,752	1,065	1,156	1,324	926	800	848	1,002	892	1,233
98 Nonbanks	4,432	3,179	3,586	3,845	4,390	4,529	3,451	4,786	4,366	3,198
99 To foreigners	47,083	50,517	60,014	63,702	60,977	59,985	59,440	58,849r	58,068	55,433
100 Other branches of parent bank	18,561	18,384	25,957	24,954	21,339	24,049	22,452	21,671	20,452	19,509
101 Banks	13,407	12,244	9,488	11,539	12,976	10,112	9,931	9,654r	8,758	9,678
102 Official institutions	4,348	5,454	4,692	7,158	6,587	6,188	8,239	8,914	10,032	7,519
103 Nonbank foreigners	10,767	14,435	19,877	20,051	20,075	19,636	18,818	18,610	18,826	18,727
104 Other liabilities	4,173	6,462	8,673	8,164	8,871	8,401	9,147	9,370	8,512	9,206
					Bahamas and Caymans					
105 **Total, all currencies**	**170,639**	**176,006**	**162,316**	**167,306**	**168,209**	**163,315**	**164,565**	**158,506**	**168,389**	**169,271**
106 Negotiable CDs	953	678	646	654	629	729	674	694	696	904
107 To United States	122,332	124,859	114,738	120,691	122,231	118,720	120,997	114,886	125,377	126,310
108 Parent bank	62,894	75,188	74,941	80,567	78,173	72,382	73,801	71,239	76,196	80,795
109 Other banks in United States	11,494	8,883	4,526	5,655	7,618	8,210	7,543	6,408	9,438	7,473
110 Nonbanks	47,944	40,788	35,271	34,469	36,440	38,128	39,653	37,239	39,743	38,042
111 To foreigners	45,161	47,382	44,444	42,850	42,472	41,660	40,289	40,629	40,180	39,624
112 Other branches of parent bank	23,686	23,414	24,715	23,099	22,923	22,303	21,645	22,017	21,701	21,765
113 Banks	8,336	8,823	5,588	6,030	6,105	6,232	5,837	5,765	5,734	4,877
114 Official institutions	1,074	1,097	622	811	728	674	676	736	931	661
115 Nonbank foreigners	12,065	14,048	13,519	12,910	12,716	12,451	12,131	12,111	11,814	12,321
116 Other liabilities	2,193	3,087	2,488	3,111	2,877	2,206	2,605	2,297	2,136	2,433
117 **Total payable in U.S. dollars**	**162,950**	**171,250**	**157,132**	**162,118**	**162,850**	**158,172**	**160,284**	**154,281**	**164,101**	**164,935**

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1989	1990	1991						
			Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1 **Total**[1]	**312,477**	**344,386**	**352,692**	**362,260**	**349,995**	**344,580[r]**	**350,867[r]**	**346,127**	**349,341**
By type									
2 Liabilities reported by banks in the United States[2]	36,496	39,765	41,464	43,309	42,266	39,061	41,769[r]	40,636	42,698
3 U.S. Treasury bills and certificates[3]	76,985	79,447	83,695	83,963	84,013	81,110	82,444	84,549	86,071
U.S. Treasury bonds and notes									
4 Marketable	179,269	202,438	205,145	212,154	200,154	201,039[r]	203,060[r]	197,365	196,664
5 Nonmarketable[4]	568	4,491	4,521	4,550	4,580	4,610	4,642	4,672	4,704
6 U.S. securities other than U.S. Treasury securities[5]	19,159	18,245	17,867	18,284	18,982	18,760	18,952	18,905	19,204
By area									
7 Western Europe[1]	132,849	167,141	169,141	174,119	166,466	162,962	166,880	163,495	165,729
8 Canada	9,482	8,672	8,179	7,900	8,467	8,454	9,433	9,155	9,185
9 Latin America and Caribbean	9,313	21,115	21,957	23,716	24,649	25,378	27,757[r]	29,435	30,032
10 Asia	153,338	138,071	143,260	146,186	139,796	137,662[r]	136,540[r]	133,936	134,445
11 Africa	1,030	1,433	1,659	1,439	1,802	1,171	1,184	1,254	1,178
12 Other countries[6]	6,469	7,955	8,497	8,897	8,814	8,953	9,073	8,851	8,771

1. Includes the Bank for International Settlements.
2. *Principally demand deposits, time deposits, bankers acceptances, commercial paper, negotiable time certificates of deposit, and borrowings under repurchase agreements.*
3. Includes nonmarketable certificates of indebtedness (including those payable in foreign currencies through 1974) and Treasury bills issued to official institutions of foreign countries.
4. Excludes notes issued to foreign official nonreserve agencies. Includes bonds and notes payable in foreign currencies; zero coupon bonds are included at current value.
5. Debt securities of U.S. government corporations and federally sponsored agencies, and U.S. corporate stocks and bonds.
6. Includes countries in Oceania and Eastern Europe.

NOTE. Based on Treasury Department data and on data reported to the Treasury Department by banks (including Federal Reserve Banks) and securities dealers in the United States and on the 1984 benchmark survey of foreign portfolio investment in the United States.

3.16 LIABILITIES TO AND CLAIMS ON FOREIGNERS Reported by Banks in the United States Payable in Foreign Currencies[1]

Millions of dollars, end of period

Item	1987	1988	1989	1990		1991	
				Sept.	Dec.	Mar.	June
1 Banks' own liabilities	55,438	74,980	67,835	71,028	70,276	64,322	59,313
2 Banks' own claims	51,271	68,983	65,127	68,675	66,558	67,599	61,491
3 Deposits	18,861	25,100	20,491	27,206	29,651	27,624	27,504
4 Other claims	32,410	43,884	44,636	41,470	36,907	39,975	33,986
5 Claims of banks' domestic customers[2]	551	364	3,507	2,843	10,594	7,357	13,191

1. Data on claims exclude foreign currencies held by U.S. monetary authorities.
2. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the accounts of the domestic customers.

3.17 LIABILITIES TO FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. dollars

Millions of dollars, end of period

	Holder and type of liability	1988	1989	1990	1991						
					Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1	**All foreigners**	**685,339**	**736,878**	**752,916**	**752,864**	**757,916**	**747,913**	**731,745**	**727,225[r]**	**722,682**	**721,242**
2	Banks' own liabilities	514,532	577,498	576,195	568,974	574,913	569,037	561,102	556,538[r]	549,622	546,519
3	Demand deposits	21,863	22,032	21,724	19,686	20,144	20,268	19,750	18,863[r]	19,013	18,011
4	Time deposits[2]	152,164	168,780	168,245	159,248	162,354	163,971	157,171	152,277[r]	148,523	148,776
5	Other[3]	51,366	67,823	65,652	75,723	74,016	71,734	73,750	72,452[r]	65,484	66,713
6	Own foreign offices[4]	289,138	318,864	320,575	314,317	318,399	313,063	310,430	312,947[r]	316,602	313,019
7	Banks' custody liabilities[5]	170,807	159,380	176,721	183,890	183,003	178,876	170,643	170,687	173,061	174,723
8	U.S. Treasury bills and certificates[6]	115,056	91,100	96,808	104,493	103,948	102,145	97,378	98,087	100,492	101,736
9	Other negotiable and readily transferable instruments[7]	16,426	19,526	17,472	17,955	18,190	17,485	16,332	16,723	17,490	17,282
10	Other	39,325	48,754	62,441	61,442	60,865	59,246	56,933	55,876	55,079	55,705
11	**Nonmonetary international and regional organizations[8]**	**3,224**	**4,894**	**5,918**	**7,908**	**6,555**	**6,669**	**6,237**	**6,057[r]**	**5,917**	**5,943**
12	Banks' own liabilities	2,527	3,279	4,540	6,431	4,092	4,806	5,061	4,675[r]	3,863	3,834
13	Demand deposits	71	96	36	67	40	73	76	24	26	44
14	Time deposits[2]	1,183	927	1,050	1,600	1,684	2,034	1,980	2,151[r]	2,010	1,732
15	Other[3]	1,272	2,255	3,455	4,763	2,368	2,700	3,006	2,501	1,827	2,058
16	Banks' custody liabilities[5]	698	1,616	1,378	1,478	2,462	1,863	1,176	1,381	2,054	2,109
17	U.S. Treasury bills and certificates[6]	57	197	364	423	1,620	1,103	275	662	1,287	1,404
18	Other negotiable and readily transferable instruments[7]	641	1,417	1,014	1,005	842	760	901	719	767	705
19	Other	0	2	0	50	0	0	0	0	0	0
20	**Official institutions[9]**	**135,241**	**113,481**	**119,212**	**125,159**	**127,271**	**126,280**	**120,171**	**124,214[r]**	**125,185**	**128,769**
21	Banks' own liabilities	27,109	31,108	34,792	37,345	38,878	38,592	36,096	38,420[r]	36,264	38,167
22	Demand deposits	1,917	2,196	1,924	1,664	1,579	1,645	1,633	1,448[r]	1,542	1,398
23	Time deposits[2]	9,767	10,495	14,265	11,659	13,426	13,946	13,546	14,433[r]	14,608	14,869
24	Other[3]	15,425	18,417	18,603	24,022	23,873	23,000	20,917	22,540[r]	20,114	21,900
25	Banks' custody liabilities[5]	108,132	82,373	84,420	87,814	88,393	87,688	84,076	85,794	88,921	90,602
26	U.S. Treasury bills and certificates[6]	103,722	76,985	79,447	83,695	83,963	84,013	81,110	82,444	84,549	86,071
27	Other negotiable and readily transferable instruments[7]	4,130	5,028	4,770	3,939	4,057	3,582	2,835	3,197	4,105	4,324
28	Other	280	361	203	180	374	92	130	152	267	207
29	**Banks[10]**	**459,523**	**515,275**	**534,143**	**521,444**	**527,740**	**520,069**	**509,598**	**500,885[r]**	**498,698**	**493,269**
30	Banks' own liabilities	409,501	454,273	457,535	445,772	451,031	445,588	439,018	432,360[r]	431,619	426,130
31	Unaffiliated foreign banks	120,362	135,409	136,960	131,455	132,633	132,525	128,587	119,413[r]	115,018	113,111
32	Demand deposits	9,948	10,279	10,053	9,003	9,522	10,050	9,073	8,674	8,586	8,480
33	Time deposits[2]	80,189	90,557	88,847	81,583	82,468	84,119	79,232	72,669[r]	69,906	70,071
34	Other[3]	30,226	34,573	38,060	40,869	40,643	38,357	40,282	38,070[r]	36,525	34,560
35	Own foreign offices[4]	289,138	318,864	320,575	314,317	318,399	313,063	310,430	312,947[r]	316,602	313,019
36	Banks' custody liabilities[5]	50,022	61,002	76,608	75,672	76,709	74,481	70,581	68,525	67,078	67,139
37	U.S. Treasury bills and certificates[6]	7,602	9,367	10,634	10,174	11,136	10,645	10,026	8,714	8,199	8,002
38	Other negotiable and readily transferable instruments[7]	5,725	5,124	5,240	5,950	6,351	6,293	5,973	5,729	5,475	5,425
39	Other	36,694	46,510	60,735	59,548	59,222	57,543	54,582	54,083	53,404	53,712
40	**Other foreigners**	**87,351**	**103,228**	**93,642**	**98,352**	**96,350**	**94,896**	**95,738**	**96,070[r]**	**92,882**	**93,261**
41	Banks' own liabilities	75,396	88,839	79,328	79,427	80,911	80,051	80,927	81,082[r]	77,875	78,388
42	Demand deposits	9,928	9,460	9,711	8,952	9,004	8,500	8,969	8,717	8,859	8,089
43	Time deposits[2]	61,025	66,801	64,083	64,406	64,775	63,873	62,413	63,024[r]	61,999	62,104
44	Other[3]	4,443	12,577	5,534	6,068	7,132	7,678	9,545	9,341[r]	7,018	8,195
45	Banks' custody liabilities[5]	11,956	14,389	14,314	18,926	15,439	14,845	14,810	14,987	15,007	14,873
46	U.S. Treasury bills and certificates[6]	3,675	4,551	6,363	10,201	7,230	6,384	5,966	6,267	6,456	6,259
47	Other negotiable and readily transferable instruments[7]	5,929	7,958	6,448	7,062	6,940	6,850	6,624	7,078	7,143	6,828
48	Other	2,351	1,880	1,503	1,664	1,269	1,611	2,221	1,642	1,408	1,786
49	MEMO: Negotiable time certificates of deposit in custody for foreigners	6,425	7,203	7,022	6,966	6,720	7,157	7,269	7,511	7,676	6,809

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Excludes negotiable time certificates of deposit, which are included in "Other negotiable and readily transferable instruments."
3. Includes borrowing under repurchase agreements.
4. U.S. banks: includes amounts due to own foreign branches and foreign subsidiaries consolidated in "Consolidated Report of Condition" filed with bank regulatory agencies. Agencies, branches, and majority-owned subsidiaries of foreign banks: principally amounts due to head office or parent foreign bank, and foreign branches, agencies, or wholly owned subsidiaries of head office or parent foreign bank.
5. Financial claims on residents of the United States, other than long-term securities, held by or through reporting banks.
6. Includes nonmarketable certificates of indebtedness and Treasury bills issued to official institutions of foreign countries.
7. Principally bankers acceptances, commercial paper, and negotiable time certificates of deposit.
8. Principally the International Bank for Reconstruction and Development, and the Inter-American and Asian Development Banks. Data exclude "holdings of dollars" of the International Monetary Fund.
9. Foreign central banks, foreign central governments, and the Bank for International Settlements.
10. Excludes central banks, which are included in "Official institutions."

3.17—Continued

Area and country	1988	1989	1990	1991 Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1 **Total**	**685,339**	**736,878**	**752,916**	**752,864**	**757,916**	**747,913**	**731,745**	**727,225**[r]	**722,682**	**721,242**
2 **Foreign countries**	**682,115**	**731,984**	**746,998**	**744,956**	**751,361**	**741,245**	**725,507**	**721,168**[r]	**716,765**	**715,299**
3 Europe	231,912	237,501	254,460	247,705	250,091	249,956	241,651	238,104[r]	236,607	227,926
4 Austria	1,155	1,233	1,229	1,570	1,522	1,494	1,147	1,100[r]	1,067	1,235
5 Belgium-Luxembourg	10,022	10,648	12,399	12,382	12,559	12,238	12,410	11,610[r]	11,872	12,286
6 Denmark	2,200	1,415	1,399	1,115	1,013	983	945	988	1,370	1,197
7 Finland	285	570	602	404	489	662	724	453	732	432
8 France	24,777	26,903	30,946	29,371	27,892	28,211	26,970	26,270	26,383	26,772
9 Germany	6,772	7,578	7,281	8,262	9,605	8,988	8,441	8,490[r]	7,823	7,043
10 Greece	672	1,028	934	895	797	747	809	785	791	830
11 Italy	14,599	16,169	17,736	16,157	17,506	17,367	15,045	14,725	14,347	13,905
12 Netherlands	5,316	6,613	5,375	5,680	6,397	6,204	6,773	6,686	6,100	6,069
13 Norway	1,559	2,401	2,358	2,181	2,078	2,121	1,099	1,168	1,927	1,653
14 Portugal	903	2,418	2,958	2,877	2,684	2,778	2,628	2,410	2,392	2,279
15 Spain	5,494	4,364	7,544	8,813	8,073	9,784	10,006	10,095	9,392	10,496
16 Sweden	1,284	1,491	1,837	1,290	759	1,159	720	525	745	858
17 Switzerland	34,199	34,496	36,915	35,572	37,209	38,546	36,711	34,880	36,619	35,331
18 Turkey	1,012	1,818	1,169	1,124	1,195	1,480	1,490	1,535	1,831	1,720
19 United Kingdom	111,811	102,362	109,496	102,363	103,846	102,973	101,484	99,776[r]	98,298	89,964
20 Yugoslavia	529	1,474	928	1,030	959	848	1,034	953	938	1,016
21 Other Western Europe[1]	8,598	13,563	11,689	14,352	12,806	10,545	10,340	12,812	10,876	11,884
22 U.S.S.R.	138	350	119	196	88	106	138	129[r]	178	75
23 Other Eastern Europe[2]	591	608	1,546	2,071	2,614	2,722	2,740	2,714[r]	2,926	2,881
24 Canada	21,062	18,865	20,332	19,218	23,839	23,445	23,254	22,734	23,844	22,521
25 Latin America and Caribbean	271,146	311,028	326,351	332,135	335,679	325,786	325,349	328,802[r]	328,329	335,205
26 Argentina	7,804	7,304	7,366	7,659	7,679	7,872	7,708	7,596[r]	7,523	7,123
27 Bahamas	86,863	99,341	107,386	105,028	102,264	96,289	96,307	97,485[r]	96,855	97,543
28 Bermuda	2,621	2,884	2,809	3,104	3,008	2,838	2,753	3,054[r]	2,919	3,161
29 Brazil	5,314	6,351	5,853	5,975	6,310	6,489	5,821	5,773	5,765	5,800
30 British West Indies	113,840	138,309	140,720	148,187	154,294	150,581	150,840	151,526[r]	150,809	157,056
31 Chile	2,936	3,212	3,145	3,188	3,063	2,995	3,107	3,240	3,233	3,309
32 Colombia	4,374	4,653	4,492	4,466	4,308	3,786	4,348	4,409	4,448	4,423
33 Cuba	10	10	11	18	8	7	8	8[r]	7	2
34 Ecuador	1,379	1,391	1,379	1,359	1,332	1,319	1,260	1,293	1,288	1,270
35 Guatemala	1,195	1,312	1,541	1,563	1,580	1,617	1,571	1,595	1,664	1,635
36 Jamaica	269	209	257	224	256	268	233	237	273	225
37 Mexico	15,185	15,423	16,625	16,938	17,144	17,405	17,508	18,657	19,552	20,015
38 Netherlands Antilles	6,420	6,310	7,381	7,139	6,970	6,600	6,898	5,986	5,959	6,081
39 Panama	4,353	4,362	4,575	4,345	4,351	4,454	4,293	4,552	4,676	4,699
40 Peru	1,671	1,984	1,295	1,347	1,324	1,364	1,428	1,413	1,342	1,332
41 Uruguay	1,898	2,284	2,520	2,596	2,639	2,509	2,463	2,488[r]	2,573	2,452
42 Venezuela	9,147	9,482	12,219	11,944	12,095	12,266	11,833	12,666	12,586	12,211
43 Other	5,868	6,206	6,779	7,053	7,055	7,127	6,969	6,825	6,856	6,868
44 Asia	147,838	156,201	136,780	135,951	132,375	133,041	126,796	122,872[r]	119,919	121,777
China										
45 Mainland	1,895	1,773	2,421	2,866	2,720	3,030	2,415	2,446	2,412	2,408
46 Taiwan	26,058	19,588	11,244	10,920	11,141	11,295	11,001	10,649	9,838	11,213
47 Hong Kong	12,248	12,416	12,700	14,872	14,794	15,748	16,109	15,010	14,575	14,529
48 India	699	780	1,233	1,472	1,628	1,174	986	1,968[r]	1,959	2,122
49 Indonesia	1,180	1,281	1,238	1,191	1,719	1,941	1,309	1,303	1,612	1,163
50 Israel	1,461	1,243	2,767	2,823	2,509	2,965	2,849	2,564[r]	2,355	2,375
51 Japan	74,015	81,184	67,075	63,452	61,093	56,820	53,172	52,031	51,482	50,012
52 Korea	2,541	3,215	2,280	2,406	2,186	2,213	2,887	2,193	2,102	2,335
53 Philippines	1,163	1,766	1,585	1,455	1,655	1,609	1,681	1,521	1,587	1,537
54 Thailand	1,236	2,093	1,443	2,228	2,148	2,403	2,571	2,502	2,386	2,367
55 Middle-East oil-exporting countries[3]	12,083	13,370	15,829	14,720	13,693	15,642	14,655	14,126[r]	13,355	15,742
56 Other	13,260	17,491	16,965	17,547	17,091	18,199	17,162	16,560	16,256	15,974
57 Africa	3,991	3,824	4,630	5,173	5,153	4,908	4,495	4,695	4,187	3,929
58 Egypt	911	686	1,425	1,476	1,416	1,449	927	1,364	1,017	999
59 Morocco	68	78	104	107	90	91	89	97	122	81
60 South Africa	437	206	228	212	317	312	220	202	241	221
61 Zaire	85	86	53	55	50	52	50	52	45	24
62 Oil-exporting countries[4]	1,017	1,121	1,110	1,508	1,528	1,370	1,434	1,140	1,105	960
63 Other	1,474	1,648	1,710	1,815	1,751	1,634	1,776	1,840[r]	1,657	1,644
64 Other countries	6,165	4,564	4,445	4,774	4,224	4,109	3,963	3,962	3,879	3,941
65 Australia	5,293	3,867	3,807	3,883	3,434	3,131	3,118	3,232	3,097	3,169
66 All other	872	697	637	891	790	978	845	730	782	772
67 Nonmonetary international and regional organizations	3,224	4,894	5,918	7,908	6,555	6,669	6,237	6,057[r]	5,917	5,943
68 International[5]	2,503	3,947	4,390	6,428	4,880	5,108	4,895	4,641[r]	4,025	4,063
69 Latin American regional	589	684	1,048	975	1,235	1,170	913	802	1,410	1,273
70 Other regional[6]	133	263	479	506	440	391	429	614	482	607

