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Electronic Transfer of Government Benefits

John C. Wood and Dolores S. Smith, of the Board's Division of Consumer and Community Affairs, prepared this article.

In 1990, the federal government paid recipients more than \$400 billion in social security and other government benefits, and state-administered programs paid another \$95 billion or so. Almost 60 percent of the federal payments and nearly all the state funds were disbursed by paper check. To increase the efficiency and minimize the cost of disbursing funds, and to improve the service to benefit recipients, agencies at the federal and state levels are working to move toward electronic delivery of these payments. The Social Security Administration and the Department of the Treasury, for example, have launched a major effort to increase the direct deposit of social security payments to recipients' bank accounts.

A problem arises when an individual has no deposit account at a financial institution: Benefits cannot then be disbursed by direct deposit of funds. Government agencies are exploring an alternative method called electronic benefit transfer (EBT) for delivering cash benefits, particularly to low-income recipients. In the EBT systems now in place, recipients use automated teller machines (ATMs), point-of-sale (POS) terminals, and other electronic devices to withdraw their benefits. The recipient generally gains access to the funds by using a combination of a plastic card with a magnetic stripe and a personal identification number. The electronic terminals that disburse benefits are attended in some cases, unattended in others. Some facilities are part of an existing commercial ATM or POS network. Other facilities are specially dedicated terminals in a stand-alone system—that is, a system that operates for the sole benefit of these recipients.

Government interest in EBT is not limited to those agencies that disburse cash benefits. The U.S. Department of Agriculture (USDA), which

administers the food stamp program at the federal level through its Food and Nutrition Service, has been a pioneer in testing the use of EBT to replace the issuance of food stamp coupons. Electronic delivery of food stamp benefits enables eligible recipients, using electronic POS terminals at participating grocery stores, to shop with an EBT card instead of with coupons. The Congress recently authorized USDA to offer state agencies EBT systems as an alternative method for delivering food stamp benefits. Until now, states have been required by federal law to issue paper coupons unless they obtain special approval for EBT demonstration projects.

An EBT system offers opportunities for improving the delivery service to recipients, maximizing the efficiency of operations at state agencies, and minimizing costs for all parties. It also brings major challenges: Building these systems to work efficiently and cost effectively for all the parties involved will take cooperative efforts—among government agencies at the federal and state levels, financial institutions, regional networks of ATMs and POS terminals, members of the retail food industry, others in the private sector, and benefit recipients. This article gives an overview of the developing interest in EBT among these various parties. It describes some of the pilot programs that have tested the practicality of electronic delivery and reviews issues—including those related to the Electronic Fund Transfer Act and the Federal Reserve Board's Regulation E—that the implementation of EBT programs raises.

BACKGROUND

Most government benefits today are paid by checks mailed to recipients. The check-based system can pose difficulties, however. Because checks can be lost in the mail or stolen, some recipients may never receive their checks and

1. Families, total and those without bank accounts, participating in selected government programs, 1985

Number in thousands

Program	Total		Without bank accounts	
	Percent of U.S. population ¹	Number	Percent	Number
Aid to Families with Dependent Children	3	2,791	75	2,084
General assistance	1	798	74	587
Food stamps	6	5,916	73	4,294
Women and infant care	1	1,384	56	782
Supplemental security income	2	2,205	50	1,106
Social security	26	23,687	14	3,395
Pensions	8	7,770	8	597

1. Based on a projected population of 92.9 million families.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Survey

of Income and Program Participation, 1985 data as analyzed by the General Accounting Office, *Government Check-Cashing Issues* (GAO, 1988), p. 44.

may need to have them replaced. Delays in mail delivery may make the benefits late. Those recipients who have no deposit accounts may have difficulty or may incur high costs in converting the checks into spendable funds. And recipients who must take the entire benefit payment at once run risks in carrying around several hundred dollars or more.

In some benefit programs, such as social security and U.S. government pensions, a large proportion of recipients receive the funds through direct deposit to their account at a financial institution, a system that is well established and generally works smoothly for them. Those recipients who have no bank account, however, do not have the option of direct deposit.

Account Holding and Check Cashing

According to Census Bureau data, the proportion of households not having deposit accounts is considerably higher among recipients of government benefit programs than among the general population. In 1985, 39 percent of families receiving state and local government benefit payments had no bank accounts, compared with about 17 percent of all U.S. families. A similar trend holds for federal benefit programs: Among recipients of supplemental security income payments, for example, 50 percent had no bank accounts (table 1).

Low-income consumers are in general the least likely to hold deposit accounts: As table 2 shows, 26 percent of households in the lowest income quintile in 1986 had no checking or savings account, compared with less than 0.5 percent of

households in the two highest quintiles. Many of these low-income households receive government benefit payments.

Some of the reasons that low-income consumers give for not holding deposit accounts are the cost, the lack of sufficient funds to open an account or to make having one worthwhile, difficulty in monitoring the account balance, preference for dealing with cash and money orders rather than checks, mistrust of financial institutions, and inconvenient bank hours or locations.

Consumers without an account can receive government payments in check form, cash the check, and conduct their financial affairs using cash and money orders. They may have problems, however, in places where depository institutions will not cash checks for noncustomers. Surveys show varying results on the willingness of depository institutions to cash checks for noncustomers. A report by the General Accounting Office (GAO) to the Congress indicated that in 1985 some 86 percent of banks and 55 percent of thrifts cashed U.S. Treasury

2. Percentage of households holding no deposit accounts, by income quintile, 1977 and 1986¹

Quintile	1977	1986
Lowest	28	26
Second	10	9
Third	4	5
Fourth	2	2
Highest	1	1
All	9	10

1. * Less than 0.5 percent.

SOURCES: Thomas A. Durkin and Gregory E. Eliehausen, *1977 Consumer Credit Survey*; June 1986 Survey of Consumer Attitudes, Survey Research Center, University of Michigan.

checks for noncustomers. The GAO noted that other studies had yielded differing figures: The Independent Bankers Association of America (IBAA) had surveyed 1,767 banks, one quarter of its membership, in 1984 and found that 68 percent of responding institutions cashed government checks free of charge for noncustomers. In contrast, the Association of Community Organizations for Reform Now in a 1986 study of 344 institutions reported 12 percent were willing, and the Consumer Federation of America (CFA) in a 1988 survey of 191 institutions found 29 percent.

Differences in the results of these studies may have resulted partly from the way the surveys were conducted. The GAO study was limited to the cashing of U.S. Treasury checks. That some institutions may be more willing to cash federal checks than to cash state or local government checks could have contributed to the high percentage of institutions in the GAO study. Moreover, of the four surveys, the GAO survey was the only one based on sampling techniques that could be projected nationwide. Institutions in the CFA survey were located mainly in urban areas; those in the IBAA survey, mostly in small towns or rural communities where banks appear more willing to cash checks for noncustomers than are their counterparts in metropolitan areas.

Cashing checks for a fee at nonbank locations, such as check-cashing centers or various retail outlets, is an alternative for these recipients. According to the National Check Cashers Association, a trade group, about 3,000 check-cashing centers were in operation in 1988, mostly in urban areas. Check-cashing fees are regulated in only a few states, including Illinois, New York, and New Jersey. Even in these states, the fees allowed may seem high to low-income recipients of government benefits. Cashing a \$500 social security check, for example, can cost up to \$7.50 in New Jersey, where cashing out-of-state checks (including checks drawn on the U.S. Treasury) is subject to a 1.5 percent charge. A 1987 survey of sixty check-cashing centers in twenty major cities by the CFA reported a median charge to cash a \$500 government check of 1.5 percent (\$7.50) and an average charge of 1.69 percent (\$8.47).

Legislative Proposals

Concern that existing systems may inadequately meet the financial services needs of benefit recipients (or of low-income consumers in general) has led to proposed legislation intended to remedy the situation. Bills introduced in recent sessions of the Congress call for depository institutions to offer government check-cashing services and basic banking accounts. (Basic banking often refers to an account that has low fees and minimum balance requirements and that allows the writing of a limited number of checks.) In the current session, Chairman Henry Gonzalez of the House Committee on Banking, Finance and Urban Affairs has introduced an omnibus bill for the reform and restructuring of the banking industry that includes provisions for basic banking and government check cashing. H.R. 6 calls for banks to offer basic accounts with limited fees, a minimum balance of no more than \$25, a maximum balance of \$1,000 (to limit the use of the accounts to low-income consumers), and at least ten withdrawals per month. The bill also calls for institutions to cash government checks of \$1,500 or less for a fee of no more than \$2.00 for individuals who register with the bank.

Senator Howard Metzenbaum has also introduced legislation. S.415 is similar to the basic banking provisions of H.R. 6; the minimum balance that banks can set for maintenance of the account, however, cannot exceed \$1.00. S.414 generally parallels the government check-cashing provisions of H.R.6, except that the permissible fee for check cashing, rather than being set at \$2.00, is limited to an amount to be determined by the Federal Reserve Board based on cost studies. Financial institutions generally have opposed such legislation, arguing that it would subject them to increased risk from fraud and costs not adequately covered by revenues. They also have said that such legislation is unnecessary because many institutions already offer basic banking and government check-cashing services on a voluntary basis.

Some states—including Connecticut, Illinois, Massachusetts, Minnesota, Pennsylvania, and Rhode Island—have enacted basic banking or check-cashing laws. Most of these laws are more limited than the legislation before the Congress,

and some apply only to individuals in certain age groups. In Massachusetts, for example, banks may not impose fees, other than for the dishonor of a check for insufficient funds, on a checking or savings account held by anyone 65 years of age or older or 18 years or younger. In Minnesota and Pennsylvania, basic banking laws come into play only when an institution engages in or is applying for interstate operations.

Though the pending federal legislation addresses some needs of government benefit recipients—primarily those revolving around fees and minimum balances for accounts—it does not resolve other problems that recipients are perceived to have with the present paper-based payment system.

SUPPORT FOR EBT

Interest in and support for examining EBT as a delivery alternative to paper-based systems is building in both the public and private sectors. The Department of the Treasury, which serves as the federal government's money manager, has taken a lead in promoting the development of systems for electronic benefit transfers as a complement to the agency's activities on the direct-deposit front.

One of the Treasury's goals for EBT is to help ensure that cost-effective electronic technologies are used in ways that best meet the needs of both the recipients and the providers. For the past two years, the Treasury has regularly convened task forces with representation from government agencies, financial institutions, the retail food industry, and consumer groups. Through these efforts, the Treasury is seeking to ensure the coordination of EBT among the multitude of federal agencies engaged in benefits delivery and to facilitate effective liaison with the private sector.

In support of the Treasury's interagency coordination, the Office of Management and Budget (OMB) recently established a steering committee of top-level officials to develop the government's plan for implementing EBT. OMB has identified EBT as a management objective, its goal being to improve the quality and reduce the costs of benefit payment services. The agency projects

that annual savings of up to \$250 million are possible.

Among the federal program agencies that administer benefits delivery to recipients, two are at the forefront of EBT development: USDA's Food and Nutrition Service, with its food stamp program, and the Family Support Administration (part of the Department of Health and Human Services), which oversees the delivery of Aid to Families with Dependent Children (AFDC) benefits. The agencies have funded, separately and jointly, pilot projects to test EBT in different environments, utilizing various electronic technologies and systems. They serve as the conduit for federal dollars to state government agencies, which will also be major players in the development of EBT given their role as the local administrators of food stamp, AFDC, and other public assistance programs.

A major impetus for the development and growth of food stamp EBT programs, in particular, will come from the recent enactment of the Food, Agriculture, Conservation, and Trade Act of 1990 (Pub. L. 101-624), which amends the Food Stamp Act. Until now, federal law has required that benefits under the food stamp program be issued in paper form. To engage in EBT, state agencies have had to obtain a special waiver from USDA for demonstration projects. With USDA's approval, states will be able to establish EBT programs for food stamp benefits on a permanent basis, instead of only as pilot projects like those instituted thus far.

The 1990 amendments direct USDA to issue regulations establishing standards for cost-effectiveness; protection of recipients (to ensure "privacy, ease of use, and access to and service in retail food stores"); terms of participation by retailers and financial institutions; and the security, reliability, and processing speed of the system. The regulations are to ensure that the operational cost of an EBT system, including the pro rata cost of capital expenditures and other start-up costs, does not exceed the cost of the paper-based food stamp system.

Another new federal law may provide added incentive for greater use of electronics for governmental fund transfers. The Cash Management Improvement Act of 1990 (Pub. L. 101-453) directs the Treasury to issue regulations that will

ensure equity between federal and state agencies in the transfer of funds. The act will require the payment of interest if funds are drawn in advance of the state's need or are held longer than necessary. If a state agency draws federal funds on the same day that benefit checks are mailed, for example, the state may have to pay interest to the federal government from that day until the day the checks are paid. If the agency instead transfers benefit funds electronically on the same day it draws the federal funds, the state can avoid interest payments. The regulations must be in place by October 1992.

In the private sector, various groups are directly affected by the implementation of EBT. For financial institutions and regional networks, EBT can bring added transactions at ATMs not operating at full capacity and thus generate revenues from fees. In EBT programs that replace food stamp coupons with electronic delivery, depository institutions will no longer have to be involved in the redemption of coupons. There will also be reduced need for check-cashing services and, thus, less risk of loss from fraud. The American Bankers Association has sponsored two annual conferences on EBT, drawing attendees from state and federal agencies and the private sector. The Consumer Bankers Association recently prepared an issues paper to familiarize its members with the implications of EBT and to encourage their participation in its development.

Food retailers that currently deal with paper food stamps may be able to improve efficiency through the use of electronic substitutes. The Food Marketing Institute, which represents about 1,600 food retailers and wholesalers (including almost every major supermarket chain), has had a committee on electronic fund transfers since the early 1980s to keep up to date on the use of debit cards in POS transactions at check-out lanes. The institute encourages the involvement of grocer representatives while EBT projects are being planned, so that their concerns about POS installations may be adequately addressed. The group has voiced strong support for the concept of EBT and for its implementation at the most rapid practical pace.

Others in the private sector, too, are taking a direct role in the evolution of EBT. In 1990, the

Electronic Funds Transfer Association, a group representing the various industries involved in electronic funds transfer, established an inter-industry task force to target the creation of operational standards for implementing EBT and to resolve other issues while systems are still being developed and tested. Representatives on the task force include financial institutions, retailers, data-processing vendors, ATM and POS regional networks, and others interested in addressing the many issues raised by EBT. Staff members from the Treasury Department, the Federal Reserve Board, the Food and Nutrition Service, the Family Support Administration, and other agencies join in task force discussions to facilitate the exchange of ideas and information between the private and public sectors. The association also recently hosted its first annual conference on EBT.

Added support for EBT has come from the Federal Reserve's Consumer Advisory Council, particularly members of its Committee on Depository and Delivery Systems. The council's thirty members represent consumer and community-based organizations, financial institutions, colleges and universities, and state government. At its meeting in June 1990, the council unanimously adopted a resolution urging the Federal Reserve Board to take a leadership role in encouraging the development of EBT.

EARLY EBT PROJECTS: TESTING THE SYSTEM

Programs at the federal and state levels have tested the practicality of EBT. Such programs in parts of New York, Pennsylvania, and Minnesota have become fully operational and permanent after going through a demonstration or pilot phase. For these programs, the focus now is on expansion to other counties or even to the entire state. In Maryland, New Mexico, Texas, and other states, EBT projects are still in their formative stages.

In general, an EBT system functions much like a commercial system for electronic fund transfers. An eligible recipient receives a plastic magnetic-striped card and a personal identification number (PIN). The card may also carry a photo-

graph of the recipient and a signature panel. To access the benefits, a recipient goes to a terminal that may be dedicated to the system or may be part of an existing ATM or POS network. The recipient inserts the card into a device that reads the magnetic stripe or, in the case of an attended terminal, presents the card to a clerk who sweeps the card through the stripe reader. The recipient's identity is usually verified by the PIN, and the terminal communicates with an authorization center to ascertain that the recipient is eligible for benefits, that the card has not been reported lost or stolen, and that benefits are available. In an attended terminal system, the recipient may sign a voucher printed by the terminal to permit a clerk to compare signatures. If everything is in order, the recipient receives the benefits through a cash disbursement or, in the case of food stamp benefits, by authorization for a food purchase.

Programs may use either government accounts or accounts in recipients' names. If government accounts are used, a settlement takes place after the close of each business day: The program agency authorizes a fund transfer from its account to a contractor financial institution, which in turn reimburses the terminal-operating institutions and retail grocers. If accounts in recipients' names are used, the program agency transfers funds monthly, by way of the automated clearing house, to the contractor financial institution so that funds are there to cover withdrawals of benefits during the cycle.

New York City: Automated Delivery of Cash and Coupons

New York City was among the first areas to have automated delivery of government benefits. Its system for handling the disbursement of AFDC benefits and food stamps, known as the Electronic Payment File Transfer System, began operations as a pilot in 1981. It received high marks from recipients in the pilot: Ninety-four percent preferred it to the check-based system. By 1986 the system was in full-scale operation, and now it serves about 500,000 households. It is limited to disbursing public assistance in cash and food stamp benefits in the form of paper coupons at attended terminals. Because of its reliance on manual disbursement, some may not consider it

an EBT system in the strictest sense; but it does demonstrate a use of electronic technology to facilitate the delivery of benefits.

The New York City system uses attended terminals in approximately 425 locations, most in check-cashing centers and some in bank branches. The card issued to participants contains a photograph, a signature panel, and a magnetic stripe; a clerk disburses the benefits after verifying the identity of the holder through the magnetic stripe and by comparing the person presenting the card to the photograph and the signature on a voucher that the person signs to the signature on the card.

When the benefit is redeemed, the recipient must take the entire amount due. The recipient's benefits are debited immediately to prevent duplicate issuance. Transactions for each day are processed nightly through the automated clearing house, and funds are transferred to reimburse the redemption centers.

Participants have reacted favorably to the system. The New York City Human Resources Administration reports reduced administrative and check-reconciliation costs, reduced incidence of lost or stolen benefits, and increased ability to prevent the issuance of benefits after a case is closed (for example, when a recipient dies or becomes ineligible). Agency savings amount to about \$9 million annually. The recipients also favor the arrangement: They can obtain public assistance benefits and food stamps at the same time and place, they have no check-cashing fees to pay, and stolen checks are no longer a problem. For financial institutions that cash checks for noncustomers, the New York City delivery system means that branches can avoid the congestion caused by many people cashing government checks on the day of receipt and that the likelihood of accepting a fraudulent check is reduced.

Reading, Pennsylvania: Electronic Delivery of Food Stamp Benefits

In 1984 a demonstration project for the electronic delivery of food stamp benefits began in Reading, Pennsylvania, under the auspices of the Food and Nutrition Service of the USDA. The system used POS terminals in about 125 grocery stores,

with cards and PINs issued to participants to replace the traditional paper coupons. Unlike the New York City system, the Reading program enabled recipients to pay directly for food by debiting their benefit account at the checkout counter. No limitation was placed on the number of draws permitted per month for participants. About 3,400 households were involved in the pilot.

Participating financial institutions, recipients, and food retailers generally favored the electronic system over the previous paper-based program. The evaluation report indicated that loss and theft of benefits were reduced and that costs to banks and retailers of handling food coupons were eliminated, as were costs to the government of producing, storing, and shipping the coupons.

Administrative costs, however, were much higher in the electronic system than in the paper-based system (about \$27 per case per month compared with about \$3 in the old system). The higher cost resulted from the special installation of the POS terminals for the pilot and from an initially small caseload. Now operated by the state, the Reading project in 1988 reported costs of about \$9 per case per month.

Ramsey County, Minnesota: AFDC Benefits

Minnesota's Ramsey County, in which St. Paul is located, has an EBT system that began as a pilot project in 1987. The program is now in full-scale operation, with about 12,000 recipients. Benefits disbursed include AFDC and other categories of cash public assistance. In developing the system, the county specified that the access card should be designed so that it could eventually also accommodate other programs such as food stamp benefits, which the county expects to add sometime in 1991, and medicaid.

Recipients receive plastic cards with a magnetic stripe, photograph, and signature panel. The Ramsey County system uses ATMs that are part of three existing regional networks. The system also uses attended POS terminals. If clients cannot demonstrate at the end of the training sessions that they can use an ATM, they are restricted to using POS terminals. For both

ATM and POS transactions, recipients need not withdraw the entire authorized benefit in one transaction; the county has found that recipients typically average three to four transactions per month.

Participation is mandatory for recipients, except for those who have bank accounts. The county expects to begin offering the recipients who have bank accounts the option of direct deposit of benefits.

In a 1990 evaluation of the pilot, the county reported that 89 percent of participants preferred EBT, whereas 4 percent continued to prefer checks. Advantages to recipients include earlier access to benefits, convenient locations and hours for obtaining benefits, and the flexibility of withdrawing benefits in one lump sum or in several smaller amounts. Ramsey County found that its costs for delivering benefits were lower than they had been under the check-based system.

Except for allowing the use of their ATMs for gaining access to benefits, banks have had little direct involvement in the program. Funds remain in a government account until drawn, and the program agencies and their contractors are responsible for accounting, resolving problems, detecting fraud, and auditing.

Other EBT Projects

EBT projects are also under way in several other states, including Maryland and New Mexico. Benefits being disbursed in these projects include AFDC, other types of cash public assistance, food stamps, and child support payments.

Begun in 1989 under the auspices of the Family Support Administration and USDA's Food and Nutrition Service, the Maryland pilot makes multiple benefits (AFDC, child support payments, and food stamp benefits) available. It uses existing network ATMs and specially installed POS terminals. The project involves about 5,000 recipients, who may obtain benefits in several draws over the month. About 170 food stores in Baltimore are participating. Approval has just been granted to expand the project statewide.

Another project, sponsored by the Food and Nutrition Service, began in September 1990 in Albuquerque, New Mexico. Initially it involved

only food stamp benefits with AFDC to be added later. Of about 16,000 households receiving food stamps, 7,000 had voluntarily converted to EBT by January 1991; the program became mandatory in February. The program will also serve almost 6,000 households receiving AFDC payments (there is some overlap among recipients in the two programs). The Albuquerque program is noteworthy in that, beyond promoting EBT, it is also serving to advance POS in the commercial environment: The great majority of participating retail grocers have chosen to install terminals that will serve the general population of debit card customers and will even accept credit cards. The government agencies have subsidized the costs attributed to the EBT function; the retailers have paid the difference.

Other possible locations for pilots include Iowa (where food stamp benefits may be added to an existing system for cash benefits), New Jersey, and South Carolina. The Food and Nutrition Service will also test the off-line delivery of food stamp benefits to about 10,000 recipients in Dayton, Ohio. The system will use information in a magnetic chip embedded in the access cards (sometimes called smart cards) rather than in a computer database at a financial institution or data-processing contractor. Thus, the terminal at which benefits are obtained need not communicate with any outside facility at the time of a transaction. With such a system, telecommunication costs decrease (although the cards are more expensive than the ordinary magnetic-stripped version) and efficiency increases, as time waiting at the checkout counter for authorization may be reduced. As in other pilots, other types of benefits may be added later.

Treasury Initiatives

Besides coordinating interagency efforts, the Treasury Department has pursued several EBT initiatives of its own. The Treasury's first pilot tested the electronic payment of supplemental security income (SSI) benefits through magnetic-stripped cards at ATMs and POS terminals. SSI benefits, which are payable to aged, blind, and disabled persons in financial need, total approximately \$15 billion annually and go to 4.6 million recipients throughout the United States.

Carried out in Baltimore, the SSI pilot ran for twelve months, ending in October 1990. It differed from most other EBT projects to date in that participation was voluntary. About 250 recipients took part in the program. Benefits could be taken in multiple withdrawals rather than all at once. As time passed and they gained confidence in the system, participants became more likely to take advantage of this feature.

The Treasury just launched its second pilot, in Houston. As in Baltimore, participation is voluntary. Benefit funds are held in regular checking accounts, and recipients may make multiple withdrawals. The Houston project covers social security benefits as well as SSI. Almost 400 recipients participate in the program, with a control group of about 500. The control group was chosen from among persons who initially expressed an interest in participating but who ultimately did not sign up.

The primary contractor operating the pilot is a regional terminal network. Recipients can obtain benefits through any ATM or POS terminal in the network; the network itself issues the cards, and, therefore, no network interchange fees will be charged.

The evaluation of the Houston project will differ from evaluations in other pilots in that it will focus also on EBT's effects on crime. The National Institute of Justice, a cosponsor of the project with the Treasury Department and the Social Security Administration, has said that the test will consider robberies, thefts, physical assaults, and white collar crimes.

ISSUES RAISED BY EBT

The projects conducted to date suggest that EBT systems can effectively meet the needs of benefits recipients, as evidenced by the positive endorsements the systems have received in New York City, Ramsey County, and elsewhere. These delivery systems may offer other participants in EBT, as well as the recipients, clear advantages over the paper-based systems they replace. But for EBT programs to become a reality on any major scale, all of the parties with an interest in EBT—including recipients, government program agencies, banks and other financial institutions,

retailers, regional networks, service providers such as data-processing firms, and equipment vendors—must undertake cooperative efforts in EBT's evolution and implementation.

Addressing the issues in a way that will further the development of EBT calls for a common understanding of the perspectives of other participants from the private and public sectors. High on the list of the issues are cost factors, which will determine the willingness of the various parties to engage in the system, and factors related to the recipients' needs and concerns. To the extent that piggybacking on existing systems for electronic fund transfers may help make EBT economically feasible, the public and private sectors may have to shape compromises that take into account the interests of all the parties.

Cost, Operational, and Technical Issues

The economics of EBT are fundamental to its viability. Unless the overall costs of an EBT system are no higher than the costs of the paper-based system it would replace, a government agency may have difficulty justifying and funding the switch from paper to electronics despite the favorable features for benefit recipients.

One factor that may influence the cost of EBT systems is the extent to which providers can use existing terminals and networks, instead of installing equipment specially designed for EBT purposes. Some EBT projects have used private-sector regional ATM networks already in place; because such networks exist in virtually all areas of the country, this approach appears feasible as far as ATMs are concerned. Because ATMs generally do not dispense currency in dollar bills or coins, some other means are required for recipients to obtain their entire benefit payments. Generally the means have been POS terminals, which enable the retail clerk to dispense funds from the cash register.

For the disbursement of food stamp benefits, POS terminals at grocery stores are a necessity. And unlike ATMs, POS terminals are not yet in place in many areas. Where few or no POS terminals exist, they must be installed for an EBT project to function. If the program agency pays the entire cost of installing terminals—as it

has in the food stamp pilots thus far—startup costs will be correspondingly higher.

For the retail food industry the placement of terminals has been an important issue: Should terminals be placed in every checkout lane in a grocery store or only in selected lanes? The industry's position has been that terminals should be installed in all lanes to provide better service and to avoid stigmatizing EBT recipients. This issue will be resolved by the new regulations that USDA is to adopt by April 1992. In a mandatory EBT program, participating food stores are to have POS terminals at all checkout lanes, if the store's food stamp sales volume is 15 percent or more of the total sales volume. For stores with less food stamp business, POS terminals must be at a sufficient number of registers to provide "service that is comparable to service provided individuals who are not members of food stamp households," as determined in the regulations.

Even where substantial numbers of ATM and POS terminals exist, piggybacking on existing EFT networks may not necessarily be easy or cost-effective. In the EBT pilots to date, the federal agencies' specifications have included on-line authorization, the use of PINs by recipients, differentiation between food stamp and cash transactions, and the printing of account balances on receipts. Meeting some of these operational requirements could pose problems for the networks if existing equipment is incapable of fulfilling the requirements. The requirement that account balances appear on the transaction receipts that the terminals provide is one such example.

Another issue concerns the way costs will be allocated among participants. So far, the program agencies have borne the costs of EBT projects, compensating financial institutions, retailers, and others for the costs occasioned by EBT. To the extent that private-sector entities derive economic benefits from participating in EBT systems, government agencies may suggest that some sharing of costs is appropriate.

Recipients, too, may benefit economically from not having to pay fees to cash checks or maintain deposit accounts for cash benefits. Another advantage to recipients is the ability to withdraw funds in several transactions: In the

check-based system, they had no choice but to take the entire amount in a lump sum. Because a program agency that pays fees on a per-transaction basis may face higher costs, however, the agency may seek to limit the number of free transactions allowed. An alternative is to provide recipients with a certain number of free transactions per month and to give them the option of making additional transactions for a fee.

If startup and other fixed costs can be spread over a large transaction base, the cost per transaction can be minimized. Ideally, for this purpose, the program agency would want to have the entire recipient population in the EBT program, to avoid having to operate dual paper-based and electronic systems.

The majority of EBT programs to date have made participation mandatory; the payment of benefits by check has not been an option in these programs. Pilots for the direct payment of federal benefits, such as the SSI pilot in Baltimore, have allowed voluntary participation. The Social Security Act provides that recipients of SSI benefits may not be required to take part in "experimental, pilot, or demonstration projects" involving SSI benefits; if they do agree to participate, they may still revoke the agreement at any time.

Other issues involve technical and operating standards, including equipment reliability, the availability of backup procedures in case of electronic failure, and security measures against unauthorized access. For example, what are the liabilities if the system breaks down or some other problem occurs? If multiple programs use a common EBT system, how and to what extent can these programs be made consistent? Will the system operate on line or off line? Will PINs or some other identification technology be used?

These are among the issues being studied, from the industry side through the Electronic Funds Transfer Association's EBT task force and other groups and from the government side through the coordinated efforts of the Treasury Department, the Office of Management and Budget, and the program agencies responsible for oversight of benefits delivery. The EFTA's task force, for example, set up a subgroup to address issues associated with using existing EFT networks. Recommendations to federal and state agencies and to EFT networks, processors, and

financial institutions will cover a wide range of subjects: standards for the performance and availability of systems and authorization procedures; the authorization databases to support, through one card, the multiple programs for which a recipient is eligible; the card technology to support EBT, including the security standards for PIN encryption; and technical specifications for POS terminals.

Recipient Concerns

Factors that affect costs, and that therefore interest program agencies, financial institutions, food retailers, and other organizations involved in EBT programs, also affect recipients. One example is the placement of terminals. For EBT to meet recipients' needs, the terminals for gaining access to benefits must be in the areas in which the recipients live. These areas are likely to be low-income neighborhoods, which typically have fewer ATMs and POS terminals than other communities. Access may be considered adequate, however, if terminals are available in business districts or in other areas that are adjacent to neighborhoods in which recipients live. Even with few ATMs in an area where programs are being established, access may be sufficient if POS terminals can be installed in grocery stores.

In rural areas, ATMs and POS terminals may be sparsely situated, so rural recipients may have difficulty in getting their benefits. However, bank branches, check-cashing centers, and grocery stores may also be distantly spaced in rural areas, so EBT may not impose any greater disadvantage than the present system.

The issue of accessibility also pertains to special groups such as handicapped, elderly, non-English-speaking, or illiterate recipients. Such people may have difficulty reaching or using terminals, especially ATMs. Some of these problems may be remedied by extra training or multilingual terminals or through allowing authorized representatives of recipients to pick up benefits.

The Americans with Disabilities Act of 1990 (Pub. L. 101-336) is aimed at preventing discrimination against physically or mentally disabled persons. It does not target EBT programs, but because benefit programs may have a relatively high proportion of disabled persons as recipients,

issues involving the interpretation and application of the act may arise most often in EBT settings. For example, can the act be interpreted as requiring key pads at ATMs and POS terminals to be coded in Braille so that blind persons may have access? Might it require the installation of ramps for terminals to be accessible to persons in wheelchairs? The Department of Justice issued proposed regulations in February 1991 to implement the act; final rules will become effective January 1992.

A related issue is the personal safety of recipients. If the likelihood of being attacked at or near an ATM is perceived to be greater than it is for the traditional alternative such as a check-cashing center, the accessibility of benefits is somewhat compromised. In the check-based system, however, recipients without deposit accounts also face the risk of being attacked after cashing their checks. While the safety of a check-cashing center may be increased by the presence of other people such as clerical personnel, it may be decreased by the larger amount of cash carried by a recipient after cashing a benefit check.

Consumer groups have expressed concern about making EBT the only available delivery system. Although requiring recipients to obtain benefits through EBT tends to decrease costs, a mandatory system can be criticized for not affording the same freedom of choice to recipients of government benefits that is available to consumers generally. An employee of an organization that offers direct deposit of salary, for example, often can choose instead to receive a paycheck. Even after the funds are in the bank, the person may choose to withdraw them by cashing a check or using an ATM.

Another potential concern for recipients is privacy. Issues about the privacy of electronic data, including financial data, have been debated for some time; the National Commission on Electronic Fund Transfers and the Privacy Protection Study Commission, among others, have studied and reported on these questions. Electronic data systems can facilitate the collection, storage, manipulation, and retrieval of large amounts of information about individuals, and gaining access to data about individuals whose records are in the system can be easy and fast.

In practice, recipients using EBT systems

may have considerably more, rather than less, privacy in their financial dealings than those using paper-based systems. Withdrawing funds by ATM, for example, may allow greater privacy than cashing a public assistance check at a bank or a retail store, especially in a small-town environment. Paying for food purchases at a POS terminal with an EBT card may afford greater privacy than counting out food stamp coupons.

REGULATION E

Among bankers particularly, a key question to any discussion of EBT systems is whether Regulation E applies. This regulation, which implements the Electronic Fund Transfer (EFT) Act (15 U.S.C. 1693 *et seq.*), creates the legal framework of rights and responsibilities for providers of EFT services to consumers. Among them are consumer rights to the disclosure of terms and conditions, to receipts and periodic statements, to error resolution within a certain period of time, and to limits on the consumer's liability for unauthorized transfers.

Regulation E applies to transfers that debit or credit an "account." To date, the Federal Reserve Board has not covered EBT systems in Regulation E so as not to impede the development of the various state and federal pilot programs. This result has been achieved through a narrow interpretation of the regulation, focusing on the Board's legal definition of what constitutes an account. In the official staff commentary to Regulation E, the Board has stated that no "consumer asset account" exists where a government agency, rather than the consumer, has set up the account; consequently, any electronic transfer of funds from such an account—to a consumer or on the consumer's behalf—is not covered by the regulation.

Application to EBT

Whether EBT programs involve the type of account relationship—with the program agency or a financial institution—that should be covered by the EFT act is currently under review. Several factors argue for coverage:

- The Congress intended the EFT act to have broad scope. The application of the law is not limited to banks and other traditional financial institutions. The statute directs the Federal Reserve Board, in the event that EFT services are offered other than by financial institutions, to ensure that the “disclosures, protections, responsibilities, and remedies” created by the statute are made applicable. Indeed, Regulation E has long reached nonbanking entities—whether or not they hold consumers’ accounts—when they engage in activities governed by the statute. The regulation prohibits magazine telemarketers, for instance, from initiating electronic debits to a checking account based on a telephone call to the consumer. To so debit an account, the telemarketer must first obtain a written authorization signed by the consumer, just like any other provider of an electronic fund transfer service.

- The regulation already covers the direct deposit of government benefits into bank accounts—social security or SSI payments, for instance. Should the treatment be different for those who receive these same benefits through an EBT system?

- The law does not exempt governmental bodies. If a government agency chooses to disburse payroll electronically through an ATM system, the transactions are covered. Should the result differ if the funds being disbursed are entitlement monies rather than salary, or because the funds are disbursed through a state agency and not the federal government?

- EBT systems often piggyback on the ATM and POS terminals and networks used for transactions that Regulation E covers. Since Regulation E covers those transactions, coverage of the EBT transfers appears logical.

Consequences of Coverage

The statute directs the Federal Reserve Board, in prescribing rules under the EFT act, to consider the costs and benefits to all parties—financial institutions, consumers, and other users of EFT. The Board must consider also the rules’ effect on the availability of these services to different groups of consumers, particularly low-income consumers. To the extent practicable, the Board is also to demonstrate that the protection ac-

corded consumers by regulations outweighs the costs of compliance imposed on consumers and financial institutions.

Among the questions to be dealt with are those revolving around who must comply and how exactly the rules would be applied. Even a preliminary analysis of the issues makes clear that, while some rules would be easy to implement in the EBT environment, others raise significant policy questions and difficult operational problems.

Issuance of Cards and PINs. Regulation E sets rules for the issuance of debit cards and PINs to consumers. In general, a card and PIN for making electronic fund transfers may be issued only upon request. In an EBT program, consumers applying to receive government benefits normally request cards and PINs willingly because these devices are required to obtain the benefits.

Disclosures. Regulation E requires the disclosure of applicable terms and conditions of EFT service. The purpose of this disclosure is to explain the features of the service and to help consumers understand their rights and responsibilities. Giving these disclosures probably poses little problem in EBT systems. Indeed, government agencies may go far beyond written disclosures in introducing recipients to the EBT program and the technology. In the EBT projects thus far, participants generally have received extensive hands-on training on electronic terminals before receiving their cards and PINs. The disclosures could easily be provided at the same time.

Documentation. Regulation E requires the giving of receipts, when transactions are made at an ATM or POS terminal, and a monthly statement. The receipt documents the transaction through such information as the date, the type and the amount of transfer, and the terminal location. The statement assembles data about all the transactions that took place during the cycle; it provides a way for spotting any errors or unauthorized transactions in account activity.

Because existing ATM and POS systems already provide receipts that comply with Regulation E, this requirement would probably impose

little additional burden for EBT programs that piggyback on the commercial systems. Providing periodic statements, however, could be burdensome if statements were sent only because of the regulation, given the costs for paper, internal processing, printing, and postage.

If the transactions performed through an EBT system are relatively infrequent and are uniform in type, the recipients' need for statements may not be great. In the current check-based systems, recipients receive no statements from the program agencies except for notice of changes in the amount of the benefits. A periodic statement may prove less essential also if the terminal receipt contains information about balances or if the recipient can request the information by other means, such as from a terminal or by telephone.

The pilot EBT programs that have been conducted have generally required that the receipts show an account balance. This balance information is particularly useful if recipients can make multiple withdrawals over the month. Providing information about balances may not be a problem in programs that use facilities dedicated to EBT alone. Doing so may be less feasible in systems that piggyback on the existing ATM and POS network systems, which may not have the capacity to perform this function.

For recipients who receive payments from several different government programs, having to provide balances for each program could be a problem. An alternative, which might provide adequate documentation for the recipient, is an initial disclosure of the amount and the scheduled date of each benefit. Another alternative—to use separate cards for the different programs—goes against the objective of using a single EBT system to gain access to benefits from different agencies. Indeed, joint programs may be necessary to make the offering of EBT systems economically feasible.

Notice of Deposits Received. Without the tangible evidence that a paper check gives them, benefit recipients in EBT systems may be uncertain about whether benefits are available to them. For EFT transactions generally, Regulation E requires informing consumers that a scheduled transfer of funds has been credited to their account. Instead of sending a notice, financial

institutions are allowed by the regulation to provide a telephone number that the consumer can call to obtain confirmation. EBT systems could use the same procedure. Indeed, the pilot programs have often used audio-response units that recipients can call at any time.

Liability for Loss or Theft. Application of the rules on liability to EBT systems probably represents the greatest dilemma in regard to coverage. Under the EFT act and Regulation E, a consumer is liable for at most \$50 of unauthorized transfers if the consumer reports a lost or stolen card within two business days of learning of the loss or theft. In other cases, the consumer's liability can be as high as \$500 or even unlimited. From the perspective of a low-income recipient, even \$50 may seem too high. Moreover, under the check-based system, if a check is lost or stolen and the endorsement forged, an agency will generally issue a replacement check if the recipient meets certain conditions, such as filing a police report and making a written claim.

While these rules create some protection for consumers, the question arises of who ultimately bears the loss for amounts greater than the consumer's liability. In the typical EFT case, these losses fall on whoever issued the card that gave access to the consumer's account.

In the EBT pilots so far, the unauthorized withdrawal of benefits appears not to have been a problem. State agencies currently apply rules for negligent behavior that impose the risk of loss on the client, and these may tend to discourage claims. Benefit recipients are warned against writing the PIN on the card and against letting others know their PIN. Agencies warn recipients that the card is like cash and that they do not replace lost cash.

Under Regulation E, the result would be different. The legislative record to the act makes clear that the Congress intended liability to be assessed based strictly on how promptly the consumer reports the loss or theft of a card. Writing a PIN on the ATM card or keeping it with the card does not increase the cardholder's liability. To minimize the risk to everyone involved, recipients could be allowed to choose their own PIN. Thus, they would have no need to

write down a number they might have difficulty memorizing. The ultimate resolution of this issue could strongly influence an agency's decision on whether to proceed with the adoption of an EBT program.

Error Resolution. Regulation E requires investigations of errors to be completed within fixed periods of time. In general, once the consumer alleges an error, the institution has ten business days to resolve it. If more time is needed, the institution may take up to forty-five calendar days, in total, but it must provisionally credit the consumer's account within ten business days for the amount of the alleged error while its investigation continues.

It is not clear whether these rules would create problems for recipients, program agencies, and financial institutions. If benefits are not posted to an account or are posted in the wrong amount, the institution should be able to resolve the matter quickly. The institution would simply check whether in fact the correct amount was made available. If the question concerns the amount that the recipient is entitled to receive, the matter can be worked out between the recipient and the agency caseworker as is done with benefits transferred by check.

Difficulties may arise if an error cannot be resolved within ten business days. Under Regulation E the recipient's account has to be provisionally credited for the amount in question. The problem comes if a determination is later made that no error has occurred. In such a case, the institution is entitled to reclaim the amount previously credited. Under the laws that generally govern entitlement programs, however, an agency may not be allowed to collect the full amount of an overpayment from the installment next due. The percentage of the total benefit that can be recovered month to month is limited.

Mandatory Use of EFT. The EFT act provides that a consumer may not be required to establish an account "with a particular financial institution" for receiving electronic fund transfers as a condition of employment or of receipt of a government benefit. The act does not prohibit program agencies from making EBT the exclusive means of disbursing payments.

Even if a particular institution is designated as the holder of the accounts for an EBT program, the situation may be different from that which the statutory provision was intended to remedy—that a consumer who banks with a certain institution not be required to open an account at another institution to accommodate an employer or a government agency. The provision may also have been intended to enable the consumer to shop for the most economical and convenient EFT services, which again may not coincide with the arrangements made by the employer or agency. Neither of these concerns may be relevant to an EBT system that is offered to those without an account.

Next Steps for Resolving Issues

These are some of the regulatory issues that are being considered as the Federal Reserve Board explores the possible coverage of EBT systems by Regulation E. One approach that could be taken involves establishing special rules for EBT programs within the existing framework of Regulation E. Such rules could remove legal uncertainty about the status of EBT systems and recipients' rights while allowing continued innovation in the electronic delivery of government benefits.

To ensure that adequate attention is given to the potential impact of Regulation E on EBT systems, the Board is consulting with federal and state agencies, financial institutions and other private-sector participants in EBT systems, members of the Federal Reserve's Consumer Advisory Council, and consumer advocacy groups. Any regulatory proposal that may result from this study will be published for comment and provide members of the public the opportunity to give their views.

CONCLUSION

EBT systems offer federal and state government agencies the strong potential to enhance the delivery of benefits to recipients, particularly those who do not have bank accounts. These alternatives to paper-based systems also may enable agencies to restructure their operations in

ways that can reduce their costs. In carrying out pilot projects, sponsoring agencies have tested different approaches and have worked with a variety of participants from the private sector. The experiences gained from these early efforts will be invaluable to the achievement of EBT systems that meet the needs of all parties.