1. Includes the Bank for International Settlements and Eastern European countries that are not listed in line 23.
2. Comprises Bulgaria, Czechoslovakia, Hungary, Poland, and Romania.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.
5. Excludes "holdings of dollars" of the International Monetary Fund.
6. Asian, African, Middle Eastern, and European regional organizations, except the Bank for International Settlements, which is included in "Other Western Europe."

3.18 BANKS' OWN CLAIMS ON FOREIGNERS Reported by Banks in the United States[1] Payable in U.S. Dollars

Millions of dollars, end of period

Area and country	1988	1989	1990	1991 Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
1 **Total**	**491,165**	**534,492**	**510,078**	**497,886**	**509,839**	**495,614**	**507,001**	**502,896[r]**	**504,792**	**496,635**
2 **Foreign countries**	**489,094**	**530,630**	**505,285**	**495,344**	**505,995**	**493,114**	**504,286**	**500,194[r]**	**500,711**	**494,907**
3 Europe	116,928	119,025	113,043	108,184	107,614	104,180	100,318	99,243[r]	98,968	97,971
4 Austria	483	415	362	248	400	270	392	220	304	270
5 Belgium-Luxembourg	8,515	6,478	5,458	6,169	5,905	5,665	5,462	7,841[r]	6,721	6,154
6 Denmark	483	582	497	567	472	583	765	909	896	898
7 Finland	1,065	1,027	1,047	1,083	1,364	1,157	1,173	867	673	647
8 France	13,243	16,146	14,466	15,202	14,384	14,915	13,894	13,584[r]	14,304	14,126
9 Germany	2,329	2,865	3,343	3,361	3,620	3,305	3,235	2,628[r]	2,782	2,690
10 Greece	433	788	727	651	652	667	688	762	657	625
11 Italy	7,936	6,662	6,036	6,094	5,660	6,602	5,417	5,827[r]	6,329	6,055
12 Netherlands	2,541	1,904	1,751	1,953	2,108	2,119	2,230	1,960[r]	2,122	2,427
13 Norway	455	609	782	706	670	765	679	695	701	641
14 Portugal	261	376	292	323	292	384	293	322	378	255
15 Spain	1,823	1,930	2,668	2,864	2,526	3,334	3,344	3,082	2,056	2,582
16 Sweden	1,977	1,773	2,093	2,175	2,336	2,330	1,950	1,956[r]	1,974	1,850
17 Switzerland	3,895	6,141	4,200	2,073	2,444	3,165	3,238	3,487[r]	2,969	3,620
18 Turkey	1,233	1,071	1,405	1,377	1,509	1,537	1,440	1,445	1,593	1,419
19 United Kingdom	65,706	65,527	65,147	60,532	60,397	53,896	52,550	50,174[r]	51,333	50,607
20 Yugoslavia	1,390	1,329	1,142	1,084	980	991	1,012	965	932	877
21 Other Western Europe[2]	1,152	1,302	597	705	851	1,141	1,118	999	734	857
22 U.S.S.R.	1,255	1,179	530	505	501	781	904	936	891	782
23 Other Eastern Europe[3]	754	921	499	512	545	573	533	585	618	589
24 Canada	18,889	15,451	16,080	16,951	19,364	17,062	17,580	17,718[r]	17,434	16,686
25 Latin America and Caribbean	214,264	230,438	230,196	231,387	237,514	233,032	239,873	244,319[r]	248,601	245,721
26 Argentina	11,826	9,270	6,928	6,781	6,655	6,535	6,420	6,363	6,128	5,943
27 Bahamas	66,954	77,921	76,490	79,834	81,148	73,338	76,321	79,437[r]	78,054	80,545
28 Bermuda	483	1,315	4,006	1,771	3,602	3,823	4,935	7,182	3,893	6,563
29 Brazil	25,735	23,749	17,994	17,956	17,935	18,319	16,523	15,594[r]	15,245	12,302
30 British West Indies	55,888	68,749	87,429	94,213	97,500	100,882	105,073	105,685[r]	114,916	110,348
31 Chile	5,217	4,353	3,271	3,225	3,237	3,170	3,050	3,023	2,917	2,823
32 Colombia	2,944	2,784	2,585	2,555	2,528	2,441	2,334	2,281	2,349	2,201
33 Cuba	1	1	0	0	0	0	0	0	0	0
34 Ecuador	2,075	1,688	1,387	1,361	1,361	1,325	1,326	1,339	1,344	1,262
35 Guatemala[4]	198	197	191	193	191	199	208	220[r]	203	190
36 Jamaica[4]	212	297	238	243	171	224	196	181	187	144
37 Mexico	24,637	23,376	14,845	14,629	14,817	15,077	15,593	15,174[r]	15,411	15,453
38 Netherlands Antilles	1,306	1,921	7,998	2,194	1,599	1,298	1,496	1,589	1,639	1,563
39 Panama	2,521	1,740	1,471	1,534	1,502	1,479	1,475	1,410	1,423	1,500
40 Peru	1,013	771	663	656	691	697	670	722	726	710
41 Uruguay	910	929	786	767	626	588	620	615	590	588
42 Venezuela	10,733	9,652	2,569	2,118	2,254	2,168	2,209	2,223[r]	2,260	2,386
43 Other Latin America and Caribbean	1,612	1,726	1,344	1,357	1,698	1,468	1,424	1,280[r]	1,315	1,200
44 Asia	130,881	157,474	138,628	131,144	134,016	131,273	139,066	131,492[r]	128,043	127,208
China										
Mainland	762	634	620	565	497	723	641	567[r]	992	659
46 Taiwan	4,184	2,776	1,934	1,776	1,475	1,264	1,685	1,390	2,019	1,696
47 Hong Kong	10,143	11,128	10,644	8,250	8,792	9,729	10,891	9,870	9,217	8,871
48 India	560	621	655	624	590	539	560	455	405	362
49 Indonesia	674	651	933	926	1,081	1,136	1,029	984	896	879
50 Israel	1,136	813	774	964	842	952	871	829	852	815
51 Japan	90,149	111,300	90,679	90,266	89,896	84,614	91,287	88,822[r]	85,689	88,070
52 Korea	5,213	5,323	5,712	5,959	6,007	6,217	6,226	5,608	5,943	5,623
53 Philippines	1,876	1,344	1,247	1,230	1,261	1,445	1,478	1,452	1,506	1,647
54 Thailand	848	1,140	1,573	1,587	1,791	1,764	1,662	1,747	1,971	1,975
55 Middle East oil-exporting countries[5]	6,213	10,149	10,749	8,966	12,096	12,386	12,286	9,658	10,468	9,771
56 Other Asia	9,122	11,594	13,107	10,031	9,688	10,503	10,449	10,110	8,087	6,840
57 Africa	5,718	5,890	5,445	5,439	5,424	5,488	5,355	5,464	5,429	5,424
58 Egypt	507	502	380	384	314	304	304	305	315	324
59 Morocco	511	559	513	514	511	538	538	603	590	597
60 South Africa	1,681	1,628	1,525	1,517	1,518	1,628	1,627	1,641	1,626	1,627
61 Zaire	17	16	16	17	21	17	18	18	12	9
62 Oil-exporting countries[6]	1,523	1,648	1,486	1,467	1,478	1,452	1,372	1,365	1,336	1,291
63 Other	1,479	1,537	1,525	1,539	1,582	1,547	1,497	1,533	1,550	1,576
64 Other countries	2,413	2,354	1,893	2,238	2,063	2,079	2,093	1,957	2,236	1,897
65 Australia	1,520	1,781	1,413	1,672	1,547	1,468	1,570	1,470	1,622	1,377
66 All other	894	573	479	566	517	611	524	487	615	520
67 Nonmonetary international and regional organizations[7]	2,071	3,862	4,793	2,542	3,844	2,501	2,715	2,701	4,081	1,728

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Includes the Bank for International Settlements and Eastern European countries not listed in line 23.
3. Comprises Bulgaria, Czechoslovakia, Hungary, Poland, and Romania.
4. Included in "Other Latin America and Caribbean" through March 1978.
5. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
6. Comprises Algeria, Gabon, Libya, and Nigeria.
7. Excludes the Bank for International Settlements, which is included in "Other Western Europe."

3.19 BANKS' OWN AND DOMESTIC CUSTOMERS' CLAIMS ON FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Type of claim	1988	1989	1990	1991						
				Jan.	Feb.	Mar.	Apr.	May[r]	June[r]	July[p]
1 **Total**	**538,689**	**593,087**	**576,790**	....	....	**558,185**	....	....	**570,769**	....
2 Banks' own claims on foreigners	491,165	534,492	510,078	497,886	509,839	495,614	507,001	502,896	504,792	496,635
3 Foreign public borrowers	62,658	60,511	41,797	38,872	43,726	43,855	42,731	38,610	38,660	34,474
4 Own foreign offices[2]	257,436	296,011	303,054	300,514	306,122	296,895	303,046	298,546	305,958	305,679
5 Unaffiliated foreign banks	129,425	134,885	117,799	116,664	116,509	110,497	112,541	117,785	115,549	114,802
6 Deposits	65,898	78,185	65,211	68,564	69,039	63,021	64,642	68,838	68,470	68,326
7 Other	63,527	56,700	52,588	48,100	47,470	47,476	47,899	48,947	47,079	46,476
8 All other foreigners	41,646	43,085	47,428	41,835	43,483	44,368	48,684	47,955	44,626	41,680
9 Claims of banks' domestic customers[3]	47,524	58,594	66,712	....	....	62,571	....	....	65,976	....
10 Deposits	8,289	13,019	14,375	....	....	17,044	....	....	19,638	....
11 Negotiable and readily transferable instruments[4]	25,700	30,983	42,030	....	....	34,533	....	....	35,385	....
12 Outstanding collections and other claims	13,535	14,592	10,308	....	....	10,994	....	....	10,953	....
13 MEMO: Customer liability on acceptances	19,596	12,899	13,659	....	....	11,766	....	....	10,499	....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States[5]	45,360	45,509	43,645	46,776	42,264	41,751	42,656[r]	40,057	36,051	n.a.

1. Data for banks' own claims are given on a monthly basis, but the data for claims of banks' own domestic customers are available on a quarterly basis only. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. U.S. banks: includes amounts due from own foreign branches and foreign subsidiaries consolidated in "Consolidated Report of Condition" filed with bank regulatory agencies. Agencies, branches, and majority-owned subsidiaries of foreign banks: principally amounts due from head office or parent foreign bank, and foreign branches, agencies, or wholly owned subsidiaries of head office or parent foreign bank.
3. Assets owned by customers of the reporting bank located in the United States that represent claims on foreigners held by reporting banks for the account of their domestic customers.
4. Principally negotiable time certificates of deposit and bankers acceptances.
5. Includes demand and time deposits and negotiable and nonnegotiable certificates of deposit denominated in U.S. dollars issued by banks abroad. For description of changes in data reported by nonbanks, see July 1979 *Bulletin*, p. 550.

3.20 BANKS' OWN CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Banks in the United States[1]
Payable in U.S. Dollars

Millions of dollars, end of period

Maturity, by borrower and area	1987	1988	1989	1990		1991	
				Sept.	Dec.	Mar.	June[p]
1 **Total**	**235,130**	**233,184**	**238,123**	**213,258**	**206,995**	**198,820**	**198,338**
By borrower							
2 Maturity of one year or less[2]	163,997	172,634	178,346	166,040	165,732	157,799	158,040
3 Foreign public borrowers	25,889	26,562	23,916	21,670	19,283	21,172	17,866
4 All other foreigners	138,108	146,071	154,430	144,369	146,450	136,626	140,174
5 Maturity over one year[2]	71,133	60,550	59,776	47,218	41,263	41,021	40,298
6 Foreign public borrowers	38,625	35,291	36,014	26,354	22,393	22,377	20,534
7 All other foreigners	32,507	25,259	23,762	20,864	18,870	18,644	19,764
By area							
Maturity of one year or less[2]							
8 Europe	59,027	55,909	53,913	51,125	49,169	49,521	49,489
9 Canada	5,680	6,282	5,910	5,499	5,439	5,896	7,203
10 Latin America and Caribbean	56,535	57,991	53,003	44,010	49,674	42,597	40,632
11 Asia	35,919	46,224	57,755	56,123	53,138	53,848	52,902
12 Africa	2,833	3,337	3,225	2,954	3,040	3,016	2,945
13 All other[3]	4,003	2,891	4,541	6,330	5,273	2,919	4,870
Maturity of over one year[2]							
14 Europe	6,696	4,666	4,121	4,424	3,869	4,326	4,300
15 Canada	2,661	1,922	2,353	3,033	3,291	3,387	3,891
16 Latin America and Caribbean	53,817	47,547	45,816	31,284	25,964	24,950	23,724
17 Asia	3,830	3,613	4,172	5,664	5,204	5,424	5,731
18 Africa	1,747	2,301	2,630	2,546	2,374	2,417	2,456
19 All other[3]	2,381	501	684	266	561	517	197

1. Reporting banks include all kinds of depository institutions besides commercial banks, as well as some brokers and dealers.
2. Remaining time to maturity.
3. Includes nonmonetary international and regional organizations.