Many policy and operational issues have been identified in the test projects. They must be addressed, by the agencies and others involved in the process, before EBT can become a nationwide reality. Special attention will have to be given to whether or how EBT service can piggyback on existing ATM and POS terminal networks, in areas where extensive terminal networks are already in place. Groups in the public and private sectors are working together to find the most efficient and cost-effective means of offering EBT services and to ensure that developing systems meet the needs of recipients and other parties. Such cooperation at the early stages of development is important to help achieve, to the extent possible, compatibility among procedures and standards.

It is encouraging to note that, in virtually all EBT projects to date, an overwhelming majority of recipients expressed a preference for EBT over the traditional paper-based system. Indeed, the potential advantages of EBT to all parties increase the likelihood that EBT can in time become an accepted method of delivery for a substantial portion of the nation's government benefit payments.

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Payment of Household Debts

This article was prepared by Glenn B. Canner and Charles A. Luckett of the Board's Division of Research and Statistics, with assistance from Wayne C. Cook and Nellie D. Middleton.

The indebtedness of U.S. households grew substantially in the decade that ended last year. The sum of home mortgages and consumer debt outstanding rose from \$1.3 trillion at the end of 1980 to just under \$3.4 trillion at year-end 1990. This increase averaged out to a rate of 10 percent per year, which was one-third again as large as the average growth in after-tax income over the same period.

The more rapid rise of debt than of income during the 1980s has raised concerns about the ability of individuals to meet their debt obligations comfortably. The recent slowdown in economic activity has intensified those concerns. Debt repayment problems can impair the profitability of lending institutions by generating higher loan-loss provisions and collection costs. Historically, few institutions have been seriously endangered by defaults on their portfolios of consumer or home mortgage loans, but lower profits in those areas could aggravate other problems. In a broader sense, higher delinquency and default rates could provoke a tightening of credit standards, curtailing the supply of credit and thereby damping consumption and housing activity. On the demand side, higher debt burdens could act as a drag on consumption because scheduled debt payments represent a competing claim on current income.

Various statistics on debt growth, personal bankruptcies, and loan delinquency rates provide some aggregate information on the extent to which households may be experiencing debt payment problems. These statistics, reviewed in the first part of this article, provide useful insights but have several shortcomings as well. Also, they contain no information about the concentration of debt problems among borrowers or about

the individual characteristics of troubled debtors that can shed light on the extent and severity of repayment problems. To improve understanding of the financial condition of households, the second part of this article examines data on late payments by individual borrowers obtained from surveys of households conducted for the Federal Reserve by the Survey Research Center at the University of Michigan.

REVIEW OF AGGREGATE STATISTICS

The financial health of the household sector is often gauged in rough fashion by comparing the total debts of the sector to its aggregate income or asset holdings. In addition, data on the proportion of loans that have payments past due provide more direct measures of repayment problems, while personal bankruptcy statistics indicate the frequency of the most severe problems—those in which debtors find the situation so extreme as to seek resolution from the courts.

Debt-Burden Measures

The two major categories of household sector debt are home mortgage debt, which amounted to about \$2.6 trillion at the end of 1990, and so-called consumer debt, which totaled about \$800 billion at year-end. Consumer debt has two subcategories: installment (repayable in two or more payments) and noninstallment debt, with the installment component accounting for 90 percent of the total.

Loans are categorized as mortgages or as consumer debt more by their collateral than by the purpose of the loan. The mortgage debt of individuals consists of all borrowing secured by a lien on a home, including various types of "home equity loans" that are often used for purposes

1. Debt of the household sector relative to income, 1980-90

Year	Debt as a percentage of disposable personal income			
	Total debt (mortgage plus consumer)	Home mortgage debt	Consumer debt	
			Total	Installment
1980 ..	65.4	47.3	18.2	15.6
1981 ..	63.6	46.6	17.0	14.5
1982 ..	63.0	46.3	16.7	14.2
1983 ..	62.5	45.7	16.8	14.3
1984 ..	64.6	46.5	18.1	15.6
1985 ..	68.5	48.6	19.9	17.3
1986 ..	73.1	52.2	20.9	18.4
1987 ..	77.2	56.3	20.8	18.6
1988 ..	78.9	58.3	20.6	18.6
1989 ..	81.3	60.8	20.5	18.7
1990 ..	83.5 ^p	63.1 ^p	20.4	18.5

^p Preliminary.

SOURCE: Federal Reserve and U.S. Department of Commerce.

other than housing expenditure.¹ Consumer debt is often unsecured, like credit card debt and personal cash lending, or it may be collateralized by the goods it is used to finance, such as motor vehicles or household durables. While consumer credit is used predominately to purchase currently produced goods and services, no doubt it also finances some nonconsumption activities as well, like financial investments.

Ratios of household debts relative to income flows or asset holdings provide some indication of the burden that debts place on the resources available for repaying them. Interpretation of such ratios is beset by many complexities, however. Perhaps the most frequently cited debt burden measure is the debt-to-income ratio; the first problem encountered in its use is deciding which types of debt to include in it. When the broadest measure of debt is used—mortgage plus total consumer debt—the debt-to-income ratio (with disposable personal income as the denominator) now exceeds 80 percent (table 1). With mortgage and consumer debt both expanding more rapidly than income during most of the 1980s, this ratio rose more than 15 percentage points between 1980 and 1990. On its face, this rise seems to indicate a substantial increase in the burden of debt, but that conclusion is not necessarily warranted.

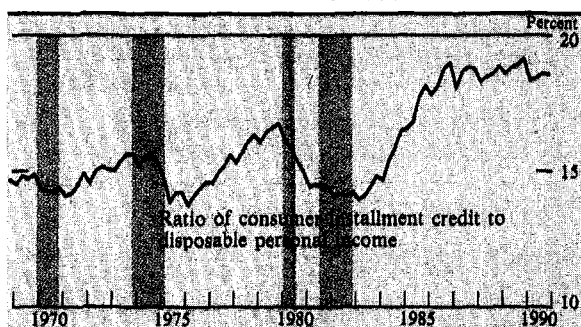
1. For an analysis of the home equity loan market and how such loans are used, see Glenn B. Canner, Thomas A. Durkin, and Charles A. Luckett, "Home Equity Lending," *Federal Reserve Bulletin*, vol. 75 (May 1989), pp. 333-44.

Home mortgage debt, as noted, accounts for the largest part of the broad debt measure, and interpretation of a mortgage debt-to-income ratio is particularly murky. For instance, aside from those who own their home free and clear, virtually every household must make a regular outlay associated with their housing—either a mortgage payment or a rent assessment. The analytical usefulness of a debt-burden measure, including as it does one form of housing outlay (a mortgage) but not the other (rent obligation), seems at least questionable. An increase in the homeownership rate would boost the level of debt and thus the calculated debt burden (while reducing the amount of rent). Because of this offsetting but unmeasured decline in rent burden, interpreting a rise in debt burden attributable to an increase in homeownership rates in the same manner as a rise in debt burden from other causes seems inappropriate. In addition, home mortgages carry such lengthy maturities that only a small portion of mortgage debt comes due in a given year. The significance of including the entirety of mortgage debt outstanding in a measure of burden thus seems questionable too, especially if one's analytical interest is the constraint imposed by debt obligations on near-term consumption.

For such reasons, the debt-to-income ratio often excludes mortgage debt. The ratio frequently leaves out noninstallment debt too, in part because much of it is very short term in nature, such as charge accounts on which full payment is required by the due date or "bridge loans" used to facilitate real estate transactions. Noninstallment debt is a small component, however, and its inclusion or exclusion makes little practical difference.

In any case, the most commonly used debt-to-income measure has only consumer installment credit in its numerator. The surge of installment borrowing in the mid-1980s raised this measure of debt burden from about 14 percent at the outset of the expansion to a high of 19 percent late in 1989 (chart 1). This increase is often cited as evidence that consumers on the whole have become overextended, but any such conclusion must be tempered by several caveats. First, as with mortgage debt, only a part of the outstanding stock of installment debt is payable in the near term, making it a less-than-perfect indicator

1. Consumer installment debt burden



In this and the following charts, the shaded areas represent periods of business recession as defined by the National Bureau of Economic Research.

of current payment burden. This deficiency is not as acute for installment debt as for mortgage debt because installment loan maturities are much shorter than mortgage maturities, but it nevertheless hinders interpretation. Moreover, a steady lengthening of consumer loan maturities in recent years taints comparisons with earlier periods.²

Second, the installment-based measure, in common with other versions of the debt-to-income ratio, contains no information about the distribution of debt across households of differing income and asset profiles. The aggregate ratio thus gives no indication of whether a given buildup of debt is owed by people with the income, assets, or employment prospects to handle it comfortably, or by people of more limited resources who might be more vulnerable to payment difficulties. In addition, shifts in the content of consumer credit over time—such as the growing use of credit cards for “convenience credit”—make longer-term comparisons difficult, just as do changes in the maturity structure of consumer debt.³ Finally, substitutions between consumer installment debt and other types of borrowing would also distort his-

2. For example, between 1980 and 1990, the average maturity on a new car loan at the major auto finance companies lengthened from forty-five to nearly fifty-five months. By reducing the rate of scheduled repayment, this lengthening of maturity has raised the stock of debt at any given time relative to the amount currently due and payable.

3. “Convenience credit” refers to funds that are borrowed on a short-term basis to facilitate transactions and are repaid in full within the billing cycle. Insofar as credit card accounts used for convenience frequently have positive balances on the last day of the month, reflecting charge activity occurring after the end of the last billing cycle, the amounts of debt outstanding reported by lenders would include convenience credit.

torical comparisons for any measure restricted to installment debt. The recent popularity of home equity lines of credit exemplifies such a substitution, and this substitution may have curtailed growth of installment debt.

So far, the discussion of debt-to-income measures has focused on outstanding debt rather than on debt payments. For many analytical purposes, a debt-service measure reflecting scheduled (or required minimum) payments of principal and interest would be a more relevant concept. Unfortunately, no comprehensive data series of repayment flows currently exists. Estimates can be made using data on outstanding debt, average maturities, and interest rates, but this approach requires making several arbitrary assumptions to fill data gaps and to supply certain behavioral parameters regarding the refinancing or prepayment of loans. Such estimates of repayments have limited analytical usefulness because of their indeterminate accuracy. Information on scheduled payments of debt was collected in the household surveys of late payments, however, enabling some discussion later in this article on the linkages between debt payment burden and late or missed payments.

Another caveat about debt-to-income ratios is that income is not the only source of funds from which households can make debt payments. Recognizing this fact, some observers also look at debt relative to the financial assets of households. At the aggregate level, assets of households are about four times the size of their liabilities, a ratio that declined only marginally during the 1980s. The net worth of the household sector—the difference between assets and liabilities—has grown from about \$6 trillion in 1980 to \$10 trillion at year-end 1990. Again, however, it must be recognized that the aggregate statistics relating assets and debts may be masking important distributional features that might alter—either favorably or unfavorably—an assessment of the household sector balance sheet.⁴

4. For a comprehensive examination of the distributional changes in consumer debt among U.S. households in recent years, see Robert B. Avery, Gregory E. Elliehausen, and Arthur B. Kennickell, “Changes in Consumer Installment Debt: Evidence From the 1983 and 1986 Surveys of Consumer Finances,” *Federal Reserve Bulletin*, vol. 73 (October 1987), pp. 761–78.

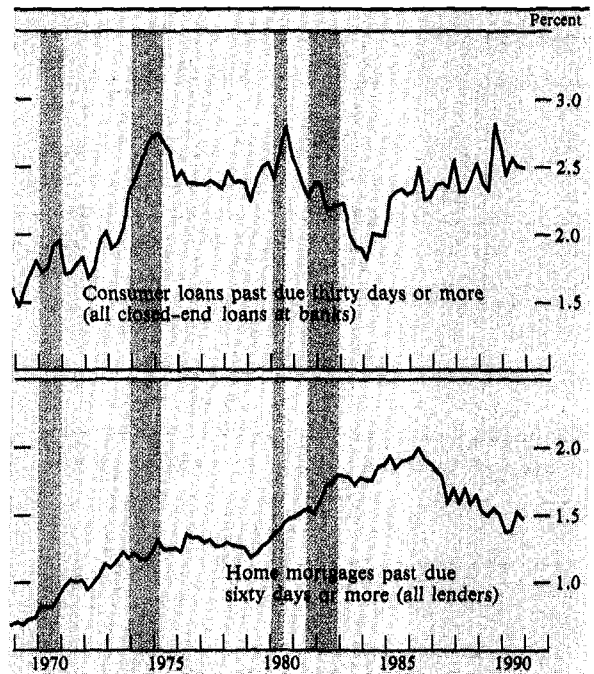
Loan Delinquency Rates

The proportion of loans with payments past due offers another slant on the extent to which individuals may be overburdened with debt. A few such aggregate data series are available based on surveys of lending institutions. However, these aggregate delinquency rates provide no sense of whether those consumers with late payment problems form a small group of people who are chronic late payers or a larger group of individuals with transitory problems. The most widely referenced series are those produced by the American Bankers Association (for consumer loans at banks) and the Mortgage Bankers Association (for home mortgages at a cross-section of loan servicers).

Delinquency rates on consumer loans, as measured by the American Bankers Association (ABA), exhibit a pronounced cyclical pattern. The ABA series (shown in the top panel of chart 2) is a weighted average of eight separate series for specific types of loans, such as direct and indirect auto loans, personal loans, and loans for mobile homes and other products. Historically, this series has begun to rise a few months in advance of a recession period, has peaked some time during the recession, then has declined steadily into the subsequent economic recovery.⁵

Such a pattern of cyclicity is consistent with expectations. As economic activity slows approaching a recession, an increasing number of workers are being laid off, or their working hours are being reduced. It would not be surprising if the number of households falling behind on debt payments rose too. Also, with new borrowing typically curtailed at such times, the denominator of the delinquency rate increases more slowly, providing less of a downward pull on the rate. (Early in an expansion period, when borrowing is brisk, the calculated delinquency rate is held down by the large volume of loans coming on stream, very few of which become delinquent

2. Delinquency rates on loans to households



SOURCE: For consumer loans, American Bankers Association; for home mortgages, Mortgage Bankers Association.

immediately.) Delinquencies peak and then begin to decline at some point during a recession for a number of reasons: As a recession unfolds, many borrowers have already begun taking steps to get their finances in order, and lenders have been applying stricter lending standards, resulting in loan portfolios of improving average quality. Moreover, as lenders write off uncollectable loans, removing them from portfolios, such loans cease to affect the delinquency rate. After several months, these various factors combine to drive the delinquency rate back down.

Mortgage delinquencies have generally risen during recessions as well, but their pattern appears tied much less directly to the business cycle. For instance, the proportion of home mortgages past due (Mortgage Bankers Association series in the bottom panel of chart 2) continued to rise for almost four years after the end of the 1981–82 recession. Over the next four years, however, mortgage delinquencies declined steadily, in contrast to the moderate uptrend in consumer loans past due. The relatively quick response of consumer delinquencies in contrast to the more delayed response of mortgage delin-

5. Commercial banks (with deposits of at least \$300 million) have been reporting consumer loan delinquency rates on their Report of Condition since 1982. In recent quarters, an average delinquency rate based on these reports has risen somewhat faster than the ABA delinquency rate. However, given the relatively recent origin of this series, little can be said of its behavior during different phases of the business cycle.

quencies to shifts in economic activity partly reflects the considerable differences in loan maturities for the two types of debt—consumer loans turn over much faster. If relaxed lending standards during expansion periods contribute to later increases in delinquency, then faster loan turnover would imply more rapid liquidation of risky loans. For example, the bulk of consumer loans made in 1978 would have been substantially paid down by 1981, and almost all would have been liquidated by 1983. In contrast, many mortgage loans made in 1978 would still have twenty years or more of scheduled life remaining in 1983. Thus any lower-quality mortgage loans that may have been extended in 1978 (under the presumably liberal credit standards of that year), were probably still on lenders' books in the mid-1980s, while any lower-quality consumer loans would have been retired.

Home mortgage delinquencies may also reflect the amount of equity that borrowers have in their homes. When home prices have been rising sharply, homeowner equity is likely to be substantial, and people may be less inclined to be delinquent on their mortgages—at least for periods longer than thirty days. Because equity may be substantial even during recessions, depending on the strength of previous home price trends, aggregate delinquency rates on mortgages may exhibit only minimal changes in response to current economic activity. In the present economic downturn, which has been preceded by unusual weakness in house prices in many areas, the mortgage delinquency rate may exhibit greater sensitivity to income and employment developments. Through the fourth quarter of last year, however, mortgage delinquencies remained near ten-year lows.

Bankruptcy Statistics

Individual borrowers who lack any reasonable prospect of being able to repay their debts according to agreement have, in bankruptcy, a process for dissolving those debts, in full or in part, under court protection from collection efforts of creditors. Only a few types of obligations are ineligible for bankruptcy, such as federal tax obligations and child support payments, or any debt incurred by fraud or, in the judgement of the

bankruptcy referee, in contemplation of declaring bankruptcy.⁶

Chapter 7 of the Bankruptcy Act provides for dissolving debts in full, and Chapter 13 provides for a partial repayment plan administered by the court—the so-called wage-earner plan. Under either type of bankruptcy, secured creditors are still permitted to recover collateral from bankrupts, and any assets above certain exemption levels are liquidated and distributed among the creditors. Historically, the social stigma attached to bankruptcy, the relatively limited asset exemptions under the laws of many states, and the difficulty of obtaining credit after bankruptcy all served to make this remedy truly one of last resort for troubled debtors. Even so, vigorous collection efforts by creditors, particularly through the garnishment of wages, often propelled people into bankruptcy court.

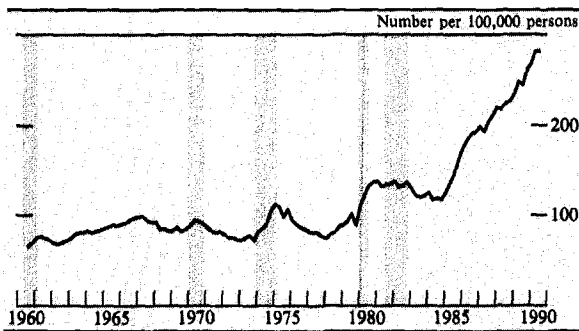
Limitations on garnishment and some other refinements of federal bankruptcy law in 1969 curtailed the use of bankruptcy in the 1970s. However, further major revisions to the law ten years later—especially the overriding of state asset exemptions with more liberal federal provisions—made bankruptcy a more attractive alternative for dealing with debt payment problems. In addition, though the development is hard to document, bankruptcy now seems to carry less of a stigma than it once did, and some evidence suggests that credit may be easier to obtain after bankruptcy than it once was.⁷

Historical trends in personal bankruptcies, shown adjusted for population growth in chart 3, reveal a prominent cyclical pattern. Most periods of sharply rising bankruptcy coincide with peri-

6. For a more complete discussion of the bankruptcy process and trends in the number of filings, see Charles A. Lockett, "Personal Bankruptcies," *Federal Reserve Bulletin*, vol. 74 (September 1988), pp. 591–603.

7. Research at the Credit Research Center of Purdue University indicates that a substantial proportion of persons declaring bankruptcy in recent years has been able to obtain credit fairly soon after completing the process. In some cases, a bankrupt may retain a credit card that had no outstanding balance at the time of the bankruptcy (and therefore need not have been listed among the filer's debts), which is then still available for use after bankruptcy has been declared. See Michael Staten, "The Availability of Credit to Consumers After Personal Bankruptcy," Working Paper (Purdue University, Krannert Graduate School of Management, Credit Research Center, 1991).

3. Nonbusiness bankruptcies



ods of economic contraction, although the extremely sharp rise in the expansion years of 1985 and 1986 and the continued strong increases over the next four years seem strikingly out of step with past patterns. On its face, this development suggests that the sizable expansion of debt in the 1980s has substantially weakened the financial condition of the household sector. However, because of the legal changes noted above that made bankruptcy a more attractive option to troubled debtors, the recent surge cannot be taken as an unqualified sign that the incidence of severe debt payment problems is mounting rapidly. The rise in bankruptcies may be reflecting to a significant degree a shift in the way households choose to respond to debt problems rather than an increase in debt problems per se.

SURVEYS OF CONSUMERS

The Federal Reserve Board has for many years sponsored surveys of consumers to gather information about their overall financial situation and about their use of specific financial services, including various types of debt instruments. As noted earlier, while some information is available regarding trends in consumer debt payments in the aggregate, less is known about the payment behavior of individual households. In particular, relatively little is known about how widespread or how severe payment problems may be among households. Also little documentation exists on what consumers do when they fall behind in their payments or what types of actions creditors pursue in cases of late payment. Surveys sponsored by the Federal Reserve in late 1990 and early 1991 provide some information on these questions.

2. Debt status of U.S. households¹

Percentage distribution

Type of debt owed	Percent ²
None	15
Mortgage only	3
Consumer only	45
Both mortgage and consumer	38
Total	100
MEMO	
Households with mortgage debt	41
Households with any debt	85

1. Here and in the following tables, data have been weighted to ensure the representativeness of the sample.

2. Details may not add to 100 percent because of rounding.

SOURCE: Surveys of Consumer Attitudes, September and November 1990, and January 1991, Survey Research Center, University of Michigan.

Payment Behavior

The consumer surveys indicate that, overall, 85 percent of all households had an outstanding debt obligation or access to a line of credit under a credit card plan when interviewed (table 2).⁸ Among all households, only 3 percent had home mortgages exclusively; 45 percent had only consumer credit, and 38 percent had both outstanding mortgage and consumer debt.

The vast majority of indebted households reported no problems meeting their debt payment obligations on time during the twelve months preceding the survey (table 3).⁹ Specifically, 86 percent of the indebted households reported that they met or exceeded all of their scheduled debt

8. This figure of the proportion of indebted households exceeds similar estimates from other surveys sponsored by the Federal Reserve primarily because households having credit cards, but reporting no outstanding balance after their last payment, were categorized here as indebted households even if they had no other types of debt. This distinction was made because most of these households had in all likelihood used at least one of their credit cards during the preceding twelve months and consequently could have missed or been late in a payment during this period. Surveys, such as the 1983 Survey of Consumer Finances, have found that few households have credit cards and never use them. See Glenn B. Canner and Anthony W. Cynrak, "Recent Developments in Credit Card Holding and Use Patterns Among U.S. Families," *Journal of Retail Banking*, vol. 7 (Fall 1985), pp. 63-74.

9. Every indebted household participating in the survey was asked the following question with respect to each of its outstanding loans. "During the past twelve months, were all the (type of debt) payments made the way they were scheduled, did you get behind on any of the payments, or did you make payments that were larger or more frequent than scheduled?"

3. Payment behavior of indebted households for the twelve-month period preceding the survey interview, by type of debt

Percentage distribution

Payment behavior	Type of debt ¹					
	All	First mortgages	Other mortgages	Credit cards	Vehicle loans	Other installment debt ²
Paid as scheduled or made larger or more frequent payments	86.0	90.6	96.4	92.6	89.9	84.8
Fell behind or paid late	12.3	7.4	3.2	6.0	9.1	13.2
Fell behind or paid late and made larger or more frequent payments	1.7	2.0	*	1.4	1.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
MEMO						
Percentage of debt holders more than thirty days late	9.2	3.5	2.5	5.1	5.1	11.7
Percentage of debt holders sixty or more days late	2.9	1.3	*	1.5	.7	5.4

1. Details may not add to 100 percent because of rounding.

2. Other installment debt includes loans for educational purposes, medical expenses, vacations, and various types of household durables.

* Less than 0.5 percent.

SOURCE: Surveys of Consumer Attitudes, September and November 1990, January 1991, Survey Research Center, University of Michigan.

payment obligations. As indicated by the survey, 42 percent of these households made payments that were larger or more frequent than scheduled on at least one of their outstanding obligations. These households may have been attempting to retire their debts ahead of schedule or, in some cases, the larger payments may have involved a refinancing.

Among the various types of debt owed by consumers, "other mortgages," primarily home equity loans, had the best overall payment performance. This finding is consistent with the extremely low delinquency rates reported by commercial banks on their outstanding home equity lines of credit and, to a lesser degree, on their other types of home equity loans.

Despite the overall satisfactory payment performance of the majority of indebted households, a significant minority, about 14 percent of those surveyed, reported falling behind on at least one of their scheduled debt payments. A small fraction of these late payers—roughly 12 percent—reported both that they fell behind in their payments and that, at some point during the year, they made larger or more frequent payments than scheduled. In some cases, consumers may have done so to catch up on earlier missed payments.

Households reported falling behind in their payments most frequently on vehicle loans and other types of non-credit-card installment debt

(table 3). These two categories, along with credit cards, also had the highest incidence of consumers who reported falling more than thirty days behind in their payments. Of the households reporting payment problems, relatively few with home mortgages or vehicle loans let these debts get as much as sixty days in arrears (table 3). Delinquency of this duration is more likely to raise the possibility of foreclosure or repossession, actions most consumers would like to avoid.

Characteristics of Consumers with Payment Problems

Not all types of households are equally likely to report falling behind on their payment obligations. Consumer survey data provide an opportunity to profile the household characteristics (such as income, marital status, and age) that may be associated with late payment problems. The relationships observed, however, do not directly reflect the creditworthiness of persons with given characteristics because the debtor segment of the population has already passed through a credit-screening process designed to weed out the riskiest applicants. To be precise, the data can show which factors are associated with missed payments, given the credit standards prevailing in the marketplace, but not

which factors, before the fact, are associated with default risk.¹⁰

Strong correlations exist between payment problems and housing tenure, marital status, and debt-service burdens (table 4).¹¹ Differences in payment behavior also show up with respect to household income and age, although the differences are greatest at the extremes of the household groups. The combined results for debtors in the lowest two income quintiles, for example, show that they are about twice as likely to have been late or missed a scheduled payment as are households in the highest income group. A similar relationship holds with respect to the age of the household head: Households headed by persons under thirty-five years of age are nearly four times as likely to report payment problems as are those headed by an individual at least fifty-five years of age. As might be expected, debt-service burdens—measured by the ratios of scheduled monthly payments to monthly income—are positively related to late payment problems. Households in the group with the highest ratios of debt payment to income are more than four times as likely to be late or to miss payments as households in the group with the lowest payment burdens.

While the relationships described above appear straightforward, their interpretation is not quite so clear. For example, although households with younger heads tend to miss or be late on their debt payments more often than their older counterparts, this finding may reflect the fact that younger persons also tend to have lower-paying jobs. Thus the extent to which age and income differences independently affect payment behavior is left unsettled. For this reason, a multivariate analytical framework was used to assess the likelihood that a household either repaid its debts as scheduled or fell behind or missed one or more

4. Proportion of indebted households with payment difficulties, by demographic characteristics and type of outstanding loan¹

Percent

Demographic characteristic	Any type of debt	Mortgage debt	Consumer debt
<i>Household income (quintiles)</i>			
Lowest	16	20	17
Second	19	15	16
Third	15	10	13
Fourth	14	8	12
Highest	9	6	7
<i>Education of household head</i>			
11th grade or less	14	13	13
High school graduate or some college	16	10	14
College graduate	13	9	11
<i>Age of household head (years)</i>			
Less than 25	13	13	13
25-34	20	11	17
35-44	18	11	15
45-54	16	12	12
55 and over	5	2	5
<i>Marital status</i>			
Married	14	9	12
Never married	13	6	12
Widowed	4	2	3
Divorced, separated	27	15	23
<i>Housing tenure status</i>			
Own	12	9	10
Rent	20	n.a.	20
<i>Payment-to-income ratio (thirds)²</i>			
Lowest	6	5	5
Second	12	8	9
Highest	26	15	24
MEMO			
All debtors	14	9	12

1. Households categorized as having payment difficulties are those who reported having missed or been late in their debt payments in the preceding year.

2. Three groups of equal size were determined for each debt category separately. The figures shown are the proportion of each size group that fell behind in their debt payments.

n.a. Not applicable.

SOURCE. Surveys of Consumer Attitudes, September and November 1990, and January 1991, Survey Research Center, University of Michigan.

payments.¹² However, because the survey did not collect some relevant information, such as data on asset holdings, the analysis cannot be as complete as one might wish.

The multivariate analysis suggests that payment problems are most strongly related to

10. Of course, lenders might also respond to higher-risk seekers of credit by modifying downpayment or collateral requirements or by charging higher interest rates commensurate with the risk assumed in extending the credit. To the extent that riskier applicants are served with higher-cost credit rather than by being refused credit, the variables associated with ex ante default risk would more likely correlate with payment performance as well.

11. Debt-service burdens are measured by the estimated monthly ratio of total debt payments to income.

12. The specific multivariate technique employed was the logit model. This technique is one in a family of econometric models that may be used to estimate statistical relationships when the dependent variable takes on a limited number of values.

debt-service burdens, educational attainment, the number of children under eighteen years of age in a household, and marital status. Higher debt-service burdens were positively related to late payment problems, as was the number of young children in a household, while separated or divorced heads of households were also significantly more likely to report payment problems than either married couples or other single households. In considering all factors simultaneously through this approach, no statistically significant relationship was found between the incidence of payment problems and either the age of the household head or housing-tenure status. In general, the level of household income was also not found to be a good predictor of payment performance, except for those in the highest income quintile. The analysis found that compared with households in the lowest-income quintile, the highest-income families were much less likely to fall behind in their payments.

Severity of Payment Problems

Summary statistics, such as those presented in the previous sections, provide a broad perspective on the recent performance of consumers in paying their debts. These statistics, however, do not convey information, except in the most general sense, about the severity of payment problems among indebted households.

Households who reported falling behind in paying their debts were asked about the number of payments that were more than thirty days late and whether any of these payments were as many as sixty days late. All respondents reporting loans more than thirty days in arrears were also asked why they fell behind, what they did about it, and what actions creditors took in response to the late or missed payments.

Overall, the survey found that 9 percent of all indebted households, which is two-thirds of households reporting late payments, fell behind more than thirty days on one or more of their debt obligations in the year preceding the survey (table 3). The survey further found, however, that relatively few households fell sixty or more days behind in their payments. Only 3 percent of all indebted households (or roughly

5. Severity of late payment problems

Percentage distribution

Number of late payments more than thirty days past due	Percentage of late payers with at least one payment more than thirty days past due
1	34.9
2	26.6
3	20.6
4	1.8
5	2.8
6-9	6.8
10 or more	6.5
Total	100.0
MMMO	
Percentage of all indebted households that had at least one payment more than thirty days past due	9.2
<i>Number of payments more than thirty days past due</i>	
Mean	2.9
Median	2.0

SOURCE: Surveys of Consumer Attitudes, September and November 1990, and January 1991, Survey Research Center, University of Michigan.

20 percent with any instance of late or missed payments) reported at least one payment sixty or more days delinquent during the preceding twelve months.

A second way to measure the severity of payment problems is to examine the distribution of late payers by the number of payments on which they fell behind by more than thirty days during the previous year (table 5). Among the households who had at least one payment more than thirty days late, most reported only a limited number of instances in which payments were behind by this much. Eighty-two percent of the households that had at least one payment late by more than thirty days were this late on three or fewer of their payments during the year preceding the interview. At the other end of the spectrum, 7 percent of the households who were late at least once by more than thirty days reported ten or more such instances. Overall, the mean and median number of payments more than thirty days past due for those with such late payments were 2.9 and 2.0 respectively. If having more than three payments past due for more than thirty days in a twelve-month period is considered "serious," then about 18 percent of all late payers, or roughly 3 percent of all debtors, could be said to have had a serious debt payment problem.

Reasons for Late Payment

Of those consumers who have had at least one payment more than thirty days late, most indicated that the main reasons for their difficulties were that they became overextended by taking on too much debt or they experienced an unforeseen change in their employment or health status. Overall, 55 percent of the families experiencing payment problems indicated that they became overextended; 6 percent experienced medical-related problems; and 24 percent either lost their jobs, were not working, or had suffered a cutback in the number of hours worked.¹³ A fairly small group of households (roughly 14 percent) reported that they became delinquent either because they were on vacation or forgot to mail their payment.

Consumer Response to Payment Difficulties

Individuals facing debt payment problems respond in a variety of ways. Nearly 40 percent of those who were more than thirty days behind in their payments reported that they caught up on their delinquencies the next month or paid "when they were able." Other households delinquent in their payments cut back on other types of spending, took second jobs, worked longer hours, sold various items to raise funds, or borrowed or received gifts from relatives or friends. About 22 percent of late payers reported that they called their creditor about the problem; in some cases, the terms of the loans were extended, in others new loans were obtained. Some late payers, about 12 percent, said that they took no action in response to their late payments.

Creditor Responses to Late Payments

The survey asked households that were more than thirty days late in making their loan payments what actions creditors took in response. The most common responses mentioned, 71 per-

cent of the total, were to call the borrower, send a letter, or send additional billing notices.¹⁴ Other actions taken by creditors were to suggest new payment plans, notify credit reporting agencies, and cancel lines of credit. Only one household reported the repossession of an item securing a loan. In about 19 percent of the cases, respondents reported that creditors took no significant action in response to the late payments.

IMPLICATIONS OF SURVEY FINDINGS

Some insights into the aggregate delinquency statistics developed from lender reports may be drawn from the results of the household survey, although some conceptual differences prevent simple comparisons between the two types of data. For example, one difference is that the aggregate statistics from industry sources reflect the proportion of loans delinquent at a particular time, while the household survey identifies borrowers who had been delinquent at any point in the twelve months preceding the survey date, regardless of their current status. Another difference is that the industry statistics usually apply to a specific type of lender, while the survey of households asked that late payments to any type of lender be reported.

Despite these differences, comparisons between the two types of delinquency statistics can be informative. For example, the higher that the household-reported delinquency rate is for a given type of loan relative to an industry-reported rate, the more widely dispersed late-payment behavior is among the debtor population. If a household-reported delinquency rate (covering twelve months) is close in magnitude to a corresponding industry-reported rate (for a given point in time), that suggests that industry-reported delinquencies reflect a relatively small set of chronically delinquent debtors. On the other hand, if the household-reported rate markedly exceeds the rate reported by lenders, that suggests that a larger group of individuals is occasionally delinquent. That is, it would imply

13. Included in the medical-related category are situations in which insurance failed to cover medical expenses.

14. Some of the letters were reminders, others threatened specific action, still others were notifications of late charges.

that a borrower misses a payment one month, but subsequently gets back and stays on schedule and is replaced in the delinquent category by another short-term delinquent the next month.

For consumer loans, exclusive of credit cards, the ABA reported an aggregate thirty-day delinquency rate of about 2.5 percent on average during 1990, as indicated in chart 2. From the household survey, about 8.7 percent of those having such debts (combining observations for vehicle loans and for other installment debt in table 3) had been delinquent some time during the previous twelve months. The relationship between the ABA and household survey rates suggests a moderate degree of rotation from period to period among those identified as delinquent. (If no one were late more than once a year or for as long as sixty days, the survey-based rate should be about twelve times the aggregate rate.)

Information from the household survey about the number of instances of delinquency also sheds light on the severity of delinquencies in the aggregate. As shown in table 5, several households in the survey reported multiple instances of late payments. Among those who were thirty days late at least once, 18 percent said they were that late on more than three occasions. From the distribution in table 5, it can be calculated that these frequently late debtors accounted for roughly half of all instances of late payment among surveyed households. When this approximation is applied to the ABA's installment loan delinquency rate of around 2.5 percent, it appears that perhaps 1.25 percent of the installment loans on banks' books at a given time are owed by persons with a chronic late-payment problem. The actual figure is likely to be lower, however, because the classification of individuals as chronic late payers was based on the number of missed payments for any type of loan a person had. The proportion of debtors with multiple late payments for a single category of loans would be at least somewhat smaller.

On balance, the household survey data suggest that a substantial proportion of the loans that are past due at a point in time do not reflect serious payment problems, but ones that will be rectified within a reasonably short period. This

conclusion is based on the relatively few survey respondents that reported payments as much as sixty days late, the small fraction of borrowers with several instances of late payment, and the statements of respondents concerning what actions they took after missing loan payments. In that the survey was conducted during a period of economic growth, the question may be raised as to whether these patterns would hold during an economic downswing. The answer cannot be known with certainty. It should be noted, however, that aggregate debt burdens were relatively high in the period surveyed, and the economy, while not in recession, was sluggish, which suggests some broad applicability for the results reported here.

APPENDIX: SURVEY OF CONSUMER ATTITUDES

To obtain information on consumer debts and recent household experience with repayment problems, the Federal Reserve Board developed questions that were included in the September and November 1990 and January 1991 Survey of Consumer Attitudes conducted by the Survey Research Center of the University of Michigan. Interviews were conducted by telephone, with telephone numbers chosen from a cluster sample of residential numbers. The sample was chosen to be broadly representative of the four major regions—Northeast, North Central, South, and West—in proportion to their populations (Alaska and Hawaii were not included). For each telephone number drawn, a randomly selected adult from the family was the respondent.

The survey defines the family as any group of persons living together who are related by marriage, blood, or adoption, and any individual living alone or with persons to whom the individual is not related. The head of the family is defined as the individual living alone, the male of the married couple, or the adult in a family with more than one person and only one adult. Generally, when there is no married couple and more than one adult, the head is the person most familiar with the family's finances, or the one closest to age 45. Adults are persons aged 18 years or more.

Together the surveys sampled 1,534 families, 668 of whom were homeowners with outstanding mortgage debt. Six hundred and fifty-six additional families had outstanding consumer credit but no mortgage debt. Altogether, 187 of the 1,331 indebted families reported falling behind in at least one of their scheduled loan payments in the twelve months before their interview. The survey data have been weighted to be representative of the population, thereby correcting for differences among families in the probability of their being selected as survey respondents. Estimates of population characteristics derived from samples are subject to errors based on the degree to which the sample differs from the general population. Table A.1 indicates the

A.1. Approximate sampling errors of survey results, by size of sample¹
Percentage points

Survey result (percent)	Size of sample		
	100	200	1,500
50	10.5	6.2	3.2
30 or 70	9.6	5.7	2.9
20 or 80	8.4	4.9	2.6
10 or 90	6.3	3.7	1.9
5 or 95	4.6	2.7	1.4

1. The figures in this table represent *two* standard errors. Hence, for most items, the chances are 95 in 100 that the value being estimated lies within a range equal to the reported percentages, plus or minus the sampling error.

sampling error for proportions derived from samples of different sizes.

Treasury and Federal Reserve Foreign Exchange Operations

This quarterly report, covering the period November 1990 through January 1991, provides information on Treasury and System foreign exchange operations. It was presented by Sam Y. Cross, Manager of Foreign Operations of the System Open Market Account and Executive Vice President in charge of the Foreign Group of the Federal Reserve Bank of New York. Daniel H. Brotman was primarily responsible for preparation of the report.¹

The dollar was subjected to conflicting forces during the November–January period. Sentiment toward dollar investments continued to deteriorate as the U.S. economy weakened and as interest rate differentials moved further in favor of foreign currencies. But at times, political developments abroad—particularly the Persian Gulf conflict—encouraged greater demand for dollars and limited the extent to which negative sentiment toward the currency was reflected in exchange rates. With these offsetting factors helping to maintain a sense of two-way risk to dollar exchange rates, the dollar ended the period mixed against major foreign currencies, and the U.S. monetary authorities conducted no intervention operations in the foreign exchange market. The dollar closed the period down slightly against the German mark and up slightly against the Japanese yen. On a trade-weighted basis, as measured by the staff of the Board of Governors of the Federal Reserve System, the dollar ended the period 1 percent below its level at the beginning of the period.

THE FIRST PART OF THE PERIOD: EARLY TO MID-NOVEMBER

In the early part of the period, market attention centered on evidence of diverging growth and interest rate trends in the major industrial economies. Ever since the Iraqi invasion of Kuwait in August and the associated rise in oil prices and decline in consumer confidence, analysts had been progressively revising downward their forecasts for U.S. economic growth. The release of October payroll employment data in the first week of November revealed an unexpectedly large drop that, together with subsequent data, reinforced the view that the U.S. economy was slowing down. At the same time, preliminary indications suggested that inflationary pressures were subsiding. Under these circumstances, market participants widely expected that the Federal Reserve would continue to ease money market conditions and possibly reduce its discount rate.

In contrast, market forecasts for the German and Japanese economies remained relatively upbeat. The need to rebuild East Germany was seen as providing ongoing stimulus to the German economy. Japanese economic data provided little evidence that the economy or price pressures were slowing in response to the central bank's tight policy stance. Mindful of these economic trends, market participants expected that German and Japanese interest rates would either rise further or would remain at existing levels. Indeed, on the first day of the period, the Bundesbank announced an increase of $\frac{1}{2}$ of 1 percentage point in its official Lombard rate, and many market participants expected further tightening after German national elections in early December. The Bank of Japan was considered less likely than the Bundesbank to tighten monetary policy but was nonetheless seen as unwill-

1. The charts for the report are available on request from Publications Services, Board of Governors of the Federal Reserve System, mail stop 138, Washington, D.C. 20551.

ing to ease monetary conditions, given high oil prices and Japan's tight labor market conditions.

The divergent outlook for interest rates weighed on the dollar in early to mid-November. Short-term interest rate differentials had been steadily moving against the dollar since spring 1989, when dollar investments held an interest rate advantage of 4 to 6 percentage points relative to the mark and yen. By late summer 1990, the dollar's short-term interest rate advantage had been entirely eliminated. Thus, in early November, expected further declines in dollar interest rates, coupled with steady to higher rates abroad, threatened to push short-term U.S. interest rates well below mark and yen rates for the first time since 1980. Under these circumstances, the dollar declined 3¼ percent against the mark from its opening level of DM1.5170 to its November low of DM1.4660 on November 16. Its decline against the yen measured 2½ percent from ¥130.07 at the opening of the period to ¥126.70 on November 22.

The dollar was not the only currency affected by the divergent performance of major national economies. Pressures also developed among the European currencies during early November as the pace of German expansion contrasted with slowing growth or actual declines in the United Kingdom, Italy, France, and certain other European countries. The market conditions that had allowed several European central banks to lower domestic interest rates earlier in the year dissipated with the November increase in German interest rates. As the mark moved up from its relatively low position in the exchange rate mechanism of the European Monetary System (EMS), several participating central banks responded to the softening of their currencies relative to the mark by raising interest rates at a time when their economies were weakening or by intervening against marks to support their currencies. The Italian lira, the French franc, and the British pound were the currencies that came under the strongest downward pressures in November.

Dollar selling in response to the diverging economic trends was tempered somewhat by developments in the Persian Gulf. The Gulf conflict, while not the dominant market force that it later became, served as a background factor

supporting the dollar at times during early and mid-November. Developments in the military and diplomatic arena at that time suggested that the probability of a war in the near term was increasing. Many market participants interpreted the U.S. Administration's announcement on November 8 of a large reinforcement of U.S. forces in the Gulf as indicating that the United States was preparing for an outbreak of hostilities. Past experience had demonstrated a tendency for the U.S. dollar exchange rate to benefit from "safe-haven" inflows during periods of political instability or military conflict abroad, and market participants increasingly came to build in a safe-haven premium for the dollar. In that environment, dealers became increasingly reluctant to take on large, short dollar positions. Thus, notwithstanding negative sentiment about the U.S. economy and the belief that interest rate differentials against the dollar would increase, the prospect of a safe-haven effect associated with the outbreak of war helped cushion the dollar's decline.

THE MIDDLE OF THE PERIOD: LATE NOVEMBER TO MID-JANUARY

Beginning in late November, the dollar came under several waves of upward pressure that pushed the currency above its opening levels and to its highs of the period. These pressures primarily reflected heightening expectations that the Gulf conflict would result in an early war. But the dollar's rise was aided by other factors, including a perceived deterioration of the political situation in the Soviet Union and two episodes of acute upward pressure on U.S. money market rates.

From November 29, when the U.N. Security Council set a deadline for Iraq to withdraw from Kuwait, until January 16, when Operation Desert Storm began, market attention focused almost entirely on the Gulf crisis. As the threat of war hung over the market during this month and a half, market participants of all types showed an increased reluctance to take on new risks or to respond fully to changes in underlying economic conditions. With interbank dealing in any case about to wind down as the year-end approached, many dealing institutions took the opportunity to

impose an early halt to or reduction in their marketmaking activities. Many commercial and institutional participants decided to move to the sidelines and, to the extent possible, to postpone further transactions until the Persian Gulf situation was clarified. In this environment, markets became unusually thin and illiquid, and managers of interbank trading rooms at many institutions took steps to reduce the position-taking latitude of their trading staff.

Meanwhile, pressures in the federal funds and other short-term money markets began to appear in late November as banks bid aggressively to secure money to cover year-end accounting statements. These pressures, coming earlier and with much greater intensity than in past years, occurred against a background of heightened concerns over the quality of bank credit. At the same time, the efforts of many institutions to improve capital ratios, trim balance sheet size, and enhance internal liquidity reduced the availability of, and increased the demand for, short-term interbank funds, thereby pushing rates upward. Some market participants who were unable to secure funds in the interbank market bought dollars in the foreign exchange market to meet their year-end requirements. In response, the dollar moved up in late November and early December. When these pressures temporarily subsided in early December, the dollar retraced most of its rise and, in fact, edged down to touch a new post-World War II low against the mark of DM1.4625. But year-end pressures reemerged late in December and again helped support the dollar at that time.

Another reason for the dollar's rise starting in late November was the growing expectation that the finance ministers and central bank governors of the Group of Seven (G-7) would soon meet and discuss exchange rate issues. With strains appearing in the exchange market involving the dollar and other currencies, some market participants believed that the G-7 might take steps to stabilize exchange rates. This notion gained credence as several G-7 officials indicated that a meeting would occur in January.

Around mid-December, market unease over the political situation in the Soviet Union also contributed to the dollar's resilience. The resignation on December 20 of Soviet Foreign Minis-

1. Federal Reserve reciprocal currency arrangements

Millions of dollars

Institution	Amount of facility, January 31, 1991
Austrian National Bank	250
National Bank of Belgium	1,000
Bank of Canada	2,000
National Bank of Denmark	250
Bank of England	3,000
Bank of France	2,000
Deutsche Bundesbank	6,000
Bank of Italy	3,000
Bank of Japan	5,000
Bank of Mexico	700
Netherlands Bank	500
Bank of Norway	250
Bank of Sweden	300
Swiss National Bank	4,000
Bank for International Settlements	
Dollars against Swiss Francs	600
Dollars against other authorized European currencies	1,250
Total	30,100

ter Shevardnadze raised concerns about the outlook for the success of the Soviet leadership's policies of political openness and economic restructuring. Because Germany was viewed as most vulnerable to the spillover effects of negative developments in the Soviet Union, the mark eased. The mark moved lower not only against the dollar and the yen but also against its partner currencies in the EMS. The mark's softer tone helped reduce, albeit temporarily, pressures that had been building throughout December within the EMS exchange rate mechanism.

In these circumstances, the dollar reacted only modestly to a series of actions by the Federal Reserve to ease monetary conditions. These actions included three moves in December and early January that led to declines in the federal funds rate totaling 75 basis points and one move to reduce the Federal Reserve discount rate 50 basis points on December 18. In addition, the Federal Reserve on December 2 announced plans to eliminate reserve requirements on non-personal time deposits and on net Eurocurrency liabilities in two stages during December.

Trading in the foreign exchange market remained listless even after the usual year-end holiday lull. During the early weeks of January, as participants awaited the January 15 U.N. deadline for Iraq to withdraw from Kuwait, the dollar tended to move during the day in response to the latest statements or signals regarding dip-

2. Drawings and repayments by foreign central banks under special swap arrangements with the U.S. Treasury

Millions of dollars; drawings or repayments (—)

Central bank drawing on the U.S. Treasury	Amount of facility	Outstanding as of November 1, 1990	November	December	January	Outstanding as of January 31, 1991
Central Bank of Honduras ¹	82.3	34.8	—34.8	...	...	...

NOTE. Data are on a value-date basis. Components may not add to totals due to rounding.

1. Represents the ESF portion of a \$147.3 million short-term credit facility established on June 28, 1990.

lomatic efforts to avert war. Thus, the dollar eased after announcements that U.S. Secretary of State Baker would meet his Iraqi counterpart in Geneva and that the U.N. Secretary General would visit Iraqi leader Saddam Hussein in Baghdad, only to rebound later when these approaches proved fruitless. Against this background, however, the dollar edged up intermittently. The dollar's movements around this time were greatest against the Japanese yen, which was seen as having the most to lose from any disruption in oil supplies as a result of war and the most to gain from an expected oil price decline in the event of a peaceful settlement. But the dollar also rose against the mark. By mid-January, the dollar was trading up to levels as high as ¥137 against the yen and DM1.55 against the mark, or roughly 5 percent and 2 percent respectively above its early November levels against those two currencies.

THE END OF THE PERIOD: MID- TO LATE JANUARY

The dollar's response to the outbreak of war on January 16 took many market participants by surprise. Having anticipated a wave of sustained dollar buying upon the outbreak of war, many interbank dealers had quietly been building up long dollar positions as the January 15 deadline approached. In the event, the dollar did move up on the first reports of bombing over Baghdad to highs of DM1.5525 and ¥138.00. However, the currency quickly gave way to selling pressures as market participants took profits on these long positions. Within a few hours after Operation Desert Storm began, the dollar had declined about 3 to 4 percent from its highs. Oil prices fell back sharply while bond and stock markets rallied around the world.

Thereafter, the dollar edged lower through the remainder of January. From time to time, dollar demand increased in response to concerns over the severity and scope of the Gulf conflict. This was the case, for instance, when missile attacks on Israel raised fears that the war might widen. But the dollar's tendency to firm on negative reports out of the Gulf began to wane as market participants appeared to grow more confident that the war would be relatively short and that the United States and its allies would be victorious.

As the exchange market grew accustomed to news from the Gulf and liquidity returned to more normal levels, market participants directed more attention to the economic developments and interest rate changes that had gone almost unnoticed in December and early January. Against this background, the dollar began to decline again. Statements by Federal Reserve Chairman Greenspan on the potential for further monetary easing if growth of monetary aggregates remained sluggish and on the risks of a long and deep recession if the Gulf war were to drag on were noted. These comments, coupled with President Bush's call for lower interest rates in his State of the Union speech, heightened expectations of further near-term cuts in dollar interest rates.

In a statement issued after their January 21 meeting, G-7 finance ministers and central bank governors "agreed to strengthen cooperation and to monitor developments in exchange markets" and stated that they were "prepared to respond as appropriate to maintain stability in international financial markets." Market participants did not conclude at the time, however, that officials were prepared to take immediate and concrete action to stem further dollar declines.

Some market participants came to interpret the G-7 statement of January 21 as suggesting that

further interest rate increases abroad might be avoided as U.S. rates declined. Indeed, the expectation that Germany would postpone further tightening became so widespread during the last two weeks in January that pressures within the EMS eased, and European authorities were reportedly able to scale back their intervention mark sales. On the last day of the period, however, the Bundesbank increased its official discount and Lombard rates 50 basis points, an action whose timing took the market by surprise. However, the Bundesbank characterized its move as technical and subsequently took steps to keep money market rates from rising.

Thus, as the period closed, sentiment toward the dollar remained negative as market participants, believing that dollar interest rates would decline further, expected interest rate differentials to continue to move against the dollar. The dollar closed the period at DM1.4768 against the mark, down 2½ percent from its November opening levels and only slightly above its post-World War II low against that currency. Against the yen, the dollar closed the period 1 percent above its opening levels at ¥131.25.

As noted in the report for the August–September 1990 period, the U.S. Treasury Exchange Stabilization Fund (ESF) repurchased \$2,500 mil-

lion of foreign currencies from the Federal Reserve on November 1 to reverse certain previous warehousing operations. From that date through the close of the period, outstanding warehousing of foreign currencies with the Federal Reserve remained at \$4,500 million, down from the peak of \$9,000 million reached in March 1990.

The Treasury also continued to provide Special Drawing Rights (SDRs) in exchange for dollars to foreign monetary authorities requiring SDRs for the payment of charges by the International Monetary Fund and for repurchases. These exchanges totaled \$204.3 million equivalent of SDRs over the three-month period.

The ESF's share of a multilateral credit facility established in June 1990 for Honduras was repaid in full during the period, with payments of \$34.0 million on November 15 and \$0.8 million on November 20. The ESF portion of this special facility expired at the end of November, and as of the end of January 1991 the Treasury had no special swap arrangements outstanding.

As of the end of January, cumulative bookkeeping or valuation gains on outstanding foreign currency balances amounted to \$5,688.0 million for the Federal Reserve and \$3,027.2 million for the ESF. The latter figure includes valuation gains on warehoused funds. These valuation gains represent the increase in dollar value of outstanding currency assets valued at end-of-period exchange rates, compared with rates prevailing at the time the foreign currencies were acquired.

The Federal Reserve and the ESF regularly invest their foreign currency balances in a variety of instruments that yield market-related rates of return and that have a high degree of quality and liquidity. A portion of the balances is invested in securities issued by foreign governments. As of the end of January, holdings of such securities by the Federal Reserve amounted to \$8,114.8 million equivalent, and holdings by the Treasury amounted to the equivalent of \$8,000.6 million valued at end-of-period exchange rates. □

3. Net profits or losses (–)
on U.S. Treasury and Federal Reserve
current foreign exchange operations¹
Millions of dollars

Period and item	Federal Reserve	U.S. Treasury Exchange Stabilization Fund
Valuation profits and losses on outstanding assets and liabilities as of October 31, 1990	5,363.3	2,876.3
November 1, 1990–January 31, 1991 Realized	0	0
Valuation profits and losses on outstanding assets and liabilities as of January 31, 1991	5,688.0	3,027.2

1. Data are on a value-date basis.

Industrial Production and Capacity Utilization

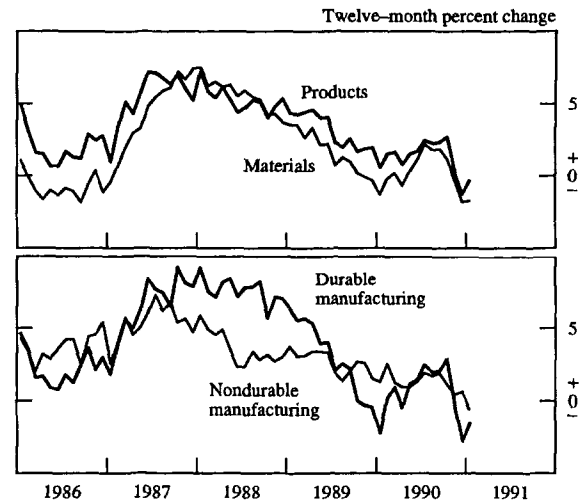
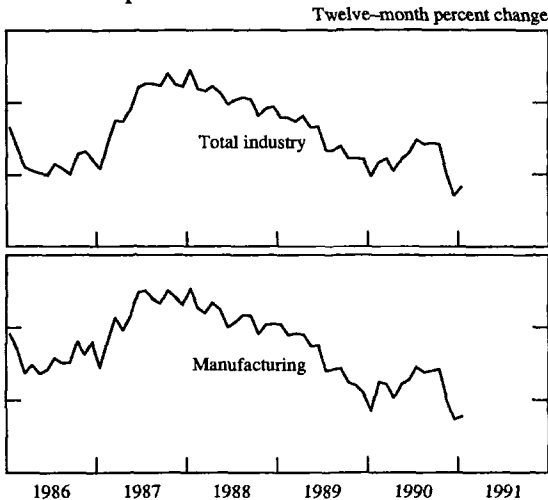
Released for publication on February 15

Industrial production fell 0.4 percent in January, following drops of 1.6 and 1.1 percent (revised) in November and December. Output of autos and trucks, which fell sharply throughout the fourth quarter of last year, turned up in January. Excluding motor vehicles and parts, production de-

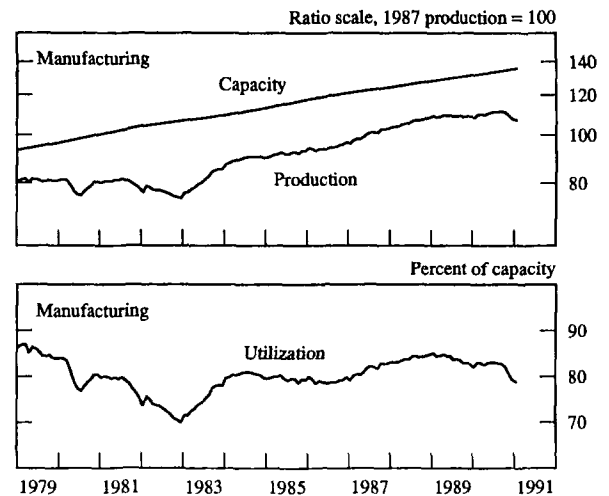
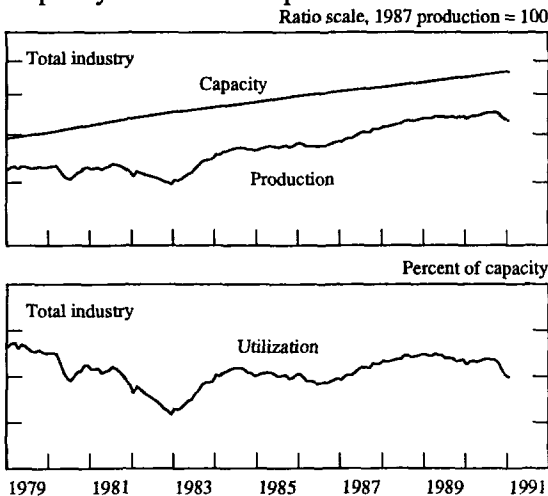
creased 0.6 percent, slightly less than during the previous three months. Total industrial capacity utilization fell 0.5 percentage point in January to 79.9 percent, nearly 3 percentage points below its level a year earlier. At 106.5 percent of its 1987 annual average, total industrial production in January was 0.9 percent below its level of a year ago.

In market groups, production of consumer

Industrial production indexes



Capacity and industrial production



All series are seasonally adjusted. Latest series, January.

Industrial production	1987 = 100				Percentage change from preceding month				Percentage change, Jan. 1990 to Jan. 1991
	1990			1991	1990			1991	
	Oct. ^r	Nov. ^r	Dec. ^r	Jan. ^p	Oct. ^r	Nov. ^r	Dec. ^r	Jan. ^p	
Total index	109.9	108.2	107.0	106.5	-.6	-1.6	-1.1	-.4	-.9
Previous estimates	109.8	107.8	107.1	...	-.7	-1.8	-.6	...	...
<i>Major market groups</i>									
Products, total	111.0	109.2	108.3	107.9	-.3	-1.6	-.8	-.3	-.4
Consumer goods	108.6	106.5	105.8	105.7	.0	-2.0	-.6	-.1	-.2
Business equipment	125.4	122.7	120.7	120.5	-.8	-2.2	-1.6	-.2	2.1
Construction supplies	103.1	101.5	100.6	98.8	-.7	-1.5	-.9	-1.8	-8.5
Materials	108.3	106.6	104.9	104.4	-1.0	-1.6	-1.6	-.5	-1.7
<i>Major industry groups</i>									
Manufacturing	110.7	108.9	107.3	106.9	-.5	-1.6	-1.4	-.4	-1.1
Durable	112.5	109.8	107.3	106.9	-1.1	-2.5	-2.2	-.4	-1.6
Nondurable	108.4	107.7	107.4	106.9	.3	-.6	-.3	-.4	-.6
Mining	102.6	102.2	102.3	102.2	-1.3	-.4	.1	.0	.6
Utilities	109.2	106.8	107.9	107.1	-1.1	-2.1	1.0	-.7	.3
Percent of capacity									
Capacity utilization	Average, 1967-90	Low, 1982	High, 1988-89	1990	1990			1991	Capacity growth, Jan. 1990 to Jan. 1991
				Jan.	Oct. ^r	Nov. ^r	Dec. ^r	Jan. ^p	
Total industry	82.2	71.8	85.0	82.7	83.0	81.5	80.4	79.9	2.5
Manufacturing	81.5	70.0	85.1	82.0	82.2	80.7	79.3	78.8	2.9
Advanced processing	81.1	71.4	83.6	80.5	81.3	79.7	78.5	78.2	3.3
Primary processing	82.4	66.8	89.0	85.7	84.3	83.0	81.4	80.3	2.2
Mining	87.4	80.6	87.2	87.8	89.9	89.7	89.9	89.9	-1.8
Utilities	86.8	76.2	92.3	84.8	85.6	83.7	84.4	83.7	1.6

r Revised.
p Preliminary.

NOTE. Indexes are seasonally adjusted.

goods other than motor vehicles decreased again in January; since October, output in this category has fallen about 1¼ percent, reflecting, in part, sizable cuts in clothing, energy products for consumer use, and goods for the home, such as appliances and furniture. Output of business equipment excluding motor vehicles fell 0.5 percent in January, owing mainly to another large drop in the production of information-processing equipment, particularly computers. Production of construction supplies declined further in January; it has fallen more than 7 percent since last summer. Among materials, output of durables has dropped over the past four months, with much of the weakness reflecting the effects of the cutbacks in motor vehicle production. In January, production of parts and materials for autos and trucks firmed, but output of basic metals, particularly steel, was curtailed again. Production of nondurable materials also has weakened steadily, on bal-

ance, since October. Output of textiles, which dropped sharply late last year, rose somewhat in January; however, production of chemicals declined last month. Output of energy materials was little changed in both December and January.

In industry groups, manufacturing production declined 0.4 percent in January, lowering the operating rate at factories to 78.8 percent. The operating rate for manufacturing is now about 2½ percentage points below its 1967-90 average, and at its lowest rate since September 1986. The production declines in January, as well as during the fourth quarter, hit virtually all major industries, with most operating rates falling below their 1967-90 averages. Large declines in the last few months have come in motor vehicles and related industries, such as fabricated metal products and steel. Construction-related industries, such as lumber, furniture, and stone, clay, and glass products, also

have been hard hit, as have petroleum refining, textiles, and apparel. Mining output has only fallen off slightly during the past few months, while utilities production has declined somewhat more, reflecting the relatively mild winter.

The capacity utilization and capacity data for 1990 have been revised. The capacity growth rate for total industry during 1990 was revised down slightly; the most significant adjustments occurred in the motor vehicles industry.

Statements to the Congress

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, February 7, 1991.

I welcome the opportunity to appear on this panel this morning to discuss title III of S.207, "The Intermarket Coordination Act of 1991." This bill addresses important issues affecting the integrity of our financial markets, and I compliment the committee on the contributions it has made toward better understanding of these issues and toward strengthening the regulatory system. Many of the questions addressed in this bill are extremely complex, and any proposed changes inevitably involve tradeoffs on which there will be disagreement. The compromises that members of this committee and of the Committee on Banking, Housing, and Urban Affairs have made in putting this package together have been reached in the spirit of bridging differences in viewpoint and moving ahead.

My remarks this morning will focus, as you have requested, on two provisions of the act that are particularly pertinent to the Board of Governors of the Federal Reserve System. The first is federal authority to set margins for stock-index futures contracts, and the second is the "exclusivity provision" of the Commodities Exchange Act (CEA). The Board's views on both these issues have been presented in testimony before, and letters to, the Congress on several occasions in the past, and my statement today will expand a bit on these views in the context of the current proposals. Let me begin with margins.

MARGIN AUTHORITY ON STOCK-INDEX FUTURES

As I have noted in previous testimony, the Board considers the primary purpose of margins to be to protect the clearing organizations, brokers,

and other intermediaries from credit losses that may result from adverse movements in prices. Without appropriate safeguards, losses can lead to the failure of key market participants, jeopardize contract performance, and threaten the integrity not only of the market in question but of other markets as well. Margins, along with capital requirements, liquidity requirements, position limits, loss-sharing agreements, and other operational controls, are tools designed to limit the exposure of financial exchanges and participants to problems that may arise in the markets. Containment of risk through the use of these tools is essential to maintain public confidence in the soundness of our financial markets and to avoid excessive strains on our clearing and payment systems.

Recognition of the important role for margins leads to the critical operational question of how one determines the adequate level of margins for prudential purposes. Clearly if margins are set too low, markets and clearing systems will be exposed to undesirable levels of risk. On the other hand, if margins are set much higher than necessary for prudential purposes, liquidity in the markets will be reduced, and competitive pressures may drive business to less regulated markets, probably offshore.

For some time, the Board has been of the view that the exchanges and self regulatory organizations (SROs) are well positioned for developing and refining margin policy. These organizations have a strong economic interest in maintaining the integrity of their markets and membership, as well as a close familiarity with the instruments and trading practices in their markets. Moreover, they have the flexibility to adjust margin requirements quickly in response to changing economic, financial, or institutional developments. While we continue to believe that the SROs should play a lead role in structuring margin policy, the Board believes that federal oversight is important to ensure that margins on stocks and stock-index

futures are adequate to protect against a wide range of conditions.

The need for federal regulation of margins on stock-index futures has become clearer in recent years, especially in light of behavior during periods of market stress. In particular, I expressed concerns last year that the self regulatory organizations tended to set margins at levels too low in periods of price stability and then were compelled to raise them when market prices moved sharply. Such behavior tends to exacerbate liquidity pressures on market participants and their creditors and the clearing and payment systems in periods of unusual price volatility. To avoid the possibility that margin decisions of a given exchange or clearing organization may not fully take into account implications across other markets and payment systems, a federal agency should have ultimate oversight authority. The *Intermarket Coordination Act* provides for just such federal responsibility, and the Board endorses this concept.

Nonetheless, while the Board believes that federal oversight is necessary, we have been of the view that this authority should rest with either the Commodity Futures Trading Commission (CFTC) or the Securities and Exchange Commission (SEC). Let me explain our reasons for this view.

I noted earlier that margin requirements are but one of many interdependent tools that play a role in the management of risk. Other elements in this process include, for example, capital requirements, surveillance activities, maintenance of guarantee funds, and financial support agreements. These factors have an important bearing on the overall level of risk associated with any given level of margins. Indeed, the margins applied against stock-index futures are only one part of the total amount of margin held to protect the integrity of the clearing organizations and member firms. The Board has been of the view that the agency or agencies that have overall responsibility for supervision of the institutions and the exchanges that trade these instruments can bring to bear appreciably more day-to-day information in these areas. These agencies could best take into account other elements of the risk management system when choosing appropriate margin levels.

Which agency, the CFTC or the SEC, is better suited for oversight of stock-index futures is less clear to us. The CFTC can be viewed as the better choice because of its oversight of the futures exchanges and their clearing organizations. On the other hand, the strong price and trading linkage among stocks and stock-derivative options and futures products presents a case for having a single regulator for all equity-related products. The SEC, to whom the Board, by rule, already has delegated oversight authority on options products and which has prudential responsibility for broker-dealers and securities markets, could be considered a logical choice to foster consistency of margins across equity-related products. We also appreciate that the Federal Reserve's position as the authority for setting margins on stocks and stock options places us in a position to achieve consistency across all equity-related instruments.

The Board recognizes the difficulty and the urgency of resolving this particular question. In these circumstances, while we prefer that the authority rest with one of the other agencies for the reasons discussed, if the Congress were to decide to assign this to the Federal Reserve, the Board would, of course, endeavor to discharge the responsibility for margins on stock-index futures in a careful and serious manner. In so doing, we would work closely with the other agencies that have broader authority over the entities that margins are intended to protect; in this regard, the proposed legislation appears to provide appropriate flexibility for implementing such a system.

EXCLUSIVITY AND HYBRID INSTRUMENTS

Let me turn now to the provisions of the bill that deal with the question of the CFTC's "exclusive jurisdiction" over futures products. The Board, as you know, has had serious concerns about the current interpretation of the Commodities Exchange Act that requires any contract with an element of futurity to be traded only on a CFTC-regulated exchange. Interpreted broadly, any financial contract has some element of futurity; hence this provision affects a wide range of existing and new financial products that might be

offered outside the futures exchanges, including some depository instruments that are subject to other regulatory safeguards. The potential for the strict application of this principle to stifle the development of new products was demonstrated when the courts ruled that index participations fell under the futures definition and could not be offered by the securities exchanges.

The proposed bill would modify the exclusivity restriction to allow certain hybrid products to trade either on a securities exchange or a futures exchange. In addition, it would give the CFTC authority to exempt certain other products. The

amendment explicitly directs the CFTC to exempt swap agreements and deposit accounts offered by insured and regulated financial institutions if it finds that such exemptions are not contrary to the public interest. I believe that these are positive steps that will provide the CFTC with greater ability to avoid conflicts such as have occurred in the past and to limit the risk that disputes over regulatory jurisdiction will have to be dealt with in the courts. More important, it should reassure the markets that financial innovations and new products will not be curbed by ambiguities in the regulatory process. □

Statement by Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 20, 1991.

I am pleased to appear before you again at these monetary policy oversight hearings.¹ As is the convention on these occasions, I shall focus my remarks this morning on monetary policy and the current situation in the economy. However, the events of the past year have once again underlined the ways in which the state of our nation's banking system can affect the transmission of monetary policy to the economy. Consequently, I think I should comment at least briefly on some of the regulatory issues bearing on the willingness of banks to extend credit.

I should like to start, however, with an overview of the economic outlook. As you know, business activity turned down in the latter months of 1990 and appeared still to be declining through the early part of February. With the unpredictability of events in the Middle East compounding the usual uncertainties attending any economic projection, it would be most unwise to rule out the possibility that the recession may become more serious than already is apparent. Nonetheless, the balance of forces does appear to suggest that this downturn could well prove shorter and shallower than most previous

postwar recessions. An important reason for this assessment is that one of the most negative economic impacts of the Gulf war—the run-up in oil prices—has been reversed. Another is that the substantial decline in interest rates over the past year and a half—especially in the past several months—should ameliorate the contractionary effects of the crisis in the Gulf and of tighter credit availability.

The major danger to a near-term recovery is that the erosion in purchasing power and frayed consumer and business confidence stemming from the recession and war could interact with a weakened financial system to produce a further decline in the economy. The recent actions we have taken, along with the ranges for growth of money and credit this year, which I shall be discussing in a moment, were designed to reduce the probability of such an outcome and to support a resumption of sustainable economic growth, in the context of progress toward price stability.

ECONOMIC AND MONETARY POLICY DEVELOPMENTS IN 1990 AND EARLY 1991

When I last testified on our monetary policy objectives in July, the economy appeared likely to continue growing, though moderately. The objective of restoring a clear downward tilt to the path of underlying inflation while maintaining the economic expansion thus seemed attainable. Indeed, data that became available subsequently

1. See "Monetary Policy Report to the Congress," *Federal Reserve Bulletin*, vol. 77 (March 1990), pp. 147–64.

indicated behavior of economic activity in the third quarter consistent with that appraisal.

That said, evidence in July of weaknesses in certain regions and sectors of the economy signaled caution. Notably, deteriorating market conditions for commercial real estate were limiting the ability of some borrowers to service loans, which, along with the restructuring of thrift institutions, induced lenders to pull back from extending credit to this sector. Banks also were becoming less willing to make business loans—not only for highly leveraged transactions, but more generally when industry or local economic conditions looked at all unfavorable. Tendencies toward such restraint, which might normally have been expected in a time of uneven and generally less robust business prospects, were exacerbated by pressures on the capital positions of many institutions. In mid-July, to better ensure the economy's continued growth, the Federal Reserve adopted a slightly more accommodative stance in reserve markets to counter the potential effect on spending of this tightening of credit terms at depository institutions.

The invasion of Kuwait in early August dramatically altered the economic landscape. Oil prices surged, simultaneously worsening prospects for both real income and inflation. The higher world oil prices transferred domestic purchasing power to foreign oil exporters, while uncertainties about how the crisis would be resolved shook household and business confidence. After the invasion, spending held up for a time before starting to soften, while the jump in oil prices fed through quickly to energy prices more generally and to measures of overall inflation. Amid considerable volatility in financial markets and concern about the inflation outlook, bond rates moved back up and stock prices moved down, as many investors shifted to more liquid instruments. Treasury bill rates eased, and a surge in purchases of money market mutual fund shares boosted growth of the broader monetary aggregates in August and September.

Oil prices, which peaked at more than \$40 per barrel in early October, seemed to be the primary source of financial market uncertainty and volatility; however, the fitful progress toward agreement on measures to reduce the federal deficit

also contributed. When the budget accord was finally reached in late October, its promise of fiscal restraint over the next several years was reflected in somewhat lower bond yields. Against a backdrop of weakening economic activity and in light of the passage of the multiyear deficit-reduction package, the Federal Reserve again eased money market conditions.

This policy action proved to be only the first of a series of easing moves extending through early this month. These moves were prompted in part by subsequent information pointing to sizable contractions of consumer outlays and economic activity stemming from the marked weakening of consumer confidence and purchasing power. They also were taken in response to a lessening of wage and price pressures and decidedly sluggish growth in the monetary aggregates after their surge in August and September. After continued moderate expansion in the third quarter, real GNP turned downward, led by the decline in consumer spending but also reflecting reduced construction activity and business inventory investment. Industrial production began a rapid descent in October, with the motor vehicle industry accounting for an especially large share of the drop. Private employment also started to fall steeply, and the unemployment rate rose further. The associated rise in layoffs brought increased uncertainty to the household sector, which in turn has kept consumer spending subdued.

The widening economic slack helped prevent the energy price surge from becoming embedded in ongoing wage and price inflation. The increases in nominal wages and broader compensation measures diminished in the fourth quarter after having exhibited initial signs of slowing in the preceding three months. In September, the nonenergy component of the consumer price index (CPI) began to rise at a slower pace. And in the final two months of the year, inflation in the overall CPI fell back, as energy prices topped out in November and declined in December in the wake of lower crude oil prices. The success of coalition military operations after the outbreak of war in mid-January was seen in oil markets as reducing the odds of wide-ranging supply disruptions, and oil prices retreated still more, further improving the near-term outlook for inflation.

This reduction of cost and price pressures has given the Federal Reserve scope to move aggressively to counter contractionary influences on the economy without contributing to market concerns about the inflation outlook. Absent such a lessening of price pressures, monetary policy easing probably would have risked a heightening of inflation expectations, which could have put the foreign exchange value of the dollar under severe downward pressure and fed through to long-term interest rates, perhaps even pushing them higher.

The easing of policy also was keyed to the meager expansion since September of the broader monetary aggregates. As I shall be discussing more fully, the slowdown in money growth was worrisome because it seemed to reflect a further tightening of credit availability as well as the weakening in spending. The surfacing of additional asset quality problems has heightened financial strains on many banking institutions, placing pressures on capital positions and boosting funding costs. In turn, banks have progressively tightened their standards for granting loans and have set still more restrictive terms and conditions on the loans they have made. Strains also have been evident at other intermediaries, and many securities have been downgraded by the rating agencies, suggesting that even those borrowers who are not relying on banks in many cases have faced higher costs and more restrictive terms.

In responding to evidence of economic weakness, to a lessening of inflation pressures, and to slow monetary growth, the Federal Reserve has used all three of its key policy tools. More accommodative reserve provision through open market operations, together with two cuts in the discount rate totaling a full percentage point, have brought the federal funds rate down to around $6\frac{1}{4}$ percent. This important short-term rate has fallen 2 percentage points since mid-1990 and roughly $3\frac{1}{2}$ percentage points over the past two years. We also reduced the remaining reserve requirement on nonpersonal time and similar accounts from 3 percent to zero. The requirement to hold nonearning reserves at the Federal Reserve in effect imposes a tax on credit intermediation at banks and thrift institutions. This action lowered this tax and was

aimed specifically at relieving the tightening of credit availability at depository institutions.

Other short-term market interest rates generally have fallen nearly as much as the federal funds rate since mid-1990. Long-term interest rates also have retreated, and rates on fixed-rate mortgages are now in the vicinity of their lows of the past decade. Lower interest rates and oil prices have helped to lift some major stock price indexes to all-time highs. After firming in December and early January on safe-haven demands, the exchange value of the dollar has shown unwelcome weakening tendencies at times recently.

THE BEHAVIOR OF MONEY AND CREDIT IN 1990 AND EARLY 1991

As I indicated earlier, sluggish expansion of the monetary aggregates was an important ingredient in the decisions to ease policy during recent months. The broader aggregates ended 1990 well down in the lower halves of their annual growth ranges. The Federal Open Market Committee (FOMC) recognized that the relationship between M2 and spending is uncertain, but the slower growth of M2 in the latter part of 1990 and early 1991 brought the aggregate so far below our expectations that it seemed highly likely to be inconsistent with the Committee's longer-run objectives for the economy.

The weakness in M2 is a complex development and requires careful interpretation. The shortfall from our expectations appeared to be related to the stalling of nominal income in the fourth quarter and also to the circumstances surrounding the extraordinary decline in assets at depository institutions last year, which in turn had implications for future, as well as current, spending. As their willingness or capacity to expand their assets diminished, banks and thrift institutions became less eager to attract deposits of all kinds. Hence, they paid unusually low rates on retail deposits in M2 relative to market interest rates. Moreover, public attitudes toward deposits also seemed to have been adversely affected by developments in the depository sector; publicity about thrift closings, Bank Insurance Fund losses, and credit quality problems at commer-

cial banks evidently encouraged shifts of funds into Treasury securities or alternative nondeposit instruments.

The shifting of credit intermediation away from depositories appeared likely to be having a damping effect on the spending of those borrowers without ready access to alternative sources of funds at comparable interest rates. Thus, part of the slow growth in retail deposits could be seen as symptomatic of developments in the credit-granting process with adverse implications for contemporaneous and future aggregate demand.

However, a portion of the credit flows no longer being intermediated by depositories has been readily replaced by alternative suppliers. In particular, markets for securities backed by mortgages and consumer loans have allowed demands for these types of credit to be met with little or no increase in costs to the ultimate borrowers. And some businesses with relatively high credit ratings have had little difficulty switching from banks to commercial paper markets and other sources of short-term funding. The reduction in funding through retail deposits associated with this type of shift in credit flows would not signal a weakness in current or future spending. Some of the surprising weakness in M2 growth has been reflected simply in a higher velocity than otherwise, rather than having been indicative of restraint on spending. M2 velocity last year did not exhibit the decline that would be expected with the drop in short-term market interest rates in late 1989 and 1990.

But with not all of the weakness in M2 likely to be offset by a lasting shift in velocity, the behavior of this aggregate seemed increasingly to signal a weaker path for the economy than was consistent with the Committee's intentions. Our policy easings over recent months were keyed partly to reinvigorating growth of M2 to a rate more likely to be consistent with satisfactory economic performance. If history is any guide, the policy-induced declines in interest rates on market instruments relative to returns on M2 balances will generate the desired speedup in M2 growth; indeed, we have begun to see some evidence of that in recent weeks, though it is still too early to be very confident that a new, more robust growth trend has been established.

Restrained growth of M3 last year was ex-

pected once the size of the runoff of thrift assets and of Resolution Trust Corporation (RTC) activities became clear. But its increase was further depressed by a larger-than-expected decline in bank credit growth. The fall-off in total depository assets had an especially pronounced effect on M3 because this aggregate includes, besides retail deposits, certain managed liabilities whose issuance is more sensitive to overall depository funding needs. In fact, currency and money market mutual funds more than accounted for the expansion in this aggregate over 1990. M3 growth has picked up this year, but so far it has reflected the substitution by some depositories of large time deposits for non-M3 funding sources rather than a renewed expansion of their credit.

Although credit outstanding at depositories contracted last year, credit flows at other intermediaries and in the open market were better maintained. Some borrowers undoubtedly felt the effects of tightening lending terms, but nonetheless the debt of domestic, nonfederal sectors rose 5¾ percent last year. This growth rate, though considerably lower than in recent years, was well in excess of the percentage increase in nominal income. Growth of federal debt by contrast surged to 11 percent, of which more than 2 percentage points represented federal funding of RTC activities. Buoyed by federal government borrowing, the total debt of domestic nonfinancial sectors grew 7 percent, the midpoint of the FOMC's monitoring range for the aggregate.

ECONOMIC PROSPECTS IN 1991 AND MONETARY POLICY PLANS AND OBJECTIVES

These economic, financial, and monetary conditions form the starting point for the Federal Reserve's view of economic prospects and plans for monetary policy in 1991. An important aspect of the outlook is the unusually high degree of uncertainty about how these conditions will evolve, in the face of the Gulf war and financial strains. Another aspect is the recognition that there may be substantial lags between changes in financial conditions—notably, the decline in interest rates and the depreciation of the dollar in recent months—and the response of spending.

The assessment of the FOMC, as captured by the central tendency of the individual projections of Board members and Reserve Bank presidents, is that the odds favor a moderate upturn in activity in coming quarters. Real GNP for the year as a whole is anticipated to grow in the area of $\frac{3}{4}$ to $1\frac{1}{2}$ percent. Unemployment is likely to rise further before the recovery takes hold, and consequently the expectation is that the jobless rate will be somewhere between $6\frac{1}{2}$ and 7 percent at year-end. The lower oil prices, if they persist, will help damp overall inflation, as will slack in labor and capital resources. Most of us believe that consumer prices will rise $\frac{3}{4}$ to 4 percent this year—the best performance in several years.

The forces currently at work in restraining spending can be readily identified. Consumer and business confidence still looks to be quite depressed, evidently because of the high degree of uncertainty, as well as the weak economy. Moreover, problems in many parts of the real estate sector are not going to be resolved soon. In particular, the large stock of vacant commercial properties is virtually certain to limit activity in that sector for some time. It also will take a while to correct the associated financial difficulties facing many lenders, who are likely to remain quite conservative in making new loans. Finally, secondary effects on aggregate demand of the recent decline in our economy's output and real income are now in the process of running their course.

Fortunately, several stimulative forces are in motion that enhance the chances of economic recovery. Monetary policy easings have brought about a significant drop in short-term interest rates. The decline started more than a year before the business cycle peak, a pattern unique in postwar experience and one which should help cushion the current recession. Moreover, short-term rates have declined substantially further in recent months. Long-term interest rates also have come down appreciably; reduced mortgage rates already have improved the affordability of housing and thus should help to revive housing sales and starts. The enhanced international competitiveness of our industries augers well for the net export component of GNP. Furthermore, the fall in oil prices, which was especially marked in mid-January, has restored considerable do-

mestic purchasing power. With most businesses having kept their inventories lean, the anticipated pickup in aggregate demand should show through relatively quickly in rising production.

The 1991 ranges for money and debt growth were selected by the Federal Open Market Committee to promote sustainable economic recovery, consistent with progress over time toward price stability. In keeping with a long-term disinflationary path, the FOMC ratified the provisional ranges set last July, which embody a reduction of $\frac{1}{2}$ percentage point in the M2 range compared with the limits for 1990. The midpoint of the $2\frac{1}{2}$ to $6\frac{1}{2}$ percent range for M2 growth matches the midpoint of the central tendency of the projections by the governors and presidents for nominal GNP growth. The recent sizable declines in short-term market rates normally would be expected to elevate the growth of M2 relative to that of nominal GNP. However, the FOMC anticipates that, as an offset, the ongoing restructuring of the thrift industry, combined with continued hesitancy of many banks to expand their assets, will again create an environment that restrains M2 growth relative to nominal GNP expansion and buoys M2 velocity. An outcome this year involving little change in M2 velocity would be quite similar to last year's experience.

The range of 1 to 5 percent for M3 growth this year is the same as the sharply reduced range for last year. It again is lower than the bounds for M2 growth because M3 is likely to continue to be more depressed than M2 by restructuring of the thrift industry and restrained growth in bank credit. The annual monitoring range for debt, however, has been reduced $\frac{1}{2}$ percentage point relative to last year's specification, to $4\frac{1}{2}$ to $8\frac{1}{2}$ percent, in line with the sustained deceleration of this aggregate in recent years.

RISKS TO THE ECONOMIC OUTLOOK

These money and debt ranges are wide enough to afford scope for policy reactions should the economy or its relationship to these financial aggregates diverge from FOMC expectations. Indeed, the individual forecasts of Board members and Reserve Bank presidents for the economy cover

a relatively wide range. This divergence of opinion has its roots in the major uncertainties facing all forecasters today. Economic forecasters typically have had great difficulty in projecting business cycle turning points, that is, judging when the relative strength of contending economic forces of contraction versus expansion will reverse. Moreover, the current outlook is unusually clouded, in part by uncertainties about the war and its effects. The Federal Reserve will need to remain alert to possible contingencies and will have to continue to respond flexibly to information about evolving trends.

Monetary policy thus will depend on how trends in economic activity and inflation actually unfold. Downside risks in the economic outlook are obviously there and not difficult to identify. For example, an extended war with Iraq clearly could carry some risk of further undercutting public confidence and spending. Additional restraint on credit availability at depositories or increased public concern about the health of the banking system would be negative factors as well, and could show up initially as continued subpar money growth.

The worry has been expressed that, under current conditions of restrained willingness of depository institutions to extend credit, monetary policy easing moves may have only a minimal impact on lending and hence on overall spending. I believe this risk is exaggerated. Our easings and reserve requirement action have lowered bank funding costs appreciably. Some of this decline has been passed through to borrowers in the form of a lower prime rate; even with this reduction, funding costs have fallen relative to loan rates, and with higher profit, potential banks should be more inclined to extend credit. Moreover, monetary policy stimulus works through other channels as well. Some potential borrowers will be encouraged by lower market interest rates to undertake additional expenditures financed, either directly or indirectly, by issuance of securities. Spending effects also can appear through routes involving price responses in equity and foreign exchange markets. Finally, the anticipated economic recovery itself will help allay problems of credit availability at, and public trust in, depository institutions. Indeed, there is some possibility that once the economy turns

around, the expansion could become fairly robust, sparked by a return of consumer and business confidence and fueled by increasing availability of credit.

REGULATORY INITIATIVES

Monetary policy will continue to be conducted to foster attainment of important macroeconomic objectives. In so doing, we will need to remain mindful of any impediments to the process of credit intermediation. But monetary policy cannot resolve market imperfections in which credit for some financially sound projects is more expensive or less available than might otherwise seem warranted. Structural problems involving imperfections in credit and capital markets require structural solutions. To the extent that current banking regulations are impeding the efficient functioning of these markets, a more promising approach would lie along the path of revising those regulations. I would like to offer several thoughts along these lines, some of which are in only the formative stages.

We already have taken the step, as noted, of reducing reserve requirements on nontransaction accounts at banks and thrift institutions so as to eliminate the reserve tax on lending financed through these sources. This action lowered non-interest-bearing required reserve balances at Federal Reserve Banks by some \$11½ billion. The Federal Reserve Board also has the authority to reduce the required reserve ratio on transaction deposits from its current 12 percent to as low as 8 percent. However, unusual volatility in the federal funds rate appeared in January and early February, as required reserve balances moved to a seasonal low point. This experience suggests that reserve balances had fallen so far that many depository institutions were encountering difficulties in managing their reserve balances to meet day-to-day clearing needs. Subsequently, volatility in the federal funds rate has diminished, as required reserve balances have begun to move above their seasonal lows, and as institutions have enlarged their clearing balances. These developments should continue for a time. Even so, the experience early this year suggests caution in considering further reduc-

tions in required reserve ratios, at least for a while. We shall, however, continue to assess this situation.