3.21 CLAIMS ON FOREIGN COUNTRIES Held by U.S. Offices and Foreign Branches of U.S.-Chartered Banks[1,2]

Billions of dollars, end of period

Area or country	1987	1988	1989			1990				1991	
			June	Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June p
1 **Total**	**382.4**	**346.3**	**340.0**	**346.5**	**338.8**	**333.4**	**321.4**	**331.6**	**316.5**	**324.0r**	**319.7**
2 G-10 countries and Switzerland	159.7	152.7	145.1	146.4	152.9	146.4	139.3	144.3	132.1r	129.6r	129.7
3 Belgium-Luxembourg	10.0	9.0	7.8	6.9	6.3	6.6	6.2	6.5	5.9	6.2r	6.1
4 France	13.7	10.5	10.8	11.1	11.7	10.4	10.2	11.1	10.4r	9.7	10.5
5 Germany	12.6	10.3	10.6	10.4	10.5	11.2	11.2	11.1	10.6	8.8r	8.1
6 Italy	7.5	6.8	6.1	6.8	7.4	5.9	5.4	4.4	5.0	4.0	3.6
7 Netherlands	4.1	2.7	2.8	2.4	3.1	3.1	2.7	3.8	3.0	3.3	3.3
8 Sweden	2.1	1.8	1.8	2.0	2.0	2.1	2.3	2.3	2.2r	2.1r	2.4
9 Switzerland	5.6	5.4	5.4	6.1	7.1	6.2	6.3	5.6	4.4	3.7r	3.3
10 United Kingdom	68.8	66.2	64.5	63.7	67.2	63.9	59.8	62.5	60.8r	62.0	59.8
11 Canada	5.5	5.0	5.1	5.9	5.4	4.7	5.1	5.1	5.9	6.7	8.2
12 Japan	29.8	34.9	30.2	31.0	32.2	32.2	30.1	32.0	24.0r	23.2r	24.6
13 Other developed countries	26.4	21.0	21.2	21.0	20.7	23.0	22.4	23.1	22.6	23.1	21.2
14 Austria	1.9	1.5	1.7	1.5	1.5	1.5	1.5	1.6	1.4	1.4	1.1
15 Denmark	1.7	1.1	1.4	1.1	1.1	1.2	1.1	1.1	1.1	.9	1.2
16 Finland	1.2	1.1	1.0	1.1	1.0	1.1	.9	.8	.7	1.0	.8
17 Greece	2.0	1.8	2.3	2.4	2.5	2.6	2.7	2.8	2.7	2.5	2.4
18 Norway	2.2	1.8	1.8	1.4	1.4	1.7	1.4	1.6	1.6	1.5	1.5
19 Portugal	.6	.4	.6	.4	.4	.4	.8	.6	.6	.6	.6
20 Spain	8.0	6.2	6.2	6.9	7.1	8.2	7.8	8.4	8.3	9.0	7.0
21 Turkey	2.0	1.5	1.1	1.2	1.2	1.3	1.4	1.6	1.7	1.7	1.9
22 Other Western Europe	1.6	1.3	1.1	1.0	.7	1.0	1.1	.7	.9	.8	1.0
23 South Africa	2.9	2.4	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.8
24 Australia	2.4	1.8	1.9	2.1	1.6	2.1	1.8	2.0	1.8	1.9	2.0
25 OPEC countries[3]	17.4	16.6	16.1	16.2	17.1	15.5	15.3	14.4	12.8	17.1r	13.7
26 Ecuador	1.9	1.7	1.5	1.5	1.3	1.2	1.1	1.1	1.0	.9	.9
27 Venezuela	8.1	7.9	7.5	7.4	7.0	6.1	6.0	6.0	5.0	5.1	5.0
28 Indonesia	1.9	1.7	1.9	2.0	2.0	2.1	2.0	2.3	2.7	2.8	2.6
29 Middle East countries	3.6	3.4	3.4	3.5	5.0	4.3	4.4	3.3	2.5	6.6r	3.7
30 African countries	1.9	1.9	1.6	1.9	1.7	1.8	1.8	1.7	1.7	1.6r	1.5
31 Non-OPEC developing countries	97.8	85.3	83.4	81.2	77.5	68.8	66.7	67.1	65.3	66.3r	65.0
Latin America											
32 Argentina	9.5	9.0	7.9	7.6	6.3	5.6	5.2	5.0	4.9	4.7	4.6
33 Brazil	24.7	22.4	22.1	20.9	19.0	17.5	16.7	15.4	14.4	13.9r	11.6
34 Chile	6.9	5.6	5.2	4.9	4.6	4.3	3.7	3.6	3.5	3.6	3.6
35 Colombia	2.0	2.1	1.7	1.6	1.8	1.8	1.7	1.8	1.8	1.7	1.6
36 Mexico	23.5	18.8	17.7	17.2	17.7	12.8	12.6	12.8	13.0	13.7r	14.3
37 Peru	1.1	.8	.6	.6	.6	.5	.5	.5	.5	.5	.5
38 Other Latin America	2.8	2.6	2.6	2.9	2.8	2.8	2.3	2.4	2.3	2.2r	2.1
Asia											
China											
39 Mainland	.3	.3	.3	.3	.3	.3	.2	.2	.2	.4	.6
40 Taiwan	8.2	3.7	5.2	5.0	4.5	3.8	3.6	4.0	3.5	3.6	4.1
41 India	1.9	2.1	2.4	2.7	3.1	3.5	3.6	3.6	3.3	3.5	3.0
42 Israel	1.0	1.2	.8	.7	.7	.6	.7	.6	.5	.5	.5
43 Korea (South)	5.0	6.1	6.6	6.5	5.9	5.3	5.6	6.2	6.1	6.7	6.9
44 Malaysia	1.5	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9	2.0	2.1
45 Philippines	5.2	4.5	4.4	4.0	4.1	3.7	3.9	3.9	3.8	3.7	3.6
46 Thailand	.7	1.1	1.0	1.3	1.3	1.1	1.3	1.5	1.5	1.6	1.7
47 Other Asia	.7	.9	.8	1.0	1.0	1.2	1.1	1.6	1.7	2.1	2.3
Africa											
48 Egypt	.6	.4	.6	.5	.4	.4	.5	.4	.4	.4	.4
49 Morocco	.9	.9	.9	.8	.9	.9	.9	.9	.8	.8	.7
50 Zaire	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
51 Other Africa[4]	1.3	1.1	1.1	1.0	1.0	.9	.8	.8	1.0	.8	.8
52 Eastern Europe	3.2	3.6	3.4	3.5	3.5	3.3	2.9	2.7	2.3	2.1r	2.1
53 U.S.S.R.	.3	.7	.6	.8	.7	.8	.4	.4	.2	.3	.4
54 Yugoslavia	1.8	1.8	1.7	1.7	1.6	1.4	1.4	1.3	1.2	1.0	1.0
55 Other	1.1	1.1	1.1	1.1	1.3	1.2	1.1	1.1	.9	.8r	.7
56 Offshore banking centers	54.5	44.2	43.2	49.2	36.6	42.9	40.0	41.8	41.2r	49.0r	48.3
57 Bahamas	17.3	11.0	11.0	11.4	5.5	9.2	8.5	8.9	2.8	8.7	6.8
58 Bermuda	.6	.9	.7	1.3	1.7	.9	2.2	4.0	4.3	4.1	4.2
59 Cayman Islands and other British West Indies	13.5	12.9	10.8	15.3	9.0	10.9	8.5	9.0	10.4	13.1r	15.1
60 Netherlands Antilles	1.2	1.0	1.0	1.1	2.3	2.6	2.3	2.2	7.9	1.1	1.3
61 Panama[5]	3.7	2.5	1.9	1.5	1.4	1.3	1.4	1.5	1.4	1.4r	1.3
62 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
63 Hong Kong	11.2	9.6	10.4	10.7	9.7	9.8	10.0	8.7	7.7r	11.5r	12.3
64 Singapore	7.0	6.1	7.3	7.8	7.0	8.0	7.0	7.5	6.6r	8.9r	7.2
65 Others[6]	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
66 Miscellaneous and unallocated[7]	23.2	22.6	27.4	28.7	30.3	33.3	34.5	38.1	39.8r	36.6r	39.4

1. The banking offices covered by these data are the U.S. offices and foreign branches of U.S.-owned banks and of U.S. subsidiaries of foreign-owned banks. Offices *not* covered include (1) U.S. agencies and branches of foreign banks, and (2) foreign subsidiaries of U.S. banks. To minimize duplication, the data are adjusted to exclude the claims on foreign branches held by a U.S. office or another foreign branch of the same banking institution. The data in this table combine foreign branch claims in table 3.14 (the sum of lines 7 through 10) with the claims of U.S. offices in table 3.18 (excluding those held by agencies and branches of foreign banks and those constituting claims on own foreign branches).

2. Beginning in June 1984 reported claims held by foreign branches have been reduced by an increase in the reporting threshold for "shell" branches from $50 million to $150 million equivalent in total assets, the threshold now applicable to all reporting branches.

3. This group comprises the Organization of Petroleum Exporting Countries shown individually, other members of OPEC (Algeria, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, and United Arab Emirates), and Bahrain and Oman (not formally members of OPEC).

4. Excludes Liberia.

5. Includes Canal Zone beginning December 1979.

6. Foreign branch claims only.

7. Includes New Zealand, Liberia, and international and regional organizations.

3.22 LIABILITIES TO UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

Type and area or country	1987	1988	1989	1989	1990				1991
				Dec.	Mar.	June	Sept.	Dec.	Mar.
1 **Total**	**28,302**	**32,952**	**38,017**	**38,017**	**38,076**	**39,092**	**43,885**	**41,788**	**39,573**[r]
2 Payable in dollars	22,785	27,335	33,211	33,211	33,705	34,595	38,744	37,406	35,561[r]
3 Payable in foreign currencies	5,517	5,617	4,805	4,805	4,371	4,496	5,140	4,382	4,012
By type									
4 Financial liabilities	12,424	14,507	17,690	17,690	17,134	18,715	19,616	17,538	16,703[r]
5 Payable in dollars	8,643	10,608	13,830	13,830	13,841	15,336	15,766	14,306	14,016[r]
6 Payable in foreign currencies	3,781	3,900	3,860	3,860	3,292	3,380	3,850	3,232	2,687
7 Commercial liabilities	15,878	18,445	20,327	20,327	20,942	20,376	24,268	24,251	22,870[r]
8 Trade payables	7,305	6,505	7,626	7,626	7,471	6,968	10,081	10,007	8,224[r]
9 Advance receipts and other liabilities	8,573	11,940	12,701	12,701	13,471	13,409	14,188	14,243	14,646[r]
10 Payable in dollars	14,142	16,727	19,381	19,381	19,864	19,260	22,978	23,100	21,546[r]
11 Payable in foreign currencies	1,737	1,717	945	945	1,078	1,117	1,291	1,150	1,325
By area or country									
Financial liabilities									
12 Europe	8,320	9,962	11,615	11,615	11,094	11,759	11,216	9,641	9,144[r]
13 Belgium-Luxembourg	213	289	340	340	318	332	350	344	285
14 France	382	359	258	258	271	171	470	638	578
15 Germany	551	699	475	475	442	557	615	630	570
16 Netherlands	866	880	944	944	900	932	945	973	948
17 Switzerland	558	1,033	541	541	528	552	632	576	577
18 United Kingdom	5,557	6,533	8,846	8,846	8,388	8,851	7,651	5,944	5,547
19 Canada									
	360	388	601	601	343	297	301	215	272[r]
20 Latin America and Caribbean									
21 Bahamas	1,189	839	1,268	1,268	1,815	2,573	3,394	3,239	3,509[r]
22 Bermuda	318	184	157	157	272	249	368	344	456[r]
23 Brazil	0	0	17	17	2	0	0	0	0
24 British West Indies	25	0	0	0	0	0	0	0	0
25 Mexico	778	645	635	635	1,061	1,782	2,409	2,274	2,483[r]
26 Venezuela	13	1	6	6	5	4	4	5	6
	0	0	0	0	0	0	0	4	4
27 Asia									
28 Japan	2,451	3,312	4,104	4,104	3,775	4,027	4,223	4,032	3,774
29 Middle East oil-exporting countries[2]	2,042	2,563	3,252	3,252	2,737	2,824	3,088	2,853	2,701
	8	3	2	2	3	5	4	5	1
30 Africa									
31 Oil-exporting countries[3]	4	2	2	2	3	3	2	2	2
	1	0	0	0	0	1	0	0	0
32 All other[4]	100	4	100	100	103	55	479	409	2
Commercial liabilities									
33 Europe	5,516	7,319	8,952	8,952	9,198	8,560	9,834	10,292	9,605[r]
34 Belgium-Luxembourg	132	158	179	179	233	297	248	285	261[r]
35 France	426	455	878	878	888	1,049	1,263	1,260	1,209
36 Germany	909	1,699	1,393	1,393	1,174	990	1,052	1,264	1,380[r]
37 Netherlands	423	587	699	699	688	608	701	840	715
38 Switzerland	559	417	641	641	604	628	728	759	656[r]
39 United Kingdom	1,599	2,079	2,620	2,620	2,926	2,439	2,777	2,791	2,734[r]
40 Canada	1,301	1,217	1,124	1,124	1,151	1,179	1,263	1,246	1,230[r]
41 Latin America and Caribbean	864	1,090	1,187	1,187	1,304	1,279	1,555	1,598	1,544[r]
42 Bahamas	18	49	41	41	37	22	18	12	21
43 Bermuda	168	286	308	308	516	412	371	538	494
44 Brazil	46	95	100	100	116	106	126	137	214[r]
45 British West Indies	19	34	27	27	18	29	42	30	35
46 Mexico	189	217	304	304	241	285	506	421	304[r]
47 Venezuela	162	114	154	154	85	119	120	121	109[r]
48 Asia	6,565	6,915	7,193	7,193	7,019	7,084	8,892	8,928	8,235[r]
49 Japan	2,578	3,094	2,917	2,917	2,748	3,189	3,283	3,606	3,467
50 Middle East oil-exporting countries[2,5]	1,964	1,385	1,401	1,401	1,393	1,125	2,321	1,701	1,263
51 Africa	574	576	844	844	753	885	1,315	789	650[r]
52 Oil-exporting countries[3]	135	202	307	307	263	277	593	422	225
53 All other[4]	1,057	1,328	1,027	1,027	1,517	1,390	1,408	1,397	1,606

1. For a description of the changes in the International Statistics tables, see July 1979 *Bulletin*, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.
5. Revisions include a reclassification of transactions, which also affects the totals for Asia and the grand totals.

3.23 CLAIMS ON UNAFFILIATED FOREIGNERS Reported by Nonbanking Business Enterprises in the United States[1]

Millions of dollars, end of period

	Type, and area or country	1987	1988	1989	1989	1990				1991
					Dec.	Mar.	June	Sept.	Dec.	Mar.
1	**Total**	**30,964**	**34,035**	**31,542**	**31,542**	**29,956**	**31,716**	**31,086**	**33,487**	**34,833^{r}**
2	Payable in dollars	28,502	31,654	29,209	29,209	27,802	29,398	28,691	31,038	32,609^{r}
3	Payable in foreign currencies	2,462	2,381	2,334	2,334	2,154	2,318	2,395	2,449	2,223^{r}
	By type									
4	Financial claims	20,363	21,869	17,721	17,721	16,622	18,079	16,638	18,109	18,420^{r}
5	Deposits	14,894	15,643	10,400	10,400	10,461	9,885	10,301	11,473	11,347^{r}
6	Payable in dollars	13,765	14,544	9,473	9,473	9,583	8,815	9,107	10,504	10,432
7	Payable in foreign currencies	1,128	1,099	927	927	878	1,070	1,193	969	915^{r}
8	Other financial claims	5,470	6,226	7,322	7,322	6,161	8,194	6,338	6,636	7,073^{r}
9	Payable in dollars	4,656	5,450	6,568	6,568	5,471	7,460	5,685	5,769	6,357^{r}
10	Payable in foreign currencies	814	777	754	754	690	733	652	866	716
11	Commercial claims	10,600	12,166	13,821	13,821	13,334	13,637	14,448	15,378	16,413^{r}
12	Trade receivables	9,535	11,091	12,203	12,203	11,704	11,909	12,653	13,430	14,350^{r}
13	Advance payments and other claims	1,065	1,075	1,618	1,618	1,630	1,728	1,795	1,948	2,063^{r}
14	Payable in dollars	10,081	11,660	13,168	13,168	12,748	13,123	13,898	14,764	15,820^{r}
15	Payable in foreign currencies	519	505	653	653	586	514	549	613	593^{r}
	By area or country									
	Financial claims									
16	Europe	9,531	10,279	7,044	7,044	6,982	9,619	7,989	8,005	9,462
17	Belgium-Luxembourg	7	18	28	28	22	126	27	76	86
18	France	332	203	153	153	203	141	153	366	240
19	Germany	102	120	192	192	508	93	102	371	481
20	Netherlands	350	348	303	303	316	340	329	333	448
21	Switzerland	65	218	95	95	122	137	176	325	405
22	United Kingdom	8,467	9,039	6,035	6,035	5,589	8,556	6,976	6,276	7,555
23	Canada	2,844	2,325	1,904	1,904	1,758	2,036	1,989	2,887	1,833
24	Latin America and Caribbean	7,012	8,160	7,590	7,590	6,984	5,479	5,661	5,751	5,881^{r}
25	Bahamas	1,994	1,846	1,516	1,516	1,662	992	977	1,261	1,640
26	Bermuda	7	19	7	7	4	3	4	3	6
27	Brazil	63	47	224	224	79	84	70	68	68
28	British West Indies	4,433	5,763	5,431	5,431	4,824	4,003	4,210	4,031	3,738^{r}
29	Mexico	172	151	94	94	152	153	158	160	179^{r}
30	Venezuela	19	21	20	20	21	20	23	25	28
31	Asia	879	844	847	847	806	843	771	1,213	919
32	Japan	605	574	456	456	459	486	472	875	592
33	Middle East oil-exporting countries[2]	8	5	8	8	7	6	9	8	11
34	Africa	65	106	140	140	67	62	49	37	62
35	Oil-exporting countries[3]	7	10	12	12	11	8	7	0	3
36	All other[4]	33	155	195	195	25	41	179	215	262
	Commercial claims									
37	Europe	4,180	5,181	6,194	6,194	6,046	6,082	6,502	7,094	7,035^{r}
38	Belgium-Luxembourg	178	189	242	242	220	209	189	211	221
39	France	650	672	963	963	964	924	1,206	1,302	1,267^{r}
40	Germany	562	669	696	696	702	669	638	800	859^{r}
41	Netherlands	133	212	479	479	453	479	492	552	609
42	Switzerland	185	344	305	305	270	235	301	299	323
43	United Kingdom	1,073	1,324	1,572	1,572	1,689	1,583	1,674	1,794	1,654^{r}
44	Canada	936	983	1,079	1,079	1,148	1,147	1,148	1,050	1,194^{r}
45	Latin America and Caribbean	1,930	2,241	2,178	2,178	2,063	2,207	2,399	2,320	2,304^{r}
46	Bahamas	19	36	57	57	22	17	25	14	15
47	Bermuda	170	230	323	323	243	284	340	246	232
48	Brazil	226	299	293	293	232	235	253	323	308^{r}
49	British West Indies	26	22	36	36	38	47	35	40	49
50	Mexico	368	461	510	510	526	582	651	646	656
51	Venezuela	283	227	147	147	189	224	225	190	190
52	Asia	2,915	2,993	3,560	3,560	3,279	3,446	3,594	4,032	5,017^{r}
53	Japan	1,158	946	1,197	1,197	1,074	1,097	1,221	1,418	2,458
54	Middle East oil-exporting countries[2]	450	453	518	518	434	417	408	459	548
55	Africa	401	435	419	419	425	390	373	488	390
56	Oil-exporting countries[3]	144	122	108	108	89	97	72	67	68
57	All other[4]	238	333	392	392	372	365	432	395	473^{r}

1. For a description of the changes in the International Statistics tables, see July 1979 *Bulletin*, p. 550.
2. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
3. Comprises Algeria, Gabon, Libya, and Nigeria.
4. Includes nonmonetary international and regional organizations.

3.24 FOREIGN TRANSACTIONS IN SECURITIES

Millions of dollars

Transactions, and area or country	1989	1990	1991 Jan.–July	1991 Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
	U.S. corporate securities									
STOCKS										
1 Foreign purchases	214,061	173,231	127,286	10,259	21,691	21,763	20,569	19,218[r]	17,342	16,444
2 Foreign sales	204,114	188,373	115,779	11,056	20,615	19,393	17,440	15,886[r]	16,098	15,291
3 **Net purchases, or sales (−)**	**9,946**	**−15,142**	**11,507**	**−797**	**1,076**	**2,370**	**3,129**	**3,332**	**1,244**	**1,153**
4 **Foreign countries**	**10,180**	**−15,213**	**11,250**	**−798**	**1,020**	**2,369**	**3,051**	**3,278[r]**	**1,200**	**1,130**
5 Europe	481	−8,498	2,580	−600	−1,245	846	1,639	1,218	719	3
6 France	−708	−1,234	270	−24	27	100	−45	83	170	−41
7 Germany	−830	−368	−238	−114	−204	0	13	24	49	−7
8 Netherlands	79	−398	40	−142	−104	119	30	25	64	49
9 Switzerland	−3,277	−2,867	420	−222	−943	357	552	290	346	41
10 United Kingdom	3,691	−2,992	1,056	−83	27	121	686	585[r]	−147	−133
11 Canada	−881	892	2,143	25	469	284	111	712	383	159
12 Latin America and Caribbean	3,042	−1,333	1,975	233	937	3	120	240	285	157
13 Middle East[1]	3,531	−2,435	203	−279	675	−30	−182	207	−460	272
14 Other Asia	3,577	−3,477	3,732	−196	432	1,223	1,236	829[r]	99	110
15 Japan	3,330	−2,891	1,254	−271	−366	−2	1,163	669	76	−15
16 Africa	131	−63	115	33	31	16	0	21	9	6
17 Other countries	299	−298	502	−13	−279	28	128	51	165	423
18 **Nonmonetary international and regional organizations**	**−234**	**71**	**257**	**2**	**56**	**1**	**78**	**55**	**44**	**23**
BONDS[2]										
19 Foreign purchases	120,550	118,755	78,823	8,859	8,468	14,802	10,291	14,323	12,316	9,763
20 Foreign sales	87,376	101,703	65,479	8,575	9,269	10,608	9,083[r]	11,645[r]	8,626	7,673
21 **Net purchases, or sales (−)**	**33,174**	**17,052**	**13,344**	**284**	**−801**	**4,194**	**1,207[r]**	**2,678[r]**	**3,691**	**2,090**
22 **Foreign countries**	**32,821**	**17,523**	**13,386**	**103**	**−723**	**4,093**	**1,307[r]**	**2,736[r]**	**3,752**	**2,117**
23 Europe	19,064	10,396	7,848	−130	−1,065	3,271	1,189[r]	1,667[r]	2,141	776
24 France	372	373	607	31	68	392	34	86	2	−5
25 Germany	−238	−377	627	−54	78	238	114	400	−120	−29
26 Netherlands	850	172	190	47	1	20	84	21	45	−28
27 Switzerland	−511	284	878	360	−217	318	−56	162	318	−7
28 United Kingdom	18,123	10,703	4,692	−102	−885	1,633	789[r]	896[r]	1,784	577
29 Canada	1,116	1,906	1,342	71	106	385	247	374	127	34
30 Latin America and Caribbean	3,686	4,289	1,653	−17	439	351	188	−142	524	309
31 Middle East[1]	−182	76	638	69	−2	−13	−25	20	160	430
32 Other Asia	9,025	1,104	1,975	131	−209	81	−301	831	898	544
33 Japan	6,292	747	1,525	308	−214	162	−240	544	685	280
34 Africa	56	96	18	−15	10	7	8	10	−1	−1
35 Other countries	57	−344	−89	−5	−2	10	3	−23	−96	25
36 **Nonmonetary international and regional organizations**	**353**	**−471**	**−42**	**181**	**−78**	**102**	**−100**	**−58**	**−62**	**−27**
	Foreign securities									
37 Stocks, net purchases, or sales (−)[3]	−13,120	−8,952	−19,384	−404	−3,177	−3,305	−2,540	−3,312	−3,595	−3,051
38 Foreign purchases	109,792	122,600	64,430	6,230	10,561	11,095	7,942	8,558	9,973	10,071
39 Foreign sales[3]	122,912	131,552	83,814	6,634	13,738	14,400	10,482	11,871	13,568	13,122
40 Bonds, net purchases, or sales (−)	−5,943	−22,322	−7,734	−173	−1,945	−991	−254[r]	−1,987	−1,547	−837
41 Foreign purchases	234,320	314,466	187,868	27,138	37,202	40,161	20,779[r]	20,642	19,916	22,030
42 Foreign sales	240,263	336,788	195,601	27,312	39,146	41,152	21,033[r]	22,629	21,462	22,867
43 **Net purchases, or sales (−), of stocks and bonds**	**−19,063**	**−31,273**	**−27,117**	**−577**	**−5,122**	**−4,296**	**−2,793[r]**	**−5,299**	**−5,141**	**−3,888**
44 **Foreign countries**	**−19,101**	**−28,600**	**−26,059**	**−538**	**−5,166**	**−2,845**	**−2,917[r]**	**−4,770**	**−5,422**	**−4,402**
45 Europe	−17,721	−7,999	−12,687	328	−3,139	−340	348[r]	−1,918	−3,033	−4,932
46 Canada	−4,180	−7,502	−5,337	−573	−797	3	−2,290	−943	−1,011	275
47 Latin America and Caribbean	426	−8,959	−718	351	314	114	8[r]	−1,652	−26	174
48 Asia	2,532	−3,824	−7,343	−778	−1,793	−2,494	−987	−159	−1,172	40
49 Africa	93	−137	−122	22	30	2	10	4	−198	8
50 Other countries	−251	−179	147	113	218	−130	−4	−101	19	33
51 **Nonmonetary international and regional organizations**	**38**	**−2,673**	**−1,058**	**−39**	**44**	**−1,451**	**123**	**−529**	**280**	**514**

1. Comprises oil-exporting countries as follows: Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
2. Includes state and local government securities, and securities of U.S. government agencies and corporations. Also includes issues of new debt securities sold abroad by U.S. corporations organized to finance direct investments abroad.
3. As a result of the merger of a U.S. and U.K. company in July 1989, the former stockholders of the U.S. company received $5,453 million in shares of the new combined U.K. company. This transaction is not reflected in the data above.

3.25 MARKETABLE U.S. TREASURY BONDS AND NOTES Foreign Transactions

Millions of dollars

Country or area	1989	1990	1991	1991						
			Jan.–July	Jan.	Feb.	Mar.	Apr.	May	June[r]	July[p]
	Transactions, net purchases or sales (–) during period[1]									
1 **Estimated total**[2]	**54,203**	**19,687**	**14,769**	**3,144**	**12,922**	**–15,574**	**2,891[r]**	**16,415**	**–5,740**	**711**
2 Foreign countries[2]	52,301	19,524	15,530	4,776	11,462	–14,755	2,583	16,398	–5,317	383
3 Europe[2]	36,286	19,065	577	3,356	2,933	–4,535	–1,358	5,513	–4,229	–1,103
4 Belgium–Luxembourg	1,048	10	441	260	149	115	37	121	–81	–159
5 Germany[2]	7,904	5,829	–5,464	–542	–1,691	–3,340	–549	1,433	–1,458	684
6 Netherlands	–1,141	1,077	–2,534	300	–85	–607	–292	–61	–794	–994
7 Sweden	693	1,152	–980	–661	43	–244	–410	560	31	–299
8 Switzerland[2]	1,098	112	375	170	139	470	–622	230	207	–218
9 United Kingdom	20,198	–1,338	3,600	2,829	–54	513	260	1,699	–1,249	–398
10 Other Western Europe	6,508	12,202	5,131	995	4,432	–1,442	214	1,534	–886	284
11 Eastern Europe	–21	13	8	6	0	0	5	–3	3	–3
12 Canada	698	–4,614	404	–795	–171	182	566	342	–114	395
13 Latin America and Caribbean	464	14,980	15,812	–4,984	2,802	121	5,561	10,481	161	1,669
14 Venezuela	311	33	–117	–153	–1	6	2	2	20	7
15 Other Latin America and Caribbean	–322	4,190	10,598	–426	1,593	765	2,969	5,687	–233	242
16 Netherlands Antilles	475	10,757	5,331	–4,405	1,210	–650	2,590	4,793	374	1,420
17 Asia	13,297	–11,062	–983	7,019	5,517	–9,984	–2,179	12	–879	–489
18 Japan	1,681	–14,895	–4,058	2,244	1,915	–7,016	–3,379	711	1,422	45
19 Africa	116	313	316	78	110	0	16	1	104	7
20 All other	1,439	842	–597	102	269	–540	–22	48	–358	–96
21 Nonmonetary international and regional organizations	1,902	163	–761	–1,633	1,461	–819	308[r]	17	–423	328
22 International	1,473	287	–1,004	–1,571	1,104	–845	100[r]	42	–12	178
23 Latin America regional	231	–2	139	–202	156	5	225	–186	–9	150
Memo										
24 Foreign countries[2]	52,301	19,524	15,530	4,776	11,462	–14,755	2,583	16,398	–5,317	383
25 Official institutions	26,840	23,169	–5,774	2,707	7,009	–12,000	886[r]	2,020[r]	–5,695	–701
26 Other foreign[2]	25,461	–3,645	21,304	2,069	4,453	–2,755	1,698[r]	14,377[r]	378	1,084
Oil-exporting countries										
27 Middle East[3]	8,148	–387	–2,541	523	644	–1,485	–513	–562	–505	–643
28 Africa[4]	–1	0	20	0	21	–6	5	0	0	0

1. Estimated official and private transactions in marketable U.S. Treasury securities with an original maturity of more than 1 year. Data are based on monthly transactions reports. Excludes nonmarketable U.S. Treasury bonds and notes held by official institutions of foreign countries.
2. Includes U.S. Treasury notes, denominated in foreign currencies, publicly issued to private foreign residents.
3. Comprises Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Trucial States).
4. Comprises Algeria, Gabon, Libya, and Nigeria.

3.26 DISCOUNT RATES OF FOREIGN CENTRAL BANKS

Percent per year

Country	Rate on Sept. 30, 1991 Percent	Rate on Sept. 30, 1991 Month effective	Country	Rate on Sept. 30, 1991 Percent	Rate on Sept. 30, 1991 Month effective	Country	Rate on Sept. 30, 1991 Percent	Rate on Sept. 30, 1991 Month effective
Austria	7.5	Aug. 1991	France[1]	9.0	Mar. 1990	Norway	10.50	July 1990
Belgium	8.0	Aug. 1991	Germany, Fed. Rep. of	7.5	Aug. 1991	Switzerland	7.0	Aug. 1991
Canada	8.59	Sept. 1991	Italy	11.5	May 1991	United Kingdom[2]	....	....
Denmark	9.0	May 1991	Japan	5.5	July 1991			
			Netherlands	8.0	Aug. 1991			

1. As of the end of February 1981, the rate is that at which the Bank of France discounts Treasury bills for 7 to 10 days.
2. Minimum lending rate suspended as of Aug. 20, 1981.
NOTE. Rates shown are mainly those at which the central bank either discounts or makes advances against eligible commercial paper and/or government commercial banks or brokers. For countries with more than one rate applicable to such discounts or advances, the rate shown is the one at which it is understood the central bank transacts the largest proportion of its credit operations.

3.27 FOREIGN SHORT-TERM INTEREST RATES

Averages of daily figures, percent per year

Country, or type	1988	1989	1990	1991 Mar.	Apr.	May	June	July	Aug.	Sept.
1 Eurodollars	7.85	9.16	8.16	6.44	6.11	5.94	6.08	6.01	5.65	5.50
2 United Kingdom	10.28	13.87	14.73	12.33	11.90	11.48	11.21	11.04	10.85	10.24
3 Canada	9.63	12.20	13.00	9.97	9.67	9.12	8.83	8.78	8.73	8.59
4 Germany	4.28	7.04	8.41	8.99	9.08	8.98	8.95	9.06	9.23	9.16
5 Switzerland	2.94	6.83	8.71	8.17	8.26	8.10	7.89	7.74	7.80	7.90
6 Netherlands	4.72	7.28	8.57	9.04	9.11	9.05	9.08	9.09	9.27	9.21
7 France	7.80	9.27	10.20	9.34	9.21	9.13	9.59	9.46	9.46	9.30
8 Italy	11.04	12.44	12.11	12.52	11.90	11.46	11.48	11.74	11.86	11.63
9 Belgium	6.69	8.65	9.70	9.28	9.20	9.00	9.08	9.12	9.25	9.02
10 Japan	4.43	5.39	7.75	8.09	7.96	7.82	7.79	7.56	7.31	6.70

NOTE. Rates are for three-month interbank loans except for Canada, finance company paper; Belgium, three-month Treasury bills; and Japan, CD rate.

3.28 FOREIGN EXCHANGE RATES[1]

Currency units per dollar

Country/currency	1988	1989	1990	1991					
				Apr.	May	June	July	Aug.	Sept.
1 Australia/dollar[2]	78.409	79.186	78.069	77.947	77.427	75.982	77.156	78.235	79.369
2 Austria/schilling	12.357	13.236	11.331	11.977	12.104	12.538	12.562	12.267	11.910
3 Belgium/franc	36.785	39.409	33.424	35.017	35.363	36.689	36.751	35.890	34.878
4 Canada/dollar	1.2306	1.1842	1.1668	1.1535	1.1499	1.1439	1.1493	1.1452	1.1370
5 China, P.R./yuan	3.7314	3.7673	4.7921	5.2767	5.3257	5.3667	5.3693	5.3725	5.3869
6 Denmark/krone	6.7412	7.3210	6.1899	6.5163	6.5793	6.8634	6.9030	6.7396	6.5367
7 Finland/markka	4.1933	4.2963	3.8300	3.9925	4.0431	4.2189	4.3295	4.2325	4.1241
8 France/franc	5.9595	6.3802	5.4467	5.7540	5.8282	6.0483	6.0596	5.9244	5.7621
9 Germany/deutsche mark	1.7570	1.8808	1.6166	1.7027	1.7199	1.7828	1.7852	1.7435	1.6933
10 Greece/drachma	142.00	162.60	158.59	184.76	188.14	195.03	195.46	192.69	188.07
11 Hong Kong/dollar	7.8072	7.8008	7.7899	7.7939	7.7798	7.7341	7.7610	7.7646	7.7524
12 India/rupee	13.900	16.213	17.492	19.906	20.519	21.062	25.613	25.846	25.834
13 Ireland/punt[2]	152.49	141.80	165.76	157.12	155.68	142.66	136.48	153.38	157.87
14 Italy/lira	1,302.39	1,372.28	1,198.27	1,261.57	1,275.67	1,325.09	1,329.55	1,303.31	1,266.25
15 Japan/yen	128.17	138.07	145.00	137.11	138.22	139.75	137.83	136.82	134.30
16 Malaysia/ringgit	2.6190	2.7079	2.7057	2.7498	2.7573	2.7810	2.7868	2.7806	2.7577
17 Netherlands/guilder	1.9778	2.1219	1.8215	1.9186	1.9379	2.0085	2.0114	1.9650	1.9084
18 New Zealand/dollar[2]	65.560	59.561	59.619	58.909	58.647	57.645	56.681	57.353	57.989
19 Norway/krone	6.5243	6.9131	6.2541	6.6198	6.6953	6.9542	6.9627	6.8118	6.6266
20 Portugal/escudo	144.27	157.53	142.70	148.00	149.59	156.37	154.20	149.72	145.64
21 Singapore/dollar	2.0133	1.9511	1.8134	1.7688	1.7688	1.7782	1.7555	1.7269	1.7002
22 South Africa/rand	2.2770	2.6214	2.5885	2.7325	2.7975	2.8625	2.8819	2.8704	2.8316
23 South Korea/won	734.52	674.29	710.64	728.36	727.99	727.97	731.76	733.90	744.18
24 Spain/peseta	116.53	118.44	101.96	105.08	106.45	111.18	111.81	108.92	106.28
25 Sri Lanka/rupee	31.820	35.947	40.078	40.836	40.988	41.211	41.213	41.723	41.935
26 Sweden/krona	6.1370	6.4559	5.9231	6.1145	6.1578	6.4235	6.4609	6.3311	6.1652
27 Switzerland/franc	1.4643	1.6369	1.3901	1.4399	1.4574	1.5297	1.5481	1.5201	1.4803
28 Taiwan/dollar	28.636	26.407	26.918	27.333	27.282	27.166	26.982	26.730	26.559
29 Thailand/baht	25.312	25.725	25.609	25.578	25.645	25.766	25.745	25.720	25.617
30 United Kingdom/pound[2]	178.13	163.82	178.41	174.97	172.38	164.97	165.13	168.41	172.65
MEMO									
31 United States/dollar[3]	92.72	98.60	89.09	91.41	92.29	95.18	95.19	93.47	91.18

1. Averages of certified noon buying rates in New York for cable transfers. Data in this table also appear in the Board's G.5 (405) release. For address, see inside front cover.
2. Value in U.S. cents.
3. Index of weighted-average exchange value of U.S. dollar against the currencies of 10 industrial countries. The weight for each of the 10 countries is the 1972–76 average world trade of that country divided by the average world trade of all 10 countries combined. Series revised as of August 1978 (see *Federal Reserve Bulletin*, vol. 64, August 1978, p. 700).