The recent episode of more volatile funds trading also has underscored the increased reluctance depositories have exhibited in recent years in availing themselves of short-term adjustment credit at the discount window. The reluctance has stemmed from fears of being identified as having more fundamental funding problems. Because of depository reluctance, the discount window in recent years has been a less effective safety valve in relieving transitory pressures in the reserves and funds markets. Tapping the window for adjustment credit, when alternative sources of funds temporarily are not available on reasonable terms from the usual sources, is not indicative of longer-term stresses at borrowing institutions. Despite bank reluctance, borrowing has been somewhat higher on occasion this year as banks were in the process of adapting to the lower reserve requirements. We would not be surprised to see somewhat higher adjustment borrowing persist. The Federal Reserve has no desire to circumscribe the legitimate use of the discount window, and market participants should not interpret such use as indicating underlying problems for the institutions involved.

Another regulatory area in which possible steps are being considered pertains to the guidelines used in the supervisory process. The Federal Reserve is working with the other bank supervisory and regulatory agencies to ensure that bank examination standards are prudent and fair and do not artificially encourage or discourage credit extension. The intent of these

efforts is to contribute to a climate in which banks make loans to creditworthy borrowers and work constructively with borrowers experiencing financial difficulties, consistent with safe and sound banking practices. For example, the agencies are studying steps to clarify that the supervisory evaluation of real estate collateral is to be based, not solely upon liquidation prices, but upon the ability of a property to generate cash flow, given reasonable projections of rents, expenses, and rates of occupancy over time. We need a balanced evaluation process that endeavors to reflect the long-term value of an illiquid asset, rather than the exaggerated appraisals that have been evident in both the upside and the downside of the real estate cycle in recent years.

The supervisory agencies also are seeking to encourage banking institutions to provide additional public disclosure on their nonperforming assets. Under present circumstances, as best we can judge, the market tends to suspect the worst. Additional disclosure would supplement data on the level of nonperforming loans with information on the amount of such loans that are in fact generating substantial cash income. Other similar steps are under consideration.

In general, we have emphasized our view that prudent lending standards and effective and timely supervision should not inhibit banking organizations from playing an active role in financing the needs of sound, creditworthy borrowers. Such an approach can contribute to the efficient functioning of credit markets and thereby complement monetary policy in promoting the attainment of the nation's overall economic objectives. □

Chairman Greenspan presented identical testimony before the Subcommittee on Domestic Monetary Policy of the House Committee on Banking, Finance and Urban Affairs, February 21, 1991.

Statement by John P. LaWare, Member, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions Supervision, Regulation and Insurance of the Committee on Banking, Finance and Urban

Affairs, U.S. House of Representatives, February 28, 1991.

It is my pleasure to appear before this subcommittee with such a distinguished panel to discuss

H.R. 192, the proposed "Financial Industry Reform and Capital Enforcement Act." Financial industry reform is one of the most pressing and important issues facing the Congress and the nation. The Federal Reserve Board, like this subcommittee, believes that this topic should be placed high on the congressional agenda.

H.R. 192 highlights two of the basic problems that need to be addressed in reforming the financial services industry. First, institutional developments and technological change have altered the competitive environment and made obsolete the statutory and regulatory framework in which banks currently operate. Competition in banking has become more intense as a result of the technological revolution in information transmission and processing. These innovations have led to an increased volume of transactions made directly between lenders and borrowers, fostered new institutions offering banklike claims and granting banklike credit, and permitted old banking rivals to become more banklike as well. In this environment, outdated laws increasingly are hindering the ability of many banks to service their customers' needs. But most significantly, American consumers are being denied the benefits of a more efficient financial system. These developments all call for expanding the activities that banking organizations are authorized to deliver and—just as important—relieving them from the costly prohibition of interstate branching.

The second problem is the potential liability of the taxpayer for losses that banks may incur. Over the years, moral hazard has created a threat to the deposit insurance system, as expanding deposit insurance guarantees have greatly reduced the market discipline imposed by depositors on bank risktaking. Consequently, some insured depository institutions have been encouraged to take excessive risks and to operate with eroded capital ratios that may not provide sufficient insulation for the insurance fund. Tragically, these developments have exposed American taxpayers to liability for the insurance guarantees in the thrift industry. Thus, we need to develop legislation to limit the size of potential taxpayer exposure for deposit insurance in the commercial banking industry. The pressing need to enhance the ability of commercial banking

organizations to compete by expanding the range of their permissible activities only increases the need to avoid extending the safety net guarantees to whatever additional risks may be present in these new businesses.

With these concerns in mind, the Federal Reserve Board supports the objective of H.R. 192 of expanding bank activities and permitting affiliations of banking and other financial firms. This reform directly addresses the first problem: the need for banking organizations to modernize their delivery systems. But the defense of the safety net is not addressed as fully as we would like in the bill. We are concerned that certain provisions of the bill spread the safety net under a wider variety of risks and thereby increase the exposure of the insurance fund.

To protect the safety net, H.R. 192 focuses on the regulation of the bank subsidiaries of depository institution holding companies, supplemented by an "early intervention" requirement that relies on the parent maintaining the capital of the bank subsidiary. Failure of the parent to maintain the bank's capital would result in dividend restrictions on the bank and ultimately divestiture of undercapitalized banks or imposition of a conservatorship. Such an approach is generally consistent with the Board's proposals last summer for a policy of prompt corrective action.

The Board is concerned, however, that other features of the bill may not provide sufficient supervisory authority to safeguard the insurance funds. The bill does not provide for an umbrella supervisor for the parent and its nonbank subsidiaries, nor any control over the capital of these units. It will, I am sure, come as no surprise to you that the Board believes that a federal supervisor should have the overall authority to look at the whole enterprise that contains an insured deposit-taking unit. Our experience has reinforced our view regarding the complexities of intercompany relationships within a holding company and the conviction that fire walls alone cannot insulate a bank from the problems of its parent or affiliates. We have seen that pressures on the parent holding company or nonbanking affiliates may well affect the costs and availability of funding of affiliate banks.

While H.R. 192 looks to the parent to maintain

the capital of its bank affiliates, it does not give the supervisor the examination and reporting tools to closely monitor or supervise the financial condition or operations of the parent. In addition, no realistic and timely means are provided to ensure that the activities or financial condition of the organization as a whole does not pose additional risk to the insured deposit taker and through it, to the financial system or the safety net. Even if the potential for trouble is detected, the agencies would have no specific cease-and-desist authority over the holding company and its nonbanking affiliates.

It is true that the bill authorizes the bank regulator to require divestiture of the depository institution when it is being endangered by the activities or condition of an affiliate, but corporate structures are often complicated, and without regular supervisory oversight, discovery may be difficult. More important, the possibility of administrative and judicial challenges, the one-year divestiture period, and the difficulties of proof under the proposed statutory standard eliminate the ability of the bank supervisor to use this divestiture provision in a timely fashion to protect the bank and the insurance fund.

Moreover, it is not clear whether the holding company could avoid the obligation imposed by H.R. 192 to maintain the capital of subsidiary depository institutions. For example, could the holding company simply turn over a troubled bank to a conservator, passing the losses to the deposit insurance funds and potentially to the taxpayer? Any reliance on the holding company to recapitalize its subsidiary banks would be greatly undermined if the holding company retained that option.

H.R. 192 wisely recognizes that certain risky nonbanking activities, such as real estate investment and development, should not be conducted directly by a federally insured depository institution. The Board is concerned, however, that the bill does not adequately address the equally important issue of the conduct of such activities through subsidiaries of state-chartered institutions (when permitted by state law) and the concomitant exposure of the safety net. In our view, banks should not use federally insured funds to engage directly in such risky activities or to acquire or finance subsidiaries engaged in

these activities. Experience has demonstrated that the market expects insured banks to support their subsidiaries. Even when an insured bank wishes to assert corporate independence from its subsidiaries, all losses experienced by these units are reflected directly in the income statements and balance sheets of the parent bank and reduce the bank's capital. Thus, unlike holding company affiliates, a subsidiary of a bank may directly reduce the bank's ability to use its own capital as a buffer protecting the bank's depositors and the insurance fund.

We are also concerned that the proposed amendments to sections 23A and 23B of the Federal Reserve Act could increase the bank's exposure to its affiliates. The bill fragments the existing unified rulemaking authority under section 23, giving each bank regulator the authority to adopt its own rules and interpretations and to exempt institutions or transactions from the limits of section 23A and section 23B. In addition, the bill amends existing law to allow depository institutions to lend to customers of affiliates to purchase the affiliates' products and services without regard to the quantitative and collateral limits of section 23A—a troublesome exemption since, under the bill, commercial firms may own or be affiliates of banks.

I should note that H.R. 192 places no limits on who may own a depository institution holding company or what business the bank affiliates may conduct, or on cross-marketing of financial or commercial products and services. This mix of banking and commerce, which would raise serious issues in any context, is further complicated by the weakening of 23A and 23B fire walls and the absence of umbrella supervision. Before the Congress takes what will amount to an irreversible step, the Board believes that the issue of commerce and banking should be carefully studied and that if the Congress decides to authorize commercial connections, it should be done in a carefully supervised and phased-in manner with adequate protection of the public interest.

The Board strongly objects to that provision of H.R. 192 that apparently would limit the Federal Reserve's ability to control its risk exposure from access by depository institutions to the Federal Reserve's payment services. This provision would deny to the Federal Reserve the

discretion that it and all lenders have to make credit judgments based on all relevant factors. Further, in an era of electronic payments when trillions of dollars change hands daily, the bill would prevent the Federal Reserve from acting promptly to deal with troubled institutions accessing daylight credit from the Federal Reserve. These limitations could result in substantial losses to the Federal Reserve that could be reflected in reduced Federal Reserve payments to the Treasury.

In sum, we support the principle of wider

activities for banking organizations that is the centerpiece of H.R. 192, and applaud its contribution to the financial reform debate. This objective, however, needs to be accompanied by safeguards to address the risks to the safety net of new activities and to limit the transfer of the safety net subsidy to noninsured entities. We would also hope that any banking reform legislation would promptly authorize interstate branching. Revising these outdated limitations would be extremely helpful in reducing both bank costs and their risk profiles. □

Announcements

MEETING OF CONSUMER ADVISORY COUNCIL

The Federal Reserve Board announced that its Consumer Advisory Council met on March 14. 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.

REGULATION CC: FINAL AMENDMENTS

The Federal Reserve Board adopted on February 20, 1991, final amendments to Regulation CC (Availability of Funds and Collection of Checks) to conform the regulation to a recent amendment to the Expedited Funds Availability Act. These amendments to Regulation CC have a retroactive effective date of September 1, 1990.

The Amendment to the Expedited Funds Availability Act extends the availability schedules for deposits at nonproprietary automated teller machines for a two-year period.

POSTPONEMENT OF NEW ACH PARTICIPATION FEE

The Federal Reserve Board on February 13, 1991, postponed the implementation of a new \$10 monthly participation fee for automated clearinghouses (ACHs) that had previously been scheduled to take effect on April 1, 1991. The Board also has modified the manner in which the fee will be applied during 1991.

The new participation fee will become effective on July 1, 1991, and during the remainder of 1991 will apply only with respect to participant records that have commercial ACH volume in a given month. These actions are being taken to address concerns raised by some institutions that they would not be able to act in a sufficiently timely manner to avoid paying multiple participation fees beginning in April 1991.

NEW PUBLICATION: Consumer Compliance Handbook

The Federal Reserve Board announced on February 27, 1991, the publication of a new *Consumer Compliance Handbook* designed to help banks comply with the consumer protection laws and regulations. The *Handbook* provides easy-to-read summaries of all the various consumer laws and regulations administered by the Board, sets forth the examination procedures used by the Federal Reserve System, and includes an examiner's checklist. Some of the laws and regulations included in the *Handbook* are the Fair Housing Act, the Home Mortgage Disclosure Act, the Community Reinvestment Act, Truth in Lending Act, Consumer Leasing Act, Electronic Fund Transfer Act, Expedited Funds Availability Act, Unfair or Deceptive Practices Act, and Fair Credit Reporting Act.

Copies of the *Handbook* are available from Publications Services, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. A check for \$20 should accompany each order.

GOVERNOR SEGER'S RESIGNATION: EFFECTIVE DATE

On March 11, 1991, Governor Martha R. Seger announced that her resignation as a member of the Board of Governors would be effective at the close of business on that day.

CHANGES IN THE STATISTICAL APPENDIX TO THE BULLETIN

Two tables in the statistical appendix to the *Bulletin*, table 1.28, "Assets and Liabilities of Large Weekly Reporting Commercial Banks in New York City," and table 1.31, "Gross Demand Deposits of Individuals, Partnerships, and Corporations," are being discontinued. Table 1.31 is being discontinued as of this issue. Table 1.28 will

no longer be carried in the *Bulletin* starting with the May 1991 issue. Historical data for the series in table 1.28 are available on request from the Banking and Money Market Statistics Section, Division of Monetary Affairs, mail stop 81, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

REVISIONS TO MONEY STOCK DATA

Measures of the money stock were revised in February of this year as a result of the annual benchmark and seasonal factor review. Data in tables 1.10 and 1.21 in the statistical appendix to the *Bulletin* reflect these changes beginning with this issue.

Data for the monetary aggregates were benchmarked using call reports through June 1990 and other sources. Estimates of deposits at institutions that do not file reports were revised from 1984 to 1990.

Seasonal factors for the monetary aggregates continued to be estimated by the X-11-ARIMA procedure. Beginning with January 1990, a new procedure is being applied to the following monetary aggregates—other checkable deposits (OCDs), money market deposit accounts

(MMDAs), other savings deposits, small time deposits, and large time deposits. Under the new procedure, the commercial bank and thrift deposit components of these aggregates, with the exception of OCDs, have each been adjusted with seasonal factors computed from data aggregated over banks and thrift institutions. With OCDs, when seasonal patterns show more differences between banks and thrift institutions, commercial bank data are seasonally adjusted directly, and seasonally adjusted OCDs at thrift institutions are computed as the difference between the seasonally adjusted total OCDs and seasonally adjusted bank OCD series. The previous procedure had been to derive seasonal factors from each deposit component at banks and thrift institutions separately. This procedure remains the one used for computing seasonal factors applied to deposit data up to December 1989.

More detail on the revisions is available in the Board's H.6 statistical release, "Money Stock, Liquid Assets, and Debt Measures," dated February 7, 1991. Historical data are available from the Money and Reserves Projections Section, Division of Monetary Affairs, mail stop 72, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

1. Monthly seasonal factors used to construct M1, M2, and M3, January 1990–March 1992

Year and month	Currency	Nonbank travelers' checks	Demand deposits	Other checkable deposits ¹		Nontransactions components	
				Total	At banks	In M2	In M3 only
1990—January .....	.9931	.9351	1.0187	1.0133	1.0213	1.0016	.9946
February .....	.9902	.9517	.9707	.9930	1.0004	1.0014	.9973
March .....	.9946	.9588	.9741	1.0011	1.0055	1.0027	1.0006
April .....	.9971	.9526	1.0069	1.0322	1.0333	1.0011	.9940
May .....	.9995	.9708	.9748	.9900	.9865	.9961	1.0020
June	1.0050	1.0373	.9958	.9964	.9925	.9977	1.0020
July	1.0068	1.1108	1.0061	.9932	.9878	1.0004	.9988
August	1.0039	1.1198	.9957	.9907	.9874	1.0011	1.0053
September .....	.9978	1.0680	.9965	.9934	.9914	.9993	1.0036
October .....	.9952	1.0083	1.0032	.9884	.9857	1.0004	.9997
November	1.0032	.9561	1.0119	.9968	.9948	1.0003	1.0043
December	1.0131	.9300	1.0469	1.0110	1.0130	.9981	.9975
1991—January .....	.9929	.9366	1.0177	1.0136	1.0216	1.0015	.9948
February .....	.9903	.9521	.9707	.9932	1.0003	1.0015	.9967
March .....	.9956	.9584	.9745	1.0018	1.0059	1.0028	1.0001
April .....	.9977	.9526	1.0066	1.0325	1.0335	1.0011	.9944
May	1.0022	.9706	.9743	.9894	.9861	.9959	1.0023
June	1.0060	1.0364	.9950	.9962	.9926	.9975	1.0020
July	1.0075	1.1094	1.0061	.9929	.9878	1.0004	.9994
August	1.0046	1.1200	.9958	.9905	.9873	1.0011	1.0058
September .....	.9977	1.0679	.9968	.9934	.9914	.9992	1.0036
October .....	.9952	1.0088	1.0035	.9882	.9855	1.0004	.9995
November	1.0038	.9569	1.0123	.9969	.9948	1.0003	1.0039
December	1.0121	.9308	1.0475	1.0111	1.0130	.9981	.9973
1992—January .....	.9930	.9368	1.0170	1.0138	1.0217	1.0015	.9952
February .....	.9902	.9521	.9707	.9933	1.0003	1.0015	.9966
March .....	.9948	.9597	.9747	1.0020	1.0061	1.0029	.9998

1. Seasonally adjusted other checkable deposits at thrift institutions are derived as the difference between total other checkable deposits, seasonally

adjusted, and seasonally adjusted other checkable deposits at commercial banks.

2. Monthly seasonal factors for selected components of the monetary aggregates, January 1990–March 1992

Year and month	Deposits ¹				Money market mutual funds	
	Savings	Money market deposit accounts	Small denomination time	Large denomination time	In M2	In M3
1990–January .....	.9922	1.0069	1.0011	.9960	1.0002	1.0335
February .....	.9910	1.0032	1.0016	.9970	1.0111	1.0353
March .....	.9993	1.0052	.9998	.9996	1.0177	1.0154
April	1.0030	1.0007	1.0000	.9944	1.0120	.9912
May	1.0028	.9905	.9990	.9989	.9891	.9924
June	1.0069	.9941	1.0002	.9987	.9840	.9831
July	1.0103	.9928	1.0029	.9965	.9871	.9859
August	1.0030	.9968	1.0016	1.0022	.9965	.9929
September .....	.9985	.9972	.9995	1.0046	.9999	.9759
October	1.0025	.9978	.9998	1.0063	.9986	.9795
November .....	.9984	1.0060	.9983	1.0066	1.0044	1.0051
December .....	.9916	1.0086	.9966	1.0000	1.0004	1.0099
1991–January .....	.9925	1.0076	1.0007	.9959	1.0007	1.0361
February .....	.9916	1.0039	1.0010	.9964	1.0115	1.0343
March .....	.9999	1.0056	.9993	.9988	1.0178	1.0133
April	1.0030	1.0006	1.0001	.9944	1.0120	.9901
May	1.0024	.9900	.9996	.9989	.9875	.9928
June	1.0065	.9935	1.0006	.9988	.9827	.9838
July	1.0099	.9920	1.0031	.9969	.9865	.9852
August	1.0028	.9965	1.0019	1.0025	.9966	.9933
September .....	.9984	.9970	.9997	1.0046	1.0001	.9769
October	1.0024	.9976	.9998	1.0063	.9994	.9803
November .....	.9987	1.0065	.9979	1.0067	1.0051	1.0033
December .....	.9918	1.0090	.9965	.9998	1.0007	1.0110
1992–January .....	.9927	1.0080	1.0007	.9960	1.0007	1.0374
February .....	.9919	1.0042	1.0006	.9962	1.0116	1.0328
March	1.0000	1.0057	.9992	.9984	1.0175	1.0119

1. These seasonal factors are applied to deposits data at both commercial banks and thrift institutions.

3. Weekly seasonal factors used to construct M1, M2 and M3, December 1990–March 1992

Week ending	Currency	Nonbank travelers' checks	Demand deposits	Other checkable deposits ¹		Nontransactions components	
				Total	At banks	In M2	In M3 only
1990–December 3 .....	.9998	.9311	1.0081	.9984	.9972	.9996	.9991
10	1.0139	.9306	1.0293	1.0221	1.0210	1.0005	.9990
17	1.0105	.9300	1.0401	1.0096	1.0103	.9995	.9942
24	1.0209	.9295	1.0453	1.0028	1.0086	.9960	.9974
31	1.0096	.9289	1.0852	1.0070	1.0114	.9953	.9989
1991–January 7	1.0088	.9306	1.0807	1.0525	1.0574	1.0009	.9811
14	1.0005	.9338	1.0383	1.0345	1.0439	1.0034	1.0003
21 .....	.9900	.9371	1.0050	1.0099	1.0191	1.0018	1.0009
28 .....	.9807	.9403	.9667	.9751	.9825	1.0003	.9960
February 4 .....	.9863	.9437	.9864	.9971	1.0057	1.0006	.9966
11 .....	.9952	.9481	.9722	1.0055	1.0120	1.0012	1.0002
18 .....	.9939	.9524	.9669	.9882	.9989	1.0014	.9965
25 .....	.9840	.9567	.9579	.9802	.9852	1.0019	.9936
March 4 .....	.9903	.9602	.9834	1.0043	1.0071	1.0023	.9966
11	1.0007	.9592	.9801	1.0133	1.0174	1.0029	.9962
18 .....	.9968	.9582	.9778	1.0001	1.0040	1.0031	.9993
25 .....	.9920	.9572	.9555	.9858	.9934	1.0020	1.0047

For notes, see following page.

3. Weekly seasonal factors used to construct M1, M2 and M3, December 1990–March 1992—Continued

Week ending	Currency	Nonbank travelers' checks	Demand deposits	Other checkable deposits ¹		Nontransactions components	
				Total	At banks	In M2	In M3 only
1991–April	1 .....	.9898	.9562	.9814	.9991	1.0007	1.0040
	8	1.0071	.9547	1.0136	1.0482	1.0439	1.0053
	15	1.0016	.9529	1.0228	1.0499	1.0496	1.0034
	22 .....	.9964	.9512	1.0088	1.0412	1.0494	.9988
	29 .....	.9879	.9494	.9825	.9960	.9984	.9975
May	6	1.0034	.9526	.9802	1.0116	1.0017	.9954
	13	1.0055	.9622	.9764	.9959	.9921	.9955
	20	1.0012	.9718	.9790	.9855	.9827	.9959
	27	1.0007	.9814	.9549	.9672	.9710	.9954
June	3	1.0005	.9910	.9972	1.0010	.9938	.9980
	10	1.0134	1.0119	1.0027	1.0206	1.0128	.9978
	17	1.0069	1.0326	.9976	1.0045	1.0016	.9976
	24	1.0015	1.0532	.9728	.9739	.9746	.9967
July	1	1.0010	1.0735	1.0115	.9772	.9751	.9979
	8	1.0214	1.0890	1.0374	1.0212	1.0115	.9991
	15	1.0113	1.1026	1.0194	1.0021	.9959	1.0015
	22	1.0057	1.1161	.9913	.9835	.9799	1.0009
	29 .....	.9970	1.1297	.9715	.9667	.9660	1.0004
August	5	1.0074	1.1370	1.0016	1.0040	.9975	1.0007
	12	1.0117	1.1287	1.0061	1.0014	.9965	1.0019
	19	1.0052	1.1204	1.0069	.9875	.9837	1.0015
	26 .....	.9966	1.1121	.9711	.9707	.9723	1.0008
September	2 .....	.9984	1.1039	.9896	.9888	.9853	1.0005
	9	1.0081	1.0891	1.0188	1.0267	1.0197	1.0006
	16	1.0001	1.0733	1.0097	1.0082	1.0063	.9997
	23 .....	.9936	1.0576	.9767	.9762	.9780	.9974
	30 .....	.9870	1.0419	.9825	.9607	.9616	.9989
October	7	1.0028	1.0287	1.0139	1.0079	1.0003	1.0012
	14	1.0009	1.0173	1.0205	1.0002	.9961	1.0009
	21 .....	.9951	1.0058	.9995	.9862	.9844	.9995
	28 .....	.9878	.9943	.9796	.9646	.9681	.9998
November	4 .....	.9953	.9826	1.0170	.9982	.9925	1.0005
	11	1.0085	.9702	1.0152	1.0083	1.0023	1.0003
	18	1.0035	.9578	1.0233	.9987	.9956	1.0010
	25	1.0003	.9456	.9981	.9783	.9823	.9999
December	2	1.0042	.9335	1.0138	.9937	.9930	.9999
	9	1.0117	.9312	1.0287	1.0260	1.0218	1.0008
	16	1.0095	.9307	1.0380	1.0091	1.0106	.9992
	23	1.0183	.9301	1.0419	1.0052	1.0107	.9966
	30	1.0123	.9295	1.0712	1.0023	1.0086	.9952
1992–January	6	1.0065	.9305	1.1107	1.0536	1.0535	1.0009
	13 .....	.9986	.9337	1.0379	1.0402	1.0475	1.0037
	20 .....	.9919	.9369	1.0009	1.0125	1.0238	1.0014
	27 .....	.9827	.9400	.9613	.9729	.9883	1.0006
February	3 .....	.9842	.9432	.9782	.9896	.9931	1.0002
	10 .....	.9963	.9473	.9773	1.0107	1.0144	1.0007
	17 .....	.9950	.9514	.9713	.9907	.9998	1.0014
	24 .....	.9852	.9555	.9622	.9825	.9902	1.0023
March	2 .....	.9836	.9595	.9704	.9863	.9960	1.0026
	9	1.0004	.9592	.9865	1.0192	1.0264	1.0028
	16 .....	.9965	.9582	.9785	1.0031	1.0077	1.0030
	23 .....	.9938	.9572	.9600	.9924	.9956	1.0019
	30 .....	.9903	.9563	.9618	.9897	.9907	1.0036
April	6	1.0067	.9550	1.0229	1.0470	1.0352	1.0057

1. Seasonally adjusted other checkable deposits at thrift institutions are derived as the difference between total other checkable deposits, seasonally

adjusted, and seasonally adjusted other checkable deposits at commercial banks.

4. Weekly seasonal factors for selected components of the monetary aggregates, December 1990–March 1992

Week ending	Deposits ¹				Money market mutual funds	
	Savings	Money market deposit accounts	Small denomination time	Large denomination time	In M2	In M3
1990–December 3 .....	.9960	1.0082	.9975	1.0024	1.0037	1.0136
10 .....	.9965	1.0112	.9969	1.0030	1.0042	1.0038
17 .....	.9919	1.0102	.9959	.9995	1.0025	1.0105
24 .....	.9865	1.0060	.9956	.9983	1.0014	1.0113
31 .....	.9887	1.0062	.9976	.9984	.9920	1.0123
1991–January 7 .....	.9978	1.0125	1.0003	.9969	.9820	1.0008
14 .....	.9947	1.0119	1.0009	.9988	1.0023	1.0434
21 .....	.9912	1.0071	1.0007	.9955	1.0077	1.0501
28 .....	.9875	1.0013	1.0007	.9934	1.0087	1.0482
February 4 .....	.9898	1.0022	1.0014	.9933	1.0059	1.0399
11 .....	.9928	1.0044	1.0017	.9977	1.0108	1.0405
18 .....	.9918	1.0043	1.0012	.9971	1.0120	1.0311
25 .....	.9902	1.0036	1.0002	.9965	1.0138	1.0322
March 4 .....	.9936	1.0047	.9997	.9961	1.0140	1.0249
11 .....	.9992	1.0073	.9994	.9987	1.0180	1.0164
18	1.0002	1.0063	.9985	.9981	1.0185	1.0081
25 .....	.9999	1.0042	.9987	1.0002	1.0203	1.0105
April 1	1.0047	1.0049	1.0007	1.0000	1.0164	1.0111
8	1.0113	1.0102	1.0005	.9977	1.0160	.9989
15	1.0066	1.0082	.9999	.9943	1.0193	.9939
22 .....	.9984	.9967	1.0001	.9916	1.0133	.9790
29 .....	.9958	.9884	.9998	.9930	1.0020	.9870
May 6	1.0010	.9875	.9998	.9945	.9897	.9817
13	1.0032	.9897	.9997	.9981	.9883	.9884
20	1.0031	.9904	.9996	.9983	.9848	.9899
27	1.0011	.9897	.9993	1.0035	.9887	1.0070
June 3	1.0042	.9935	.9995	1.0001	.9852	.9969
10	1.0090	.9983	1.0000	1.0007	.9842	.9863
17	1.0072	.9964	1.0001	.9992	.9838	.9839
24	1.0039	.9899	1.0003	.9978	.9831	.9857
July 1	1.0069	.9889	1.0026	.9968	.9777	.9723
8	1.0142	.9929	1.0039	.9940	.9759	.9692
15	1.0128	.9933	1.0035	.9960	.9885	.9771
22	1.0095	.9913	1.0029	.9977	.9900	.9952
29	1.0047	.9905	1.0023	.9997	.9916	.9986
August 5	1.0062	.9938	1.0027	.9979	.9905	.9947
12	1.0068	.9969	1.0027	1.0018	.9952	.9964
19	1.0038	.9974	1.0020	1.0022	.9956	.9886
26 .....	.9989	.9962	1.0012	1.0055	1.0014	.9974
September 2 .....	.9976	.9976	1.0009	1.0046	.9990	.9886
9	1.0007	1.0021	1.0003	1.0034	.9963	.9825
16 .....	.9993	1.0007	.9993	1.0039	1.0015	.9773
23 .....	.9964	.9935	.9988	1.0056	1.0035	.9753
30 .....	.9974	.9915	1.0001	1.0055	.9996	.9695
October 7	1.0062	.9956	1.0019	1.0060	.9960	.9664
14	1.0050	.9989	1.0006	1.0064	.9999	.9797
21	1.0022	.9977	.9991	1.0048	.9997	.9812
28 .....	.9977	.9968	.9984	1.0074	1.0011	.9888
November 4 .....	.9992	1.0014	.9984	1.0073	1.0018	.9916
11	1.0013	1.0066	.9985	1.0098	1.0038	.9991
18 .....	.9993	1.0078	.9980	1.0067	1.0033	.9984
25 .....	.9968	1.0068	.9973	1.0064	1.0098	1.0144

For note, see following page.

4. Weekly seasonal factors for selected components of the monetary aggregates, December 1990–March 1992—Continued

Week ending	Deposits ¹				Money market mutual funds	
	Savings	Money market deposit accounts	Small denomination time	Large denomination time	In M2	In M3
1991—December 2 .....	.9962	1.0082	.9972	1.0022	1.0056	1.0097
9 .....	.9974	1.0115	.9968	1.0013	1.0046	1.0063
16 .....	.9931	1.0111	.9959	.9990	1.0040	1.0119
23 .....	.9878	1.0069	.9955	.9977	1.0016	1.0148
30 .....	.9867	1.0064	.9969	1.0009	.9938	1.0131
1992—January 6 .....	.9973	1.0121	1.0000	.9979	.9820	.9974
13 .....	.9957	1.0133	1.0010	.9976	.9994	1.0431
20 .....	.9920	1.0080	1.0008	.9961	1.0070	1.0517
27 .....	.9883	1.0026	1.0006	.9944	1.0092	1.0496
February 3 .....	.9894	1.0018	1.0011	.9932	1.0051	1.0406
10 .....	.9931	1.0048	1.0013	.9971	1.0101	1.0376
17 .....	.9924	1.0046	1.0009	.9970	1.0129	1.0300
24 .....	.9906	1.0040	1.0001	.9962	1.0134	1.0279
March 2 .....	.9925	1.0044	.9997	.9957	1.0131	1.0322
9 .....	.9984	1.0073	.9996	.9983	1.0159	1.0167
16 .....	.9999	1.0066	.9988	.9981	1.0173	1.0148
23	1.0000	1.0047	.9984	.9990	1.0188	1.0156
30	1.0023	1.0040	.9996	.9993	1.0194	.9987
April 6	1.0131	1.0094	.9998	.9958	1.0163	.9871

1. These seasonal factors are applied to deposits data at both commercial banks and thrift institutions.

Record of Policy Actions of the Federal Open Market Committee

MEETING HELD ON DECEMBER 18, 1990

1. Domestic Policy Directive

The information reviewed at this meeting suggested that economic activity had fallen appreciably in recent months. A depressed level of consumer confidence and a decline in real disposable income had contributed to sluggish consumer spending. In response to apparent weakness in final demands, businesses had reduced production and employment; these cutbacks were most evident in the motor vehicle and construction sectors, but a broad range of other industries had been affected to some degree. Consumer inflation had moderated recently, largely as a result of some softening in oil prices. Despite the substantial increases in living costs this year, wage gains appeared to have slowed somewhat in recent months.

After a progressive weakening during the first three quarters of the year, total nonfarm payroll employment fell sharply further in October and November. Job losses were widespread across industries in November but were especially pronounced in manufacturing and construction. In the service-producing sector, which had generated most of the employment gains earlier in the year, the health industry was one of the few to post significant increases in jobs. The civilian unemployment rate rose to 5.9 percent in November.

Industrial output declined markedly for a second straight month in November. Production cutbacks were broadly distributed across industries but were especially pronounced in motor vehicles and parts, non-auto consumer goods, and construction supplies. Reflecting the sizable decline in manufacturing production, the rate of capacity utilization in manufacturing dropped further below the midyear high.

In October and November, retail sales in real terms were below the downward revised September level. Real disposable incomes had been reduced by a decrease in total hours worked and by the effects of higher energy prices, and major surveys of consumer attitudes in November indicated that consumer confidence remained at depressed levels. In October, total private housing starts declined substantially further; almost all of the drop reflected additional weakness in starts of multifamily units. Sales of both new and existing houses fell in September and October.

Shipments of nondefense capital goods edged lower in October after changing little on balance in previous months. A sizable drop in shipments of aircraft and parts more than offset further increases in the office and computing equipment category. New orders for nondefense capital goods pointed to a considerable softening in business equipment spending in coming months. Nonresidential construction activity fell for a third straight month, and permits and contracts for new construction remained in a downtrend. Manufacturing inventories posted a small increase in October, and the ratio of stocks to sales continued to edge down. At the retail level, non-auto inventories rose moderately after two months of little change; the inventory-to-sales ratio remained within the range that had prevailed for an extended period.

Reflecting a sharper rise in the value of imports than in that of exports, the nominal U.S. merchandise trade deficit widened in October from its average rate in the third quarter. After moderating somewhat in September, non-oil imports surged in October; the value of oil imports also rose as a sharp increase in prices offset a small decline in volume. Nonagricultural exports registered a sizable increase that more than offset a further drop in exports of agricultural products. Economic growth in the major foreign industrial

countries was mixed in the third quarter. Growth remained strong in Western Germany and appeared to have rebounded in France. Some slowing from the rapid rise early in the year had occurred in Japan, while declines in economic activity were recorded in the United Kingdom and Canada. Some moderation in consumer price inflation appeared to be in progress for the major foreign economies, reflecting the nearly completed pass-through to the retail level of the earlier rise in oil prices.

In November, increases in producer prices of finished goods moderated from the rapid pace of previous months; the prices of finished foods again advanced sharply, but declines in the prices of refined petroleum products damped the overall rise in producer prices. Over October and November, producer prices of non-energy, non-food finished goods increased at about the third-quarter rate, which in turn was somewhat below that in the first half of the year. The pace of consumer inflation also slowed in November, mostly as a result of a smaller rise in energy prices. Excluding food and energy items, consumer prices rose in November at the more moderate pace seen in the previous two months. Average hourly earnings of production or non-supervisory workers were unchanged on balance over October and November; this represented a considerable slowing from the increases recorded in earlier months of the year.

At its meeting on November 13, the Committee adopted a directive that called for a slight immediate reduction in the degree of pressure on reserve positions and that also called for giving weight to potential developments that might require some slight further easing during the intermeeting period. The reserve conditions contemplated by the Committee were expected to be consistent with growth of both M2 and M3 at annual rates of about 1 to 2 percent over the period from September through December.

Following the meeting, open market operations were directed toward implementing the slight easing of reserve market conditions sought by the Committee. Subsequently, in early December, in light of further indications of a softening economy and continuing weakness in the monetary aggregates, another slight easing in reserve pressures was carried out. In addition, a

number of technical adjustments were made to assumed levels of adjustment plus seasonal borrowing to reflect the declines in seasonal borrowing activity that typically occur late in the year. Adjustment plus seasonal borrowing fell from about \$260 million for the reserve maintenance period that ended the day after the November meeting to a little over \$100 million for the period completed prior to this meeting. In the early part of the intermeeting period, in the context of continued cautious reserve management by banks and the settlement of the midquarter Treasury refunding, the federal funds rate averaged near $7\frac{3}{4}$ percent. Late in the period, after the slight additional easing of policy and as concerns about a year-end squeeze on the availability of short-term funds abated somewhat, the federal funds rate averaged around $7\frac{1}{4}$ percent. Other market interest rates also declined on balance over the intermeeting period, in some cases substantially, as markets responded to mounting evidence that the economy was slowing significantly and to the easing of monetary policy. Lower interest rates and optimism over a possible peaceful resolution of the Persian Gulf situation contributed to a rise in broad stock market indexes.

The easing of concerns about year-end pressures appeared to have been helped by the announcement by the Board of Governors on December 4, 1990, of the elimination of reserve requirements on nonpersonal time deposits and net Eurocurrency liabilities. These reserve requirements were phased down in two steps, with the second occurring in the reserve maintenance period spanning year-end. This action was not expected to affect underlying pressures on reserves or federal funds rates but was intended to help counter the tightening by depository institutions of credit terms for many types of borrowers by providing those institutions with added incentive to lend to creditworthy borrowers.

In the foreign exchange markets, the dollar fluctuated in value over the intermeeting period in response to changing perceptions regarding the Persian Gulf situation, the release of U.S. employment data for November, and the further easing of U.S. monetary policy. On balance over the period, the trade-weighted value of the dollar rose slightly in terms of the other G-10 curren-

cies. The dollar appreciated more against the yen and sterling; the recent decreases in oil prices along with expectations of slowing or negative economic growth had sparked large rallies in bond markets in Japan and the United Kingdom. The dollar increased less against the mark, which was generally firm on the basis of continuing strong economic growth in Western Germany and heightened market expectations of further tightening of German monetary policy.

M2 was about unchanged over October and November after growing at a relatively limited pace on balance in earlier months of the year, while M3 declined slightly in both months. The weakness in M2, which persisted despite an earlier decline in opportunity costs, perhaps reflected very weak expansion of nominal income in recent months as well as damped credit growth at depository institutions. From the fourth quarter of 1989 through November, expansion of M2 was estimated to be in the lower half of the Committee's range for the year and M3 near the lower end of its range. Expansion of total domestic nonfinancial debt appeared to have been near the midpoint of its monitoring range.

The staff projection prepared for this meeting pointed to a mild further decline in economic activity over the near term and an upturn before mid-1991. The projection was prepared against the background of persisting uncertainties regarding the prospects for a peaceful resolution of the situation in the Persian Gulf region. The staff assumed that there would be no major further disruption to world oil supplies and that oil prices would drop appreciably further in the first half of next year. The projection took into account the constraints on the supply of credit and an expectation that such constraints would persist to some degree through the year ahead. Consumer outlays were expected to continue to be damped in the near term by the erosion of real disposable income associated with a reduction in hours worked and the effects of higher energy prices; in light of weak consumer demands, business equipment spending was projected to be sluggish and commercial construction to decline further, given the oversupply of currently available space. Economic growth was expected to resume during the first half of 1991 in association with the effects of the assumed reduction in oil prices on

consumer spending and the support provided by further gains in exports. Subsequently, as business sales and orders improved, production and business investment outlays were expected to pick up. The outlook for inflation remained clouded by the uncertainties regarding oil prices but, based on the assumption of a substantial decline in oil prices and some added slack in resource utilization, the staff projected a slower rise in prices and labor costs.

In the Committee's discussion of the economic situation and outlook, members commented that a relatively mild and short recession remained a reasonable expectation, but they emphasized the risks of a more severe and prolonged contraction in economic activity. Generally lean business inventories, favorable conditions for the further growth of exports, and appreciable declines in oil prices from their recent peaks all promised to buoy spending and activity over coming quarters. However, the key to a near-term rebound in the economy was a pickup in consumer spending. Even under the assumption that the Persian Gulf situation would be more settled and oil prices lower, restoration of the degree of confidence needed to induce a substantial upturn in spending was not assured. The financial difficulties of many borrowers and financial intermediaries, especially banks, could continue to damage confidence as well as to constrain further the availability of credit to many borrowers and contribute to additional declines of asset values in commercial and real estate markets. In general, the economy and financial markets were undergoing a process of adjustment to earlier excesses in leveraging by borrowers and speculative increases in asset prices; while the course and effects of that adjustment were difficult to predict, there clearly had been an increase in the downside risks to the economy as a result. With regard to the outlook for inflation, members saw growing indications that a disinflationary process might be getting under way, and some viewed recent price and wage developments as consistent with an outlook for faster progress in reducing inflation than they had anticipated some months ago.

Regional business developments continued to indicate uneven conditions ranging from modest further growth in some parts of the country,

including areas that were benefiting from a relatively strong agricultural sector, to declining activity in an increasing number of regions. Indications of softening economic conditions were widespread, however, even in regions where overall business activity still appeared to be expanding. Business sentiment was negative in much of the nation, and business contacts suggested that it was worsening in many areas. Many state and local governments, notably in relatively depressed areas, were facing severe budgetary problems and were curbing expenditures in response to lagging tax receipts and impaired access to financial markets. Consumer caution was widespread and was evidenced by reports of generally soft retail sales thus far in the holiday season. Some members commented, however, that while its timing remained uncertain, an improvement in consumer sentiment associated possibly with more settled conditions in the Middle East and an upturn in real disposable income would be likely to generate considerable strengthening in deferred consumer spending, particularly for motor vehicles, and to foster a rebound in overall economic activity. Other comments focused on the possibility that consumer sentiment might well remain bearish and consumer spending restrained for an extended period, perhaps even in the context of favorable developments in the Middle East, as consumers continued to adjust to the adverse wealth effects of weak housing markets, heavy debt loads, concerns about the well publicized difficulties of many financial institutions, and fears about their employment prospects. Weak housing prices affected household spending especially by reducing perceived wealth, but also by eroding the margin of unborrowed equity available to be liquified for spending on other goods and services.

Many of the members stressed that business investment spending was likely to remain relatively weak, particularly the construction of office and other commercial facilities that were overbuilt in many metropolitan areas. To date, the manufacture of capital goods appeared to have held up relatively well in key capital-producing sections of the country, though the output of some types of capital equipment had turned down. Statistical and anecdotal reports sug-

gested that inventories generally remained under tight control, even in relatively depressed industries and regions, and a pickup in overall demand was therefore likely to lead fairly promptly to stronger production activity.

Members commented that, apart from the key role of consumer spending, current forecasts of a rebound in overall economic activity relied to an important extent on expectations of appreciable further growth in net exports over the next several quarters. The substantial depreciation of the dollar in terms of other key currencies over the past year, especially since mid-1990, would encourage exports and curb imports. Some members noted, however, that economic activity in a number of major trading nations might be somewhat weaker than was anticipated earlier, thereby tending to limit the growth in U.S. exports. That view was reinforced by comments from some domestic exporters who now saw more limited export opportunities in the year ahead, at least to some countries.