Guide to Tabular Presentation, Statistical Releases, and Special Tables

GUIDE TO TABULAR PRESENTATION

Symbols and Abbreviations

c	Corrected	0	Calculated to be zero
e	Estimated	n.a.	Not available
p	Preliminary	n.e.c.	Not elsewhere classified
r	Revised (Notation appears on column heading when about half of the figures in that column are changed.)	IPCs	Individuals, partnerships, and corporations
*	Amounts insignificant in terms of the last decimal place shown in the table (for example, less than 500,000 when the smallest unit given is millions)	REITs	Real estate investment trusts
		RPs	Repurchase agreements
		SMSAs	Standard metropolitan statistical areas
		. . .	Cell not applicable

General Information

Minus signs are used to indicate (1) a decrease, (2) a negative figure, or (3) an outflow.

"U.S. government securities" may include guaranteed issues of U.S. government agencies (the flow of funds figures also include not fully guaranteed issues) as well as direct obligations of the Treasury. "State and local government" also includes municipalities, special districts, and other political subdivisions.

In some of the tables, details do not add to totals because of rounding.

STATISTICAL RELEASES—List Published Semiannually, with Latest BULLETIN *Reference*

SPECIAL TABLES—Published Irregularly, with Latest BULLETIN *Reference*

Special tables follow.

4.20 DOMESTIC AND FOREIGN OFFICES, Insured Commercial Bank Assets and Liabilities[1,2]
Consolidated Report of Condition, June 30, 1991
Millions of dollars

Item	Total	Banks with foreign offices			Banks with domestic offices only	
		Total	Foreign	Domestic	Over 100	Under 100
1 **Total assets**[6]	**3,358,235**	**1,882,085**	**416,647**	**1,538,538**	**1,108,645**	**367,506**
2 Cash and balances due from depository institutions	281,877	194,879	89,407	105,472	63,679	23,319
3 Cash items in process of collection, unposted debits, and currency and coin	n.a.	81,363	1,645	79,718	32,692	n.a.
4 Cash items in process of collection and unposted debits	n.a.	n.a.	n.a.	65,866	23,494	n.a.
5 Currency and coin	n.a.	n.a.	n.a.	13,852	9,198	n.a.
6 Balances due from depository institutions in the United States	n.a.	31,692	20,913	10,778	18,434	n.a.
7 Balances due from banks in foreign countries and foreign central banks	n.a.	70,015	66,747	3,268	2,902	n.a.
8 Balances due from Federal Reserve Banks	n.a.	11,809	102	11,707	9,651	n.a.
MEMO						
9 Noninterest-bearing balances due from commercial banks in the United States (included in balances due from depository institutions in the United States)	n.a.	n.a.	n.a.	6,965	13,507	8,553
10 **Total securities, loans and lease financing receivables, net**	**2,797,249**	**1,480,496**	n.a.	n.a.	**988,208**	**328,545**
11 Total securities, book value	634,531	256,679	28,975	227,704	259,676	118,177
12 U.S. Treasury securities and U.S. government agency and corporation obligations	464,166	175,414	3,522	171,892	195,244	93,508
13 U.S. Treasury securities	n.a.	52,591	1,592	50,999	79,987	n.a.
14 U.S. government agency and corporation obligations	n.a.	122,823	1,930	120,893	115,257	n.a.
15 All holdings of U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages	152,374	76,085	1,279	74,806	53,919	22,370
16 All other	n.a.	46,738	651	46,088	61,337	n.a.
17 Securities issued by states and political subdivisions in the United States	76,276	25,509	738	24,771	35,200	15,567
18 Other domestic debt securities	n.a.	27,169	1,374	25,795	24,833	n.a.
19 All holdings of private certificates of participation in pools of residential mortgages	4,914	2,423	11	2,412	2,238	252
20 All other domestic debt securities	54,907	24,745	1,362	23,383	22,595	7,567
21 Foreign debt securities	n.a.	23,616	22,144	1,472	437	n.a.
22 Equity securities	10,215	4,971	1,197	3,774	3,962	1,282
23 Marketable	4,932	1,380	114	1,266	2,596	955
24 Investments in mutual funds	2,646	484	20	464	1,287	875
25 Other	2,639	1,018	94	924	1,460	161
26 Less: Net unrealized loss	354	123	0	123	150	81
27 Other equity securities	5,284	3,591	1,083	2,508	1,365	327
28 Federal funds sold and securities purchased under agreements to resell	153,402	82,324	702	81,622	52,105	18,973
29 Federal funds sold	130,388	65,972	n.a.	n.a.	45,749	18,666
30 Securities purchased under agreements to resell	23,014	16,351	n.a.	n.a.	6,356	307
31 Total loans and lease financing receivables, gross	2,075,413	1,182,709	202,766	979,943	696,272	196,432
32 LESS: Unearned income on loans	12,051	4,765	1,295	3,470	5,527	1,759
33 Total loans and leases (net of unearned income)	2,063,362	1,177,944	201,471	976,473	690,745	194,673
34 LESS: Allowance for loan and lease losses	53,598	36,002	n.a.	n.a.	14,318	3,278
35 LESS: Allocated transfer risk reserves	449	449	n.a.	n.a.	0	0
36 EQUALS: Total loans and leases, net	2,009,315	1,141,494	n.a.	n.a.	676,427	191,395
Total loans, gross, by category						
37 Loans secured by real estate	843,524	416,066	24,704	391,362	326,923	100,535
38 Construction and land development	n.a.	n.a.	n.a.	74,851	34,999	6,431
39 Farmland	n.a.	n.a.	n.a.	2,062	6,052	9,959
40 1–4 family residential properties	n.a.	n.a.	n.a.	191,946	169,493	55,805
41 Revolving, open-end loans, extended under lines of credit	n.a.	n.a.	n.a.	35,502	27,195	3,284
42 All other loans	n.a.	n.a.	n.a.	156,445	142,299	52,520
43 Multifamily (5 or more) residential properties	n.a.	n.a.	n.a.	11,218	9,343	1,910
44 Nonfarm nonresidential properties	n.a.	n.a.	n.a.	111,284	107,035	26,430
45 Loans to depository institutions	44,165	35,238	16,010	19,228	8,679	248
46 To commercial banks in the United States	n.a.	16,053	465	15,588	8,236	n.a.
47 To other depository institutions in the United States	n.a.	1,531	180	1,351	428	n.a.
48 To banks in foreign countries	n.a.	17,654	15,365	2,288	16	n.a.
49 Loans to finance agricultural production and other loans to farmers	34,776	5,696	290	5,406	9,759	19,320
50 Commercial and industrial loans	585,846	414,711	100,215	314,496	135,206	35,929
51 To U.S. addressees (domicile)	n.a.	336,715	23,949	312,766	134,829	n.a.
52 To non-U.S. addressees (domicile)	n.a.	77,996	76,267	1,729	377	n.a.
53 Acceptances of other banks	2,515	831	353	477	928	756
54 U.S. banks	n.a.	366	17	349	n.a.	n.a.
55 Foreign banks	n.a.	465	336	129	n.a.	n.a.
56 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	384,192	159,470	15,944	143,526	188,583	36,138
57 Credit cards and related plans	129,546	51,041	n.a.	n.a.	76,125	2,379
58 Other (includes single payment and installment)	254,646	108,430	n.a.	n.a.	112,458	33,758
59 Obligations (other than securities) of states and political subdivisions in the U.S. (includes nonrated industrial development obligations)	31,412	18,160	204	17,956	11,833	1,418
60 Taxable	1,355	893	75	818	413	49
61 Tax-exempt	30,057	17,268	129	17,139	11,420	1,369
62 All other loans	112,188	102,014	41,445	60,569	8,588	1,586
63 Loans to foreign governments and official institutions	n.a.	24,852	23,676	1,176	86	n.a.
64 Other loans	n.a.	77,163	17,770	59,393	8,502	n.a.
65 Loans for purchasing and carrying securities	n.a.	n.a.	n.a.	13,899	1,398	n.a.
66 All other loans	n.a.	n.a.	n.a.	45,494	7,104	n.a.
67 Lease financing receivables	36,796	30,522	3,600	26,922	5,772	502
68 Assets held in trading accounts	57,761	56,095	29,085	26,873	1,528	138
69 Premises and fixed assets (including capitalized leases)	51,057	27,603	n.a.	n.a.	17,333	6,121
70 Other real estate owned	25,974	15,660	n.a.	n.a.	8,085	2,229
71 Investments in unconsolidated subsidiaries and associated companies	3,508	3,065	n.a.	n.a.	394	49
72 Customers' liability on acceptances outstanding	16,778	16,460	n.a.	n.a.	301	18
73 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	n.a.	n.a.	n.a.	45,148	n.a.	n.a.
74 Intangible assets	11,499	6,671	n.a.	n.a.	4,443	385
75 Other assets	112,531	81,156	n.a.	n.a.	24,674	6,701

4.20—Continued

Item	Total	Banks with foreign offices: Total	Banks with foreign offices: Foreign	Banks with foreign offices: Domestic	Banks with domestic offices only: Over 100	Banks with domestic offices only: Under 100
76 **Total liabilities, limited-life preferred stock, and equity capital**	**3,358,235**	**1,882,085**	n.a.	n.a.	**1,108,645**	**367,506**
77 **Total liabilities**[7]	**3,132,912**	**1,773,845**	**416,647**	**1,430,298**	**1,024,848**	**334,219**
78 Limited-life preferred stock	6	0	n.a.	n.a.	3	2
79 Total deposits	2,612,799	1,373,202	301,213	1,071,989	913,908	325,689
80 Individuals, partnerships, and corporations	n.a.	n.a.	180,784	986,679	851,003	299,851
81 U.S. government	n.a.	n.a.	n.a.	4,184	1,836	552
82 States and political subdivisions in the United States	n.a.	n.a.	n.a.	38,147	43,875	20,990
83 Commercial banks in the United States	n.a.	n.a.	n.a.	21,555	7,776	1,191
84 Other depository institutions in the United States	n.a.	n.a.	n.a.	4,513	3,231	994
85 Banks in foreign countries	n.a.	n.a.	n.a.	5,993	135	n.a.
86 Foreign governments and official institutions	n.a.	25,509	24,444	1,065	48	n.a.
87 Certified and official checks	19,147	11,089	1,237	9,852	6,004	2,054
88 All other[8]			94,748	n.a.	n.a.	58
89 Total transaction accounts				320,206	234,883	83,473
90 Individuals, partnerships, and corporations				270,131	206,872	73,777
91 U.S. government				2,942	1,636	451
92 States and political subdivisions in the United States				10,479	13,281	6,379
93 Commercial banks in the United States				17,737	5,800	606
94 Other depository institutions in the United States				2,916	1,170	185
95 Banks in foreign countries				5,395	112	n.a.
96 Foreign governments and official institutions				754	8	n.a.
97 Certified and official checks				9,852	6,004	2,054
98 All other				n.a.	n.a.	21
99 Demand deposits (included in total transaction accounts)				235,697	137,994	41,716
100 Individuals, partnerships, and corporations				188,920	117,829	36,633
101 U.S. government				2,895	1,582	436
102 States and political subdivisions in the United States				7,282	5,512	1,794
103 Commercial banks in the United States				17,737	5,796	605
104 Other depository institutions in the United States	n.a.	n.a.	n.a.	2,868	1,151	179
105 Banks in foreign countries				5,390	112	n.a.
106 Foreign governments and official institutions				752	8	n.a.
107 Certified and official checks				9,852	6,004	2,054
108 All other				n.a.	n.a.	15
109 Total nontransaction accounts				751,783	679,025	242,216
110 Individuals, partnerships, and corporations				716,547	644,132	226,074
111 U.S. government				1,241	200	100
112 States and political subdivisions in the United States				27,669	30,594	14,610
113 Commercial banks in the United States				3,818	1,976	585
114 *U.S. branches and agencies of foreign banks*				288	296	n.a.
115 Other commercial banks in the United States				3,531	1,681	n.a.
116 Other depository institutions in the United States				1,597	2,061	809
117 Banks in foreign countries				599	23	n.a.
118 Foreign branches of other U.S. banks				16	19	n.a.
119 Other banks in foreign countries				583	4	n.a.
120 Foreign governments and official institutions				312	39	n.a.
121 All other				n.a.	n.a.	37
122 Federal funds purchased and securities sold under agreements to repurchase	237,561	177,015	1,142	175,872	57,390	3,156
123 Federal funds purchased	148,253	118,574	n.a.	n.a.	28,354	1,325
124 Securities sold under agreements to repurchase	89,308	58,441	n.a.	n.a.	29,036	1,831
125 Demand notes issued to the U.S. Treasury	n.a.	n.a.	n.a.	25,517	5,011	481
126 Other borrowed money	113,916	83,364	32,759	50,605	29,636	916
127 Banks liability on acceptances executed and outstanding	16,897	16,579	3,551	13,028	301	18
128 Notes and debentures subordinated to deposits	24,158	22,700	n.a.	n.a.	1,320	139
129 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	n.a.	n.a.	n.a.	27,952	n.a.	n.a.
130 All other liabilities	96,571	75,469	n.a.	n.a.	17,282	3,820
131 Total equity capital[9]	225,318	108,240	n.a.	n.a.	83,794	33,285
MEMO						
132 Holdings of commercial paper included in total loans, gross		751	355	396	2,248	n.a.
133 Total individual retirement accounts (IRA) and Keogh plan accounts				63,952	59,188	19,069
134 Total brokered deposits				47,669	19,770	803
135 Total brokered retail deposits				28,435	15,806	740
136 Issued in denominations of $100,000 or less				2,606	4,695	570
137 Issued in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less				25,829	11,111	170
Savings deposits						
138 Money market deposit accounts (MMDAs)				214,013	145,145	36,921
139 Other savings deposits (excluding MMDAs)				97,908	89,336	29,455
140 Total time deposits of less than $100,000				259,285	325	139,779
141 Time certificates of deposit of $100,000 or more	n.a.	n.a.	n.a.	153,288	116,050	34,861
142 Open-account time deposits of $100,000 or more				27,288	3,721	1,199
143 All NOW accounts (including Super NOW)				82,888	95,185	40,580
144 *Total time and savings deposits*				836,291	775,914	283,973
Quarterly averages						
145 Total loans				960,072	686,031	191,592
146 Obligations (other than securities) of states and political subdivisions in the United States				18,784	12,103	n.a.
147 Transaction accounts in domestic offices (NOW accounts, ATS accounts, and telephone and preauthorized transfer accounts)				84,216	95,191	41,399
Nontransaction accounts in domestic offices						
148 Money market deposit accounts (MMDAs)				211,345	143,518	36,407
149 Other savings deposits				95,322	87,141	28,629
150 Time certificates of deposit of $100,000 or more				159,507	119,804	35,237
151 All other time deposits				290,407	329,308	140,918
152 Number of banks	12,131	229	n.a.	n.a.	2,766	9,136

Footnotes appear at the end of table 4.22

4.21 DOMESTIC OFFICES, Insured Commercial Banks with Assets of $100 Million or more or with foreign offices[1,2,6]
Consolidated Report of Condition, June 30, 1991
Millions of dollars