Turning to financial developments, members commented that economic recovery would depend to an important degree on the availability of credit. While credit terms and conditions were not projected to tighten appreciably further, the possibility of such a development represented a risk to the economy that could not be ruled out. A major source of financial pressures was the decline in real estate values in many areas and the inability of many heavily indebted borrowers to service their real estate debts. The difficulties in the real estate sector and the related vulnerability of many lending institutions obviously would be aggravated by a prolonged recession. Many business borrowers with less than prime credit ratings continued to report problems in securing financing, even from their usual lenders, and those problems seemed to be increasing in at least some parts of the country in conjunction with bank efforts to rebuild their capital positions and limit their lending risks in a weak economy. At the same time, there were indications of greater efforts by banks in some areas to increase their loans in order to improve their profits; moreover, many large banks appeared to have made significant progress in adjusting the pricing of their loans to take better account of lending risks; those efforts also could lead to improved

profits and to a better availability of credit to many potential borrowers.

The softness in real estate prices was having a pronounced effect on inflationary sentiment, and against the background of reduced pressures on production resources and an extended period of limited monetary growth most of the members believed that substantial progress toward lower inflation was a likely prospect over the next several quarters. Rising unemployment in some areas of the country was clearly reflected in downward adjustments to the wages of some categories of workers. More generally, the rise in broad wage measures appeared to have peaked in an atmosphere of concern about reduced employment opportunities; it was noted in this connection that current unemployment rates probably underestimated actual unemployment, as discouraged potential workers abandoned efforts to secure employment. Members also commented that competitive pressures, including competition from foreign producers, remained strong in retail markets around the country and also in markets for many producer goods.

In the Committee's discussion of policy for the intermeeting period ahead, all of the members indicated that they favored or could accept a directive calling for some slight easing in reserve conditions. Members noted that monetary policy had been eased in several steps over the course of recent weeks; while substantial additional easing might not be needed under prevailing conditions, a limited further move would provide some added insurance in cushioning the economy against the possibility of a deepening recession and an inadequate rebound in the economy without imposing an unwarranted risk of stimulating inflation later. The members favored a cautious approach to further policy moves in light of the appreciable easing in reserve conditions that already had been implemented and the considerable decline that had occurred in market interest rates. The stimulus provided by the recent easing actions had not yet been felt in the economy, and given the lags that were involved, there was some risk of overdoing the easing of policy at some point, with potential inflationary consequences once the economic recovery got under way. Most of the members viewed such a risk as relatively

remote and one that could be dealt with, should the need arise, by a future tightening of policy, although it was recognized that moves toward restraint could be difficult. Persisting weakness in the monetary aggregates tended to reinforce the view that policy was not moving in a way that would promote a resurgence in inflation. In evaluating the behavior of the monetary aggregates, members stressed the need for policy to provide adequate liquidity in a period of declining economic activity in order to encourage economic recovery.

Growth of M2 had displayed an uneven pattern but had tended to weaken over the course of the year, especially in recent months. The behavior of M2 was not fully understood, but it appeared to be associated, at least in the past year, with the constrained availability of credit from depository institutions and with lagging income growth. In addition, other factors, such as perceptions of increased risks in holding deposit balances in current financial circumstances, seemed to be affecting monetary expansion. A staff projection prepared for this meeting pointed to a pickup in M2 growth over the months immediately ahead, reflecting in part a projected upturn in the expansion of nominal GNP and the lagged effects of the recent declines in market rates on demands for money balances. Members noted that for the year 1990 as a whole, M2 would increase at a rate within the Committee's range, albeit in the lower half of that range and that M2 growth had now been within the Committee's ranges consistently in recent years. While monetary policy might still be viewed as somewhat restrictive from the standpoint of monetary growth, members cited other indicators such as the decline in interest rates, the shape of the yield curve, and conditions in the commodity and foreign exchange markets as indicative of an adequate provision of liquidity and a basically satisfactory policy in current circumstances. Nonetheless, members stressed the need to maintain an appropriate rate of monetary expansion, and they generally concluded that the behavior of the monetary aggregates would need to be monitored with special care in the period ahead for any indication that their growth might be falling significantly short of current expectations.

During this discussion, members noted the potential interactions between open market policy and a possible, near-term reduction in the discount rate. Most of the Federal Reserve Banks had proposed a reduction of $\frac{1}{2}$ percentage point in the discount rate, and in light of their concerns about the narrowing spread between the discount rate and short-term market rates, the members generally favored Board approval of that reduction to implement an easing of conditions in money markets. Ordinarily, a reduction in the discount rate would show through fully in lower short-term market rates. However, because of their desire to ease reserve conditions only slightly in the near term, the members generally supported a proposal to gear open market operations toward allowing only about one-half of the proposed cut in the discount rate to be reflected immediately in the money market. If the discount rate were not reduced, the Manager for Domestic Operations would execute the slight easing of policy through open market operations alone. With regard to any further adjustment in the degree of reserve pressure later in the intermeeting period, nearly all the members expressed a preference for retaining a bias in the directive toward potential easing, especially given the recessionary tendencies in the economy, current fragilities in the financial system, and the weakness in the monetary aggregates.

At the conclusion of the Committee's discussion, all of the members indicated that they could support a directive that called for some slight further easing in the degree of pressure on reserve positions and that also provided for giving emphasis to potential developments that might require some additional easing during the intermeeting period. It was recognized that open market operations initially might need to take account of a possible reduction in the discount rate. Subsequent to the initial easing, slightly greater reserve restraint might be acceptable during the intermeeting period or somewhat lesser reserve restraint would be acceptable depending on progress toward price stability, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets. The reserve conditions contemplated by the

Committee were expected to be consistent with some pickup in monetary growth, including expansion of M2 and M3 at annual rates of about 4 and 1 percent respectively over the four-month period from November to March.

At the conclusion of the meeting, the following domestic policy directive was issued to the Federal Reserve Bank of New York:

The information reviewed at this meeting suggests appreciable weakening in economic activity. Total nonfarm payroll employment fell sharply further in November, reflecting widespread job losses that were especially pronounced in manufacturing and construction; the civilian unemployment rate rose to 5.9 percent. Industrial output declined markedly in October and November, in part because of sizable cutbacks in the production of motor vehicles. Retail sales were weak in real terms in October and November; real disposable income has been reduced not only by a decrease in total hours worked but also by the effects of higher energy prices. Advance indicators of business capital spending point to considerable softening in investment in coming months. Residential construction has declined substantially further in recent months. The nominal U.S. merchandise trade deficit widened in October from its average rate in the third quarter as non-oil imports rose more sharply than exports. Increases in consumer prices moderated in November largely as a result of a softening in oil prices. The latest data on labor costs suggest some improvement from earlier trends.

Most interest rates have fallen appreciably since the Committee meeting on November 13. In foreign exchange markets, the trade-weighted value of the dollar in terms of the other G-10 currencies rose slightly on balance over the intermeeting period.

M2 was about unchanged on balance over October and November after several months of relatively limited expansion, while M3 declined slightly in both months. From the fourth quarter of 1989 through November, expansion of M2 was estimated to be in the lower half of the Committee's range for the year and growth of M3 near the lower end of its range. Expansion of total domestic nonfinancial debt appears to have been near the midpoint of its monitoring range.

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability, promote growth in output on a sustainable basis, and contribute to an improved pattern of international transactions. In furtherance of these objectives, the Committee at its meeting in July reaffirmed the range it had established in February for M2 growth of 3 to 7 percent, measured from the fourth quarter of 1989 to the fourth quarter of 1990. The Committee in July also retained the monitoring range of 5 to 9 percent for the year that it had set for growth of total

domestic nonfinancial debt. With regard to M3, the Committee recognized that the ongoing restructuring of thrift depository institutions had depressed its growth relative to spending and total credit more than anticipated. Taking account of the unexpectedly strong M3 velocity, the Committee decided in July to reduce the 1990 range to 1 to 5 percent. For 1991, the Committee agreed on provisional ranges for monetary growth, measured from the fourth quarter of 1990 to the fourth quarter of 1991, of 2½ to 6½ percent for M2 and 1 to 5 percent for M3. The Committee tentatively set the associated monitoring range for growth of total domestic nonfinancial debt at 4½ to 8½ percent for 1991. The behavior of the monetary aggregates will continue to be evaluated in the light of progress toward price level stability, movements in their velocities, and developments in the economy and financial markets.

In the implementation of policy for the immediate future, the Committee seeks to decrease slightly the existing degree of pressure on reserve positions, taking account of a possible change in the discount rate. Depending upon progress toward price stability, trends in economic activity, the behavior of the monetary aggregates, and developments in foreign exchange and domestic financial markets, slightly greater reserve restraint might or somewhat lesser reserve restraint would be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from November through March at annual rates of about 4 and 1 percent, respectively.

Votes for this action: Messrs. Greenspan, Corrigan, Angell, Boehne, Boykin, Hoskins, Kelley, LaWare, Mullins, Ms. Seger, and Mr. Stern. Votes against this action: None.

2. *Authorization for Domestic Open Market Operations*

The Committee approved a temporary increase of \$6 billion, to a level of \$14 billion, in the limit on changes between Committee meetings in System Account holdings of U.S. government and federal agency securities. The increase amended paragraph 1(a) of the Authorization for Domestic Open Market Operations and was effective for the intermeeting period ending with the close of business on February 6, 1991.

Votes for this action: Messrs. Greenspan, Corrigan, Angell, Boehne, Boykin, Hoskins, Kelley, LaWare, Mullins, Ms. Seger, and Mr. Stern. Votes against this action: None.

The Manager for Domestic Operations advised the Committee that the current leeway of \$8 billion for changes in System Account holdings was not likely to be sufficient to accommodate the potentially very large need to drain reserves over the intermeeting period ahead. That need would reflect a bulge in available reserves stemming from the elimination of reserve requirements on nonpersonal time deposits and net Eurocurrency liabilities combined with the effects of seasonal reductions in currency in circulation and in required reserves over the intermeeting period.

Legal Developments

FINAL RULE—AMENDMENT TO REGULATION A

The Board of Governors is amending 12 C.F.R. Part 201, its Regulation A (Extensions of Credit by Federal Reserve Banks), to reflect its recent approval of a reduction in discount rates at each Federal Reserve Bank. The discount rate is the interest rate that is charged depository institutions when they borrow from their district Federal Reserve Banks. The Board acted on requests submitted by the Boards of Directors of the twelve Federal Reserve Banks. The Board approved the requests in light of further declines in economic activity, continued sluggish growth trends in money and credit, and evidence of abating inflationary pressures, including weakness in commodity prices.

Effective on the dates specified below, 12 C.F.R. Part 201 is amended as follows:

1. The authority citation for 12 C.F.R. Part 201 continues to read as follows:

Authority: Secs. 10(a), 10(b), 13, 13a, 14(d) and 19 of the Federal Reserve Act (12 U.S.C. 347a, 347b, 343 et seq., 347c, 348 et seq., 357, 374, 374a and 461); and sec. 7(b) of the International Banking Act of 1978 (12 U.S.C. 374d).

2. Section 201.51 is revised to read as follows:

Section 201.51—Short-term Adjustment Credit for Depository Institutions

The rates for short-term adjustment credit provided to depository institutions under section 201.3(a) of Regulation A are:

Federal Reserve Bank	Rate	Effective Date
Boston	6.0	February 1, 1991
New York	6.0	February 1, 1991
Philadelphia	6.0	February 1, 1991
Cleveland	6.0	February 1, 1991
Richmond	6.0	February 1, 1991
Atlanta	6.0	February 4, 1991
Chicago	6.0	February 1, 1991
St. Louis	6.0	February 4, 1991
Minneapolis	6.0	February 1, 1991
Kansas City	6.0	February 1, 1991
Dallas	6.0	February 1, 1991
San Francisco	6.0	February 1, 1991

3. Section 201.52 is revised to read as follows:

Section 201.52—Extended Credit for Depository Institutions

(a) *Seasonal credit.* The rates for seasonal credit extended to depository institutions under section 201.3(b)(1) of Regulation A are:

Federal Reserve Bank	Rate	Effective Date
Boston	6.0	February 1, 1991
New York	6.0	February 1, 1991
Philadelphia	6.0	February 1, 1991
Cleveland	6.0	February 1, 1991
Richmond	6.0	February 1, 1991
Atlanta	6.0	February 4, 1991
Chicago	6.0	February 1, 1991
St. Louis	6.0	February 4, 1991
Minneapolis	6.0	February 1, 1991
Kansas City	6.0	February 1, 1991
Dallas	6.0	February 1, 1991
San Francisco	6.0	February 1, 1991

(b) *Other extended credit.* The rates for other extended credit provided to depository institutions under sustained liquidity pressures or where there are exceptional circumstances or practices involving a particular institution under section 201.3(b)(2) of Regulation A are:

Federal Reserve Bank	Rate	Effective
Boston	6.0	February 1, 1991
New York	6.0	February 1, 1991
Philadelphia	6.0	February 1, 1991
Cleveland	6.0	February 1, 1991
Richmond	6.0	February 1, 1991
Atlanta	6.0	February 4, 1991
Chicago	6.0	February 1, 1991
St. Louis	6.0	February 4, 1991
Minneapolis	6.0	February 1, 1991
Kansas City	6.0	February 1, 1991
Dallas	6.0	February 1, 1991
San Francisco	6.0	February 1, 1991

These rates apply for the first 30 days of borrowing. For credit outstanding for more than 30 days, a flexible rate will be charged which takes into account rates on market sources of funds, but in no case will the rate charged be less than the basic discount rate plus one-half percentage point. Where extended credit pro-

vided to a particular depository institution is anticipated to be outstanding for an unusually prolonged period and in relatively large amounts, the 30-day time period may be shortened.

FINAL RULE — AMENDMENT TO REGULATION CC

The Board of Governors is amending 12 C.F.R. Part 229, its Regulation CC (Availability of Funds and Collection of Checks), to conform to recent amendments to the Expedited Funds Availability Act (see the Cranston-Gonzales National Affordable Housing Act, Pub. L. No. 101-625, section 1001). The amendments extend the availability schedules for deposits at nonproprietary automated teller machines for a period of two years. The amendments to the Expedited Funds Availability Act were signed into law on November 28, 1990, with a retroactive effective date of September 1, 1990.

Effective September 1, 1990, 12 C.F.R. Part 229 is amended as follows:

Part 229—[Amended]

1. The authority citation for Part 229 continues to read as follows:

Authority: Title VI of Pub. L. 100-86, 101 Stat. 552, 635, 12 U.S.C. 4001 *et seq.*

2. In section 229.12, paragraph (a) and the introductory text to paragraph (b) are revised, paragraph (b)(3) is removed, paragraphs (b)(4) and (b)(5) are redesignated as (b)(3) and (b)(4), newly redesignated paragraph (b)(4) is revised, paragraph (c)(1) introductory text and the first and third sentences of paragraph (d) are revised, and a new paragraph (f) is added to read as follows:

Section 229.12—Permanent Availability Schedule

(a) *Effective date.* Except as provided in paragraph (f)(2) of this section, the permanent availability schedule contained in this section is effective September 1, 1990.

(b) *Local checks and certain other checks.* Except as provided in paragraphs (d), (e), and (f) of this section, a depository bank shall make funds deposited in an account by a check available for withdrawal not later than the second business day following the banking day on which funds are deposited, in the case of—

* * * * *

(4) A check drawn on a Federal Reserve Bank or Federal Home Loan Bank; a check drawn by a state or unit of general local government; or a cashier's, certified, or teller's check; if any check referred to in this paragraph (b)(4) is a local check that is not governed by the availability requirements of section 229.10(c).

(c) *Nonlocal checks*—(1) *In general.* Except as provided in paragraphs (d), (e), and (f) of this section, a depository bank shall make funds deposited in an account by a check available for withdrawal not later than the fifth business day following the banking day on which funds are deposited, in the case of—

* * * * *

(d) *Time period adjustment for withdrawal by cash or similar means.* A depository bank may extend by one business day the time that funds deposited in an account by one or more checks subject to paragraphs (b), (c), or (f) of this section are available for withdrawal by cash or similar means. *** A depository bank shall, however, make \$400 of these funds available for withdrawal by cash or similar means not later than 5:00 p.m. on the business day on which the funds are available under paragraphs (b), (c), or (f) of this section. ***

* * * * *

(f) *Deposits at nonproprietary ATMs.*

(1) (i) A depository bank shall make funds deposited in an account at a nonproprietary ATM by cash or check available for withdrawal not later than the fifth business day following the banking day on which the funds are deposited.

(ii) Paragraph (f)(1) of this section is effective September 1, 1990, through November 27, 1992.

(2) (i) A depository bank shall make funds deposited in an account at a nonproprietary ATM available for withdrawal not later than the second business day following the banking day on which the funds are deposited, in the case of—

(A) Cash;

(B) A check or checks described in sections 229.10(c)(1)(i) through (v) and (vii), even though the check or checks are not deposited in person to an employee of the depository bank; and

(C) A check described in paragraph (b) of this section.

(ii) A depository bank shall make funds deposited in an account by a check described in paragraph (c) of this section at a nonproprietary ATM available for withdrawal not later than the fifth busi-

ness day following the banking day on which the funds are deposited.

(iii) Paragraph (f)(2) of this section is effective November 28, 1992.

APPENDIX C TO PART 229—[AMENDED]

3. Appendix C is amended as set forth below:

a. In the listing following the first paragraph of Appendix C, the entry for Model Clause C-10 is revised to read as follows:

APPENDIX C—MODEL FORMS, CLAUSES, AND NOTICES

* * * * *

C-10—Automated teller machine deposits (permanent schedule, extended hold)

* * * * *

b. In model clause C-10, the heading and the first sentence under the subheading "Deposits at Automated Teller Machines" are revised to read as follows:

C-10—Automated Teller Machine Deposits (Permanent Schedule, Extended Hold)

Deposits at Automated Teller Machines

Funds from any deposits (cash or checks) made at automated teller machines (ATMs) we do not own or operate will not be available until the fifth business day after the day of your deposit. ***

APPENDIX E TO PART 229 —[AMENDED]

4. Appendix E is amended as set forth below:

a. In the Commentary to section 229.12, a new sentence is added to the end of paragraph (a), the second paragraph of paragraph (b) is revised, and a new paragraph (f) is added to read as follows:

Section 229.12—Permanent Availability Schedule

(a) *Effective date.* *** Paragraph (f) provides special effective dates for deposits made at nonproprietary ATMs.

(b) *Local checks and certain other checks.*

* * * * *

In addition, the proceeds of Treasury checks and U.S. Postal Service money orders not subject to next-day (or second-day) availability under section 229.10(c); checks drawn on Federal Reserve Banks and Federal Home Loan Banks; checks drawn by a state or unit of general local government; and cashier's, certified, and teller's checks not subject to next-day (or second-day) availability under section 229.10(c) and payable in the same check processing region as the depository bank, must be made available for withdrawal by the second business day following deposit.

* * * * *

(f) *Deposits at nonproprietary ATMs.* The Act and regulation provide a special rule for deposits made at nonproprietary ATMs. This paragraph does not apply to deposits made at proprietary ATMs. During the period from September 1, 1990, through November 27, 1992, all deposits at a nonproprietary ATM must be made available for withdrawal by the fifth business day following the banking day of deposit (i.e., such deposits may be treated in the same manner as deposits of nonlocal checks under the permanent schedule). For example, during that time period, a deposit made at a nonproprietary ATM on a Monday, including any deposit by cash or checks that would otherwise be subject to next-day (or second-day) availability, must be made available for withdrawal not later than Monday of the following week.

Effective November 28, 1992, deposits of cash, "next-day" checks, and local checks at a nonproprietary ATM must be made available by the second business day following the banking day of deposit. In addition, the first \$100 of the aggregate deposit at a nonproprietary ATM on any one banking day must be made available for withdrawal on the second business day after the banking day of deposit (rather than on the next day, as required by section 229.10(c)(1)(vii) for deposits at staffed teller stations and proprietary ATMs). If a customer makes a deposit at a nonproprietary ATM and one or more deposits to the same account on the same day at another location, such as a staffed teller station, the \$100 rule is applied to the aggregate of all deposits made on that day. In this situation, the \$100 rule is applied first to funds for which the \$100 must be available for withdrawal on the next day (e.g., funds deposited at a staffed teller station) and then to funds deposited at nonproprietary ATMs for which the \$100 must be made available for withdrawal on the second day. For example, if a customer deposits a \$75 nonlocal check at a staffed teller station and a \$100 nonlocal check at a nonpro-

prietary ATM on the same banking day, \$75 must be available for withdrawal on the next business day (as required by section 229.10(c)(1)(vii)) and an additional \$25 must be available for withdrawal on the second business day after the banking day of deposit (as required by this paragraph). Nonlocal checks deposited at a nonproprietary ATM after November 28, 1992, must continue to be made available for withdrawal by the fifth business day following the banking day of deposit.

b. In the Commentary to section 229.16, the first sentence of the seventh paragraph of paragraph (b) is revised to read as follows:

Section 229.16—Specific Availability Policy Disclosure

* * * * *

(b) * * *

* * * * *

A bank taking advantage of the extended time period for making deposits at nonproprietary ATMs available for withdrawal under section 229.12(f)(1) must explain this in the initial disclosure. * * *

* * * * *

c. In the Commentary to Appendix C, under the subheading "Model C-10," the first sentence is revised to read as follows:

APPENDIX C—MODEL FORMS, CLAUSES, AND NOTICES

* * * * *

Model C-10. This clause must be incorporated in the specific availability-policy disclosure by banks that reserve the right to delay availability of deposits at nonproprietary ATMs until the fifth business day following the date of deposit, as permitted by section 229.12(f)(1). * * *

* * * * *

FINAL RULE—AMENDMENT TO RULES REGARDING DELEGATION OF AUTHORITY

The Board of Governors is amending 12 C.F.R. Part 265, its Rules Regarding Delegation of Authority, in order to delegate to the Federal Reserve Banks authority to approve certain proposals by state member banks to issue, or retire prior to maturity subordinated capital notes. As part of this amendment, the Board is

also delegating to the Reserve Banks authority to approve investments by state member banks in bank premises without quantitative limitation. Applications falling outside the standards set forth herein will be forwarded to the Board for further consideration.

Effective February 15, 1991, 12 C.F.R. Part 265 is amended as follows:

Part 265—Rules Regarding Delegation of Authority

1. The authority citation for Part 265 continues to read as follows:

Authority: Section 11(k), 38 Stat. 261 and 80 Stat. 1314 (12 U.S.C. 248(k)).

2. Section 265.2 is amended by revising paragraphs (c)(10) and (f)(7)(i), by removing and reserving paragraphs (c)(24) and (c)(26), by removing subparagraph (f)(7)(ii), and by adding new paragraphs (f)(50) and (f)(51) to read as follows:

Section 265.2—Specific Functions Delegated to Board Employees and to Federal Reserve Banks

* * * * *

(c) * * *

(10) To exercise the functions described in paragraphs (f)(4),(50), and (51) of this section in cases in which the conditions specified therein as prerequisites to exercise of such functions by the Federal Reserve Banks are not present, or in which, even though such conditions are present, the appropriate Federal Reserve Bank considers that nevertheless it should not take action on the member bank's request, and to exercise the functions described in paragraphs (f)(1),(2), and (7) of this section in cases in which the appropriate Federal Reserve Bank considers that it should not take action to approve the member bank's request.

* * * * *

(24) [Reserved]

* * * * *

(26) [Reserved]

* * * * *

(f) * * *

(7) * * *

(i) The bank's capitalization in relation to the character and condition of its assets and to its deposit liabilities and other corporate responsibil-

ities, including the volume of its risk assets and of its marginal and inferior-quality assets, all considered in relation to the strength of its management.

* * * * *

(50) *Approval of subordinated debt to capital.* To approve a State member bank's proposed subordinated debt issue as an addition to the bank's capital structure if all of the following conditions are met:

(i) The terms of the proposed debt issue satisfy the requirements of section 204.2(a)(1)(vii)(C) of this part (Regulation D) and the Board's guideline criteria for approval of subordinated debt as an addition to capital; and

(ii) No significant policy issue is raised by the proposed issue as to which the Board has not expressed its view.

(51) To approve the retirement prior to maturity of capital notes issued by a state member bank described in section 204.2(a)(1)(vii)(C) of this part (Regulation D), provided the Reserve Bank is satisfied that the bank's capital position will be adequate after the proposed redemption.

* * * * *

FINAL RULE—AMENDMENT TO RULES REGARDING DELEGATION OF AUTHORITY

The Board of Governors is amending 12 C.F.R. Part 265, its Rules Regarding Delegation of Authority, in order to delegate to the Reserve Banks, and to the Staff Director of the Division of Banking Supervision and Regulation acting together with the General Counsel of the Board, authority to approve certain transactions requiring approval of the Federal Reserve pursuant to section 5(d)(3) of the Federal Deposit Insurance Act ("FDI Act") (12 U.S.C. 1815(d)(3)).

This amendment adds new paragraphs (b)(14), (c)(37) and (f)(52) to section 265.2 to effect the delegation.

Effective February 28, 1991, 12 C.F.R. Part 265 is amended as follows:

Part 265—Rules Regarding Delegation of Authority

1. The authority citation for Part 265 continues to read as follows:

Authority: Section 11(k), 38 Stat. 261 and 80 Stat. 1314 (12 U.S.C. 248(k)).

2. The Board adds paragraphs (b)(14), (c)(37) and (f)(52) to section 265.2, to read as set forth below:

Section 265.2—Specific Functions Delegated to Board Employees and to Federal Reserve Banks.

* * * * *

(b) * * *

(14) With the concurrence of the Staff Director of Banking Supervision and Regulation, to exercise the functions described in section (f)(52) of this section in those cases in which the appropriate Federal Reserve Bank concludes that, because of unusual considerations, or for other good cause, it should not take action.

(c) * * *

(37) With the concurrence of the General Counsel, to exercise the functions described in section (f)(52) of this section in those cases in which the appropriate Federal Reserve Bank concludes that, because of unusual considerations, or for other good cause, it should not take action.

* * * * *

(f) * * *

(52) Under the provisions of section 5(d)(3)(E) of the Federal Deposit Insurance Act (12 U.S.C. 1815(d)(3)(E)), to approve requests by a bank holding company to engage in any transaction described in subparagraph (A) of section 5(d)(3) of that Act.

ORDERS ISSUED UNDER BANK HOLDING COMPANY ACT

Orders Issued Under Section 3 of the Bank Holding Company Act

Bancorp III, Inc.
Kansas City, Kansas

Order Denying Formation of a Bank Holding Company

Bancorp III, Inc., Kansas City, Kansas ("Bancorp"), has applied for the Board's approval under section 3(a)(1) of the Bank Holding Company Act ("BHC Act") (12 U.S.C. § 1842(a)(1)) to become a bank holding company by acquiring 100 percent of the voting shares of Farmers Bank of Polo, Polo, Missouri ("Bank").

Notice of the application, affording interested persons an opportunity to submit comments, has been published (55 *Federal Register* 51,160 (1990)). 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.

Bancorp is a non-operating company formed for the purpose of acquiring Bank. Bank is the 344th largest commercial banking organization in Missouri, controlling deposits of \$9.4 million, representing less than 1 percent of the total deposits in commercial banking organizations in the state.¹

Under section 3(c) of the BHC Act, the Board must consider several factors, including the "managerial resources . . . of the company or companies and the banks concerned."² The Board's regulations provide that, in reviewing applications under section 3 of the BHC Act, the Board will consider the competence and character of the principals of the applicant and its subsidiary banks, including their record of compliance with laws and regulations. 12 C.F.R. 225.13(b)(2).

In this case, an individual who proposes to acquire 25 percent of the shares of Bancorp for a nominal investment, and serve as president and director of Bancorp and director of Bank ("Principal"), has incurred significant contingent liabilities as a result of his nonbanking business activities, primarily real estate partnerships. The record indicates that loans that have been made by banks to Principal's real estate interests that have been guaranteed by Principal are not current and that Principal's troubled financial condition could continue to result in losses on these loans.

The Board believes that the conduct of a management official in dealing with other banks is relevant in evaluating that official's managerial strength. In this proposal, Principal maintains that he brings the most significant managerial strength to the group of investors in Bancorp. Principal would provide management services to Bank through a management contract, as well as serving as president of Bancorp, and a director of both Bancorp and Bank. In these capacities, Principal would be responsible for reviewing lending practices and policies of Bank and for evaluating certain loans as well as loan charge-off and collection decisions. There is significant concern that the well-publicized financial difficulties of Principal and his current inability to fulfill his own obligations to banks may impair Principal's ability to act effectively and prudently in making lending and collection policies at Bank and serve as a management official of Bank. The degree of Principal's financial problems and the continuing attention that these problems warrant also

raise concerns that his attention to affairs of Bancorp and Bank may be diverted or affected by the managerial and financial demands of his other business holdings.

The Board has considered Principal's prior banking experience. The Board believes that, on balance, the business difficulties that Principal is experiencing and the other facts of record warrant a decision that Principal should not be permitted to expand the number of banks under his management and control at this time. Accordingly, the Board concludes that considerations relating to managerial resources are not consistent with approval in this case. Considerations relating to financial resources, competitive factors, future prospects and the convenience and needs of the community do not lend sufficient weight to warrant approval of this application.

Based on all the facts of record in this case, the Board concludes that adverse considerations relating to managerial resources of Bancorp and Bank are not outweighed by other factors. Accordingly, it is the Board's judgment that approval of this application would not be in the public interest and that the application should be, and hereby is, denied. The Board notes that this denial is without prejudice to Principal or the other investors filing other applications under the BHC Act under different circumstances.

By order of the Board of Governors, effective February 13, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, and Mullins. Absent and not voting: Governor Seger.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Mitsui Manufacturers Bank
Los Angeles, California

Notice of Public Meeting

Background

On December 14, 1990, the Board of Governors of the Federal Reserve System ordered a public meeting on the issues regarding the record of performance of Mitsui Manufacturers Bank, Los Angeles, California ("MMB"), under the Community Reinvestment Act ("CRA"). This public meeting was ordered in connection with an application by MMB's parent company, The Mitsui Taiyo Kobe Bank, Limited, Tokyo, Japan ("Mitsui Taiyo Kobe"), under section 3 of the Bank Holding Company Act ("BHC Act") to convert Taiyo

1. Banking and market share data are as of December 31, 1989.

2. 12 U.S.C. § 1842(c). The Supreme Court has stated that section 3(c) authorizes the Board to disapprove formation of a bank holding company solely on the grounds of financial or managerial unsoundness, regardless of whether that unsoundness would be caused or exacerbated by the proposed transaction. *Board of Governors v. First Lincolnwood Corp.*, 439 U.S. 234, 252 (1978).

Kobe Bank and Trust Company, New York, New York ("TKBTC" and the "TKBTC Application"), from a nonbank trust company back into a bank pursuant to the interstate banking laws of New York and California. In its prior approval of Mitsui Taiyo Kobe's application to acquire TKBTC as a nonbank trust company, the Board noted that MMB had not implemented in all respects the type of CRA program outlined in the Joint Agency Policy Statement regarding the CRA, 54 *Federal Register* 13,742 (1989) ("Agency CRA Statement"), and that there were significant issues raised regarding the adequacy of MMB's CRA performance. *The Mitsui Bank, Limited*, 76 *Federal Reserve Bulletin* 381, 384-85 (1990) ("Mitsui Bank").

In *Mitsui Bank*, the Board stated its intent to hold a public meeting on MMB's CRA performance unless the record developed over several months in the Board's view resolved the issues regarding MMB's CRA performance. After considering the record in this application, the Board concluded that a public meeting was appropriate and approved the order for a public meeting in *Mitsui Manufacturers Bank*, 77 *Federal Reserve Bulletin* 109 (1991) ("Public Meeting Order").

The Public Meeting Order specified that all persons wishing to give testimony at the public meeting should file certain information with the Board not later than January 15, 1991. On the basis of these requests, and taking into account the interests of the persons requesting to appear, the Public Meeting Order directed the Presiding Officer to schedule a date for the public meeting, to choose an appropriate location in California for the public meeting, and to schedule times for persons wishing to testify at the public meeting. The Presiding Officer was also given the authority and discretion to conduct the public meeting and to prescribe all procedures incidental thereto to ensure that the public meeting proceeds in a fair and orderly manner.

Public Meeting Date and Scheduling

After considering these requests, the Presiding Officer has determined that the public meeting on the CRA issues raised in the TKBTC Application will be held on March 21, 1991, at the Robert Pitts Westminster Neighborhood Center, 1827 E. 103rd Street, Los Angeles, California, 90002, beginning at 9:00 a.m. Attached to this notice is an agenda scheduling persons and groups who have indicated that they wish to give testimony. 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 no later than March 1, 1991.

All persons testifying and persons not testifying at the public meeting may file written submissions with the Board through April 8, 1991. Persons not listed in the attached agenda may be permitted to give testimony at the public meeting in the discretion of the Presiding Officer if time permits at the conclusion of the schedule of witnesses.

Purpose and Procedures

The purpose of the public meeting is to receive additional information regarding the record of performance of MMB 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.

In this regard, the Agency CRA Statement provides guidance regarding the types of policies and procedures that the federal financial supervisory agencies believe that financial institutions should have in place in order to fulfill their responsibilities under the CRA. In addition, the Agency CRA Statement provides guidance regarding the procedures that these agencies will use during the application process to review an institution's CRA compliance and performance. The Agency CRA Statement also suggests that decisions by agencies to allow financial institutions to expand will be made pursuant to an analysis of that institution's overall CRA performance, and will be based on the actual record of performance of the institution. In considering the TKBTC Application, the Board will take into account the information developed in this public meeting, the examinations of MMB's record by the Federal Deposit Insurance Corporation, MMB's primary supervisor, and the Board's own analysis of the record.

The Public Meeting Order specified that 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. 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. 12 C.F.R. 262.25(d). 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. Persons desiring a transcript may also write to the Presiding Officer regarding its cost and availability.

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; Shawn McNulty, Program Manager, Compliance, Division of Consumer and Community Affairs, Federal Reserve Board; Robert deV. Frierson, Legal Division, Federal Reserve Board; and W. Gordon Smith, Vice President, Federal Reserve Bank of San Francisco. These panel members may question witnesses, but no cross examination of witnesses will be permitted.

Questions may be submitted in advance to the Presiding Officer for consideration by the panel members. These questions will be forwarded to the participant possessing the requested information. Participants receiving these questions may supply the requested information to the Presiding Officer to the extent relevant to the public meeting. Any information supplied before the meeting will be available to any person upon request.

Persons testifying at the public meeting should address, to the extent possible, the following issues:

- (i) the activities conducted by MMB to ascertain the credit needs of its communities, including the extent of its efforts to communicate with members of its communities regarding the credit services being provided by MMB;
- (ii) the extent of participation by MMB's board of directors in formulating policies and reviewing MMB's performance with respect to the purposes of the CRA;
- (iii) the extent of MMB's marketing and special credit-related programs to make members of its communities aware of the credit services offered by MMB;
- (iv) the types of credit MMB makes available to its communities, including the extent of MMB's origination of residential mortgage loans, housing rehabilitation loans, home improvement loans, and small business or small farm loans within its communities, including analyses of data under the Home Disclosure Mortgage Act, or the purchase of any such loans originated in its communities;
- (v) the extent of MMB's participation in governmentally-insured, -guaranteed, or -subsidized loan programs for housing, small businesses, or small farms;
- (vi) the delineation of MMB's service areas, including low- and moderate-income areas, and

analyses of MMB's geographic distribution of credit extensions, credit applications, and credit denials;

(vii) the record of MMB concerning the opening and closing of branches and providing services at branches;

(viii) the extent of MMB's participation, including investments, in local community development and redevelopment projects or programs;

(ix) an operational description of MMB's current CRA program, including personnel, and a description of training and any special skills possessed by MMB's CRA personnel and loan officers; and

(x) any evidence of prohibited discriminatory credit practices by MMB.

The Board noted in *Mitsui Bank* that MMB had undertaken a review of its CRA program to meet the credit needs of its communities and had committed to make certain revisions in that plan. MMB's progress in meeting these commitments would be a relevant consideration for participants appearing at the public meeting. Accordingly, a description of MMB's current CRA program, which may omit confidential business plans, should be submitted to the Presiding Officer by March 11, 1991. This material will be supplied to any person upon request to the Presiding Officer.

By order of the Presiding Officer, effective February 20, 1991.

GRIFFITH L. GARWOOD
Presiding Officer

Orders Issued Under Section 4 of the Bank Holding Company Act

Philippine Commercial International Bank Manila, The Philippines

Order Approving Application to Engage in Money Transmission Activity

Philippine Commercial International Bank, Manila, The Philippines ("Applicant"), a foreign banking organization, has applied under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. § 1843(c)(8)) ("BHC Act") and section 225.23(a)(3) of the Board's Regulation Y (12 C.F.R. 225.23(a)(3)) to engage *de novo* through its subsidiary, PCI Express Padala, Inc., Los Angeles, California ("Company"), in the activity of transmitting money for customers to a foreign country.

Notice of the application, affording an opportunity for interested persons to submit comments, has been published (56 *Federal Register* 861 (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 4 of the BHC Act.

Applicant, with consolidated assets equivalent to approximately \$1.1 billion, has numerous branches throughout the Philippines.¹ In addition, Applicant operates an agency in Los Angeles, California, and offices in Germany, Hong Kong, and Saudi Arabia.

Applicant proposes to engage *de novo* throughout California in the activity of transmitting money for customers to a foreign country through Company. Applicant has committed to conduct the proposed activity from offices in California that are located where Applicant could operate an agency or branch. Company will not engage in any other nonbanking activity, and, in particular, will not engage in commercial lending activities. Company will not be an FDIC-insured institution. Company will operate under a license as a money transmitter granted under California law, and will be subject to examination by the California Superintendent of Banks.²

Company would receive funds from customers at its Los Angeles office for delivery to designated persons at one of Applicant's branch banks in the Philippines. Since the transmission of money activity often involves delivery of funds in the local currency, Company would convert the U.S. dollars received to Philippine pesos through a foreign exchange transaction with Applicant's head office. Under California law, Company is authorized to receive money for transmission only to foreign countries.³

Section 4(c)(8) of the BHC Act requires the Board to consider whether:

- (i) the proposed activity is closely related to banking; and
- (ii) the performance of the proposed activity is a proper incident to banking — that is whether the proposed activity "can reasonably be expected to produce benefits, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices."

The Board has previously determined that the activity of transmitting money to foreign countries is

closely related to banking for purposes of section 4(c)(8) of the BHC Act.⁴ The Board also believes that consummation of the proposal can reasonably be expected to result in public benefits. The proposal provides customers with improved access to a reliable and efficient money transmission service. In addition, Applicant's *de novo* entry into the market for these services would increase the level of competition among providers of these services. Consummation of the 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. Accordingly, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval.

Based on the foregoing and other facts of record, the Board has determined that consummation of the proposed transaction would be consistent with the public interest. Accordingly, the Board has determined that the application under section 4 of the BHC Act should be, and hereby is, approved. The determination as to the nonbanking activity is subject to all of the conditions contained in the Board's Regulation Y, including those in sections 225.4(d) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), and to the Board's authority to require such modification or termination of the activities of a holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, or prevent evasions of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder.

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 San Francisco, pursuant to delegated authority.

By order of the Board of Governors, effective February 13, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, and Mullins. Absent and not voting: Governor Seger.

JENNIFER J. JOHNSON
Associate Secretary of the Board

1. Asset data are as of September 30, 1990.

2. Provisions in the Transmission of Money Abroad chapter of the California financial code authorize and regulate the proposed activity. Cal. Fin. Code §§ 1800 *et seq.* (West 1989 & Supp. 1991). The California banking office granted approval of Company's license to engage in money transmission activities on January 14, 1991.

3. Cal. Fin. Code § 1800.5(a)(1) (West Supp. 1991).

4. See *European-American Bancorp.*, 63 *Federal Reserve Bulletin* 595 (1977); *Skandinaviska Enskilda Banken*, 69 *Federal Reserve Bulletin* 42 (1983); *Bergen Bank A/S*, 72 *Federal Reserve Bulletin* 200 (1986); *Bergen Bank A/S*, 76 *Federal Reserve Bulletin* 457 (1990). These cases involved state-chartered companies organized under Article XII of the New York Banking Law that were authorized to "receive money for transmission and to transmit the same from the United States to any foreign country and from any foreign country to the United States." N.Y. Banking Law § 508(3)(c) (McKinney 1990).

The Royal Bank of Canada
Montreal, Quebec, Canada

Order Approving Application to Act as a "Riskless Principal" in Buying and Selling Securities

The Royal Bank of Canada, Montreal, Quebec, Canada ("RBC"), a bank holding company within the meaning of the Bank Holding Company Act ("BHC Act"), has applied for the Board's approval under section 4(c)(8) of the BHC Act, 12 U.S.C. § 1843(c)(8), for its indirect subsidiary, RBC Dominion Securities Corporation, New York, New York ("Company"), to buy and sell securities on the order of investors as a "riskless principal."

Notice of the application, affording interested persons an opportunity to submit comments on the proposal, has been published (56 *Federal Register* 530 (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.

RBC has total consolidated assets equivalent to approximately \$107.7 billion.¹ It owns a bank subsidiary in San Juan, Puerto Rico, and operates branches in Portland, Oregon, and New York, New York, and agencies in Miami, Florida, and Los Angeles, California. RBC has received Board approval to engage in a broad range of nonbanking activities, including engaging through Company in underwriting and dealing in, to a limited extent, debt and equity securities that are not eligible to be underwritten by a state member bank ("ineligible securities").² 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, the New York Stock Exchange, and the National Association of Securities Dealers.

The Board has previously determined by order that, subject to certain prudential limitations established to address the potential for conflicts of interests, unsound banking practices or other adverse effects, the proposed "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. The Board also has determined that acting as agent in purchasing and selling securities on the order of investors as a "riskless principal" does not constitute underwriting and dealing in securities for purposes of

section 20 of the Glass-Steagall Act, and that revenue derived from this activity is not subject to the 10 percent revenue limitation on ineligible securities underwriting and dealing.³ RBC has committed that Company will conduct its "riskless principal" activities using the same methods and procedures, and subject to all of the prudential limitations approved by the Board in the *Bankers Trust* and *J.P. Morgan* orders, as modified to reflect RBC's status as a foreign bank, consistent with the framework adopted in the *Canadian Imperial* order.⁴

Consummation of this proposal would provide added convenience to RBC's customers by allowing the provision of a wider range of services by a single entity. In addition, the Board expects that the *de novo* entry of RBC into the market for these services would increase the level of competition among providers of these services. 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. Accordingly, the Board has determined that the performance of the proposed activities by RBC can reasonably be expected to produce public benefits that would outweigh adverse effects under the proper incident to banking standard of section 4(c)(8) of the BHC Act.

Based on the above, the Board has determined to approve RBC's application, subject to all of the terms and conditions set forth above and in the above-noted Board orders. The Board's determination is subject to all of the conditions set forth in the Board's 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

3. See *J.P. Morgan and Company, Inc.*, 76 *Federal Reserve Bulletin* 26 (1990) ("*J.P. Morgan*"); *Bankers Trust New York Corporation*, 75 *Federal Reserve Bulletin* 829 (1989) ("*Bankers Trust*").

4. In the *Canadian Imperial* order, in which the Board considered and approved applications by foreign banks to engage in underwriting and dealing in all types of debt and equity securities, the Board modified the prudential framework imposed in *J.P. Morgan & Co. Incorporated*, *The Chase Manhattan Corporation*, *Bankers Trust New York Corporation*, and *Citicorp*, 75 *Federal Reserve Bulletin* 192 (1989), to account for the fact that the applicants were foreign banks that operate predominately outside the United States. The Board determined in those cases to adjust the funding and certain operational requirements of the framework previously established for those activities in order to take into account principles of national treatment and the Board's policy not to extend U.S. bank supervisory standards extraterritorially. See also *The Toronto-Dominion Bank*, 76 *Federal Reserve Bulletin* 573 (1990).