Item	Total	Members: Total	Members: National	Members: State	Nonmembers
1 **Total assets**[6]	**2,647,183**	**2,055,894**	**1,644,870**	**411,024**	**591,289**
2 Cash and balances due from depository institutions	169,151	137,682	112,652	25,030	31,470
3 Cash items in process of collection and unposted debits	89,361	79,150	64,513	14,637	10,210
4 Currency and coin	23,050	18,826	15,692	3,133	4,224
5 Balances due from depository institutions in the United States	29,212	18,519	15,259	3,259	10,693
6 Balances due from banks in foreign countries and foreign central banks	6,170	4,859	3,746	1,113	1,312
7 Balances due from Federal Reserve Banks	21,358	16,328	13,441	2,887	5,030
8 **Total securities, loans and lease financing receivables, (net of unearned income)**	**2,288,324**	**1,757,975**	**1,420,605**	**337,371**	**530,348**
9 Total securities, book value	487,379	359,959	277,506	82,453	127,420
10 U.S. Treasury securities	130,986	89,599	71,076	18,523	41,387
11 U.S. government agency and corporation obligations	236,150	184,255	143,182	41,073	51,896
12 All holdings of U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages	128,725	105,762	84,451	21,312	22,963
13 All other	107,425	78,492	58,731	19,761	28,933
14 Securities issued by states and political subdivisions in the United States	59,971	44,052	32,996	11,056	15,919
15 Other domestic debt securities	50,628	36,240	25,685	10,555	14,388
16 All holdings of private certificates of participation in pools of residential mortgages	4,650	3,861	2,765	1,096	789
17 All other	45,978	32,380	22,921	9,459	13,598
18 Foreign debt securities	1,909	1,352	923	429	557
19 Equity securities	7,736	4,461	3,644	817	3,275
20 Marketable	3,862	1,246	1,042	204	2,616
21 Investments in mutual funds	1,751	866	812	54	885
22 Other	2,384	446	272	174	1,938
23 Less: Net unrealized loss	273	66	42	24	207
24 Other equity securities	3,874	3,215	2,602	613	658
25 Federal funds sold and securities purchased under agreements to resell[10]	133,727	108,560	82,537	26,022	25,167
26 Federal funds sold	45,749	29,532	25,799	3,733	16,217
27 Securities purchased under agreements to resell	6,356	3,766	3,008	758	2,590
28 Total loans and lease financing receivables, gross	1,676,215	1,295,949	1,065,862	230,088	380,265
29 LESS: Unearned income on loans	8,997	6,493	5,300	1,193	2,504
30 Total loans and leases (net of unearned income)	1,667,218	1,289,456	1,060,561	228,895	377,761
Total loans, gross, by category					
31 Loans secured by real estate	718,285	536,769	454,929	81,840	181,516
32 Construction and land development	109,850	85,266	70,613	14,653	24,584
33 Farmland	8,114	5,129	4,409	720	2,985
34 1–4 family residential properties	361,440	269,926	229,903	40,023	91,514
35 Revolving, open-end and extended under lines of credit	62,697	48,011	40,131	7,881	14,685
36 All other loans	298,743	221,914	189,772	32,142	76,829
37 Multifamily (5 or more) residential properties	20,562	15,097	12,751	2,347	5,465
38 Nonfarm nonresidential properties	218,320	161,351	137,253	24,098	56,968
39 Loans to commercial banks in the United States	23,824	16,741	13,327	3,414	7,083
40 Loans to other depository institutions in the United States	1,779	1,589	1,502	87	190
41 Loans to banks in foreign countries	2,304	2,237	1,217	1,021	67
42 Loans to finance agricultural production and other loans to farmers	15,165	10,911	9,887	1,024	4,254
43 Commercial and industrial loans	449,702	367,148	292,404	74,745	82,553
44 To U.S. addressees (domicile)	447,595	365,349	291,070	74,278	82,246
45 To non-U.S. addressees (domicile)	2,107	1,800	1,333	466	307
46 Acceptances of other banks[11]	1,406	902	721	182	503
47 Of U.S. banks	732	516	388	129	216
48 Of foreign banks	183	151	132	19	32
49 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	332,109	243,156	205,844	37,312	88,954
50 Credit cards and related plans	76,125	41,592	39,106	2,486	34,534
51 Other (includes single payment and installment)	112,458	68,614	57,970	10,644	43,844
52 Loans to foreign governments and official institutions	1,262	1,217	947	270	45
53 Obligations (other than securities) of states and political subdivisions in the United States	29,790	24,614	18,496	6,118	5,176
54 Taxable	1,231	1,013	738	275	218
55 Tax-exempt	28,559	23,601	17,758	5,843	4,958
56 Other loans	67,895	62,847	43,459	19,388	5,047
57 Loans for purchasing and carrying securities	15,297	14,437	7,537	6,900	860
58 All other loans	52,598	48,410	35,922	12,488	4,188
59 Lease financing receivables	32,694	27,818	23,130	4,688	4,876
60 Customers' liability on acceptances outstanding	13,010	11,693	8,739	2,953	1,317
61 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	45,148	39,406	18,338	21,068	5,742
62 Remaining assets	176,697	148,544	102,874	45,670	28,153

4.21—Continued

Item	Total	Members			Non-members
		Total	National	State	
63 **Total liabilities and equity capital**	**2,647,183**	**2,055,894**	**1,644,870**	**411,024**	**591,289**
64 **Total liabilities**[4]	**2,455,146**	**1,911,008**	**1,530,806**	**380,202**	**544,137**
65 Total deposits	1,985,897	1,520,797	1,243,954	276,843	465,099
66 Individuals, partnerships, and corporations	1,837,682	1,403,947	1,150,603	253,344	433,735
67 U.S. government	6,020	5,268	4,472	796	751
68 States and political subdivisions in the United States	82,023	60,769	49,847	10,922	21,253
69 Commercial banks in the United States	29,331	26,087	20,537	5,550	3,245
70 Other depository institutions in the United States	7,744	5,658	4,718	940	2,086
71 Banks in foreign countries	6,128	5,519	3,549	1,970	609
72 Foreign governments and official institutions	1,113	987	632	355	125
73 Certified and official checks	15,856	12,563	9,596	2,966	3,294
74 Total transaction accounts	555,089	441,311	356,347	84,964	113,778
75 Individuals, partnerships, and corporations	477,003	375,207	304,853	70,353	101,796
76 U.S. government	4,579	3,875	3,249	627	703
77 States and political subdivisions in the United States	23,760	18,733	15,203	3,530	5,027
78 Commercial banks in the United States	23,537	21,639	17,032	4,606	1,898
79 Other depository institutions in the United States	4,086	3,346	2,650	696	740
80 Banks in foreign countries	5,507	5,224	3,367	1,857	283
81 Foreign governments and official institutions	762	725	397	328	37
82 Certified and official checks	15,856	12,563	9,596	2,966	3,294
83 Demand deposits (included in total transaction accounts)	373,691	304,213	241,651	62,562	69,478
84 Individuals, partnerships, and corporations	306,748	246,399	196,828	49,571	60,349
85 U.S. government	4,478	3,813	3,194	619	665
86 States and political subdivisions in the United States	12,794	10,567	8,645	1,922	2,227
87 Commercial banks in the United States	23,533	21,638	17,032	4,606	1,895
88 Other depository institutions in the United States	4,019	3,287	2,592	695	732
89 Banks in foreign countries	5,502	5,222	3,367	1,855	280
90 Foreign governments and official institutions	761	724	396	328	36
91 Certified and official checks	15,856	12,563	9,596	2,966	3,294
92 Total nontransaction accounts	1,430,808	1,079,487	887,607	191,880	351,321
93 Individuals, partnerships, and corporations	1,360,679	1,028,740	845,749	182,990	331,939
94 U.S. government	1,441	1,393	1,223	170	48
95 States and political subdivisions in the United States	58,263	42,037	34,645	7,392	16,226
96 Commercial banks in the United States	5,795	4,448	3,504	944	1,347
97 U.S. branches and agencies of foreign banks	584	261	97	165	322
98 Other commercial banks in the United States	5,211	4,187	3,408	779	1,024
99 Other depository institutions in the United States	3,658	2,312	2,068	244	1,346
100 Banks in foreign countries	621	295	182	113	326
101 Foreign branches of other U.S. banks	34	28	15	13	7
102 Other banks in foreign countries	587	267	167	100	320
103 Foreign governments and official institutions	351	262	235	27	89
104 Federal funds purchased and securities sold under agreements to repurchase[12]	233,262	198,681	140,995	57,686	34,581
105 Federal funds purchased	28,354	20,161	17,290	2,871	8,194
106 Securities sold under agreements to repurchase	29,036	14,493	11,961	2,532	14,543
107 Demand notes issued to the U.S. Treasury	30,528	28,009	20,214	7,794	2,520
108 Other borrowed money	80,241	57,456	45,051	12,405	22,785
109 Banks liability on acceptances executed and outstanding	13,329	12,011	8,993	3,019	1,318
110 Notes and debentures subordinated to deposits	1,320	840	784	56	479
111 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	27,952	20,861	19,251	1,610	7,091
112 Remaining liabilities	110,568	93,214	70,815	22,399	17,355
113 **Total equity capital**[9]	**192,037**	**144,885**	**114,064**	**30,822**	**47,152**
MEMO					
114 Holdings of commercial paper included in total loans, gross	2,644	1,267	1,234	33	1,376
115 Total individual retirement accounts (IRA) and Keogh plan accounts	123,140	95,074	78,299	16,775	28,067
116 Total brokered deposits	67,439	50,878	43,731	7,147	16,561
117 Total brokered retail deposits	44,241	31,889	27,179	4,710	12,352
118 Issued in denominations of $100,000 or less	7,301	2,949	2,506	443	4,351
119 Issued in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less	36,940	28,940	24,673	4,267	8,000
Savings deposits					
120 Money market deposit accounts (MMDAs)	359,158	283,705	233,223	50,482	75,453
121 Other savings accounts	187,245	144,815	107,625	37,191	42,429
122 Total time deposits of less than $100,000	584,058	429,731	362,301	67,430	154,327
123 Time certificates of deposit of $100,000 or more	269,338	195,968	168,665	27,303	73,370
124 Open-account time deposits of $100,000 or more	31,009	25,267	15,793	9,475	5,742
125 All NOW accounts (including Super NOW accounts)	178,073	134,713	113,279	21,433	43,360
126 Total time and savings deposits	1,612,205	1,216,584	1,002,303	214,281	395,621
Quarterly averages					
127 Total loans	1,646,102	1,273,007	1,048,921	224,085	373,096
128 Obligations (other than securities) of states and political subdivisions in the United States	30,887	25,683	19,021	6,662	5,205
129 Transaction accounts (NOW accounts, ATS accounts, and telephone preauthorized transfer accounts)	179,407	135,864	113,848	22,015	43,543
Nontransaction accounts					
130 Money market deposit accounts (MMDAs)	354,863	280,541	229,791	50,750	74,322
131 Other savings deposits	182,463	141,177	104,990	36,187	41,286
132 Time certificates of deposits of $100,000 or more	279,311	203,144	173,465	29,679	76,168
133 All other time deposits	619,715	458,826	382,473	76,353	160,888
134 Number of banks	2,995	1,626	1,366	260	1,369

Footnotes appear at the end of table 4.22

4.22 DOMESTIC OFFICES, Insured Commercial Bank Assets and Liabilities[1,2,6]
Consolidated Report of Condition, June 30, 1991

Millions of dollars

Item	Total	Members: Total	Members: National	Members: State	Nonmembers
1 **Total assets[6]**	**3,014,688**	**2,200,322**	**1,758,907**	**441,416**	**814,366**
2 Cash and balances due from depository institutions	192,470	147,162	120,297	26,865	45,309
3 Currency and coin	26,186	20,076	16,694	3,382	6,110
4 Noninterest-bearing balances due from commercial banks	29,025	16,223	13,004	3,219	12,802
5 Other	137,260	110,863	90,599	20,264	26,397
6 **Total securities, loans, and lease financing receivables (net of unearned income)**	**2,620,147**	**1,888,063**	**1,523,119**	**364,944**	**732,084**
7 Total securities, book value	605,556	406,264	315,217	91,047	199,292
8 U.S. Treasury securities and U.S. government agency and corporation obligations	460,644	310,900	244,543	66,357	149,744
9 Securities issued by states and political subdivisions in the United States	75,538	49,697	37,475	12,222	25,841
10 Other debt securities	60,356	40,622	29,081	11,540	19,734
11 All holdings of private certificates of participation in pools of residential mortgages	4,902	3,963	2,837	1,126	939
12 All other	55,453	36,658	26,244	10,414	18,795
13 Equity securities	9,018	5,045	4,118	927	3,973
14 Marketable	4,818	1,595	1,340	255	3,223
15 Investments in mutual funds	2,627	1,210	1,107	103	1,417
16 Other	2,545	479	299	180	2,066
17 Less: Net unrealized loss	354	94	66	28	260
18 Other equity securities	4,200	3,451	2,778	672	750
19 Federal funds sold and securities purchased under agreements to resell[10]	152,700	117,145	89,385	27,760	35,555
20 Federal funds sold	64,415	37,934	32,482	5,452	26,481
21 Securities purchased under agreements to resell	6,663	3,950	3,172	777	2,713
22 Total loans and lease financing receivables, gross	1,872,647	1,371,864	1,124,372	247,492	500,783
23 LESS: Unearned income on loans	10,756	7,210	5,855	1,356	3,546
24 Total loans and leases (net of unearned income)	1,861,891	1,364,654	1,118,517	246,137	497,237
Total loans, gross, by category					
25 Loans secured by real estate	818,819	575,250	484,532	90,718	243,569
26 Construction and land development	116,281	87,981	72,591	15,390	28,300
27 Farmland	18,073	8,295	6,959	1,336	9,778
28 1–4 family residential properties	417,245	291,413	246,295	45,118	125,832
29 Revolving, open-end loans, and extended under lines of credit	65,981	49,449	41,167	8,282	16,532
30 All other loans	351,264	241,964	205,128	36,836	109,300
31 Multifamily (5 or more) residential properties	22,472	15,807	13,303	2,504	6,665
32 Nonfarm nonresidential properties	244,750	171,754	145,385	26,370	72,995
33 Loans to depository institutions	28,155	20,704	16,135	4,569	7,452
34 Loans to finance agricultural production and other loans to farmers	34,485	17,449	15,110	2,340	17,036
35 Commercial and industrial loans	485,631	381,877	303,396	78,482	103,753
36 Acceptances of other banks	2,162	1,182	968	214	980
37 Loans to individuals for household, family, and other personal expenditures (includes purchased paper)	368,247	257,631	217,226	40,406	110,616
38 Credit cards and related plans	78,505	42,755	40,159	2,597	35,749
39 Other (includes single payment installment)	146,216	81,926	68,300	13,626	64,290
40 Obligations (other than securities) of states and political subdivisions in the United States	31,208	25,121	18,915	6,205	6,087
41 Taxable	1,280	1,031	753	278	249
42 Tax-exempt	29,928	24,090	18,163	5,927	5,839
43 All other loans	70,743	64,668	44,823	19,845	6,075
44 Lease financing receivables	33,196	27,982	23,267	4,715	5,214
45 Customers' liability on acceptances outstanding	13,028	11,708	8,754	2,954	1,320
46 Net due from own foreign offices, Edge and agreement subsidiaries, and IBFs	45,148	39,406	18,338	21,068	5,742
47 Remaining assets	189,043	153,390	106,737	46,653	35,653
48 **Total liabilities and equity capital**	**3,014,688**	**2,200,322**	**1,758,907**	**441,416**	**814,366**
49 **Total liabilities[4]**	**2,789,365**	**2,042,676**	**1,634,902**	**407,774**	**746,688**
50 Total deposits	2,311,586	1,648,633	1,345,062	303,570	662,953
51 Individuals, partnerships, and corporations	2,137,533	1,521,879	1,243,909	277,970	615,654
52 U.S. government	6,571	5,479	4,642	837	1,092
53 States and political subdivisions in the United States	103,012	68,408	56,038	12,370	34,604
54 Commercial banks in the United States	30,522	26,865	20,989	5,876	3,657
55 Other depository institutions in the United States	8,738	6,006	4,981	1,025	2,732
56 Certified and official checks	17,910	13,452	10,290	3,161	4,458
57 All other	7,299	6,543	4,213	2,330	756
58 Total transaction accounts	638,562	475,503	383,807	91,697	163,058
59 Individuals, partnerships, and corporations	550,780	405,411	329,219	76,192	145,369
60 U.S. government	5,030	4,056	3,400	656	974
61 States and political subdivisions in the United States	30,139	21,005	17,080	3,925	9,134
62 Commercial banks in the United States	24,142	22,190	17,327	4,862	1,952
63 Other depository institutions in the United States	4,271	3,429	2,718	710	842
64 Certified and official checks	17,910	13,452	10,290	3,161	4,458
65 All other	6,290	5,961	3,771	2,190	329
66 Demand deposits (included in total transaction accounts)	415,408	321,928	255,675	66,253	93,480
67 Individuals, partnerships, and corporations	343,381	261,771	209,113	52,658	81,611
68 U.S. government	4,914	3,991	3,343	648	924
69 States and political subdivisions in the United States	14,588	11,199	9,173	2,026	3,389
70 Commercial banks in the United States	24,138	22,189	17,327	4,862	1,949
71 Other depository institutions in the United States	4,198	3,368	2,659	709	830
72 Certified and official checks	17,910	13,452	10,290	3,161	4,458
73 All other	6,278	5,959	3,771	2,188	319
74 Total nontransaction accounts	1,673,024	1,173,129	961,256	211,874	499,895
75 Individuals, partnerships, and corporations	1,586,753	1,116,468	914,690	201,778	470,285
76 U.S. government	1,541	1,423	1,242	181	118
77 States and political subdivisions in the United States	72,873	47,403	38,957	8,446	25,470
78 Commercial banks in the United States	6,380	4,675	3,662	1,014	1,704
79 Other depository institutions in the United States	4,467	2,577	2,263	315	1,890
80 All other	1,009	582	441	140	427

4.22—Continued

Item	Total	Members: Total	Members: National	Members: State	Non-members
81 Federal funds purchased and securities sold under agreements to repurchase[12]	236,418	200,198	142,063	58,135	36,220
82 Federal funds purchased	29,679	20,865	17,709	3,156	8,814
83 Securities sold under agreements to repurchase	30,867	15,305	12,611	2,695	15,562
84 Demand notes issued to the U.S. Treasury	31,009	28,197	20,368	7,829	2,813
85 Other borrowed money	81,157	57,949	45,472	12,477	23,208
86 Banks liability on acceptances executed and outstanding	13,347	12,026	9,007	3,019	1,320
87 Notes and debentures subordinated to deposits	1,459	902	838	63	557
88 Net due to own foreign offices, Edge and agreement subsidiaries, and IBFs	27,952	20,861	19,251	1,610	7,091
89 Remaining liabilities	114,389	94,772	72,091	22,681	19,617
90 ***Total equity capital***[9]	**225,324**	**157,646**	**124,004**	**33,642**	**67,678**
MEMO					
91 *Assets held in trading accounts*[13]	28,539	27,032	16,317	10,715	1,507
92 U.S. Treasury securities	10,710	10,212	4,760	5,452	498
93 U.S. government agency corporation obligations	4,688	4,592	3,878	714	96
94 Securities issued by states and political subdivisions in the United States	1,327	1,292	846	446	36
95 Other bonds, notes, and debentures	609	520	71	448	90
96 Certificates of deposit	1,178	1,148	615	533	30
97 Commercial paper	90	90	90	0	0
98 Bankers acceptances	3,379	3,292	2,093	1,199	86
99 Other	5,844	5,598	3,732	1,866	246
100 Total individual retirement accounts (IRA) and Keogh plan accounts	142,210	102,323	84,066	18,257	39,886
101 Total brokered deposits	68,242	51,058	43,848	7,210	17,184
102 Total brokered retail deposits	44,980	32,061	27,292	4,768	12,920
103 Issued in denominations of $100,000 or less	7,871	3,097	2,603	494	4,773
104 Issued in denominations greater than $100,000 and participated out by the broker in shares of $100,000 or less	37,110	28,963	24,689	4,274	8,146
Savings deposits					
105 Money market deposit accounts (MMDAs)	396,079	299,388	245,623	53,765	96,691
106 Other savings deposits	216,700	156,374	116,745	39,629	60,326
107 Total time deposits of less than $100,000	723,837	481,638	403,091	78,547	242,199
108 Time certificates of deposit of $100,000 or more	304,199	210,041	179,668	30,373	94,159
109 Open-account time deposits of $100,000 or more	32,208	25,688	16,129	9,559	6,520
110 All NOW accounts (including Super NOW)	218,653	150,805	126,444	24,361	67,848
111 Total time and savings deposits	1,896,178	1,326,705	1,089,387	237,318	569,473
Quarterly averages					
112 Total loans	1,837,694	1,347,302	1,106,283	241,019	490,392
113 Transaction accounts (NOW accounts, ATS accounts, and telephone and preauthorized transfer accounts)	220,807	152,241	127,201	25,040	68,566
Nontransaction accounts					
114 Money market deposit accounts (MMDAs)	391,270	296,080	242,082	53,998	95,190
115 Other savings deposits	211,092	152,438	113,878	38,560	58,654
116 Time certificates of deposit of $100,000 or more	314,548	217,308	184,556	32,752	97,241
117 All other time deposits	760,633	511,146	423,593	87,553	249,487
118 Number of banks	12,131	4,903	3,917	986	7,228

1. Effective Mar. 31, 1984, the report of condition was substantially revised for commercial banks. Some of the changes are as follows: (1) Previously, banks with international banking facilities (IBFs) that had no other foreign offices were considered domestic reporters. Beginning with the Mar. 31, 1984 call report these banks are considered foreign and domestic reporters and must file the foreign and domestic report of condition; (2) banks with assets greater than $1 billion have additional items reported; (3) the domestic office detail for banks with foreign offices has been reduced considerably; and (4) banks with assets under $25 million have been excused from reporting certain detail items.

2. The "n.a." for some of the items is used to indicate the lesser detail available from banks without foreign offices, the inapplicability of certain items to banks that have only domestic offices and/or the absence of detail on a fully consolidated basis for banks with foreign offices.

3. All transactions between domestic and foreign offices of a bank are reported in "net due from" and "net due to." All other lines represent transactions with parties other than the domestic and foreign offices of each bank. Since these intraoffice transactions are nullified by consolidation, total assets and total liabilities for the entire bank may not equal the sum of assets and liabilities respectively, of the domestic and foreign offices.

4. Foreign offices include branches in foreign countries, Puerto Rico, and in U.S. territories and possessions; subsidiaries in foreign countries; all offices of Edge act and agreement corporations wherever located and IBFs.

5. The 'over 100' column refers to those respondents whose assets, as of June 30 of the previous calendar year, were equal to or exceeded $100 million. (These respondents file the FFIEC 032 or FFIEC 033 call report.) The 'under 100' column refers to those respondents whose assets, as of June 30 of the previous calendar year, were less than $100 million. (These respondents filed the FFIEC 034 call report.)

6. Since the domestic portion of allowances for loan and lease losses and allocated transfer risk reserve are not reported for banks with foreign offices, the components of total assets (domestic) will not add to the actual total (domestic).

7. Since the foreign portion of demand notes issued to the U.S. Treasury is not reported for banks with foreign offices, the components of total liabilities (foreign) will not add to the actual total (foreign).

8. The definition of 'all other' varies by report form and therefore by column in this table. See the instructions for more detail.

9. Equity capital is not allocated between the domestic and foreign offices of banks with foreign offices.

10. Only the domestic portion of federal funds sold and securities purchased under agreements to resell are reported here, therefore, the components will not add to totals for this item.

11. "Acceptances of other banks" is not reported by domestic respondents less than $300 million in total assets, therefore the components will not add to totals for this item.

12. Only the domestic portion of federal funds purchased and securities sold are reported here, therefore the components will not add to totals for this item.

13. Components of assets held in trading accounts are only reported for banks with total assets of $1 billion or more; therefore the components will not add to the totals for this item.

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1991[1]

Millions of dollars

Item	All states[2]		New York		California		Illinois	
	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]
1 **Total assets[4]**	**631,166**	**285,276**	**465,699**	**221,706**	**84,747**	**34,819**	**48,052**	**17,949**
2 Claims on nonrelated parties	546,952	207,282	396,849	168,830	77,634	17,296	47,680	15,428
3 Cash and balances due from depository institutions	148,192	123,793	123,209	101,010	9,512	8,606	13,070	12,568
4 Cash items in process of collection and unposted debits	1,914	3	1,883	2	19	1	3	0
5 Currency and coin (U.S. and foreign)	22	n.a.	15	n.a.	2	n.a.	1	n.a.
6 Balances with depository institutions in United States	79,911	58,491	67,426	47,838	5,296	4,442	6,231	5,745
7 U.S. branches and agencies of other foreign banks (including their IBFs)	70,999	55,012	59,795	44,710	4,751	4,338	5,696	5,538
8 Other depository institutions in United States (including their IBFs)	8,912	3,478	7,630	3,128	544	104	535	208
9 Balances with banks in foreign countries and with foreign central banks	65,980	65,299	53,654	53,171	4,167	4,164	6,823	6,822
10 Foreign branches of U.S. banks	1,733	1,676	1,577	1,530	46	46	95	95
11 Other banks in foreign countries and foreign central banks	64,247	63,624	52,077	51,641	4,121	4,118	6,728	6,727
12 Balances with Federal Reserve Banks	365	n.a.	231	n.a.	29	n.a.	12	n.a.
13 **Total securities and loans**	**332,635**	**73,272**	**221,822**	**59,541**	**60,458**	**7,749**	**29,198**	**1,953**
14 Total securities, book value	54,720	15,605	49,063	14,111	3,626	947	1,467	497
15 U.S. Treasury	14,291	n.a.	14,056	n.a.	51	n.a.	120	n.a.
16 Obligations of U.S. government agencies and corporations	7,733	n.a.	7,427	n.a.	200	n.a.	22	n.a.
17 Other bonds, notes, debentures and corporate stock (including state and local securities)	32,696	15,605	27,579	14,111	3,375	947	1,326	497
18 Federal funds sold and securities purchased under agreements to resell	14,924	2,072	13,335	1,603	521	63	657	395
19 U.S. branches and agencies of other foreign banks	7,485	1,158	6,566	1,045	365	3	304	100
20 Commercial banks in United States	2,463	362	1,946	67	58	0	301	295
21 Other	4,975	552	4,824	491	98	60	52	0
22 Total loans, gross	278,102	57,703	172,895	45,463	56,863	6,804	27,739	1,455
23 Less: Unearned income on loans	188	35	135	33	31	2	9	0
24 Equals: Loans, net	277,914	57,667	172,759	45,430	56,832	6,802	27,731	1,455
Total loans, gross, by category								
25 Real estate loans	49,120	547	25,421	344	15,074	142	5,154	61
26 Loans to depository institutions	49,677	29,959	38,472	22,907	6,546	4,552	2,645	884
27 Commercial banks in United States (including IBFs)	29,060	11,943	21,811	8,423	4,936	2,969	2,089	481
28 U.S. branches and agencies of other foreign banks	25,395	11,378	18,682	7,952	4,750	2,915	1,777	461
29 Other commercial banks in United States	3,665	565	3,129	471	186	54	312	20
30 Other depository institutions in United States (including IBFs)	48	0	40	0	7	0	0	0
31 Banks in foreign countries	20,569	18,016	16,621	14,485	1,602	1,583	556	403
32 Foreign branches of U.S. banks	431	246	368	183	42	42	21	21
33 Other banks in foreign countries	20,138	17,770	16,253	14,301	1,560	1,541	535	383
34 Other financial institutions	9,595	1,051	7,455	867	955	133	751	46
35 Commercial and industrial loans	150,375	15,025	85,950	12,698	33,427	1,582	18,583	323
36 U.S. addressees (domicile)	128,993	287	69,205	189	30,773	92	18,027	6
37 Non-U.S. addressees (domicile)	21,382	14,738	16,745	12,510	2,653	1,490	556	317
38 Acceptances of other banks	1,098	18	727	14	210	5	118	0
39 U.S. banks	357	1	207	1	113	0	6	0
40 Foreign banks	741	17	520	12	97	5	112	0
41 Loans to foreign governments and official institutions (including foreign central banks)	11,819	10,863	9,153	8,423	471	389	146	137
42 Loans for purchasing or carrying securities (secured and unsecured)	3,061	13	2,879	8	100	0	81	5
43 All other loans	3,357	227	2,838	202	81	0	262	0
44 All other assets	51,201	8,145	38,483	6,676	7,142	878	4,755	513
45 Customers' liability on acceptances outstanding	22,269	n.a.	16,436	n.a.	4,543	n.a.	937	n.a.
46 U.S. addressees (domicile)	14,522	n.a.	9,962	n.a.	3,589	n.a.	936	n.a.
47 Non-U.S. addressees (domicile)	7,747	n.a.	6,474	n.a.	954	n.a.	1	n.a.
48 Other assets including other claims on nonrelated parties	28,932	8,145	22,047	6,676	2,599	878	3,818	513
49 Net due from related depository institutions[5]	84,214	77,994	68,850	52,876	7,113	17,523	373	2,521
50 Net due from head office and other related depository institutions[5]	84,214	n.a.	68,850	n.a.	7,113	n.a.	373	n.a.
51 Net due from establishing entity, head offices, and other related depository institutions[5]	n.a.	77,994	n.a.	52,876	n.a.	17,523	n.a.	2,521
52 **Total liabilities[4]**	**631,166**	**285,276**	**465,699**	**221,706**	**84,747**	**34,819**	**48,052**	**17,949**
53 Liabilities to nonrelated parties	548,677	249,400	424,631	195,387	73,976	33,592	32,098	12,151

4.30—Continued

Millions of dollars

Item	All states[2] Total excluding IBF's	All states[2] IBF's only[3]	New York Total excluding IBF's	New York IBF's only[3]	California Total excluding IBF's	California IBF's only[3]	Illinois Total excluding IBF's	Illinois IBF's only[3]
54 Total deposits and credit balances	111,516	185,479	96,145	163,528	4,244	10,965	4,017	3,446
55 Individuals, partnerships, and corporations	80,171	17,197	67,092	10,163	3,323	920	3,662	108
56 U.S. addressees (domicile)	65,595	448	58,722	448	1,342	0	2,612	0
57 Non-U.S. addressees (domicile)	14,576	16,748	8,371	9,715	1,981	920	1,051	108
58 Commercial banks in United States (including IBFs)	22,084	56,877	20,266	51,417	653	3,337	330	1,305
59 U.S. branches and agencies of other foreign banks	8,680	51,167	8,580	46,484	26	2,958	8	1,111
60 Other commercial banks in United States	13,404	5,710	11,686	4,933	628	379	323	194
61 Banks in foreign countries	3,768	96,606	3,673	87,910	12	6,221	2	1,916
62 Foreign branches of U.S. banks	1,132	7,154	1,132	6,246	0	638	0	237
63 Other banks in foreign countries	2,636	89,452	2,541	81,664	12	5,582	2	1,679
64 Foreign governments and official institutions (including foreign central banks)	1,453	14,315	1,160	13,554	223	488	3	117
65 All other deposits and credit balances	3,732	483	3,715	483	6	0	2	0
66 Certified and official checks	309	n.a.	238	n.a.	26	n.a.	18	n.a.
67 Transaction accounts and credit balances (excluding IBFs)	7,768	↑	6,562	↑	344	↑	237	↑
68 Individuals, partnerships, and corporations	4,985		3,961		297		215	
69 U.S. addressees (domicile)	3,631		3,037		262		210	
70 Non-U.S. addressees (domicile)	1,354		923		35		4	
71 Commercial banks in United States (including IBFs)	357		351		1		0	
72 U.S. branches and agencies of other foreign banks	68		67		0		0	
73 Other commercial banks in United States	290	n.a.	285	n.a.	1	n.a.	0	n.a.
74 Banks in foreign countries	1,039		973		12		2	
75 Foreign branches of U.S. banks	4		4		0		0	
76 Other banks in foreign countries	1,035		969		12		2	
77 Foreign governments and official institutions (including foreign central banks)	451		424		3		1	
78 All other deposits and credit balances	626		614		6		1	
79 Certified and official checks	309	↓	238	↓	26	↓	18	↓
80 Demand deposits (included in transaction accounts and credit balances)	7,040	↑	6,092	↑	281	↑	220	↑
81 Individuals, partnerships, and corporations	4,598		3,823		237		198	
82 U.S. addressees (domicile)	3,469		2,978		215		194	
83 Non-U.S. addressees (domicile)	1,129		845		22		4	
84 Commercial banks in United States (including IBF)s	255		249		1		0	
85 U.S. branches and agencies of other foreign banks	61		60		0		0	
86 Other commercial banks in United States	194	n.a.	189	n.a.	1	n.a.	0	n.a.
87 Banks in foreign countries	937		874		12		2	
88 Foreign branches of U.S. banks	4		4		0		0	
89 Other banks in foreign countries	932		870		12		2	
90 Foreign governments and official institutions (including foreign central banks)	395		368		3		1	
91 All other deposits and credit balances	547		539		3		1	
92 Certified and official checks	309	↓	238	↓	26	↓	18	↓
93 Non-transaction accounts (including MMDAs, excluding IBFs)	103,748	↑	89,583	↑	3,899	↑	3,781	↑
94 Individuals, partnerships, and corporations	75,186		63,132		3,026		3,448	
95 U.S. addressees (domicile)	61,964		55,685		1,080		2,401	
96 Non-U.S. addressees (domicile)	13,222		7,447		1,946		1,047	
97 Commercial banks in United States (including IBFs)	21,726		19,915		652		330	
98 U.S. branches and agencies of other foreign banks	8,612		8,514		26		8	
99 Other commercial banks in United States	13,114	n.a.	11,401	n.a.	627	n.a.	323	n.a.
100 Banks in foreign countries	2,728		2,700		0		0	
101 Foreign branches of U.S. banks	1,128		1,128		0		0	
102 Other banks in foreign countries	1,601		1,572		0		0	
103 Foreign governments and official institutions (including foreign central banks)	1,002		735		220		2	
104 All other deposits and credit balances	3,106	↓	3,101	↓	0	↓	1	↓
105 IBF deposit liabilities	↑	185,479	↑	163,528	↑	10,965	↑	3,446
106 Individuals, partnerships, and corporations		17,197		10,163		920		108
107 U.S. addressees (domicile)		448		448		0		0
108 Non-U.S. addressees (domicile)		16,748		9,715		920		108
109 Commercial banks in United States (including IBFs)		56,877		51,417		3,337		1,305
110 U.S. branches and agencies of other foreign banks		51,167		46,484		2,958		1,111
111 Other commercial banks in United States	n.a.	5,710	n.a.	4,933	n.a.	379	n.a.	194
112 Banks in foreign countries		96,606		87,910		6,221		1,916
113 Foreign branches of U.S. banks		7,154		6,246		638		237
114 Other banks in foreign countries		89,452		81,664		5,582		1,679
115 Foreign governments and official institutions (including foreign central banks)		14,315		13,554		488		117
116 All other deposits and credit balances	↓	483	↓	483	↓	0	↓	0

For notes see end of table.