1. Data are as of October 31, 1990.

2. See *Canadian Imperial Bank of Commerce*, *The Royal Bank of Canada*, *Barclays PLC*, 76 *Federal Reserve Bulletin* 158 (1990) ("*Canadian Imperial*").

and the Board's regulations and orders issued thereunder.

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 New York, pursuant to delegated authority.

By order of the Board of Governors, effective February 11, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, and Mullins. Absent and not voting: Governors Seger and LaWare.

JENNIFER J. JOHNSON
Associate Secretary of the Board

Orders Issued Under Sections 3 and 4 of the Bank Holding Company Act

HSBC Holdings plc Hong Kong

Order Approving Formation of Bank Holding Company and Acquisition of Nonbank Subsidiaries

HSBC Holdings plc, Hong Kong ("HSBC Holdings"), has applied for the Board's approval under section 3(a)(1) of the Bank Holding Company Act ("BHC Act") (12 U.S.C. § 1842(a)(1)), to become a bank holding company by acquiring all of the voting shares of The Hongkong and Shanghai Banking Corporation Limited, Hong Kong ("HSBC"), a foreign bank and bank holding company under the BHC Act, and thereby indirectly acquire all of the voting shares of Kellett N.V., Curacao, Netherlands Antilles ("Kellett"), HSBC Holdings B.V., Amsterdam, The Netherlands ("Holdings"), Marine Midland Banks, Inc., Buffalo, New York ("Marine Midland"), all bank holding companies within the meaning of the BHC Act, and Marine Midland Bank, N.A., Buffalo, New York ("Marine Midland Bank").¹ HSBC Holdings has also applied for the Board's approval under section 4(c)(8) of the BHC Act (12 U.S.C. § 1843(c)(8)) to acquire indirectly certain nonbanking subsidiaries of HSBC.²

1. HSBC Holdings has also applied for the Board's approval under section 3 of the BHC Act (12 U.S.C. § 1842) to acquire indirectly warrants held by Marine Midland for up to 24.99 percent of the voting shares of Statewide Bancorp, Toms River, New Jersey, a bank holding company that owns and controls The First National Bank of Toms River, Toms River, and The First National Bank of New Jersey/Salem County, Penns Grove, New Jersey.

2. A list of the nonbanking subsidiaries that HSBC Holdings has proposed to acquire pursuant to section 4(c)(8) of the BHC Act is set forth in the Appendix.

Notice of the applications, affording interested persons an opportunity to submit comments, has been duly published (56 *Federal Register* 1397 (1991)). The time for filing comments has expired, and the Board has considered the applications and all comments received in light of the factors set forth in sections 3(c) and 4 of the BHC Act.

HSBC, with consolidated assets equivalent to approximately U.S. \$144 billion, is the 27th largest banking organization in the world and the largest banking organization in Hong Kong.³ HSBC engages in a broad range of banking and financial services throughout the world through an extensive network of offices and subsidiaries. Through Kellett, Holdings, and Marine Midland, HSBC owns all of the shares of Marine Midland Bank, the 30th largest bank in the United States, with total assets of \$20.9 billion and total deposits of \$17.3 billion.⁴

In the United States, in addition to the operations of Marine Midland, HSBC maintains eight branches in New York; a branch in each of Chicago, Seattle, and Portland, Oregon; a limited branch in both San Francisco and Los Angeles; an agency in Houston; and a representative office in Orange County, California. In addition, HSBC owns a majority of the shares of Hang Seng Bank Limited, Hong Kong ("Hang Seng"), which maintains two branches in New York and a limited branch in San Francisco.⁵

HSBC Holdings, incorporated in the United Kingdom, is currently an indirect, wholly owned subsidiary of HSBC, whose principal business is to own and lease property in Thailand in which HSBC's bank premises are currently located. HSBC Holdings proposes to acquire HSBC through an exchange of shares. Immediately after completion of the exchange, HSBC and its subsidiaries will remain in the same organizational structure as before the transaction, except that HSBC Holdings will become the top-tier holding company. The proposed transaction is intended to provide HSBC with the flexibility in the future to reorganize its worldwide operations, including through a transfer of

3. Banking data are as of June 30, 1990. Worldwide ranking is as of December 31, 1989.

4. Banking data are as of September 30, 1990. U.S. ranking is as of June 30, 1990.

5. HSBC and Hang Seng have both designated New York as their home states for purposes of section 5 of the International Banking Act (12 U.S.C. § 3103). HSBC Holdings consequently would designate New York as its home state for purposes of section 5 and the Board's Regulation K (12 C.F.R. 211.22). Because the proposal represents only a corporate restructuring and does not involve a merger with or acquisition by another foreign bank, HSBC Holdings's acquisition of HSBC and its subsidiaries will not increase the number of foreign banks with grandfather rights for interstate branches nor the number of grandfathered branches. Accordingly, the Board has determined that HSBC Holdings may succeed to HSBC's grandfathered branches.

Kellett, Holdings, and Marine Midland directly to HSBC Holdings, for strategic, financial and managerial reasons. It is intended to establish a more suitable structure through which to acquire or combine with other financial institutions in markets that are important to the long-term strategic plans of HSBC Holdings and HSBC.

Because it does not engage in any activities other than holding bank premises, HSBC Holdings does not have a banking presence in any market in which HSBC or its subsidiary banks are located. Therefore, consummation of the proposal would not have a substantially adverse effect on competition in any relevant banking market.

Section 3 of the BHC Act requires in every case that the Board consider the financial resources of the applicant organization. Upon consummation of the proposal, HSBC Holdings would have the same Tier 1 and total risk-based capital ratios as HSBC, which are well above the minimum standards adopted by the Basle Supervisors Committee, as implemented by Hong Kong, as well as the Board's minimum standards.⁶ In light of these considerations and other undertakings reflected in the record, including that HSBC Holdings has committed to maintain Marine Midland Bank among the more strongly capitalized banking organizations of comparable size in the United States, the Board has determined that financial factors are consistent with approval of the applications.

The board of directors of HSBC will also serve as the board of directors of HSBC Holdings. Consequently, considerations relating to managerial resources and future prospects are consistent with approval. The Board has also determined that considerations relating to the convenience and needs of the community to be served are consistent with approval.

HSBC Holdings has applied, pursuant to section 4(c)(8) of the BHC Act, to acquire indirectly certain nonbanking subsidiaries of HSBC. The Board has determined by regulation or order that each of these activities is permissible for bank holding companies under section 4(c)(8) of the BHC Act, and HSBC Holdings proposes to conduct these activities in accordance with the Board's regulations and orders, including all conditions and commitments made by HSBC and its subsidiaries and relied on by the Board in approving those applications. Because HSBC Holdings does not currently conduct these activities in any market in which HSBC operates and the proposal is

essentially a corporate reorganization, the Board concludes that consummation of this proposal would not have any significantly adverse effect on competition in the provision of these services in any relevant market.

Furthermore, there is no evidence in the record to indicate that consummation of this proposal will result in undue concentration of resources, decreased or unfair competition, conflicts of interests, unsound banking practices, or any other significantly adverse effects. Accordingly, the Board has determined that the balance of public interest factors it must consider under section 4(c)(8) of the BHC Act is favorable and consistent with approval of HSBC Holding's application to acquire the nonbanking subsidiaries of HSBC. HSBC Holdings will also acquire indirectly subsidiaries of HSBC and Marine Midland that operate under section 25 of the Federal Reserve Act (12 U.S.C. § 601 *et seq.*), and section 4(c)(14) of the BHC Act (12 U.S.C. § 1843(c)(14)), as well as other permissible investments held pursuant to the Board's Regulation K. Considerations relating to these subsidiaries and investments are also consistent with approval.

Based on the foregoing and other facts of record, including all of the commitments made by HSBC Holdings, the Board has determined that consummation of the proposed transaction would be consistent with the public interest. Accordingly, the Board has determined that the applications under sections 3 and 4 of the BHC Act should be, and hereby are, approved. The determinations as to the nonbanking activities approved in this case are subject to all of the conditions contained in Regulation Y, including those in sections 225.4(c) and 225.23(b)(3) (12 C.F.R. 225.4(d) and 225.23(b)(3)), and to the Board's authority to require such modification or termination of the activities of a holding company or any of its subsidiaries as the Board finds necessary to assure compliance with, or to prevent evasion of, the provisions and purposes of the BHC Act and the Board's regulations and orders issued thereunder. 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 New York, acting pursuant to delegated authority.

By order of the Board of Governors, effective February 21, 1991.

Voting for this action: Chairman Greenspan and Governors Angell, Kelley, LaWare, and Mullins. Absent and not voting: Governor Seger.

JENNIFER J. JOHNSON
Associate Secretary of the Board

6. Financial data are as of June 30, 1990 and ratios were calculated under the guidelines for 1992 as set forth in the Board's Capital Adequacy Guidelines, 12 C.F.R. 225.25, App. A.

Appendix

Nonbanking Subsidiaries to be Acquired

American Interest Arbitrage Corporation, New York, New York, which engages in buying and selling fixed income securities for affiliates; Carroll McEntee & McGinley Incorporated, New York, New York, which engages in dealing in government obligations; CM&M Asset Management Company, Inc., New York, New York, which engages in providing financial advice or management services; CM&M Futures, Inc., New York, New York, which engages in providing securities brokerage services and acting as a futures commission merchant; Concord Asset Management, Inc., New York, New York, which engages in providing commercial finance and leasing services; Concord Commercial Corporation, Woodcliff Lake, New Jersey, which engages in providing commercial finance and leasing services; Concord Leasing Inc., Norwalk, Connecticut, which engages in providing commercial finance and leasing services; Delaware Credit Corp. (USA), Buffalo, New York, which engages in providing commercial mortgage banking and other financing services; Intermarket Securities Corporation, New York, New York, which engages in trading in money market instruments; Investors Arbitrage Corporation, New York, New York, which engages in providing investment or financial advice; James Capel Incorporated, New York, New York, which engages in financial and investment advisory services, securities brokerage, and futures commission merchant activities; a 4.69 percent shareholding in Liberty Brokerage Inc., New York, New York, which engages in providing brokerage services for dealers in government securities; Marine Midland Business Loans, Inc., Buffalo, New York, which engages in providing asset-based financing services; Marine Midland Capital Markets Corporation, New York, New York, which engages in providing securities brokerage and underwriting services; Marine Midland Leasing Corporation, Buffalo, New York, which engages in providing equipment leasing services; Marine Midland Mortgage (U.S.A.), Inc., Buffalo, New York, which engages in providing residential first mortgage loans; Marine Midland Payment Services Inc., Buffalo, New York, which engages in providing the issuance of payment instruments; Marine Midland Services Corporation, Buffalo, New York, which engages in providing commercial lending and equipment leasing; Marinvest Inc., New York, New York, which engages in providing investment advisory services; Marmid Life Insurance Company, Tempe, Arizona, which engages in providing credit life and credit accident and health insurance as a reinsurer; an 11.12 percent shareholding in New

York Switch Corporation, Hackensack, New Jersey, which engages in providing data processing and related activities; TKM Mid-Americas Inc., Miami, Florida, which engages in providing trade finance services; U.S. Concord Inc., Norwalk, Connecticut, which engages in providing commercial finance and leasing services; and Wardley Incorporated, New York, New York, which engages in financial and investment advisory services, securities brokerage, and futures commission merchant activities. The Board has determined that these activities are closely related to banking and permissible for bank holding companies. 12 C.F.R. 225.25(b)(1),(4),(5),(7),(8),(12),(15),(16),(18),(19) and the Board's Orders dated March 16, 1979; April 27, 1981; October 21, 1982; August 15, 1983; May 5, 1984; December 11, 1984; March 5, 1986; November 21, 1986; March 4, 1987; July 14, 1987; August 17, 1987; January 24, 1989; and July 11, 1990.

Orders Issued Under Bank Merger Act

Fleet Bank of Maine
Portland, Maine

Order Approving the Merger of Banks

Fleet Bank of Maine, Portland, Maine, has applied for the Board's approval under the Bank Merger Act (12 U.S.C. § 1828) to merge with Maine Savings Bank, Portland, Maine ("Bank"), and thereby to establish branches pursuant to section 9 of the Federal Reserve Act (12 U.S.C. § 321).

Public notice of the applications before the Board is not required by the Act, and in view of the emergency situation, the Board has not followed its normal practice of affording interested parties the opportunity to submit comments and views. In view of the emergency situation involving Bank, the Maine Superintendent for the Bureau of Banking has recommended immediate action by the Board to prevent the probable failure of Bank.

In connection with the applications, the Secretary of the Board has taken into consideration the competitive effects of the proposed transaction, the financial and managerial resources and future prospects of the banks concerned, and the convenience and needs of the communities to be served. On the basis of the information before the Board, the Secretary of the Board finds that an emergency situation exists so as to require that the Secretary of the Board act immediately pursuant to the provisions of section 18(c)(3) of the Federal Deposit Insurance Act (12 U.S.C. § 1828(c)(3)) in order to safeguard depositors of Bank. Having considered the record of these applications in

light of the factors contained in the Bank Merger Act and the Federal Reserve Act, the Secretary of the Board has determined that consummation of the transaction would be in the public interest and that the applications should be approved on a basis that would not preclude immediate consummation of the proposal. On the basis of these considerations, the applications are approved.

The transaction may be consummated immediately but in no event 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 Boston acting pursuant to delegated authority.

By order of the Secretary of the Board acting pursuant to delegated authority for the Board of Governors, effective February 1, 1991.

WILLIAM W. WILES
Secretary of the Board

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
American Interstate Bancorporation, Inc., Walnut, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Atlantic, Iowa Branch)	Walnut State Bank, Walnut, Iowa	February 11, 1991
Ankeny Investment Co., Ankeny, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Ankeny, Iowa Branch)	Ankeny State Bank, Ankeny, Iowa	February 11, 1991
BancSecurity Corporation, Marshalltown, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Newton, Iowa Branch)	Security Bank Kellogg-Sully, Kellogg, Iowa	February 11, 1991
BancSecurity Corporation, Marshalltown, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Ames, Iowa Branch)	Story County Bank and Trust, Story City, Iowa	February 11, 1991
BankAmerica Corporation, San Francisco, California	Pima Federal Savings and Loan Association, Tucson, Arizona	Bank of America Arizona, Phoenix, Arizona	February 15, 1991
Brenton Banks, Inc., Des Moines, Iowa	American Federal Savings Association, of Iowa, Des Moines, Iowa (Perry, Iowa Branch)	Brenton National Bank of Perry, Perry, Iowa	February 11, 1991
Community Grain Company, Coon Rapids, Iowa	American Federal Savings Association, of Iowa, Des Moines, Iowa (Carroll, Iowa Branch)	Iowa Savings Bank, Coon Rapids, Iowa	February 11, 1991

FIRREA Orders—Continued

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
First Bancorp of Kansas, Wichita, Kansas	Mid Kansas Savings and Loan Association, F.A., Wichita, Kansas (Wichita, Kansas Branches)	First National Bank in Wichita, Wichita, Kansas	February 15, 1991
First Liberty Bancorp, West Des Moines, Iowa	American Federal Savings Association, of Iowa, Des Moines, Iowa (Clear Lake, Iowa Branch)	Liberty Bank and Trust, Mason City, Iowa	February 11, 1991
Fourth Financial Corporation, Wichita, Kansas	Mid Kansas Savings and Loan Association, F.A., Wichita, Kansas	BANK IV Wichita, Wichita, Kansas BANK IV Garden City, N.A., Garden City, Kansas	February 15, 1991
HNB Corporation, Arkansas City, Kansas	Mid Kansas Savings and Loan Association, F.A., Wichita, Kansas (Arkansas City, Kansas Branch)	The Home National Bank of Arkansas City, Arkansas City, Kansas	February 15, 1991
Ida Grove Bancshares, Inc., Ida Grove, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Denison, Iowa Branch)	Ida County State Bank, Ida Grove, Iowa	February 11, 1991
Metro Bancorporation, Waterloo, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Cedar Falls, Iowa Branch)	Waterloo Savings Bank, Waterloo, Iowa	February 11, 1991
National City Corporation, Cleveland, Ohio	Gem Savings Association, Dayton, Ohio	First National Bank, Dayton, Ohio	February 25, 1991
Northwood Financial Services Corporation, Northwood, Iowa	American Federal Savings Association of Iowa, Des Moines, Iowa (Mason City, Iowa Branch)	Northwood State Bank, Northwood, Iowa	February 11, 1991
South Carolina National Corporation, Columbia, South Carolina	Security Federal Savings, F.S.B., Columbia, South Carolina	The South Carolina National Bank, Charleston, South Carolina	February 15, 1991
Union Bancshares, Inc., Wichita, Kansas	Mid Kansas Savings and Loan Association, F.A., Wichita, Kansas (Derby, Kansas Branch)	Union National Bank of Wichita, Wichita, Kansas	February 15, 1991

FIRREA Orders—Continued

Bank Holding Company	Acquired Thrift	Surviving Bank(s)	Approval Date
Valley Financial Services, Inc., Mishawaka, Indiana	Northern Indiana Savings Association, F.A., Chesterton, Indiana	Valley American Bank & Trust Company, Mishawaka, Indiana	February 15, 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
BankAmerica Corporation, San Francisco, California	Bank of America New Mexico, N.A., Albuquerque, New Mexico	February 25, 1991

Section 4

Applicant(s)	Bank(s)	Effective Date
BankAmerica Corporation, San Francisco, California	BAP Interim Federal Savings Bank, Tucson, Arizona	February 15, 1991
South Carolina National Corporation, Columbia, South Carolina	SCNC Interim Federal Savings Bank II, Columbia, South Carolina	February 15, 1991

APPLICATIONS APPROVED UNDER BANK MERGER 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.

Applicant(s)	Bank(s)	Effective Date
Fleet Bank of Maine, Portland, Maine	Maine Savings Bank, Portland, Maine	February 4, 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
Anchor Bancorp, Inc., Wayzata, Minnesota	Heritage National Bank, North St. Paul, Minnesota	Minneapolis	February 8, 1991
Bethany Bankshares, Inc., Bethany, Missouri	The Bethany Trust Company, Bethany, Missouri	Kansas City	February 15, 1991
Breckenridge Bancshares Company, St. Ann, Missouri	The Centennial Bank, St. Ann, Missouri	St. Louis	January 30, 1991
Button Gwinnett Bancorp, Inc., Norcross, Georgia	Button Gwinnett Savings Bank, FSB, Norcross, Georgia	Atlanta	February 11, 1991
Caledonia Financial Corporation, Caledonia, Michigan	State Bank of Caledonia, Caledonia, Michigan	Chicago	February 20, 1991
Cedar Creek Bancshares, Inc., Seven Points, Texas	Cedar Creek Bank, Seven Points, Texas	Dallas	February 13, 1991
Central of Kansas, Inc., Junction City, Kansas	Herington Bancshares, Inc., Herington, Kansas	Kansas City	February 20, 1991
First National Bancorp of Columbia, Inc., Columbia, Kentucky	The First National Bank of Columbia, Columbia, Kentucky	St. Louis	January 30, 1991
First of Fort Morgan, Inc., Fort Morgan, Colorado	Heartland Community Bancshares, Inc., Fort Morgan, Colorado First Community Bancshares, Inc., Fort Morgan, Colorado	Kansas City	February 20, 1991
First State Bancorp of Monticello, Inc., Monticello, Illinois	The Atwood State Bank, Atwood, Illinois	Chicago	February 6, 1991
Ford Bank Group Holdings, Inc., Wilmington, Delaware	MBank Waco, N.A., Waco, Texas	Dallas	February 11, 1991
Ford Bank Group, Inc., Lubbock, Texas	MBank Waco, N.A., Waco, Texas	Dallas	February 11, 1991
Illioplis Bancorporation, Incorporated, Springfield, Illinois	Farmers State Bank and Trust, Illioplis, Illinois	Chicago	February 15, 1991
Landmark Bancshares, Inc., Eules, Texas	Landmark Bank-Mid Cities, Eules, Texas	Dallas	January 30, 1991

Section 3—Continued

Applicant(s)	Bank(s)	Reserve Bank	Effective Date
Liberty Bancorporation, Durant, Iowa	Bennett Bancshares, Inc., Bennett, Iowa	Chicago	February 1, 1991
Meador Insurance Agency, Waverly, Kansas	Coffey County BankShares, Inc., Burlington, Kansas	Kansas City	February 1, 1991
Mercantile Bancorp, Inc., Quincy, Illinois	Marine Trust Company of Carthage, Carthage, Illinois	St. Louis	February 15, 1991
Mid-America National Bancorp, Inc., Chicago, Illinois	Mid-America National Bank of Chicago, Chicago, Illinois Security Chicago Corp., Chicago, Illinois	Chicago	February 14, 1991
North Park Bancshares, Inc., Walden, Colorado	North Park State Bank, Walden, Colorado	Kansas City	January 30, 1991
Park Cities Corporation, Wilmington, Delaware	First National Bank of Park Cities, Dallas, Texas	Dallas	February 6, 1991
Park Cities Bancshares, Inc., Dallas, Texas	Park Cities Corporation, Wilmington, Delaware First National Bank of Park Cities, Dallas, Texas	Dallas	February 6, 1991
Pilot Grove Savings Bank Employee Stock Ownership Plan, Pilot Grove, Iowa	Pilot Bancorp, Inc., Pilot Grove, Iowa	Chicago	January 30, 1991
Pinnacle Banc Group, Inc., Oak Brook, Illinois	The Henry County Bank, Green Rock, Illinois	Chicago	February 20, 1991
Southwestern Wisconsin Bancshares, Inc., Highland, Wisconsin	Highland State Bank, Highland, Wisconsin	Chicago	January 25, 1991
TFBC Acquisition Corporation, Tahoka, Texas	Tahoka First Bancorp, Inc., Dallas, Texas Cedar Creek Bank, Seven Points, Texas First National Bank of Tahoka, Tahoka, Texas	Dallas	February 13, 1991
Worthington Bancorporation, Farley, Iowa	State Bank of Worthington, Worthington, Iowa	Chicago	February 7, 1991

Section 4

Applicant(s)	Nonbanking Activity/Company	Reserve Bank	Effective Date
1st Source Corporation, South Bend, Indiana	Mortgage Acquisition Company, South Bend, Indiana	Chicago	February 1, 1991
The Dai-Ichi Kangyo Bank, Limited, Tokyo, Japan	First Fidelity Bancorporation, Newark, New Jersey	San Francisco	January 30, 1991
First Bank System, Inc., Minneapolis, Minnesota	Fairmont Lakes Insurance Agency, Fairmont, Minnesota	Minneapolis	February 19, 1991
The Kyowa Bank, Limited, Tokyo, Japan	Saitama Bank Trust Company of New York, New York, New York	San Francisco	February 8, 1991
Lincolnlend Bancorp, Inc., Dale, Indiana	Ayer-Wagoner Insurance Agency, Inc., Rockport, Indiana Deal Insurance Agency, Inc., Rockport, Indiana	St. Louis	January 30, 1991
Marshall & Ilsley Corporation, Milwaukee, Wisconsin	Provident Bank of Maryland, Baltimore, Maryland	Chicago	February 5, 1991
Norwest Corporation, Minneapolis, Minnesota	Coast Program, Inc., Signal Hill, California	Minneapolis	February 13, 1991
Norwest Financial Services, Inc., Des Moines, Iowa	ABQ Federal Savings Bank, Albuquerque, New Mexico		
Norwest Financial, Inc., Des Moines, Iowa			
Skandinaviska Enskilda Banken, Stockholm, Sweden	Scandinavian Bank Group plc, London, England	New York	February 1, 1991
South Carolina National Corporation, Columbia, South Carolina	Old Republic Bancorp, Inc., Rocky Mount, North Carolina Old Republic Savings Bank, Inc., Rocky Mount, North Carolina	Richmond	January 31, 1991
Valley Financial Services, Inc., Mishawaka, Indiana	Northern Indiana Savings Association, F.A., Chesterton, Indiana	Chicago	February 15, 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.

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 has appealed the injunction.

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. The Delaware Bankers Association and the State of Delaware have intervened on behalf of petitioners, and insurance trade associations have intervened on behalf of the Board in the action. Oral argument was heard on February 7, 1991.

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.

Sibille v. Federal Reserve Bank of New York and Board of Governors, No. 90-CIV-5898 (S.D. New York, filed September 12, 1990). Appeal of denial of Freedom of Information Act request.

Kuhns v. Board of Governors, No. 90-1398 (D.C. Cir., filed July 30, 1990). Petition for review of Board order denying request for attorney's fees pursuant to Equal Access to Justice Act. Oral argument was heard on February 15, 1991.

May v. Board of Governors, No. 90-1316 (D.C. Cir., filed July 27, 1990). Appeal of District Court order dismissing plaintiff's action under Freedom of Information and Privacy Acts. Board's motion for summary affirmance filed October 12, 1990.

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. Awaiting scheduling of oral argument.

BancTEXAS Group, Inc. v. Board of Governors, No. CA 3-90-0236-R (N.D. Texas, filed February 2, 1990). Suit for preliminary injunction enjoining the Board from enforcing a temporary order to cease and desist requiring injection of capital into plaintiff's subsidiary banks under the Board's source of strength doctrine. District court granted preliminary injunction on June 5, 1990, in light of *MCorp v. Board of Governors*, 900 F.2d 852 (5th Cir. 1990). On December 21, 1990, the action was dismissed by agreement of the parties.

Rutledge v. Board of Governors, No. 90-7599 (11th Cir., filed August 21, 1990). Appeal of district court grant of summary judgment for defendants in tort suit challenging Board and Reserve Bank supervisory actions. The Court of Appeals summarily affirmed the lower court on January 17, 1991.

Kaimowitz v. Board of Governors, No. 90-3067 (11th Cir., 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. Petitioner objects to approval on Community Reinvestment Act grounds.

Babcock and Brown Holdings, Inc. v. Board of Governors, No. 89-70518 (9th Cir., filed November 22, 1989). Petition for review of Board determination that a company would control a proposed insured bank for purposes of the Bank Holding Company Act. Awaiting scheduling of oral argument.

Consumers Union of U.S., Inc. v. Board of Governors, No. 90-5186 (D.C. Cir., filed June 29, 1990). Appeal of District Court decision upholding amendments to Regulation Z implementing the Home Equity Loan Consumer Protection Act. Oral argument was heard on February 20, 1991.

Synovus Financial Corp. v. Board of Governors, No. 89-1394 (D.C. Cir., 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. Oral argument was held on October 11, 1990. On December 10, the Justice Department filed a brief on behalf of the Board and the Office of the Comptroller of the Currency in response to a request from the court regarding an issue in the case.

MCorp v. Board of Governors, No. 89-2816 (5th Cir., 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 December 10, both parties filed petitions for *certiorari* in the Supreme Court, Nos. 90-913, 90-914. The petitions are pending.

MCorp v. Board of Governors, No. CA3-88-2693 (N.D. Tex., 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. Nev., filed July 29, 1988). Age discrimination complaint. Board's motion to dismiss or for summary judgment was denied on January 3, 1991. Awaiting trial date.

FINAL ENFORCEMENT ORDERS ISSUED BY THE BOARD OF GOVERNORS

Michael J. Bonk
River Rouge, Michigan

The Federal Reserve Board announced on February 13, 1991, the issuance of an Order of Prohibition against Michael J. Bonk, a former director of River Rouge Savings Bank, River Rouge, Michigan.

Credit and Commerce American Holdings,
N.V.
Netherlands Antilles

The Federal Reserve Board announced on February 20, 1991, the issuance of an Order against Credit and Commerce American Holdings, N.V., Netherlands Antilles, the parent holding company of First American Bankshares, Inc., Washington, D.C.

Sun City Bank
Sun City, Arizona

The Federal Reserve Board announced on February 15, 1991, the issuance of a Cease and Desist Order against the Sun City Bank, Sun City, Arizona.

WRITTEN AGREEMENTS APPROVED BY FEDERAL RESERVE BANKS

The Buffalo Bank
Eleanor, West Virginia

The Federal Reserve Board announced on February 13, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Richmond, the Commissioner of Banking, State of West Virginia, and The Buffalo Bank, Eleanor, West Virginia.

Cosmopolitan Bancorp, Inc.
Chicago, Illinois

The Federal Reserve Board announced on February 13, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Chicago and Cosmopolitan Bancorp, Inc., Chicago, Illinois.

Equimark Corporation
Pittsburgh, Pennsylvania

The Federal Reserve Board announced on February 13, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Cleveland, the Department of Banking, Commonwealth of Pennsylvania, and Equimark Corporation, Pittsburgh, Pennsylvania.

First Lehigh Corporation
Walnutport, Pennsylvania

The Federal Reserve Board announced on February 13, 1991, the execution of a Written Agreement between the Federal Reserve Bank of Philadelphia, the Department of Banking, Commonwealth of Pennsylvania, and First Lehigh Corporation, Walnutport, Pennsylvania.

Membership of the Board of Governors of the Federal Reserve System, 1913–91

APPOINTIVE MEMBERS¹

Name	Federal Reserve District	Date of initial oath of office	Other dates and information relating to membership ²
Charles S. Hamlin.....	Boston.....	Aug. 10, 1914	Reappointed in 1916 and 1926. Served until Feb. 3, 1936. ³
Paul M. Warburg.....	New York.....	do.....	Term expired Aug. 9, 1918.
Frederic A. Delano.....	Chicago.....	do.....	Resigned July 21, 1918.
W.P.G. Harding.....	Atlanta.....	do.....	Term expired Aug. 9, 1922.
Adolph C. Miller.....	San Francisco.....	do.....	Reappointed in 1924. Reappointed in 1934 from the Richmond District. Served until Feb. 3, 1936. ³
Albert Strauss.....	New York.....	Oct. 26, 1918	Resigned Mar. 15, 1920.
Henry A. Moehlenpah.....	Chicago.....	Nov. 10, 1919	Term expired Aug. 9, 1920.
Edmund Platt.....	New York.....	June 8, 1920	Reappointed in 1928. Resigned Sept. 14, 1930.
David C. Wills.....	Cleveland.....	Sept. 29, 1920	Term expired Mar. 4, 1921.
John R. Mitchell.....	Minneapolis.....	May 12, 1921	Resigned May 12, 1923.
Milo D. Campbell.....	Chicago.....	Mar. 14, 1923	Died Mar. 22, 1923.
Daniel R. Crissinger.....	Cleveland.....	May 1, 1923	Resigned Sept. 15, 1927.
George R. James.....	St. Louis.....	May 14, 1923	Reappointed in 1931. Served until Feb. 3, 1936. ⁴
Edward H. Cunningham.....	Chicago.....	do.....	Died Nov. 28, 1930.
Roy A. Young.....	Minneapolis.....	Oct. 4, 1927	Resigned Aug. 31, 1930.
Eugene Meyer.....	New York.....	Sept. 16, 1930	Resigned May 10, 1933.
Wayland W. Magee.....	Kansas City.....	May 18, 1931	Term expired Jan. 24, 1933.
Eugene R. Black.....	Atlanta.....	May 19, 1933	Resigned Aug. 15, 1934.
M.S. Symczak.....	Chicago.....	June 14, 1933	Reappointed in 1936 and 1948. Resigned May 31, 1961.
J.J. Thomas.....	Kansas City.....	do.....	Served until Feb. 10, 1936. ³
Marriner S. Eccles.....	San Francisco.....	Nov. 15, 1934	Reappointed in 1936, 1940, and 1944. Resigned July 14, 1951.
Joseph A. Broderick.....	New York.....	Feb. 3, 1936	Resigned Sept. 30, 1937.
John K. McKee.....	Cleveland.....	do.....	Served until Apr. 4, 1946. ³
Ronald Ransom.....	Atlanta.....	do.....	Reappointed in 1942. Died Dec. 2, 1947.
Ralph W. Morrison.....	Dallas.....	Feb. 10, 1936	Resigned July 9, 1936.
Chester C. Davis.....	Richmond.....	June 25, 1936	Reappointed in 1940. Resigned Apr. 15, 1941.
Ernest G. Draper.....	New York.....	Mar. 30, 1938	Served until Sept. 1, 1950. ³
Rudolph M. Evans.....	Richmond.....	Mar. 14, 1942	Served until Aug. 13, 1954. ³
James K. Vardaman, Jr.	St. Louis.....	Apr. 4, 1946	Resigned Nov. 30, 1958.
Lawrence Clayton.....	Boston.....	Feb. 14, 1947	Died Dec. 4, 1949.
Thomas B. McCabe.....	Philadelphia.....	Apr. 15, 1948	Resigned Mar. 31, 1951.
Edward L. Norton.....	Atlanta.....	Sept. 1, 1950	Resigned Jan. 31, 1952.
Oliver S. Powell.....	Minneapolis.....	do.....	Resigned June 30, 1952.
Wm. McC. Martin, Jr.	New York.....	April 2, 1951	Reappointed in 1956. Term expired Jan. 31, 1970.
A.L. Mills, Jr.....	San Francisco.....	Feb. 18, 1952	Reappointed in 1958. Resigned Feb. 28, 1965.
J.L. Robertson.....	Kansas City.....	do.....	Reappointed in 1964. Resigned Apr. 30, 1973.
C. Canby Balderston.....	Philadelphia.....	Aug. 12, 1954	Served through Feb. 28, 1966.
Paul E. Miller.....	Minneapolis.....	Aug. 13, 1954	Died Oct. 21, 1954.
Chas. N. Shepardson.....	Dallas.....	Mar. 17, 1955	Retired Apr. 30, 1967.
G.H. King, Jr.....	Atlanta.....	Mar. 25, 1959	Reappointed in 1960. Resigned Sept. 18, 1963.
George W. Mitchell.....	Chicago.....	Aug. 31, 1961	Reappointed in 1962. Served until Feb. 13, 1976. ³
J. Dewey Daane.....	Richmond.....	Nov. 29, 1963	Served until Mar. 8, 1974. ³

Name	Federal Reserve District	Date of initial oath of office	Other dates and information relating to membership ²
Sherman J. Maisel.....	San Francisco	Apr. 30, 1965	Served through May 31, 1972.
Andrew F. Brimmer	Philadelphia	Mar. 9, 1966	Resigned Aug. 31, 1974.
William W. Sherrill	Dallas	May 1, 1967	Reappointed in 1968. Resigned Nov. 15, 1971.
Arthur F. Burns.....	New York	Jan. 1, 1970	Term began Feb. 1, 1970. Resigned Mar. 31, 1978.
John E. Sheehan.....	St. Louis	Jan. 4, 1972	Resigned June 1, 1975.
Jeffrey M. Bucher	San Francisco	June 5, 1972	Resigned Jan. 2, 1976.
Robert C. Holland.....	Kansas City	June 11, 1973	Resigned May 15, 1976.
Henry C. Wallich.....	Boston	Mar. 8, 1974	Resigned Dec. 15, 1986.
Philip E. Coldwell.....	Dallas	Oct. 29, 1974	Served through Feb. 29, 1980.
Philip C. Jackson, Jr.....	Atlanta	July 14, 1975	Resigned Nov. 17, 1978.
J. Charles Partee.....	Richmond.....	Jan. 5, 1976	Served until Feb. 7, 1986. ³
Stephen S. Gardner.....	Philadelphia	Feb. 13, 1976	Died Nov. 19, 1978.
David M. Lilly.....	Minneapolis	June 1, 1976	Resigned Feb. 24, 1978.
G. William Miller.....	San Francisco	Mar. 8, 1978	Resigned Aug. 6, 1979.
Nancy H. Teeters.....	Chicago	Sept. 18, 1978	Served through June 27, 1984.
Emmett J. Rice.....	New York	June 20, 1979	Resigned Dec. 31, 1986.
Frederick H. Schultz.....	Atlanta.....	July 27, 1979	Served through Feb. 11, 1982.
Paul A. Volcker.....	Philadelphia	Aug. 6, 1979	Resigned August 11, 1987.
Lyle E. Gramley.....	Kansas City	May 28, 1980	Resigned Sept. 1, 1985.
Preston Martin	San Francisco	Mar. 31, 1982	Resigned April 30, 1986.
Martha R. Seger.....	Chicago.....	July 2, 1984	Resigned March 11, 1991
Wayne D. Angell.....	Kansas City	Feb. 7, 1986	
Manuel H. Johnson.....	Richmond.....	Feb. 7, 1986	Resigned August 3, 1990.
H. Robert Heller.....	San Francisco	Aug. 19, 1986	Resigned July 31, 1989.
Edward W. Kelley, Jr.....	Dallas	May 26, 1987	Reappointed in 1990.
Alan Greenspan.....	New York	Aug. 11, 1987	
John P. LaWare.....	Boston	Aug. 15, 1988	
David W. Mullins, Jr.....	St. Louis	May 21, 1990	

Chairmen⁴

Charles S. Hamlin	Aug. 10, 1914–Aug. 9, 1916
W.P.G. Harding.....	Aug. 10, 1916–Aug. 9, 1922
Daniel R. Crissinger.....	May 1, 1923–Sept. 15, 1927
Roy A. Young	Oct. 4, 1927–Aug. 31, 1930
Eugene Meyer	Sept. 16, 1930–May 10, 1933
Eugene R. Black.....	May 19, 1933–Aug. 15, 1934
Marriner S. Eccles	Nov. 15, 1934–Jan. 31, 1948
Thomas B. McCabe.....	Apr. 15, 1948–Mar. 31, 1951
Wm. McC. Martin, Jr.	Apr. 2, 1951–Jan. 31, 1970
Arthur F. Burns.....	Feb. 1, 1970–Jan. 31, 1978
G. William Miller.....	Mar. 8, 1978–Aug. 6, 1979
Paul A. Volcker.....	Aug. 6, 1979–Aug. 11, 1987
Alan Greenspan	Aug. 11, 1987–

EX-OFFICIO MEMBERS¹

Secretaries of the Treasury

W.G. McAdoo.....	Dec. 23, 1913–Dec. 15, 1918
Carter Glass	Dec. 16, 1918–Feb. 1, 1920
David F. Houston	Feb. 2, 1920–Mar. 3, 1921
Andrew W. Mellon.....	Mar. 4, 1921–Feb. 12, 1932
Ogden L. Mills	Feb. 12, 1932–Mar. 4, 1933
William H. Woodin.....	Mar. 4, 1933–Dec. 31, 1933
Henry Morgenthau Jr.	Jan. 1, 1934–Feb. 1, 1936

Vice Chairmen⁴

Frederic A. Delano.....	Aug. 10, 1914–Aug. 9, 1916
Paul M. Warburg.....	Aug. 10, 1916–Aug. 9, 1918
Albert Strauss.....	Oct. 26, 1918–Mar. 15, 1920
Edmund Platt	July 23, 1920–Sept. 14, 1930
J.J. Thomas.....	Aug. 21, 1934–Feb. 10, 1936
Ronald Ransom.....	Aug. 6, 1956–Dec. 2, 1947
C. Canby Balderston.....	Mar. 11, 1955–Feb. 28, 1966
J.L. Robertson.....	Mar. 1, 1966–Apr. 30, 1973
George W. Mitchell	May 1, 1973–Feb. 13, 1976
Stephen S. Gardner	Feb. 13, 1976–Nov. 19, 1978
Frederick H. Schultz	July 27, 1979–Feb. 11, 1982
Preston Martin.....	Mar. 31, 1982–Mar. 31, 1986
Manuel H. Johnson	Aug. 4, 1986–Aug. 3, 1990

Comptrollers of the Currency

John Skelton Williams....	Feb. 2, 1914–Mar. 2, 1921
Daniel R. Crissinger.....	Mar. 17, 1921–Apr. 30, 1923
Henry M. Dawes.....	May 1, 1923–Dec. 17, 1924
Joseph W. McIntosh.....	Dec. 20, 1924–Nov. 20, 1928
J.W. Pole.....	Nov. 21, 1928–Sept. 20, 1932
J.F.T. O'Connor	May 11, 1933–Feb. 1, 1936

1. Under the provisions of the original Federal Reserve Act, the Federal Reserve Board was composed of seven members, including five appointive members, the Secretary of the Treasury, who was ex-officio chairman of the Board, and the Comptroller of the Currency. The original term of office was ten years, and the five original appointive members had terms of two, four, six, eight, and ten years respectively. In 1922 the number of appointive members was increased to six, and in 1933 the term of office was increased to twelve years. The Banking Act of 1935, approved Aug. 23, 1935, changed the name of the Federal Reserve Board to the Board of Governors of the Federal Reserve System and provided that the Board should be

composed of seven appointive members; that the Secretary of the Treasury and the Comptroller of the Currency should continue to serve as members until Feb. 1, 1936, or until their successors were appointed and had qualified; and that thereafter the terms of members should be fourteen years and that the designation of Chairman and Vice Chairman of the Board should be for a term of four years.

2. Date after words "Resigned" and "Retired" denotes final day of service.

3. Successor took office on this date.

4. Chairman and Vice Chairman were designated Governor and Vice Governor before Aug. 23, 1935.

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1.10 RESERVES, MONEY STOCK, LIQUID ASSETS, AND DEBT MEASURES

Annual rates of change, seasonally adjusted in percent¹

Monetary and credit aggregates	1990				1990				1991
	Q1'	Q2'	Q3'	Q4'	Sept.'	Oct.'	Nov.'	Dec.'	Jan.
<i>Reserves of depository institutions²</i>									
1 Total.....	2.4	-1.4	-1.4	1.7	6.7	-9.4	3.1	15.3	2.1
2 Required.....	2.5	-9	-1.5	-2	6.0	-8.3	1.1	.9	-8.3
3 Nonborrowed.....	-3.9	-1.0	2.0	4.7	13.0	-5.2	6.8	13.5	-2.1
4 Monetary base ³	8.2	7.4	8.6	9.0	13.5	7.6	5.4	7.7	17.6
<i>Concepts of money, liquid assets, and debt⁴</i>									
5 M1.....	5.2	4.2	3.7	3.4	7.8	-9	3.1	3.1	2.3
6 M2.....	6.2	3.9	3.0	2.2	4.3	1.4	.2	1.7	.9
7 M3.....	2.9	1.3	1.6	1.3	1.5	.9	.7	.6	4.0
8 L.....	2.8	.9	2.3	2.8	6.0	.8	2.7	2.4	n.a.
9 Debt.....	6.1	6.9	7.4	6.4	6.7	5.0	6.9	6.5	n.a.
<i>Nontransaction components</i>									
10 In M2 ⁵	6.5	3.8	2.7	1.8	3.2	2.2	-.7	1.2	.5
11 In M3 only ⁶	-9.7	-9.1	-3.9	-2.6	-10.3	-1.4	2.7	-3.8	16.8
<i>Time and savings deposits</i>									
<i>Commercial banks</i>									
12 Savings.....	9.6	4.1	5.9	5.2	3.7	6.7	3.6	7.3	12.6
13 MMDAs.....	10.4	9.6	8.2	3.5	4.5	1.9	2.2	3.2	-1.9
14 Small-denomination time ⁷	7.8	12.7	15.5	11.5	9.4	18.0	2.9	17.3	6.8
15 Large-denomination time ^{8,9}	-8	-2.9	-2.2	-8.5	-14.9	-12.6	1.9	-4.3	26.1
<i>Thrift institutions</i>									
16 Savings.....	1.7	2.2	-3.3	-7.3	-5.5	-10.6	-5.6	-8.5	-4.0
17 MMDAs.....	2.7	.4	-7.7	-7.2	.9	-11.9	-5.5	-16.7	-.9
18 Small-denomination time ⁷	-3.2	-7.4	-11.1	-7.9	-6.0	-13.2	-1.5	-13.6	-10.4
19 Large-denomination time ⁸	-23.0	-28.7	-27.3	-26.3	-21.6	-24.7	-29.9	-39.3	-30.7
<i>Money market mutual funds</i>									
20 General purpose and broker-dealer.....	18.1	4.7	10.0	11.2	12.2	8.8	4.6	16.4	29.7
21 Institution-only.....	9.1	14.8	21.6	30.4	23.2	35.1	9.0	51.8	42.0
<i>Debt components⁴</i>									
22 Federal.....	6.8	9.7	14.3	11.8	11.1	6.2	16.2	12.9	n.a.
23 Nonfederal.....	6.0	6.1	5.3	4.7	5.3	4.6	4.0	4.4	n.a.