4.30 ASSETS AND LIABILITIES of U.S. Branches and Agencies of Foreign Banks, March 31, 1991[1]—Continued
Millions of dollars

Item	All states[2]		New York		California		Illinois	
	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]	Total including IBF's	IBF's only[3]
117 Federal funds purchased and securities sold under agreements to repurchase	68,203	5,046	51,107	2,888	10,810	1,588	5,632	556
118 U.S. branches and agencies of other foreign banks	10,693	1,884	6,844	903	2,300	638	1,521	330
119 Other commercial banks in United States	28,439	363	19,056	75	5,511	120	3,386	168
120 Other	29,072	2,799	25,207	1,910	2,998	830	725	58
121 Other borrowed money	129,759	51,494	72,385	22,902	40,743	20,127	14,840	7,827
122 Owed to nonrelated commercial banks in United States (including IBFs)	60,870	20,687	28,017	5,389	23,997	11,732	7,545	3,152
123 Owed to U.S. offices of nonrelated U.S. banks	22,020	3,062	11,419	1,159	6,458	1,334	3,637	444
124 Owed to U.S. branches and agencies of nonrelated foreign banks	38,850	17,626	16,597	4,230	17,539	10,398	3,908	2,708
125 Owed to nonrelated banks in foreign countries	29,006	28,008	15,709	14,838	8,379	8,276	4,678	4,670
126 Owed to foreign branches of nonrelated U.S. banks	2,769	2,730	699	688	1,501	1,474	566	566
127 Owed to foreign offices of nonrelated foreign banks	26,238	25,278	15,010	14,150	6,877	6,802	4,112	4,104
128 Owed to others	39,883	2,798	28,659	2,675	8,367	118	2,617	5
129 All other liabilities	53,720	7,382	41,467	6,069	7,215	913	4,163	321
130 Branch or agency liability on acceptances executed and outstanding	27,370	n.a.	20,938	n.a.	4,923	n.a.	894	n.a.
131 Other liabilities to nonrelated parties	26,350	7,382	20,529	6,069	2,293	913	3,269	321
132 Net due to related depository institutions[5]	82,489	35,875	41,068	26,319	10,770	1,226	15,954	5,799
133 Net due to head office and other related depository institutions[5]	82,489	n.a.	41,068	n.a.	10,770	n.a.	15,954	n.a.
134 Net due to establishing entity, head office, and other related depository institutions[5]	n.a.	35,875	n.a.	26,319	n.a.	1,226	n.a.	5,799
MEMO								
135 Non-interest bearing balances with commercial banks in United States	2,263	0	1,992	0	118	0	91	0
136 Holding of commercial paper included in total loans	2,208		2,045		115		40	
137 Holding of own acceptances included in commercial and industrial loans	2,360		1,674		458		115	
138 Commercial and industrial loans with remaining maturity of one year or less	81,228		44,137		19,052		10,815	
139 Predetermined interest rates	52,170	n.a.	27,996	n.a.	12,128	n.a.	6,673	n.a.
140 Floating interest rates	29,058		16,140		6,924		4,142	
141 Commercial and industrial loans with remaining maturity of more than one year	69,147		41,813		14,375		7,768	
142 Predetermined interest rates	21,184		12,656		3,659		3,486	
143 Floating interest rates	47,963		29,157		10,716		4,282	

4.30—Continued

Millions of dollars

Item	All states[2]		New York		California		Illinois	
	Total excluding IBFs	IBFs only[3]	Total excluding IBFs	IBFs only[3]	Total excluding IBFs	IBFs only[3]	Total excluding IBFs	IBFs only[3]
144 Components of total nontransaction accounts, included in total deposits and credit balances of nontransactional accounts, including IBFs	110,267	↑	97,310	↑	4,117	↑	3,692	↑
145 Time CDs in denominations of $100,000 or more	75,253		66,221		2,289		2,035	
146 Other time deposits in denominations of $100,000 or more	20,823	n.a.	17,998	n.a.	1,232	n.a.	1,460	n.a.
147 Time CDs in denominations of $100,000 or more with remaining maturity of more than 12 months	14,191	↓	13,092	↓	596	↓	196	↓
	All states[2]		New York		California		Illinois	
	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]	Total including IBFs	IBFs only[3]
148 Market value of securities held	49,169	13,732	43,843	12,301	3,419	887	1,455	495
149 Immediately available funds with a maturity greater than one day included in other borrowed money	75,571	n.a.	39,836	n.a.	25,337	n.a.	9,081	n.a.
150 Number of reports filed[6]	571	0	266	0	131	0	56	0

1. Data are aggregates of categories reported on the quarterly form FFIEC 002, "Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks." Details may not add to totals because of rounding. This form was first used for reporting data as of June 30, 1980, and was revised as of December 31, 1985. From November 1972 through May 1980, U.S. branches and agencies of foreign banks had filed a monthly FR 886a report. Aggregate data from that report were available through the Federal Reserve statistical release G.11, last issued on July 10, 1980. Data in this table and in the G.11 tables are not strictly comparable because of differences in reporting panels and in definitions of balance sheet items.

2. Includes the District of Columbia.

3. Effective December 1981, the Federal Reserve Board amended Regulations D and Q to permit banking offices located in the United States to operate International Banking Facilities (IBFs). As of December 31, 1985 data for IBFs are reported in a separate column. These data are either included in or excluded from the total columns as indicated in the headings. The notation "n.a." indicates that no IBF data re reported for that item, either because the item is not an eligible IBF asset or liability or because that level of detail is not reported for IBFs. From December 1981 through September 1985, IBF data were included in all applicable items reported.

4. Total assets and total liabilities include *net* balances, if any, due from or due to related banking institutions in the United States and in foreign countries (see footnote 5). On the former monthly branch and agencyu report, available through the G.11 statistical release, *gross* balances were included in total assets and total liabilities. Therefore, total asset and total liability figures in this table are not comparable to those in the G.11 tables.

5. "Related banking institutions" includes the foreign head office and other U.S. and foreign branches and agencies of the bank, the bank's parent holding company, and majority-owned banking subsidiaries of the bank and of its parent holding company (including subsidiaries owned both directly and indirectly).

6. In some cases two or more offices of a foreign bank within the same metropolitan area file a consolidated report.

4.31 Pro forma balance sheet for priced services of the Federal Reserve System[1]

Millions of dollars

Item	June 30, 1991		June 30, 1990	
Short-term assets[2]				
Imputed reserve requirement on clearing balances	370.9		222.6	
Investment in marketable securities	2,720.1		1,632.4	
Receivables	56.8		59.1	
Materials and supplies	6.2		6.5	
Prepaid expenses	16.3		15.4	
Items in process of collection	2,864.4		3,098.1	
Total short-term assets		6,034.6		5,034.2
Long-term assets[3]				
Premises	340.5		304.8	
Furniture and equipment	163.4		130.3	
Leases and leasehold improvements	17.8		7.0	
Prepaid pension costs	80.7		57.8	
Total long-term assets		602.3		499.9
Total assets		**6,636.9**		**5,534.1**
Short-term liabilities				
Clearing balances and balances arising from early credit of uncollected items	3,505.6		2,318.4	
Deferred availability items	2,449.7		2,634.8	
Short-term debt	79.3		81.0	
Total short-term liabilities		6,034.6		5,034.2
Long-term liabilities				
Obligations under capital leases	1.2		1.2	
Long-term debt	165.5		140.2	
Total long-term liabilities		166.7		141.4
Total liabilities		**6,201.3**		**5,175.6**
Equity		435.6		358.5
Total liabilities and equity[4]		**6,636.9**		**5,534.1**

1. Details may not sum to totals because of rounding.

2. The imputed reserve requirement on clearing balances and investment in marketable securities reflect the Federal Reserve's treatment of clearing balances maintained on deposit with Reserve Banks by depository institutions. For presentation of the balance sheet and the income statement, clearing balances are reported in a manner comparable to the way correspondent banks report compensating balances held with them by respondent institutions. That is, respondent balances held with a correspondent are subject to a reserve requirement established by the Federal Reserve. This reserve requirement must be satisfied with either vault cash or with nonearning balances maintained at a Reserve Bank. Following this model, clearing balances maintained with Reserve Banks for priced service purposes are subjected to imputed reserve requirements. Therefore, a portion of the clearing balances held with the Federal Reserve is classified on the asset side of the balance sheet as required reserves and is reflected in a manner similar to vault cash and due from bank balances normally shown on a correspondent bank's balance sheet. The remainder of clearing balances is assumed to be available for investment. For these purposes, the Federal Reserve assumes that all such balances are invested in three-month Treasury bills.

The account "items in the process of collection" (CIPC) represents the gross amount of Federal Reserve CIPC as of the balance sheet date, stated on a basis comparable with a commercial bank. Adjustments have been made for intra-System items that would otherwise be double-counted on a consolidated Federal Reserve balance sheet; items associated with nonpriced items, such as items collected for government agencies; and items associated with providing fixed availability or credit prior to receipt and processing of items. The cost base for providing services that must be recovered under the Monetary Control Act includes the cost of float (the difference between the value of gross CIPC and the value of deferred availability items) incurred by the Federal Reserve during the period, valued at the federal funds rate. The amount of float, or net CIPC, represents the portion of gross CIPC that involves a financing cost.

3. Long-term assets on the balance sheet have been allocated to priced services with the direct determination method, which uses the Federal Reserve's Planning and Control System (PACS) to ascertain directly the value of assets used solely in priced services operations and to apportion the value of jointly used assets between priced services and nonpriced services. Also, long-term assets include an estimate of the assets of the Board of Governors directly involved in the development of priced services.

Long-term assets include amounts for capital leases and leasehold improvements and for prepaid pension costs associated with priced services. Effective January 1, 1987, the Federal Reserve Banks implemented Financial Accounting Standards Board Statement No. 87, Employer's Accounting for Pensions.

4. A matched-book capital structure has been used for those assets that are not "self-financing" in determining liability and equity amounts. Short-term assets are financed with short-term debt. Long-term assets are financed with long-term debt and equity in a proportion equal to the ratio of long-term debt to equity for the bank holding companies used in the model for the private sector adjustment factor (PSAF).

4.32 Pro forma income statement for priced services of the Federal Reserve System[1]

Millions of dollars

Item	Quarters ending June 30			
	1991		1990	
Income services provided to depository institutions[2]		184.1		182.7
Production expenses[3]		152.5		146.3
Income from operations		31.6		36.4
Imputed costs[4]				
Interest on float	3.1		6.6	
Interest on debt	4.8		4.2	
Sales taxes	2.6		2.2	
FDIC insurance	2.3	12.8	1.2	14.3
Income from operations after imputed costs		18.8		22.1
Other income and expenses[5]				
Investment income	43.9		40.6	
Earnings credits	39.8	4.2	35.9	4.6
Income before income taxes		22.9		26.7
Imputed income taxes[6]		7.0		7.4
Net income		**15.9**		**19.3**
MEMO				
Targeted return on equity[6]		8.1		8.4
	Six months ending June 30			
	1991		1990	
Income services provided to depository institutions[2]		365.5		364.5
Production expenses[3]		302.2		292.1
Income from operations		63.3		72.4
Imputed costs[4]				
Interest on float	9.2		15.0	
Interest on debt	9.6		8.4	
Sales taxes	5.0		4.0	
FDIC insurance	4.3	28.1	2.6	29.9
Income from operations after imputed costs		35.1		42.5
Other income and expenses[5]				
Investment income	85.4		78.2	
Earnings credits	74.9	10.5	68.8	9.4
Income before income taxes		45.6		51.9
Imputed income taxes[6]		13.9		14.4
Net income		**31.7**		**37.5**
MEMO				
Targeted return on equity[6]		16.2		16.8

1. The income statement reflects income and expenses for priced services. Included in these amounts are the imputed costs of float, imputed financing costs, and the income related to clearing balances.

Details may not add to totals because of rounding.

2. Income represents charges to depository institutions for priced services. This income is realized through one of two methods: direct charges to an institution's account or charges against accumulated earnings credits. Income includes charges for per-item fees, fixed fees, package fees, explicitly priced float, account maintenance fees, shipping and insurance fees, and surcharges.

3. Production expenses include direct, indirect, and other general administrative expenses of the Federal Reserve Banks for providing priced services. Also included are the expenses of staff members of the Board of Governors working directly on the development of priced services, which amounted to $1.0 million and $0.9 million in the second quarter for 1991 and 1990, respectively.

4. Imputed float costs represent the value of float to be recovered, either explicitly or through per-item fees, during the period. Float costs include those for checks, book-entry securities, noncash collection, ACH, and wire transfers.

The following table depicts the daily average recovery of float by the Federal Reserve Banks for the second quarter of 1991. In the table, unrecovered float includes that generated by services to government agencies or by other central bank services.

Float recovered through income on clearing balances represents increased investable clearing balances as a result of reducing imputed reserve requirements through the use of a deduction for float for cash items in process of collection when calculating the reserve requirement. This income then reduces the float required to be recovered through other means.

As-of adjustments and direct charges refer to midweek closing float and interterritory check float, which may be recovered from depositing institutions through adjustments to the institution's reserve or clearing balance or by valuing the float at the federal funds rate and billing the institution directly.

Float recovered through per-item fees is valued at the federal funds rate and has been added to the cost base subject to recovery in the second quarter of 1991.

Total float	369.9
Unrecovered float	−21.8
Float subject to recovery	391.7
Sources of float recovery	
Income on clearing balances	52.6
As of adjustments	195.6
Direct charges	71.8
Per-item fees	71.7

Also included in imputed costs is the interest on debt assumed necessary to finance priced-service assets and the sales taxes and FDIC insurance assessment that the Federal Reserve would have paid had it been a private-sector firm.

Because of a change in the methodology for imputing PSAF costs approved in 1989, FDIC insurance is now calculated on the basis of actual clearing balances and credits that are deferred to depository institutions. Previously, the assessment was calculated on the basis of available funds.

5. Other income and expenses consist of income on clearing balances and the cost of earnings credits granted to depository institutions on their clearing balances. Income on clearing balances represents the average coupon-equivalent yield on three-month Treasury bills applied to the *total* clearing balance maintained, adjusted for the effect of reserve requirements on clearing balances. Expenses for earnings credits are derived by applying the average federal funds rate to the *required* portion of the clearing balances, adjusted for the net effect of reserve requirements on clearing balances.

6. Imputed income taxes are calculated at the effective tax rate derived from a model consisting of the 50 largest bank holding companies. The targeted return on equity represents the after-tax rate of return on equity that the Federal Reserve would have earned had it been a private business firm, based on the bank holding company model.

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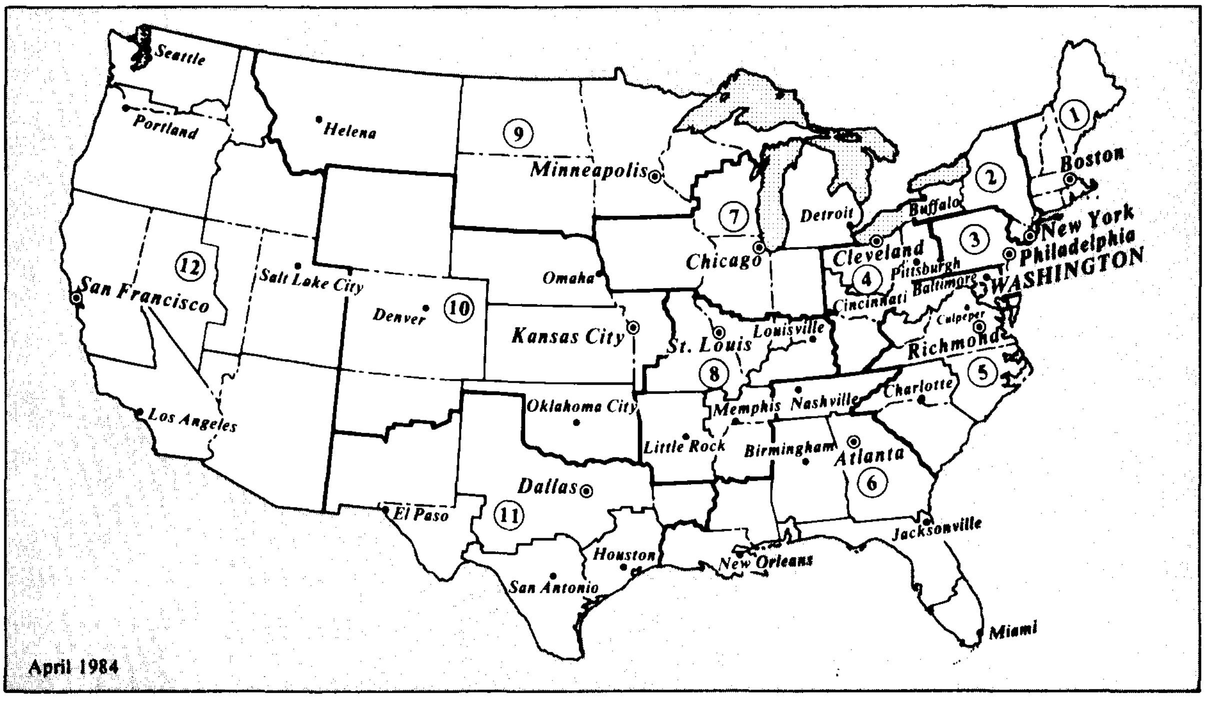

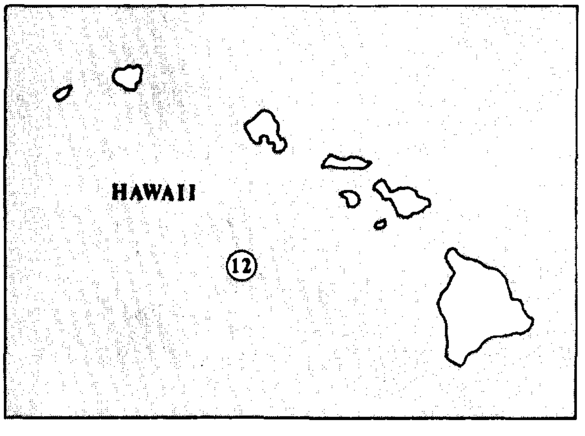

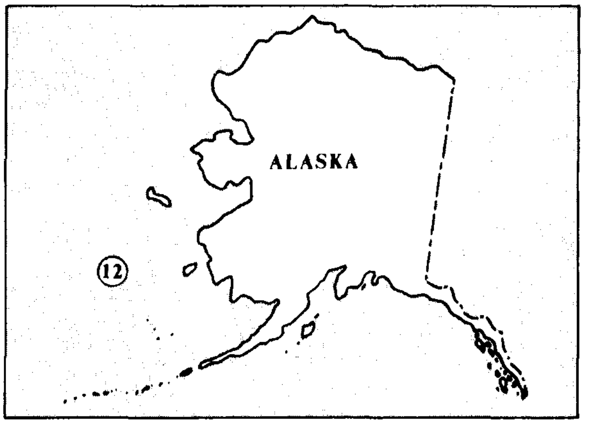

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