1. Unless otherwise noted, rates of change are calculated from average amounts outstanding in 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 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.

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 (OCD), 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.

M2: M1 plus 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, money market deposit accounts (MMDAs), savings and small-denomination time deposits (time deposits—including retail RPs—in amounts of less than \$100,000), and balances in both taxable and tax-exempt general purpose and broker-dealer money market mutual funds. Excludes individual retirement accounts (IRA) 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.

M3: M2 plus large-denomination time deposits and term RP liabilities (in amounts of \$100,000 or more) issued by all depository institutions, 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 balances in both taxable and tax-exempt, institution-only money market mutual funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also subtracted is the estimated amount of overnight RPs and Eurodollars held by institution-only money market mutual funds.

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 mutual fund holdings of these assets.

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 overnight RPs and Eurodollars, money market fund balances (general purpose and broker-dealer), MMDAs, and savings and small time deposits.

6. Sum of large time deposits, term RPs, term Eurodollars of U.S. residents, and 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 mutual funds.

7. Small-denomination time deposits—including retail RPs—are those issued in amounts of less than \$100,000. All IRA and Keogh accounts at commercial banks and thrifts are subtracted from small time deposits.

8. Large-denomination time deposits are those issued in amounts of \$100,000 or more, excluding those booked at international banking facilities.

9. Large-denomination time deposits at commercial banks less those held by money market mutual funds, depository institutions, and foreign banks and official institutions.

A4 Domestic Financial Statistics □ April 1991

1.11 RESERVES OF DEPOSITORY INSTITUTIONS AND RESERVE BANK CREDIT

Millions of dollars

Factors	Monthly averages of daily figures			Weekly averages of daily figures for week ending						
	1990		1991	1990		1991				
	Nov.	Dec.	Jan.	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30
SUPPLYING RESERVE FUNDS										
1 Reserve Bank credit	288,202	291,223	284,701	286,446	291,339	298,038	283,275	283,623	280,967	286,334
U.S. government securities ^{1, 2}										
2 Bought outright-system account	238,788	239,499	234,665	239,302	238,901	235,686	235,246	235,214	232,843	234,862
3 Held under repurchase agreements	2,405	3,144	2,165	0	3,587	10,469	828	405	0	3,797
Federal agency obligations ²										
4 Bought outright	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342
5 Held under repurchase agreements	163	121	223	0	9	450	93	126	0	266
6 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions ²										
7 Adjustment credit	43	212	508	52	754	185	281	365	1,292	213
8 Seasonal credit	163	78	32	81	76	59	23	23	32	43
9 Extended credit	25	23	29	22	22	23	20	26	30	38
10 Float	482	1,727	1,077	606	1,267	4,529	1,020	1,600	891	768
11 Other Federal Reserve assets	39,791	40,077	39,661	40,041	40,381	40,296	39,423	39,522	39,539	40,006
12 Gold stock	11,060	11,058	11,058	11,058	11,058	11,058	11,058	11,058	11,058	11,058
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	20,321	20,368	20,429	20,368	20,378	20,404	20,414	20,424	20,434	20,444
ABSORBING RESERVE FUNDS										
15 Currency in circulation	278,216	283,000	284,549	282,470	284,928	286,874	286,252	284,584	283,705	283,126
16 Treasury cash holdings	552	552	572	553	553	556	567	567	576	578
Deposits, other than reserve balances, with Federal Reserve Banks										
17 Treasury	5,543	5,809	8,701	5,406	6,810	7,987	6,906	5,320	5,494	14,064
18 Foreign	250	251	252	234	236	319	257	242	254	241
19 Service-related balances and adjustments	1,948	2,078	3,097	2,202	1,983	2,253	2,623	4,355	2,871	2,829
20 Other	240	226	188	246	201	234	161	196	173	217
21 Other Federal Reserve liabilities and capital	9,380	9,170	8,467	8,947	9,093	8,668	8,210	8,377	8,513	8,690
22 Reserve balances with Federal Reserve Banks ³	33,472	31,582	20,379	27,833	28,990	32,628	19,790	21,483	20,893	18,111
End-of-month figures				Wednesday figures						
1990		1991	1990		1991					
Nov.	Dec.	Jan.	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	
SUPPLYING RESERVE FUNDS										
23 Reserve Bank credit	291,580	301,882	299,857	288,414	294,198	284,391	279,133	285,489	291,434	285,659
U.S. government securities ^{1, 2}										
24 Bought outright-system account	242,633	235,090	234,306	240,854	237,937	238,053	231,779	235,871	238,717	234,234
25 Held under repurchase agreements	2,352	17,013	14,888	0	3,632	0	0	0	0	2,359
Federal agency obligations ²										
26 Bought outright	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342
27 Held under repurchase agreements	270	1,341	2,186	0	10	0	0	0	0	866
28 Acceptances	0	0	0	0	0	0	0	0	0	0
Loans to depository institutions ²										
29 Adjustment credit	97	112	89	39	4,880	489	597	50	5,071	51
30 Seasonal credit	7	55	39	79	74	38	21	34	40	41
31 Extended credit	26	23	52	20	25	24	22	28	32	44
32 Float	486	2,222	531	1,071	694	496	1,047	3,719	1,536	1,685
33 Other Federal Reserve assets	39,367	39,685	41,425	40,008	40,605	38,949	39,327	39,446	39,696	40,038
34 Gold stock	11,059	11,058	11,058	11,058	11,058	11,058	11,058	11,059	11,059	11,058
35 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
36 Treasury currency outstanding	20,348	20,388	20,454	20,368	20,378	20,404	20,414	20,424	20,434	20,444
ABSORBING RESERVE FUNDS										
37 Currency in circulation	279,507	286,949	283,004	283,471	286,167	287,385	285,533	284,091	283,890	282,780
38 Treasury cash holdings	552	561	590	554	553	566	569	576	576	590
Deposits, other than reserve balances, with Federal Reserve Banks										
39 Treasury	5,495	8,960	27,810	6,656	11,375	10,495	5,577	5,099	11,079	16,884
40 Foreign	264	369	271	246	180	203	197	213	188	225
41 Service-related balances and adjustments	1,935	2,253	2,766	2,202	1,983	2,253	2,623	4,355	2,871	2,829
42 Other	213	242	183	324	240	184	150	195	161	197
43 Other Federal Reserve liabilities and capital	9,515	8,147	9,820	8,610	8,826	7,987	8,186	8,190	8,429	8,506
44 Reserve balances with Federal Reserve Banks ³	35,525	35,866	16,944	27,796	26,330	16,799	17,790	24,273	25,752	15,169

1. 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.

2. Beginning with the May 1990 *Bulletin*, this table has been revised to correspond with the H.4.1 statistical release.

3. Excludes required clearing balances and adjustments to compensate for float.

NOTE. For amounts of currency and coin held as reserves, see table 1.12. Components may not add to totals because of rounding.

1.12 RESERVES AND BORROWINGS Depository Institutions¹

Millions of dollars

Reserve classification	Monthly averages ⁹									
	1988	1989	1990	1990						1991
	Dec.	Dec.	Dec. ^f	July	Aug.	Sept.	Oct.	Nov.	Dec. ^f	Jan.
1 Reserve balances with Reserve Banks ²	37,837	35,436	30,237	32,946	32,448	33,303	32,127	33,382	30,237	22,031
2 Total vault cash ³	28,204	29,822 ^r	31,777	30,459 ^r	30,842 ^r	30,625 ^r	31,515	31,086 ^r	31,777	33,219
3 Applied vault cash ⁴	25,909	27,374	28,884	27,996	28,280	28,149	28,925	28,663	28,884	28,970
4 Surplus vault cash ⁵	2,295	2,448 ^r	2,893	2,462 ^r	2,562 ^r	2,476 ^r	2,590	2,423 ^r	2,893	4,249
5 Total reserves ⁶	63,746	62,810	59,120	60,943	60,728	61,452	61,052	62,045	59,120	51,001
6 Required reserves	62,699	61,888	57,456	60,081	59,860	60,544	60,206	61,099	57,456	48,825
7 Excess reserve balances at Reserve Banks ⁷	1,047	922	1,665	862	868	909	847	947	1,665	2,176
8 Total borrowings at Reserve Banks	1,716	265	326	757	927	624	410	230	326	534
9 Seasonal borrowings at Reserve Banks	130	84	76	389	430	418	335	162	76	33
10 Extended credit at Reserve Banks ⁸	1,244	20	23	280	127	6	18	24	23	27
Biweekly averages of daily figures for weeks ending										
1990							1991			
	Oct. 3	Oct. 17	Oct. 31	Nov. 14	Nov. 28	Dec. 12	Dec. 26	Jan. 9 ^r	Jan. 23	Feb. 6
11 Reserve balances with Reserve Banks ²	32,389	32,833	31,365	33,821	32,848	34,046	28,413	26,198	21,193	18,810
12 Total vault cash ³	31,227 ^r	31,674 ^r	31,418 ^r	30,656 ^r	31,631 ^r	30,293	32,690 ^r	32,783	32,049	35,758
13 Applied vault cash ⁴	28,565	29,171	28,756	28,293	29,125	28,027	29,621	28,876	28,222	30,387
14 Surplus vault cash ⁵	2,662 ^r	2,503 ^r	2,662 ^r	2,363 ^r	2,506 ^r	2,266	3,069 ^r	3,908	3,828	5,371
15 Total reserves ⁶	60,954	62,004	60,121	62,114	61,972	62,073	58,034	55,074	49,415	49,197
16 Required reserves	59,832	61,021	59,471	61,132	61,006	61,513	56,113	51,481	48,478	46,446
17 Excess reserve balances at Reserve Banks ⁷	1,122	984	650	982	966	561	1,922	3,592	937	2,751
18 Total borrowings at Reserve Banks	516	401	397	282	193	130	504	295	884	191
19 Seasonal borrowings at Reserve Banks	424	345	307	195	140	87	79	41	28	35
20 Extended credit at Reserve Banks ⁸	9	13	26	25	25	25	22	22	28	30

1. These data also appear in the Board's H.3 (502) release. For address, see inside front cover.

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 those depository institutions currently subject to reserve requirements. Dates refer to the maintenance periods in which the vault cash can be used to satisfy reserve requirements. Under contemporaneous reserve requirements, maintenance periods end 30 days after the lagged computation periods in which the balances are held.

4. All vault cash held during the lagged computation period by "bound" institutions (i.e., those whose required reserves exceed their vault cash) plus the amount of vault cash applied during the maintenance period by "nonbound" institutions (i.e., 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. 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.

9. Data are prorated monthly averages of biweekly averages.

1.13 SELECTED BORROWINGS IN IMMEDIATELY AVAILABLE FUNDS Large Banks¹

Averages of daily figures, in millions of dollars

Maturity and source	1990, week ending Monday ²								
	Oct. 8	Oct. 15	Oct. 22	Oct. 29	Nov. 5	Nov. 12	Nov. 19	Nov. 26	Dec. 3
<i>Federal funds purchased, repurchase agreements, and other selected borrowing in immediately available funds</i>									
From commercial banks in the United States									
1 For one day or under continuing contract	91,217	86,843	78,536	75,748	82,906	83,216	87,080	82,126	83,431
2 For all other maturities	15,376	17,561	18,933	20,036	19,286	19,113	19,428	21,122	19,755
From other depository institutions, foreign banks and foreign official institutions, and U.S. government agencies									
3 For one day or under continuing contract	36,441	37,361	34,698	34,674	38,560	36,566	37,728	34,159	36,220
4 For all other maturities	19,050	19,576	19,784	20,107	20,656	21,600	21,121	23,295	20,933
<i>Repurchase agreements on U.S. government and federal agency securities in immediately available funds</i>									
Brokers and nonbank dealers in securities									
5 For one day or under continuing contract	19,495	18,854	16,492	16,691	15,620	15,314	13,700	11,585	12,015
6 For all other maturities	20,207	21,599	22,747	23,144	22,952	23,366	21,972	21,976	21,258
All other customers									
7 For one day or under continuing contract	31,139	32,559	31,762	30,612	30,586	29,738	31,667	27,725	30,998
8 For all other maturities	12,308	12,002	12,526	13,302	13,818	13,370	13,665	17,193	13,248
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	50,017	47,434	45,415	47,006	49,786	45,086	50,258	46,826	47,141
10 To all other specified customers ³	15,420	15,690	16,937	16,645	16,663	15,976	17,843	16,466	17,078

1. Banks with assets of \$1 billion or more as of Dec. 31, 1977. These data also appear in the Board's H.5 (507) release. For address, see inside front cover.

2. Beginning with the August Bulletin data appearing are the most current available. To obtain data from May 1, 1989, through April 16, 1990, contact the

Division of Applications Development and Statistical Services, Financial Statement Reports Section, (202) 452-3349.

3. Brokers and nonbank dealers in securities; other depository institutions; foreign banks and official institutions; and United States government agencies.

1.14 FEDERAL RESERVE BANK INTEREST RATES

Percent per year

Federal Reserve Bank	Current and previous levels									
	Adjustment credit and Seasonal credit ¹			Extended credit ²						
				First 30 days of borrowing			After 30 days of borrowing ³			
	On 2/28/91	Effective date	Previous rate	On 2/28/91	Effective date	Previous rate	On 2/28/91	Effective date	Previous rate	Effective date
Boston.....	6	2/1/91	6½	6	2/1/91	6½	6.85	2/21/91	7.30	2/7/91
New York.....	↑	2/1/91	↑	↑	2/1/91	↑	↑	2/21/91	↑	2/7/91
Philadelphia.....	↑	2/1/91	↑	↑	2/1/91	↑	↑	2/21/91	↑	2/7/91
Cleveland.....	↑	2/1/91	↑	↑	2/1/91	↑	↑	2/21/91	↑	2/7/91
Richmond.....	↑	2/1/91	↑	↑	2/1/91	↑	↑	2/21/91	↑	2/7/91
Atlanta.....	↑	2/4/91	↑	↑	2/4/91	↑	↑	2/21/91	↑	2/7/91
Chicago.....	↓	2/1/91	↓	↓	2/1/91	↓	↓	2/21/91	↓	2/7/91
St. Louis.....	↓	2/4/91	↓	↓	2/4/91	↓	↓	2/21/91	↓	2/7/91
Minneapolis.....	↓	2/1/91	↓	↓	2/1/91	↓	↓	2/21/91	↓	2/7/91
Kansas City.....	↓	2/1/91	↓	↓	2/1/91	↓	↓	2/21/91	↓	2/7/91
Dallas.....	↓	2/1/91	↓	↓	2/1/91	↓	↓	2/21/91	↓	2/7/91
San Francisco.....	6	2/1/91	6½	6	2/1/91	6½	6.85	2/21/91	7.30	2/7/91

Range of rates for adjustment credit in recent years⁴

Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.	Effective date	Range (or level)—All F.R. Banks	F.R. Bank of N.Y.
In effect Dec. 31, 1977.....	6	6	1981—May 5.....	13-14	14	1985—May 20.....	7½-8	7½
1978—Jan. 9.....	6-6½	6½	8.....	14	14	24.....	7½	7½
20.....	6½	6½	Nov. 2.....	13-14	13			
May 11.....	6½-7	7	6.....	13	13	1986—Mar. 7.....	7-7½	7
12.....	7	7	Dec. 4.....	12	12	10.....	7	7
July 3.....	7-7¼	7¼				Apr. 21.....	6½-7	6½
10.....	7¼	7¼	1982—July 20.....	11½-12	11½	July 11.....	6	6
Aug. 21.....	7¼	7¼	23.....	11½	11½	Aug. 21.....	5½-6	5½
Sept. 22.....	8	8	Aug. 2.....	11-11½	11	22.....	5½	5½
Oct. 16.....	8-8½	8½	3.....	11	11			
20.....	8½	8½	16.....	10½	10½	1987—Sept. 4.....	5½-6	6
Nov. 1.....	8½-9½	9½	27.....	10-10½	10	11.....	6	6
3.....	9½	9½	30.....	10	10			
1979—July 20.....	10	10	Oct. 12.....	9½-10	9½	1988—Aug. 9.....	6-6½	6½
Aug. 17.....	10-10½	10½	13.....	9½	9½	11.....	6½	6½
20.....	10½	10½	Nov. 22.....	9-9½	9			
Sept. 19.....	10½-11	11	26.....	9	9	1989—Feb. 24.....	6½-7	7
21.....	11	11	Dec. 14.....	8½-9	9	27.....	7	7
Oct. 8.....	11-12	12	15.....	8½-9	8½			
10.....	12	12	17.....	8½	8½	1990—Dec. 19.....	6½	6½
1980—Feb. 15.....	12-13	13	1984—Apr. 9.....	8½-9	9			
19.....	13	13	13.....	9	9	1991—Feb. 1.....	6-6½	6
May 29.....	12-13	13	Nov. 21.....	8½-9	8½	4.....	6	6
30.....	12	12	26.....	8½	8½	In effect Feb. 28, 1991.....	6	6
June 13.....	11-12	11	Dec. 24.....	8	8			
16.....	11	11						
July 28.....	10-11	10						
29.....	10	10						
Sept. 26.....	11	11						
Nov. 17.....	12	12						
Dec. 5.....	12-13	13						

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. After May 19, 1986, 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. A temporary simplified seasonal program was established on Mar. 8, 1985, and the interest rate was a fixed rate ½ percent above the rate on adjustment credit. The program was reestablished for 1986 and 1987 but was not renewed for 1988.

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 30 days, a flexible rate somewhat above rates on market sources of funds ordinarily will be charged, but

in no case will the rate charged be 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; 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 13-week period. The surcharge was eliminated on Nov. 17, 1981.

1.15 RESERVE REQUIREMENTS OF DEPOSITORY INSTITUTIONS¹

Percent of deposits

Type of deposit, and deposit interval ²	Depository institution requirements after implementation of the Monetary Control Act	
	Percent of deposits	Effective date
<i>Net transaction accounts</i> ^{3, 4}		
\$0 million–\$41.1 million	3	12/18/90
More than \$41.1 million	12	12/18/90
<i>Nonpersonal time deposits</i> ^{5, 6}	0	12/27/90
<i>Eurocurrency liabilities</i> ⁷	0	12/27/90

1. Required reserves must be held in the form 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 shall apply in the following order: (1) net 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 on 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, 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).

4. 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.

5. The reserve requirements on nonpersonal time deposits with an original maturity of less than 1-1/2 years were reduced from 3 percent to 1-1/2 percent on the maintenance period that began December 13, 1990, and to zero for the maintenance period that began December 27, 1990, for institutions that report weekly. The reserve requirement on nonpersonal time deposits with an original maturity of 1-1/2 years or more has been zero since October 6, 1983.

6. For institutions that report quarterly, the reserves on nonpersonal time deposits with an original maturity of less than 1-1/2 years were reduced from 3 percent to zero on January 17, 1991.

7. The reserve requirements on Eurocurrency liabilities were reduced from 3 percent to zero in the same manner and on the same dates as were the reserves on nonpersonal time deposits with an original maturity of less than 1-1/2 years (see notes 5 and 6).

1.17 FEDERAL RESERVE OPEN MARKET TRANSACTIONS¹

Millions of dollars

Type of transaction		1988	1989	1990	1990						
					June	July	Aug.	Sept.	Oct.	Nov.	Dec.
U.S. TREASURY SECURITIES											
Outright transactions (excluding matched transactions)											
Treasury bills											
1	Gross purchases	8,223	14,284	24,739	1,732	287	4,264	631	933	6,658	0
2	Gross sales	587	12,818	7,291	0	0	68	0	0	0	2,350
3	Exchange	241,876	231,211	231,386	16,279	16,159	21,912	19,041	19,271	25,981	16,939
4	Redemptions	2,200	12,730	4,400	0	0	0	0	0	0	3,000
Others within 1 year											
5	Gross purchases	2,176	327	475	50	0	0	0	0	325	0
6	Gross sales	0	0	0	0	0	0	0	0	0	0
7	Maturity shift	23,854	28,848	25,638	1,314	1,321	3,235	1,010	1,934	3,531	1,991
8	Exchange	-24,588	-25,783	-27,424	0	-3,577	-4,550	0	0	-4,315	0
9	Redemptions	0	500	0	0	0	0	0	0	0	0
1 to 5 years											
10	Gross purchases	5,485	1,436	200	0	0	0	0	0	0	0
11	Gross sales	800	490	0	0	0	0	0	0	0	0
12	Maturity shift	-17,720	-25,534	-21,770	-1,314	-1,234	-2,188	-1,010	-1,677	-3,258	-1,991
13	Exchange	22,515	23,250	25,410	0	3,577	4,200	0	0	3,915	0
5 to 10 years											
14	Gross purchases	1,579	287	0	0	0	0	0	0	0	0
15	Gross sales	175	29	0	0	0	0	0	0	0	0
16	Maturity shift	-5,946	-2,231	-2,186	0	-87	-697	0	-256	127	0
17	Exchange	1,797	1,934	789	0	0	0	0	0	0	0
Over 10 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 shift	-188	-1,086	-1,681	0	0	-350	0	0	-400	0
21	Exchange	275	600	1,226	0	0	350	0	0	400	0
All maturities											
22	Gross purchases	18,863	16,617	25,514	1,782	287	4,264	631	933	6,983	100
23	Gross sales	1,562	13,337	7,491	0	0	68	0	0	0	2,550
24	Redemptions	2,200	13,230	4,400	0	0	0	0	0	0	3,000
Matched transactions											
25	Gross sales	1,168,484	1,323,480	1,369,052	107,896	95,144	113,647	120,036	127,265	116,601	125,844
26	Gross purchases	1,168,142	1,326,542	1,363,434	110,042	95,787	110,635	120,280	129,722	114,488	123,442
Repurchase agreements ²											
27	Gross purchases	152,613	129,518	219,632	11,242	13,106	26,700	31,996	19,844	36,457	45,684
28	Gross sales	151,497	132,688	202,551	11,242	11,447	23,764	34,932	19,844	34,105	31,022
29	Net change in U.S. government securities	15,872	-10,055	25,086	3,928	2,590	4,121	-2,060	3,390	7,222	6,808
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	33	37	0	34	0	1
Repurchase agreements ²											
33	Gross purchases	57,259	38,835	41,836	3,221	4,697	7,130	7,394	5,913	2,774	2,091
34	Gross sales	56,471	40,411	40,461	3,221	4,137	5,944	8,580	5,913	2,504	1,021
35	Net change in federal agency obligations	198	-2,018	1,192	0	527	1,149	-1,186	-34	270	1,070
36	Total net change in System Open Market Account	16,070	-12,073	26,278	3,928	3,117	5,270	-3,247	3,356	7,492	7,878

1. Sales, redemptions, and negative figures reduce holdings of the System Open Market Account; all other figures increase such holdings. Details may not add to totals because of rounding.

2. In July 1984 the Open Market Trading Desk discontinued accepting bankers acceptances in repurchase agreements.

A10 Domestic Financial Statistics □ April 1991

1.18 FEDERAL RESERVE BANKS Condition and Federal Reserve Note Statements¹

Millions of dollars

Account	Wednesday					End of month		
	1991					1990		1991
	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30	Nov. 30	Dec. 31	Jan. 31
Consolidated condition statement								
ASSETS								
1 Gold certificate account	11,058	11,058	11,059	11,059	11,058	11,059	11,058	11,058
2 Special drawing rights certificate account	10,018	10,018	10,018	10,018	10,018	10,018	10,018	10,018
3 Coin	529	529	553	584	611	532	535	611
Loans								
4 To depository institutions	551	639	112	5,143	136	131	190	180
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	0	0	0	0	0	0	0	0
7 Bought outright	6,342	6,342	6,342	6,342	6,342	6,342	6,342	6,342
8 Held under repurchase agreements	0	0	0	0	866	270	1,341	2,186
U.S. Treasury securities								
Bought outright								
9 Bills	115,484	109,209	113,301	116,148	111,664	119,763	112,520	111,736
10 Notes	91,407	91,407	91,407	91,407	91,407	91,707	91,407	91,407
11 Bonds	31,163	31,163	31,163	31,163	31,163	31,163	31,163	31,163
12 Total bought outright ²	238,053	231,779	235,871	238,717	234,234	242,633	235,090	234,306
13 Held under repurchase agreements	0	0	0	0	2,359	2,352	17,013	14,888
14 Total U.S. Treasury securities	238,053	231,779	235,871	238,717	236,592	244,985	252,103	249,194
15 Total loans and securities	244,946	238,760	242,324	250,202	243,936	251,728	259,975	257,901
16 Items in process of collection	4,470	7,090	9,231	9,358	6,650	6,235	6,106	5,160
17 Bank premises	872	875	876	876	875	862	872	875
Other assets								
18 Denominated in foreign currencies ²	32,634	32,668	32,700	32,810	32,838	33,579	32,633	33,879
19 All other ³	5,776	5,821	5,753	6,002	6,308	4,859	6,376	6,704
20 Total assets	310,303	306,819	312,514	320,908	312,294	318,871	327,573	326,206
LIABILITIES								
21 Federal Reserve notes	268,076	266,217	264,796	264,616	263,537	260,243	267,657	263,751
Deposits								
22 To depository institutions	19,641	21,114	28,170	28,485	17,926	37,359	38,658	19,902
23 U.S. Treasury—General account	10,495	5,577	5,099	11,079	16,884	5,495	8,960	27,810
24 Foreign—Official accounts	203	197	213	188	225	264	369	271
25 Other	184	150	195	161	197	213	242	183
26 Total deposits	30,523	27,038	33,676	39,913	35,232	43,331	48,228	48,165
27 Deferred credit items	3,716	5,380	5,851	7,951	5,019	5,783	3,540	4,470
28 Other liabilities and accrued dividends ⁴	3,035	2,977	2,945	3,131	3,195	3,807	3,301	3,588
29 Total liabilities	305,350	301,610	307,269	315,611	306,982	313,163	322,727	319,974
CAPITAL ACCOUNTS								
30 Capital paid in	2,423	2,427	2,438	2,438	2,450	2,404	2,423	2,450
31 Surplus	2,423	2,423	2,423	2,423	2,423	2,243	2,423	2,423
32 Other capital accounts	106	359	384	436	438	1,062	0	1,359
33 Total liabilities and capital accounts	310,303	306,819	312,514	320,908	312,294	318,871	327,573	326,206
34 MEMO: Marketable U.S. Treasury securities held in custody for foreign and international accounts	244,852	246,027	246,148	247,463	252,496	246,728	247,521	255,092
Federal Reserve note statement								
35 Federal Reserve notes outstanding issued to bank	304,645	304,081	305,196	306,121	306,722	304,591	304,829	306,681
36 Less: Held by bank	36,569	37,864	40,399	41,505	43,185	44,349	37,172	42,930
37 Federal Reserve notes, net	268,076	266,217	264,796	264,616	263,537	260,243	267,657	263,751
Collateral held against notes net:								
38 Gold certificate account	11,058	11,058	11,059	11,059	11,058	11,059	11,058	11,058
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	2,604	7,021	1,507	0	0	0	0	0
41 U.S. Treasury and agency securities	244,395	238,120	242,212	243,539	242,460	239,166	246,581	242,675
42 Total collateral	268,076	266,217	264,796	264,616	263,537	260,243	267,657	263,751

1. Some of these data also appear in the Board's H.4.1 (503) release. For address, see inside front cover. Components may not add 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 90 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

Millions of dollars

Type and maturity groupings	Wednesday					End of month		
	1990	1991				1990		1991
	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Nov. 30	Dec. 31	Jan. 30
1 Loans—Total	4,979	551	639	112	5,143	131	190	136
2 Within 15 days	4,979	545	633	108	5,141	80	186	136
3 16 days to 90 days	1	7	6	4	2	50	4	0
4 91 days to 1 year	0	0	0	0	0	0	0	0
5 Acceptances—Total	0	0	0	0	0	0	0	0
6 Within 15 days	0	0	0	0	0	0	0	0
7 16 days to 90 days	0	0	0	0	0	0	0	0
8 91 days to 1 year	0	0	0	0	0	0	0	0
9 U.S. Treasury securities—Total	241,569	238,054	231,779	235,871	238,717	242,633	235,090	237,000
10 Within 15 days ¹	11,489	12,094	14,059	11,230	12,074	3,841	5,516	12,567
11 16 days to 90 days	56,882	53,945	46,530	55,719	55,549	63,974	57,538	54,302
12 91 days to 1 year	75,968	75,408	74,583	72,368	74,541	77,288	75,428	73,169
13 Over 1 year to 5 years	59,372	58,749	58,749	58,510	58,510	59,572	58,749	58,510
14 Over 5 years to 10 years	13,121	13,121	13,121	13,306	13,306	13,221	13,121	13,306
15 Over 10 years	24,736	24,736	24,779	24,736	24,736	24,736	24,736	24,736
16 Federal agency obligations—Total	6,352	6,342	6,342	6,342	6,342	6,342	6,342	7,208
17 Within 15 days ¹	210	0	0	105	219	261	200	1,035
18 16 days to 90 days	737	932	932	907	884	604	737	864
19 91 days to 1 year	1,639	1,644	1,644	1,589	1,533	1,668	1,639	1,548
20 Over 1 year to 5 years	2,555	2,555	2,555	2,589	2,495	2,595	2,555	2,550
21 Over 5 years to 10 years	1,022	1,022	1,022	1,022	1,022	1,025	1,022	1,022
22 Over 10 years	188	188	187	187	188	188	188	188

1. Holdings under repurchase agreements are classified as maturing within 15 days in accordance with maximum maturity of the agreements.

NOTE: Components may not add to totals because of rounding.

1.20 AGGREGATE RESERVES OF DEPOSITORY INSTITUTIONS AND MONETARY BASE¹

Billions of dollars, averages of daily figures

Item	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec. ^f	1990							1991
					June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^f	Jan.
Seasonally adjusted												
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ²												
1 Total reserves ³	58.59	60.59	60.03	60.53	59.73	59.32	59.75	60.08	59.61	59.76	60.53	60.63
2 Nonborrowed reserves ⁴	57.82	58.88	59.77	60.20	58.85	58.56	58.82	59.46	59.20	59.53	60.20	60.10
3 Nonborrowed reserves plus extended credit ⁵	58.30	60.12	59.79	60.22	59.20	58.84	58.95	59.46	59.22	59.56	60.22	60.12
4 Required reserves.....	57.55	59.55	59.11	58.86	58.96	58.46	58.88	59.17	58.76	58.82	58.86	58.45
5 Monetary base ⁶	258.18 ^g	275.40 ^g	285.28 ^g	309.73	296.47 ^g	298.01 ^g	301.08 ^g	304.47 ^g	306.38 ^g	307.76 ^g	309.73	314.27
Not seasonally adjusted												
ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ²												
6 Total reserves ⁷	60.07	62.22	61.67	62.18	59.61	59.47	59.21	59.81	59.24	60.02	62.18	62.29
7 Nonborrowed reserves.....	59.30	60.50	61.40	61.86	58.73	58.71	58.29	59.19	58.83	59.79	61.86	61.76
8 Nonborrowed reserves plus extended credit ⁵	59.78	61.75	61.42	61.88	59.07	58.99	58.41	59.20	58.85	59.82	61.88	61.78
9 Required reserves ⁸	59.03	61.17	60.75	60.52	58.84	58.61	58.34	58.90	58.40	59.08	60.52	60.11
10 Monetary base ⁹	262.00	279.54	289.45	314.03	297.37	299.90	301.46	303.56	305.00	308.71	314.03	315.36
NOT ADJUSTED FOR CHANGES IN RESERVE REQUIREMENTS ¹⁰												
11 Total reserves ¹¹	62.14	63.75	62.81	59.12	61.20	60.94	60.73	61.45	61.05	62.05	59.12	51.00
12 Nonborrowed reserves.....	61.36	62.03	62.54	58.79	60.32	60.19	59.80	60.83	60.64	61.82	58.79	50.47
13 Nonborrowed reserves plus extended credit ⁵	61.85	63.27	62.56	58.82	60.66	60.47	59.93	60.83	60.66	61.84	58.82	50.49
14 Required reserves.....	61.09	62.70	61.89	57.46	60.42	60.08	59.86	60.54	60.21	61.10	57.46	48.83
15 Monetary base ¹²	266.06	283.00	292.55	313.70	300.99	303.39	304.99	307.21	308.85	312.69	313.70	309.31
16 Excess reserves ¹³	1.05	1.05	.92	1.66	.77	.86	.87	.91	.85	.95	1.66	2.18
17 Borrowings from the Federal Reserve.....	.78	1.72	.27	.33	.88	.76	.93	.62	.41	.23	.33	.53

1. Latest monthly and biweekly figures are available from the Board's H.3(502) 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 because of 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 includes required reserves against transactions deposits and nonpersonal time and savings deposits (but not reserveable 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 those 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. After the introduction of CRR, currency and vault cash figures are 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 MEASURES¹

Billions of dollars, averages of daily figures

Item ²	1987 Dec. ³	1988 Dec. ³	1989 Dec. ³	1990 Dec. ³	1990 ⁴			1991 Jan.
					Oct.	Nov.	Dec.	
Seasonally adjusted								
1 M1	749.7	786.4	793.6	825.4	821.2	823.3	825.4	827.0
2 M2	2,910.1	3,069.9	3,223.1	3,330.5	3,325.2	3,325.8	3,330.5	3,333.1
3 M3	3,677.4	3,919.1	4,055.2	4,115.9	4,111.3	4,113.7	4,115.9	4,129.5
4 L	4,337.0	4,676.0	4,889.9	4,988.2	4,966.9	4,978.1	4,988.2	n.a.
5 Debt	8,345.1	9,107.6	9,790.4	10,472.1	10,356.2	10,416.1	10,472.1	n.a.
<i>M1 components</i>								
6 Currency ⁵	196.8	212.0	222.2	246.4	243.9	245.0	246.4	251.6
7 Travelers checks ⁵	7.0	7.5	7.4	8.4	8.3	8.4	8.4	8.4
8 Demand deposits ⁵	286.5	286.3	278.7	276.9	277.1	277.2	276.9	272.8
9 Other checkable deposits ⁶	259.3	280.7	285.2	293.7	291.8	292.8	293.7	294.1
<i>Nontransactions components</i>								
10 In M2	2,160.4	2,283.5	2,429.5	2,505.1	2,504.0	2,502.5	2,505.1	2,506.1
11 In M3 only ⁸	767.3	849.3	832.1	785.4	786.1	787.9	785.4	796.4
<i>Time and Savings accounts</i>								
<i>Commercial banks</i>								
12 Savings deposits	178.3	192.1	187.7	199.4	197.6	198.2	199.4	201.5
13 Money market deposit accounts	356.4	350.2	353.0	378.4	376.7	377.4	378.4	377.8
14 Small time deposits ⁹	388.0	447.5	531.4	598.0	588.1	589.5	598.0	601.4
15 Large time deposits ^{10, 11}	326.6	368.0	401.9	386.0	386.8	387.4	386.0	394.4
<i>Thrift institutions</i>								
16 Savings deposits	233.7	232.3	216.4	211.4	213.9	212.9	211.4	210.7
17 Money market deposit accounts	168.5	151.2	133.1	127.6	130.0	129.4	127.6	127.5
18 Small time deposits ⁹	529.7	584.3	614.5	566.9	574.1	573.4	566.9	562.0
19 Large time deposits ¹⁰	162.6	174.3	161.6	121.0	128.3	125.1	121.0	117.9
<i>Money market mutual funds</i>								
20 General purpose and broker-dealer	221.7	241.1	313.6	347.7	341.7	343.0	347.7	356.3
21 Institution-only	88.9	86.9	101.9	125.7	119.6	120.5	125.7	130.1
<i>Debt components</i>								
22 Federal debt	1,957.9	2,114.2	2,268.1	2,534.7	2,474.3	2,507.7	2,534.7	n.a.
23 Nonfederal debt	6,387.2	6,993.4	7,522.3	7,937.3	7,881.9	7,908.4	7,937.3	n.a.
Not seasonally adjusted								
24 M1	766.2	804.2	811.9	844.3	817.6	826.1	844.3	833.5
25 M2	2,923.0	3,083.3	3,236.6	3,344.5	3,322.5	3,329.5	3,344.5	3,343.4
26 M3	3,690.3	3,931.5	4,067.0	4,127.9	4,108.4	4,120.8	4,127.9	4,135.6
27 L	4,352.8	4,691.8	4,907.4	5,007.4	4,962.9	4,983.2	5,007.4	n.a.
28 Debt	8,329.1	9,093.2	9,775.9	10,459.2	10,317.4	10,386.6	10,459.2	n.a.
<i>M1 components</i>								
29 Currency ⁵	199.3	214.8	225.3	249.6	242.8	245.7	249.6	249.8
30 Travelers checks ⁵	6.5	6.9	6.9	7.8	8.4	8.0	7.8	7.8
31 Demand deposits ⁵	298.6	298.9	291.5	289.9	278.0	280.5	289.9	277.7
32 Other checkable deposits ⁶	261.8	283.5	288.2	296.9	288.4	291.9	296.9	298.1
<i>Nontransactions components</i>								
33 In M2	2,156.8	2,279.1	2,424.7	2,500.2	2,505.0	2,503.3	2,500.2	2,509.9
34 In M3 only ⁸	767.3	848.2	830.4	783.5	785.9	791.3	783.5	792.3
<i>Time and Savings accounts</i>								
<i>Commercial banks</i>								
35 Savings deposits	176.8	190.6	186.4	197.7	198.2	197.9	197.7	200.0
36 Money market deposit accounts	359.0	353.2	356.5	381.6	375.8	379.7	381.6	380.7
37 Small time deposits ⁹	387.2	446.0	529.2	596.0	588.0	588.4	596.0	601.9
38 Large time deposits ^{10, 11}	325.8	366.8	400.4	386.0	389.2	389.9	386.0	392.8
<i>Thrift institutions</i>								
39 Savings deposits	231.4	229.9	214.2	209.6	214.4	212.6	209.6	209.1
40 Money market deposit accounts	168.6	151.6	133.7	128.7	129.7	130.1	128.7	128.4
41 Small time deposits ⁹	529.5	583.8	613.8	565.0	574.0	572.5	565.0	562.5
42 Large time deposits ¹⁰	163.3	175.2	162.6	121.0	129.1	125.9	121.0	117.4
<i>Money market mutual funds</i>								
43 General purpose and broker-dealer	221.1	240.7	313.5	347.8	341.3	344.5	347.8	356.6
44 Institution-only	89.6	87.6	102.8	127.0	117.1	121.2	127.0	134.8
<i>Repurchase agreements and Eurodollars</i>								
45 Overnight	83.2	83.4	77.3	73.9	83.6	77.7	73.9	70.8
46 Term	197.1	227.7	179.8	162.9	166.9	168.3	162.9	161.7
<i>Debt components</i>								
47 Federal debt	1,955.6	2,111.8	2,265.9	2,532.1	2,459.3	2,498.8	2,532.1	n.a.
48 Nonfederal debt	6,373.5	6,981.4	7,509.9	7,927.1	7,858.1	7,887.8	7,927.1	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) 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 (OCD) 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.

M2: M1 plus 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, money market deposit accounts (MMDAs), savings and small-denomination time deposits (time deposits—including retail RPs—in amounts of less than \$100,000), and balances in both taxable and tax-exempt general purpose and broker-dealer money market mutual funds. Excludes individual retirement accounts (IRA) 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.

M3: M2 plus large-denomination time deposits and term RP liabilities (in amounts of \$100,000 or more) issued by all depository institutions, 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 balances in both taxable and tax-exempt, institution-only money market mutual funds. Excludes amounts held by depository institutions, the U.S. government, money market funds, and foreign banks and official institutions. Also subtracted is the estimated amount of overnight RPs and Eurodollars held by institution-only money market mutual funds.

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 mutual fund holdings of these assets.

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.

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 balances at all depository institutions, credit union share draft balances, and demand deposits at thrift institutions.

7. Sum of overnight RPs and overnight Eurodollars, money market fund balances (general purpose and broker-dealer), MMDAs, and savings and small time deposits.

8. Sum of large time deposits, term RPs, term Eurodollars of U.S. residents, and 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-denomination time deposits—including retail RPs—are those issued in amounts of less than \$100,000. All individual retirement accounts (IRA) and Keogh accounts at commercial banks and thrifts are subtracted from small time deposits.

10. Large-denomination time deposits are those issued in amounts of \$100,000 or more, excluding those booked at international banking facilities.

11. Large-denomination time deposits at commercial banks less those held by money market mutual funds, depository institutions, and foreign banks and official institutions.

1.22 BANK DEBITS AND DEPOSIT TURNOVER¹

Debits are shown in billions of dollars, turnover as ratio of debits to deposits. Monthly data are at annual rates.

Bank group, or type of customer	1987	1988	1989	1990					
				June	July	Aug.	Sept.	Oct.	Nov.
DEBITS TO	Seasonally adjusted								
Demand deposits ³									
1 All insured banks	217,116.2	226,888.4	272,793.1	301,578.2	301,589.9	309,441.0	287,546.5	294,431.1	296,942.4
2 Major New York City banks	104,496.3	107,547.3	121,894.2	131,042.7	130,590.7	133,491.9	131,920.3	137,315.9	138,232.9
3 Other banks	112,619.8	119,341.2	150,898.9	170,535.5	170,999.2	175,949.1	155,626.2	157,115.2	158,709.6
4 ATS-NOW accounts ⁴	2,402.7	2,757.7	3,501.8	4,004.2	4,163.7	4,478.9	3,763.3	4,229.5	4,193.5
5 Savings deposits ⁵	526.5	579.2	636.6	566.6	608.8	592.0	543.7	638.6	560.0
DEPOSIT TURNOVER									
Demand deposits ³									
6 All insured banks	612.1	641.2	781.0	866.2	865.5	888.6	826.2	852.0	861.7
7 Major New York City banks	2,670.6	2,903.5	3,401.6	3,742.8	3,838.3	3,777.5	3,827.6	4,100.4	4,132.0
8 Other banks	357.0	376.8	481.5	544.6	543.8	562.3	496.3	503.4	510.1
9 ATS-NOW accounts ⁴	13.8	14.7	18.3	19.5	20.5	21.9	18.3	20.6	20.2
10 Savings deposits ⁵	3.1	3.1	3.5	2.9	3.1	3.1	2.8	3.3	2.9
DEBITS TO	Not seasonally adjusted								
Demand deposits ³									
11 All insured banks	217,125.1	227,010.7	271,957.3	302,181.4	302,826.4	321,168.8	263,881.4	304,854.0	283,550.3
12 Major New York City banks	104,518.8	107,565.0	122,241.8	130,332.7	130,100.1	137,460.3	121,343.4	142,664.0	133,220.6
13 Other banks	112,606.2	119,445.7	149,715.5	171,848.6	172,726.3	183,708.4	142,538.0	162,190.0	150,329.7
14 ATS-NOW accounts ⁴	2,404.8	2,754.7	3,496.5	4,098.2	4,108.9	4,274.0	3,868.9	4,207.4	3,928.4
15 MMDA ⁶	1,954.2	2,430.1	2,790.6	2,992.1	3,033.8	3,171.1	2,786.5	3,138.8	2,798.5
16 Savings deposits ⁵	526.8	578.0	635.8	567.8	640.3	598.1	538.5	662.6	510.1
DEPOSIT TURNOVER									
Demand deposits ³									
17 All insured banks	612.3	641.7	779.0	866.5	864.8	938.3	760.6	887.5	815.7
18 Major New York City banks	2,674.9	2,901.4	3,415.4	3,797.6	3,777.5	4,109.2	3,607.3	4,376.5	4,067.4
19 Other banks	356.9	377.1	477.8	546.6	547.1	594.8	454.9	521.7	477.4
20 ATS-NOW accounts ⁴	13.8	14.7	18.3	20.1	20.4	21.1	19.0	20.7	19.0
21 MMDA ⁶	5.3	6.9	8.3	8.2	8.3	8.6	7.5	8.4	7.4
22 Savings deposits ⁵	3.1	3.1	3.5	2.9	3.3	3.1	2.8	3.4	2.6

1. Historical tables containing revised data for earlier periods may be obtained from the Monetary and Reserves Projections Section, Division of Monetary Affairs, Board of Governors of the Federal Reserve System, Washington, D.C. 20551.

These data also appear on the Board's G.6(406) release. For 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 (NOW) and accounts authorized for automatic transfer to demand deposits (ATS). ATS data are available beginning December 1978.

5. Excludes ATS and NOW accounts, MMDA and special club accounts, such as Christmas and vacation clubs.

6. Money market deposit accounts.

A16 Domestic Financial Statistics □ April 1991

1.23 LOANS AND SECURITIES All Commercial Banks¹

Billions of dollars; averages of Wednesday figures

Category	1990 ²											1991
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Seasonally adjusted												
1 Total loans and securities ²	2,615.1	2,633.2	2,648.1	2,655.4	2,670.1	2,683.0	2,704.9	2,708.0	2,713.6	2,716.6	2,723.6	2,721.1
2 U.S. government securities	413.8	420.3	426.4	430.3	438.4	442.8	445.7	450.1	453.1	454.0	454.2	454.0
3 Other securities	180.6	180.4	180.2	178.2	177.5	177.3	178.8	178.8	177.8	175.9	175.6	177.8
4 Total loans and leases ²	2,020.7	2,032.5	2,041.5	2,046.9	2,054.2	2,062.9	2,080.4	2,079.0	2,082.7	2,086.7	2,093.8	2,089.3
5 Commercial and industrial	640.3	643.5	645.9	644.3	645.3	644.4	645.1	644.7	643.7	646.5	648.1	644.3
6 Bankers acceptances held ³	7.6	7.5	7.6	7.6	7.8	7.6	7.4	7.5	7.3	7.4	7.5	7.7
7 Other commercial and industrial	632.7	636.0	638.3	636.7	637.4	636.7	637.7	637.1	636.4	639.1	640.5	636.7
8 U.S. addressees ⁴	627.9	631.0	634.0	632.2	633.2	632.5	633.4	632.6	631.7	634.0	635.3	631.1
9 Non-U.S. addressees ⁴	4.9	4.9	4.3	4.4	4.3	4.3	4.3	4.5	4.7	5.1	5.3	5.5
10 Real estate	774.9	782.7	790.8	798.9	805.9	814.5	818.0	822.5	827.7	832.0	836.5	837.2
11 Individual	379.2	379.4	377.8	378.4	377.6	376.4	378.2	378.6	379.7	378.7	378.9	375.8
12 Security	38.3	37.0	36.8	35.5	35.0	38.7	44.6	41.3	40.5	39.6	40.6	43.2
13 Nonbank financial institutions	32.9	33.7	34.0	34.1	34.4	34.7	35.0	35.3	35.2	35.0	34.9	34.4
14 Agricultural	30.8	30.8	30.8	31.0	31.1	31.3	31.5	31.8	32.2	32.5	33.0	33.6
15 State and political subdivisions	39.1	38.6	38.2	37.9	37.3	36.4	35.8	35.2	35.0	34.7	34.2	33.5
16 Foreign banks	7.9	8.3	8.6	8.7	7.4	7.0	7.9	8.1	9.0	8.2	7.4	6.6
17 Foreign official institutions	3.3	3.2	3.3	3.3	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.0
18 Lease financing receivables	32.1	32.4	32.4	32.6	32.4	32.6	32.7	32.8	33.3	32.9	32.7	32.4
19 All other loans	41.8	43.0	42.8	42.3	44.5	43.6	48.2	45.4	43.2	43.3	44.3	45.2
Not seasonally adjusted												
20 Total loans and securities ²	2,616.7	2,630.0	2,647.7	2,654.5	2,670.8	2,677.5	2,700.1	2,707.0	2,715.5	2,720.1	2,730.5	2,721.0
21 U.S. government securities	419.0	423.8	427.5	430.3	437.1	439.9	444.0	448.2	450.8	454.1	451.5	455.8
22 Other securities	180.3	179.7	179.5	178.0	177.5	176.4	179.1	179.0	178.0	176.6	176.3	177.9
23 Total loans and leases ²	2,017.3	2,026.4	2,040.7	2,046.2	2,056.3	2,061.1	2,077.1	2,079.8	2,086.7	2,089.3	2,102.7	2,087.2
24 Commercial and industrial	639.5	645.8	650.6	648.3	647.7	644.6	643.5	640.9	641.2	644.5	648.0	641.1
25 Bankers acceptances held ³	7.7	7.5	7.4	7.6	8.0	7.3	7.2	7.5	7.4	7.6	7.7	7.6
26 Other commercial and industrial	631.7	638.4	643.2	640.8	639.7	637.3	636.3	633.4	633.8	636.9	640.3	633.5
27 U.S. addressees ⁴	626.9	633.6	638.6	636.3	635.5	632.9	631.8	628.8	629.1	631.9	635.1	628.2
28 Non-U.S. addressees ⁴	4.8	4.7	4.6	4.5	4.3	4.4	4.5	4.6	4.7	5.0	5.2	5.3
29 Real estate	772.1	779.4	788.4	798.0	806.0	814.9	819.9	824.2	830.3	834.0	837.9	837.1
30 Individual	378.7	376.6	375.1	376.6	375.6	374.1	377.4	380.4	380.6	379.8	383.8	380.0
31 Security	39.6	38.1	38.3	34.9	37.1	38.6	43.9	40.3	39.5	38.5	40.0	41.0
32 Nonbank financial institutions	32.5	33.0	33.7	33.8	34.5	34.6	35.0	35.0	35.1	35.4	36.3	35.0
33 Agricultural	29.9	29.5	29.8	30.6	31.4	32.1	32.5	32.9	33.1	32.9	32.9	32.9
34 State and political subdivisions	39.3	38.6	38.2	37.8	37.2	36.2	35.7	35.2	35.0	34.6	34.0	34.1
35 Foreign banks	7.8	7.9	8.3	8.6	7.5	7.1	8.0	8.2	9.3	8.4	7.6	6.6
36 Foreign official institutions	3.3	3.2	3.3	3.3	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.0
37 Lease financing receivables	32.3	32.4	32.4	32.5	32.2	32.4	32.6	32.8	33.3	33.1	32.8	32.8
38 All other loans	42.5	42.0	42.5	41.6	43.9	43.3	45.4	46.6	46.0	45.0	46.2	43.5

1. Data have been revised to reflect new benchmark and seasonal adjustments. Historical data may be obtained from the Division of Monetary Affairs, Banking and Money Market Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. These data also appear in the Board's G.7

(407) release. For address, see inside front cover.

2. Excludes loans to commercial banks in the United States.

3. Includes nonfinancial commercial paper held.

4. United States includes the 50 states and the District of Columbia.

1.24 MAJOR NONDEPOSIT FUNDS OF COMMERCIAL BANKS¹

Monthly averages, billions of dollars

Source	1990 ²											1991
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<i>Seasonally adjusted</i>												
1 Total nondeposit funds ²	267.6	270.9	268.9	269.0	272.3	281.1	283.7	282.9	290.7	291.5	286.8	276.6
2 Net balances due to related foreign offices ³	15.9	19.0	18.7	25.8	17.2	19.0	19.0	21.5	29.9	30.1	34.6	33.4
3 Borrowings from other than commercial banks in United States ⁴	251.7	251.8	250.3	243.2	255.1	262.0	264.8	261.3	260.8	261.5	252.3	243.2
4 Domestically chartered banks	200.2	197.2	193.7	186.6	196.8	201.6	202.2	198.8	196.9	195.1	187.2	182.4
5 Foreign-related banks	51.5	54.6	56.6	56.5	58.3	60.4	62.6	62.5	63.9	66.4	65.1	60.8
<i>Not seasonally adjusted</i>												
6 Total nondeposit funds	270.9	276.5	269.7	277.3	275.1	277.2	282.5	278.4	287.6	292.7	281.3	272.0
7 Net balances due to related foreign offices	15.9	18.3	16.7	28.5	17.4	16.5	18.5	21.5	29.5	30.8	37.1	33.1
8 Domestically chartered banks	-11.1	-11.5	-10.6	-1.3	-6.1	-3.8	-3.4	-4.2	-1.0	6	-4.2	-15.3
9 Foreign-related banks	26.9	29.8	27.3	29.8	23.5	22.4	21.9	25.7	30.5	30.2	41.3	48.4
10 Borrowings from other than commercial banks in United States ⁴	255.0	258.2	253.0	248.8	257.7	260.6	264.0	256.9	258.0	262.0	244.2	238.9
11 Domestically chartered banks	202.7	202.3	194.8	191.6	197.7	199.1	201.7	195.6	195.0	197.6	182.9	177.9
12 Federal funds and security RP borrowings ⁵	199.0	197.8	191.0	188.3	194.6	196.2	198.1	191.6	191.7	194.8	180.1	174.7
13 Other ⁶	3.7	4.5	3.7	3.4	3.2	2.9	3.6	4.0	3.2	2.9	2.8	3.2
14 Foreign-related banks ⁶	52.3	55.9	58.2	57.2	60.0	61.5	62.3	61.3	63.1	64.3	61.3	61.0
MEMO												
15 Gross large time deposits ⁷												
Seasonally adjusted	459.9	459.0	456.2	454.4	451.5	451.9	449.2	443.6	437.9	435.2	431.8	441.0
Not seasonally adjusted	458.7	458.8	453.9	454.0	451.0	450.5	450.1	445.4	440.4	437.8	431.8	439.4
16 U.S. Treasury demand balances at commercial banks ⁸												
Seasonally adjusted	18.6	19.8	21.3	19.2	20.6	15.0	32.7	26.0	22.3	25.2	24.4	25.9
Not seasonally adjusted	22.0	16.7	20.0	25.2	20.9	15.2	23.5	31.0	20.9	19.2	23.0	29.6

1. Data have been revised to reflect new benchmark and seasonal adjustments. Historical data may be obtained from the Division of Monetary Affairs, Banking and Money Market Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. Commercial banks are those in the 50 states and the District of Columbia with national or state charters plus 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.

These data also appear in the Board's G.10 (411) release. For address, see inside front cover.

2. Includes federal funds, 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 IBFs.

4. Other borrowings are 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. Based on daily average data reported weekly by approximately 120 large banks and quarterly or annual data reported by other banks.

6. Figures are partly daily averages 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 BANKING INSTITUTIONS Last-Wednesday-of-Month Series¹

Billions of dollars

Account	1990 ²											1991
	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	
ALL COMMERCIAL BANKING INSTITUTIONS²												
1 Loans and securities	2,821.2	2,839.0	2,847.1	2,871.6	2,878.8	2,896.8	2,887.1	2,931.3	2,925.1	2,936.9	2,908.6	
2 Investment securities	576.8	583.0	587.2	589.8	588.3	597.2	601.7	604.9	603.3	605.6	612.8	
3 U.S. government securities	405.9	413.1	417.8	422.2	421.7	429.1	434.5	438.0	437.6	439.6	447.6	
4 Other	170.8	170.0	169.3	167.6	166.6	168.0	167.2	166.8	165.7	166.0	165.2	
5 Trading account assets	26.0	23.9	21.4	23.7	27.7	29.3	21.4	27.4	25.0	22.0	24.1	
6 Total loans	2,218.5	2,232.1	2,238.5	2,258.1	2,262.8	2,270.4	2,264.0	2,299.0	2,296.9	2,309.3	2,271.7	
7 Interbank loans	191.6	190.5	192.8	202.2	204.8	200.1	191.0	207.9	207.0	204.0	193.2	
8 Loans excluding interbank	2,026.9	2,041.5	2,045.7	2,055.9	2,057.9	2,070.3	2,073.0	2,091.2	2,089.8	2,105.3	2,078.5	
9 Commercial and industrial	646.2	650.4	645.8	646.9	641.5	639.7	639.7	643.4	644.4	650.8	637.4	
10 Real estate	781.6	790.2	801.7	807.9	816.0	820.1	825.0	831.5	833.7	838.3	836.9	
11 Individual	375.5	376.7	376.6	376.8	374.8	379.4	381.2	380.8	380.5	384.7	378.2	
12 All other	223.6	224.2	221.7	224.3	225.6	231.1	227.1	235.5	231.2	231.5	225.9	
13 Total cash assets	312.9	310.6	327.7	319.6	310.7	307.7	313.7	322.8	316.7	317.9	319.2	
14 Reserves with Federal Reserve Banks	32.0	31.5	27.6	31.8	29.8	30.0	33.6	29.7	33.0	23.4	16.5	
15 Cash in vault	27.7	28.5	29.9	28.9	28.8	30.3	29.3	29.4	32.8	32.0	30.4	
16 Cash items in process of collection	80.0	80.1	100.7	86.2	79.6	77.5	81.1	85.4	78.4	86.0	74.7	
17 Demand balances at U.S. depository institutions	27.4	26.3	32.0	27.7	27.3	27.3	27.0	28.5	28.4	29.6	28.1	
18 Other cash assets	45.8	44.2	47.5	45.0	45.2	42.5	42.8	47.8	44.2	46.8	49.6	
19 Other assets	209.1	204.8	197.0	207.5	205.3	220.8	226.6	230.1	226.6	245.1	250.0	
20 Total assets/total liabilities and capital	3,243.2	3,254.4	3,281.8	3,298.6	3,294.8	3,325.3	3,327.4	3,382.2	3,368.5	3,399.9	3,357.8	
21 Deposits	2,251.3	2,258.3	2,295.3	2,282.4	2,290.9	2,296.5	2,300.1	2,332.0	2,319.9	2,363.4	2,334.6	
22 Transaction deposits	594.3	600.9	618.1	598.6	590.1	589.1	595.3	612.1	598.1	637.1	587.9	
23 Savings deposits	551.8	548.8	554.5	556.4	561.3	565.6	563.5	570.5	573.1	573.3	573.9	
24 Time deposits	1,105.3	1,108.6	1,122.7	1,127.5	1,139.5	1,141.8	1,141.3	1,149.4	1,148.8	1,152.9	1,172.8	
25 Borrowings	545.4	563.9	546.1	572.6	562.1	579.9	570.9	591.0	570.6	548.7	529.7	
26 Other liabilities	230.8	216.0	223.3	223.9	220.5	226.2	233.1	236.0	255.3	264.4	268.9	
27 Residual (assets less liabilities)	215.7	216.2	217.1	219.7	221.2	222.8	223.4	223.3	222.7	223.5	224.6	
MEMO												
28 U.S. government securities (including trading account)	423.8	428.2	430.9	436.1	440.4	446.3	445.1	454.2	451.9	451.1	459.4	
29 Other securities (including trading account)	179.0	178.7	177.6	177.4	175.6	180.2	178.0	178.1	176.4	176.5	177.5	
DOMESTICALLY CHARTERED COMMERCIAL BANKS³												
30 Loans and securities	2,570.5	2,584.1	2,589.5	2,608.3	2,614.4	2,631.8	2,620.5	2,658.4	2,645.1	2,654.2	2,627.8	
31 Investment securities	547.2	551.9	558.6	559.2	557.3	566.1	569.0	571.5	569.8	570.5	575.3	
32 U.S. government securities	391.2	398.0	404.8	407.7	406.5	414.1	417.9	420.9	420.8	421.7	426.5	
33 Other	156.0	154.0	153.7	151.5	150.8	152.0	151.2	150.6	149.1	148.8	148.8	
34 Trading account assets	26.0	23.9	21.4	23.7	27.7	29.3	21.4	27.4	25.0	22.0	24.1	
35 Total loans	1,997.3	2,008.3	2,009.5	2,025.5	2,029.4	2,036.4	2,030.0	2,059.5	2,050.3	2,061.7	2,028.5	
36 Interbank loans	148.3	148.9	144.2	153.3	153.7	153.7	146.0	164.0	157.4	160.0	151.7	
37 Loans excluding interbank	1,849.0	1,859.3	1,865.4	1,872.2	1,875.7	1,882.6	1,884.0	1,895.5	1,892.9	1,901.7	1,876.8	
38 Commercial and industrial	519.4	524.0	521.4	520.1	517.3	514.0	513.2	515.4	513.4	512.7	504.4	
39 Real estate	747.8	753.9	764.5	769.7	776.7	779.5	784.0	789.8	791.6	796.4	794.0	
40 Individual	375.5	376.7	376.6	376.8	374.8	379.4	381.2	380.8	380.5	384.7	378.2	
41 All other	206.3	204.7	202.9	205.5	206.9	209.8	205.7	209.5	207.4	207.9	200.2	
42 Total cash assets	187.3	186.3	209.7	193.3	184.7	181.7	187.0	189.3	187.7	188.3	166.6	
43 Reserves with Federal Reserve Banks	29.8	29.8	26.6	30.9	28.9	28.0	32.1	28.5	31.5	23.0	15.3	
44 Cash in vault	27.7	28.5	29.9	28.9	28.8	30.3	29.2	29.4	32.8	32.0	30.3	
45 Cash items in process of collection	78.5	78.7	99.3	84.2	78.1	75.9	79.0	83.6	76.4	83.9	72.9	
46 Demand balances at U.S. depository institutions	25.6	24.6	30.0	25.9	25.6	25.0	25.1	26.6	26.2	27.6	26.2	
47 Other cash assets	25.7	24.7	23.9	23.4	23.4	22.5	21.5	21.2	20.9	21.8	22.0	
48 Other assets	136.4	133.5	136.0	141.2	139.1	145.6	152.3	153.6	155.0	167.8	167.0	
49 Total assets/liabilities and capital	2,894.2	2,903.9	2,935.2	2,942.9	2,938.2	2,959.1	2,959.7	3,001.3	2,987.8	3,010.3	2,961.4	
50 Deposits	2,169.4	2,175.7	2,213.0	2,200.0	2,209.2	2,214.9	2,220.1	2,253.8	2,243.3	2,283.5	2,236.2	
51 Transaction deposits	584.5	591.3	608.3	588.5	580.2	578.8	584.4	601.5	587.7	626.1	577.4	
52 Savings deposits	548.8	545.8	551.6	553.4	558.3	562.6	560.4	567.4	569.8	570.0	570.6	
53 Time deposits	1,036.1	1,038.6	1,053.2	1,058.1	1,070.7	1,073.5	1,075.3	1,085.0	1,085.8	1,087.4	1,088.1	
54 Borrowings	393.1	406.4	393.6	410.3	396.0	404.3	395.8	400.4	394.1	375.6	380.0	
55 Other liabilities	119.9	109.5	115.1	116.5	115.3	120.7	124.1	127.5	131.5	131.4	124.3	
56 Residual (assets less liabilities)	211.8	212.4	213.4	216.2	217.7	219.2	219.7	219.6	219.0	219.8	220.9	
MEMO												
57 Real estate loans, revolving	52.0	53.2	54.1	55.0	56.3	57.7	58.6	60.6	61.1	61.7	63.0	
58 Real estate loans, other	695.8	700.7	710.3	714.7	720.4	721.7	725.4	729.2	730.5	734.7	731.0	

1. Data have been revised because of benchmarking beginning April 1990. Back data are available from the Banking and Monetary Statistics section, Board of Governors of the Federal Reserve System, Washington, D.C., 20551. These data also appear in the Board's weekly H.8 (510) release.

Figures are partly estimated. They include all bank-premises subsidiaries and other significant majority-owned domestic subsidiaries. Loan and securities data for domestically chartered commercial banks are estimates for the last Wednesday of the month based on a sample of weekly reporting banks and quarter-end

condition report data. Data for other banking institutions are estimates made for the last Wednesday of the month based on a weekly reporting sample of foreign-related institutions and quarter-end condition reports.

2. Commercial banking institutions include insured domestically chartered commercial banks, branches and agencies of foreign banks, Edge Act and Agreement corporations, and New York State foreign investment corporations.

3. Insured domestically chartered commercial banks include all member banks and insured nonmember banks.

1.26 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS¹

Millions of dollars, Wednesday figures

Account	1990								Adjustment bank 1990 ²
	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26	
1 Cash and balances due from depository institutions	98,474	124,953	106,130	107,639	107,019	106,643	107,105	105,231	1,656
2 Total loans, leases, and securities, net	1,305,927	1,311,348	1,305,215	1,299,570	1,308,365	1,301,990	1,303,670	1,300,989	22,869
3 U.S. Treasury and government agency	184,961	183,743	183,668	180,844	182,165	179,635	176,340	174,400	2,697
4 Trading account	16,783	15,538	16,186	14,279	16,000	14,185	12,596	11,547	4
5 Investment account	168,178	168,205	167,482	166,565	166,165	165,450	163,743	162,852	2,694
6 Mortgage-backed securities	82,237	82,126	82,251	81,521	81,523	80,703	79,303	78,995	1,463
All other maturing in									
7 One year or less	15,159	15,020	15,254	15,271	15,678	15,956	16,264	15,810	684
8 Over one through five years	41,685	41,855	41,420	41,281	40,148	40,112	39,627	39,367	403
9 Over five years	29,096	29,204	28,557	28,492	28,815	28,679	28,549	28,680	143
10 Other securities	60,533	60,421	60,108	60,107	59,762	59,275	59,176	59,442	890
11 Trading account	1,364	1,406	1,406	1,529	1,355	910	1,064	1,242	0
12 Investment account	59,170	59,015	58,702	58,578	58,407	58,366	58,112	58,200	889
13 States and political subdivisions, by maturity	31,170	30,958	30,648	30,465	30,102	29,937	29,520	29,459	539
14 One year or less	3,797	3,752	3,646	3,649	3,650	3,628	3,589	3,560	67
15 Over one year	27,373	27,206	27,002	26,816	26,452	26,309	25,931	25,899	471
16 Other bonds, corporate stocks, and securities	28,000	28,057	28,054	28,113	28,306	28,428	28,592	28,740	350
17 Other trading account assets	9,557	9,178	8,368	8,729	8,617	8,292	9,004	8,749	399
18 Federal funds sold ⁴	74,018	77,276	72,837	71,300	76,716	76,078	75,711	76,078	2,275
19 To commercial banks	50,193	55,265	50,127	48,111	54,392	50,972	50,775	52,782	2,227
20 To nonbank brokers and dealers in securities	18,613	17,690	18,158	19,054	18,173	21,252	20,299	19,048	48
21 To others	5,212	4,320	4,552	4,134	4,150	3,853	4,636	4,248	0
22 Other loans and leases, gross	1,016,970	1,020,866	1,020,413	1,018,709	1,021,299	1,018,922	1,023,606	1,022,259	17,236
23 Other loans, gross	989,630	993,458	993,060	991,382	993,968	991,638	996,531	995,166	17,183
24 Commercial and industrial	19,592	319,017	319,400	317,822	319,262	317,646	316,592	316,609	4,488
25 Bankers acceptances and commercial paper	1,520	1,488	1,338	1,384	1,493	1,380	1,315	1,363	0
26 All other	318,071	317,529	318,061	316,438	317,769	316,266	315,728	315,246	4,487
27 U.S. addressees	316,609	315,886	316,601	315,017	316,327	314,838	313,902	313,802	4,487
28 Non-U.S. addressees	1,462	1,643	1,460	1,421	1,442	1,428	1,376	1,444	0
29 Real estate loans	383,252	384,187	384,903	383,952	386,994	387,157	388,401	387,106	8,167
30 Revolving, home equity	32,676	32,803	32,864	32,939	33,323	32,946	33,198	33,205	954
31 All other	350,576	351,384	352,039	351,013	353,671	354,211	355,203	353,902	7,213
32 To individuals for personal expenditures	172,654	172,754	172,993	173,366	173,785	174,448	175,727	175,844	3,784
33 To depository and financial institutions	50,624	51,612	51,300	51,242	51,192	49,879	51,465	50,537	14
34 Commercial banks in the United States	22,571	22,943	23,632	23,740	22,719	21,551	23,297	22,186	0
35 Banks in foreign countries	3,993	4,378	4,159	4,208	4,326	4,344	4,038	4,180	0
36 Nonbank depository and other financial institutions	24,060	24,292	23,510	23,294	24,146	23,984	24,130	24,172	14
37 For purchasing and carrying securities	12,958	14,020	13,062	14,020	12,062	12,721	13,344	12,990	9
38 To finance agricultural production	6,065	6,046	5,930	5,858	5,822	5,817	5,848	5,910	94
39 To states and political subdivisions	21,611	21,611	21,490	21,415	21,256	21,112	20,950	20,940	261
40 To foreign governments and official institutions	1,352	1,431	1,492	1,402	1,489	1,563	1,280	1,424	0
41 All other	21,522	22,778	22,490	22,306	22,106	21,295	22,924	23,804	366
42 Lease financing receivables	27,341	27,408	27,354	27,326	27,331	27,285	27,075	27,093	53
43 Less: Unearned income	4,232	4,224	4,214	4,196	4,154	4,146	4,128	4,129	43
44 Loan and lease reserve ⁵	35,881	35,910	35,965	35,923	36,039	36,066	36,038	35,810	585
45 Other loans and leases, net	976,857	980,731	980,234	978,590	981,105	978,710	983,439	982,320	16,608
46 All other assets	139,382	139,846	141,369	142,960	144,959	144,443	148,448	153,572	1,996
47 Total assets	1,543,784	1,576,148	1,552,714	1,550,169	1,560,343	1,553,076	1,559,223	1,559,677	26,521
48 Demand deposits	213,880	234,321	221,678	217,214	226,104	224,606	230,851	238,449	3,706
49 Individuals, partnerships, and corporations	173,796	188,752	178,123	173,928	182,170	181,317	184,995	191,867	3,327
50 States and political subdivisions	5,825	5,757	7,201	6,427	6,796	6,640	6,882	7,441	73
51 U.S. government	1,427	1,593	2,070	1,038	1,661	1,448	1,909	1,623	16
52 Depository institutions in the United States	18,678	23,771	19,568	19,915	20,469	19,542	21,847	21,169	104
53 Banks in foreign countries	5,668	6,024	5,769	5,335	5,145	6,455	5,538	5,735	0
54 Foreign governments and official institutions	648	538	590	638	769	502	790	557	0
55 Certified and officers' checks	7,839	7,886	8,356	9,934	9,093	8,701	8,890	10,057	185
56 Transaction balances other than demand deposits	80,723	79,712	79,698	78,354	83,298	81,456	82,670	82,642	2,159
57 Nontransaction balances	756,352	756,440	754,987	753,989	759,755	758,667	757,988	756,632	16,261
58 Individuals, partnerships, and corporations	720,373	720,510	718,959	717,988	724,031	722,715	722,887	721,980	15,692
59 States and political subdivisions	28,476	28,471	28,642	28,675	28,512	28,750	27,979	27,526	516
60 U.S. government	1,009	1,003	1,014	1,019	1,014	1,008	1,007	1,004	3
61 Depository institutions in the United States	6,056	6,007	5,925	5,862	5,756	5,744	5,646	5,598	49
62 Foreign governments, official institutions, and banks	439	450	447	445	442	450	469	524	0
63 Liabilities for borrowed money	287,438	300,180	288,497	290,571	281,352	277,685	278,501	272,666	2,691
64 Borrowings from Federal Reserve Banks	0	227	0	0	0	90	0	4,281	0
65 Treasury tax-and-loan notes	9,345	9,558	13,132	16,243	4,767	4,850	23,381	25,424	0
66 All other liabilities for borrowed money ⁶	278,093	290,395	275,365	274,328	276,585	272,745	255,120	242,960	2,691
67 Other liabilities and subordinated notes and debentures	100,993	100,736	103,750	105,445	105,305	105,499	104,492	103,931	207
68 Total liabilities	1,439,386	1,471,389	1,448,610	1,445,573	1,455,814	1,447,913	1,454,502	1,454,319	25,024
69 Residual (total assets minus total liabilities) ⁷	104,397	104,759	104,104	104,596	104,529	105,162	104,721	105,358	1,496
MEMO									
70 Total loans and leases (gross) and investments adjusted ⁸	1,273,277	1,273,275	1,271,635	1,267,838	1,271,447	1,269,680	1,269,764	1,265,960	21,270
71 Total loans and leases (gross) adjusted ⁸	1,018,225	1,019,933	1,019,492	1,018,158	1,020,902	1,022,477	1,025,245	1,023,370	17,284
72 Time deposits in amounts of \$100,000 or more	208,704	207,538	206,728	206,049	205,508	204,806	202,167	201,087	2,222
73 U.S. Treasury securities maturing in one year or less	15,421	15,376	15,224	15,104	15,245	15,426	14,264	14,112	485
74 Loans sold outright to affiliates—total ⁹	277	281	278	263	250	259	262	267	0
75 Commercial and industrial	136	150	152	140	135	135	138	151	0
76 Other	140	131	125	123	115	124	124	116	0
77 Nontransaction savings deposits (including MMDAs)	290,268	291,347	290,208	289,582	292,945	292,352	291,425	290,94	6,046

1. Beginning Jan. 6, 1988, the "Large bank" reporting group was revised somewhat, eliminating some former reporters with less than \$2 billion of assets and adding some new reporters with assets greater than \$3 billion.

2. These amounts represent accumulated adjustments originally made to offset the cumulative effects of bank mergers during the calendar year. The adjustment data for 1990 should be added to the reported data for 1990 to establish comparability with data reported for 1991.

3. Includes U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages.

4. Includes securities purchased under agreements to resell.

5. Includes allocated transfer risk reserve.

6. Includes federal funds purchased and securities sold under agreements to repurchase; for information on these liabilities at banks with assets of \$1 billion or more on Dec. 31, 1977, see table 1.13.

7. This is not a measure of equity capital for use in capital-adequacy analysis or for other analytic uses.

8. Exclusive of loans and federal funds transactions with domestic commercial banks.

9. Loans sold are those sold outright to 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.

1.28 ASSETS AND LIABILITIES OF LARGE WEEKLY REPORTING COMMERCIAL BANKS
IN NEW YORK CITY¹

Millions of dollars, Wednesday figures

Account	1990								
	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26
1 Cash balances due from depository institutions	21,704	22,020	26,393	20,970	23,816	20,642	21,815	24,567	20,398
2 Total loans, leases, and securities, net ²	220,234	214,241	217,372	214,147	213,274	215,993	217,660	216,877	214,789
<i>Securities</i>									
3 U.S. Treasury and government agency ³	0	0	0	0	0	0	0	0	0
4 Trading account ³	0	0	0	0	0	0	0	0	0
5 Investment account	24,195	24,249	24,189	23,299	22,785	23,138	23,182	22,936	22,992
6 Mortgage-backed securities ⁴	11,850	11,841	11,968	11,789	11,425	11,448	11,444	11,151	11,232
All other maturing in									
One year or less	2,338	2,361	2,297	2,319	2,335	2,662	2,675	2,691	2,632
Over one through five years	5,017	5,076	4,923	4,196	4,034	3,891	3,922	3,951	3,974
Over five years	4,990	4,971	5,000	4,995	4,990	5,136	5,141	5,143	5,153
10 Other securities ³	0	0	0	0	0	0	0	0	0
11 Trading account ³	0	0	0	0	0	0	0	0	0
12 Investment account	12,781	12,569	12,438	12,234	12,160	12,187	12,173	12,128	12,108
13 States and political subdivisions, by maturity	5,859	5,632	5,528	5,307	5,254	5,227	5,214	5,189	5,173
14 One year or less	616	607	606	592	597	599	601	579	572
15 Over one year	5,242	5,025	4,922	4,715	4,658	4,627	4,613	4,611	4,600
16 Other bonds, corporate stocks, and securities	6,922	6,936	6,911	6,927	6,905	6,960	6,958	6,938	6,935
17 Other trading account assets ⁵	0	0	0	0	0	0	0	0	0
<i>Loans and leases</i>									
18 Federal funds sold ⁶	19,082	16,102	17,323	16,022	15,229	18,166	20,425	17,145	16,573
19 To commercial banks	13,450	9,289	11,743	9,403	9,273	11,932	13,196	11,220	11,529
20 To nonbank brokers and dealers in securities	5,136	5,792	4,970	5,912	5,306	5,582	6,431	5,448	4,656
21 To others	496	1,021	609	706	650	651	798	477	388
22 Other loans and leases, gross	180,168	177,349	179,504	178,682	179,167	178,534	177,920	180,707	179,049
23 Other loans, gross	174,436	171,628	173,760	172,930	172,796	172,796	172,197	174,968	173,318
24 Commercial and industrial	58,210	57,715	58,052	57,837	57,158	58,316	57,396	56,594	56,608
25 Bankers acceptances and commercial paper	153	145	138	141	142	142	117	109	108
26 All other	58,056	57,571	57,914	57,696	57,016	58,174	57,279	56,485	56,500
27 U.S. addressees	57,430	56,961	57,169	57,103	56,474	57,563	56,676	55,926	55,879
28 Non-U.S. addressees	626	609	745	594	542	611	602	558	621
29 Real estate loans	62,369	62,498	62,626	62,912	62,696	62,787	62,963	63,137	62,356
30 Revolving, home equity	4,364	4,359	4,363	4,371	4,372	4,322	4,333	4,342	4,346
31 All other	58,005	58,139	58,263	58,541	58,325	58,465	58,630	58,795	58,010
32 To individuals for personal expenditures	19,969	19,956	20,013	20,011	19,886	19,787	19,812	19,932	19,474
33 To depository and financial institutions	18,572	17,566	17,917	17,756	18,228	17,749	17,724	19,453	19,191
34 Commercial banks in the United States	6,438	5,818	5,741	5,960	6,596	5,784	5,780	7,802	7,709
35 Banks in foreign countries	3,642	3,098	3,323	3,261	3,347	3,516	3,602	3,409	3,490
36 Nonbank depository and other financial institutions	8,492	8,649	8,852	8,535	8,285	8,449	8,341	8,242	7,992
37 For purchasing and carrying securities	5,284	4,327	4,952	4,112	4,951	3,972	4,245	4,801	4,403
38 To finance agricultural production	153	169	168	172	172	176	176	166	156
39 To states and political subdivisions	4,343	4,318	4,337	4,331	4,328	4,346	4,288	4,232	4,232
40 To foreign governments and official institutions	199	232	308	367	276	375	436	321	466
41 All other	5,336	4,845	5,386	5,433	5,734	5,288	5,158	6,332	6,432
42 Lease financing receivables	5,732	5,722	5,744	5,752	5,738	5,738	5,723	5,739	5,730
43 Less: Unearned income	1,810	1,810	1,809	1,810	1,809	1,790	1,768	1,767	1,769
44 Loan and lease reserve	14,183	14,217	14,273	14,281	14,258	14,241	14,272	14,272	14,163
45 Other loans and leases, net ⁶	164,176	161,322	163,422	162,592	163,100	162,502	161,881	164,668	163,117
46 All other assets ⁷	56,300	56,490	56,951	57,408	59,626	58,468	57,599	60,749	63,902
47 Total assets	298,238	292,751	300,716	292,525	296,716	295,103	297,075	302,194	299,089
<i>Deposits</i>									
48 Demand deposits	45,437	43,309	47,383	44,282	46,534	46,414	46,767	50,992	49,981
49 Individuals, partnerships, and corporations	31,968	31,030	34,376	31,332	32,590	33,429	32,847	36,533	35,609
50 States and political subdivisions	641	632	536	626	777	532	620	741	664
51 U.S. government	294	121	179	235	102	202	174	237	161
52 Depository institutions in the United States	4,482	3,729	4,392	3,692	4,009	4,015	3,935	5,189	4,721
53 Banks in foreign countries	4,752	4,442	4,839	4,628	4,119	3,920	5,315	4,327	4,356
54 Foreign governments and official institutions	419	510	390	454	494	614	368	659	430
55 Certified and officers' checks	2,882	2,846	2,670	3,315	4,443	3,702	3,509	3,306	4,040
56 Transaction balances other than demand deposits (ATS, NOW, Super NOW, telephone transfers)	8,406	8,589	8,528	8,598	8,376	8,836	8,676	8,879	8,979
57 Nontransaction balances	112,559	112,428	113,004	112,350	112,076	112,952	112,641	111,837	111,977
58 Individuals, partnerships, and corporations	104,752	104,926	105,448	104,749	104,444	105,497	105,241	104,778	105,064
59 States and political subdivisions	5,631	5,695	5,753	5,916	5,980	5,813	5,764	5,469	5,372
60 U.S. government	119	117	112	112	118	124	122	112	108
61 Depository institutions in the United States	1,527	1,526	1,523	1,404	1,362	1,350	1,347	1,315	1,252
62 Foreign governments, official institutions, and banks	530	164	167	170	170	168	166	163	180
63 Liabilities for borrowed money	62,290	63,075	66,637	59,714	61,164	58,318	58,685	61,010	57,631
64 Borrowings from Federal Reserve Banks	0	0	0	0	0	0	0	0	3,345
65 Treasury tax-and-loan notes	5,010	1,979	2,074	2,489	3,158	871	937	5,120	6,093
66 All other liabilities for borrowed money ⁸	57,279	61,096	64,563	57,224	58,006	57,448	57,748	55,889	48,192
67 Other liabilities and subordinated notes and debentures	44,093	40,220	40,048	42,603	43,764	43,397	44,986	44,446	44,961
68 Total liabilities	272,785	267,623	275,601	267,548	271,914	269,917	271,756	277,165	273,528
69 Residual (total assets minus total liabilities) ⁹	25,452	25,128	25,115	24,977	24,802	25,186	25,319	25,029	25,560
<i>MEMO</i>									
70 Total loans and leases (gross) and investments adjusted ^{2,10}	216,338	215,162	215,969	214,874	213,472	214,308	214,723	213,894	211,483
71 Total loans and leases (gross) adjusted ¹⁰	179,362	178,344	179,342	179,341	178,527	178,984	179,369	178,830	176,384
72 Time deposits in amounts of \$100,000 or more	35,893	35,415	35,244	34,950	34,817	35,289	34,945	34,384	34,316
73 U.S. Treasury securities maturing in one year or less	1,791	2,051	2,235	2,386	2,191	2,175	2,089	1,935	1,884

1. These data also appear in the Board's H.4.2 (504) release. For address, see inside front cover.

2. Excludes trading account securities.

3. Not available due to confidentiality.

4. Includes U.S. government-issued or guaranteed certificates of participation in pools of residential mortgages.

5. Includes securities purchased under agreements to resell.

6. Includes allocated transfer risk reserve.

7. Includes trading account securities.

8. Includes federal funds purchased and securities sold under agreements to repurchase.

9. Not a measure of equity capital for use in capital adequacy analysis or for other analytic uses.

10. Exclusive of loans and federal funds transactions with domestic commercial banks.

1.30 LARGE WEEKLY REPORTING U.S. BRANCHES AND AGENCIES OF FOREIGN BANKS¹ Assets and Liabilities

Millions of dollars, Wednesday figures

Account	1990								
	Oct. 31	Nov. 7	Nov. 14	Nov. 21	Nov. 28	Dec. 5	Dec. 12	Dec. 19	Dec. 26
1 Cash and due from depository institutions . . .	17,374	16,515	17,455	14,711	15,292	15,044	15,853	14,774	16,332
2 Total loans and securities	163,623	162,182	167,122	164,017	167,730	165,969	170,051	169,302	169,948
3 U.S. Treasury and government agency securities	11,296	11,752	12,068	11,157	11,161	11,330	12,631	12,481	11,778
4 Other securities	7,480	7,599	7,626	7,618	7,639	7,787	7,856	7,878	7,938
5 Federal funds sold ²	7,600	4,304	9,174	6,078	8,905	4,984	6,949	6,205	6,511
6 To commercial banks in the United States . .	4,334	2,267	6,449	4,471	6,418	2,618	4,105	3,445	3,980
7 To others	3,266	2,037	2,725	1,607	2,487	2,366	2,844	2,760	2,531
8 Other loans, gross	137,247	138,527	138,254	139,164	140,025	141,868	142,615	142,738	143,721
9 Commercial and industrial	77,625	77,901	78,208	78,950	79,554	80,669	80,975	81,864	83,871
10 Bankers acceptances and commercial paper	2,579	2,682	2,694	2,895	3,020	3,123	2,739	2,827	3,038
11 All other	75,046	75,219	75,514	76,055	76,534	77,546	78,236	79,037	80,833
12 U.S. addressees	73,626	73,684	73,949	74,519	74,870	75,880	76,550	77,295	79,111
13 Non-U.S. addressees	1,420	1,535	1,565	1,536	1,664	1,666	1,686	1,742	1,722
14 Loans secured by real estate ³	25,482	25,691	25,575	25,760	25,994	26,229	26,041	26,015	26,071
15 To financial institutions	30,376	30,787	30,539	30,277	30,274	30,491	31,130	30,028	29,343
16 Commercial banks in the United States . . .	22,374	23,195	23,424	23,343	23,293	23,460	23,924	22,851	22,238
17 Banks in foreign countries	2,730	2,416	1,828	1,769	1,697	1,445	1,476	1,300	1,208
18 Nonbank financial institutions	5,272	5,176	5,287	5,165	5,284	5,586	5,730	5,877	5,897
19 To foreign governments and official institutions	199	204	213	216	207	210	218	216	203
20 For purchasing and carrying securities . . .	1,561	1,582	1,371	1,581	1,609	1,768	1,698	2,148	1,583
21 All other	2,004	2,362	2,348	2,380	2,387	2,501	2,553	2,467	2,650
22 Other assets (claims on nonrelated parties) .	33,200	33,593	33,227	33,917	33,742	33,877	34,624	34,346	34,060
23 Net due from related institutions	12,980	13,286	12,766	12,985	10,456	12,770	12,345	12,778	11,907
24 Total assets	227,178	225,578	230,570	225,629	227,221	227,664	232,873	231,202	232,250
25 Deposits or credit balances due to other than directly related institutions	45,456	45,374	45,048	44,907	44,701	44,313	44,682	45,696	46,934
26 Transaction accounts and credit balances ⁴ .	3,983	3,928	3,999	4,266	4,405	4,295	4,597	4,334	4,603
27 Individuals, partnerships, and corporations	2,664	2,700	2,690	2,957	2,929	2,907	2,775	2,916	3,001
28 Other	1,319	1,228	1,309	1,309	1,476	1,388	1,822	1,418	1,602
29 Nontransaction accounts ⁵	41,473	41,446	41,049	40,641	40,296	40,018	40,085	41,362	42,331
30 Individuals, partnerships, and corporations	32,040	31,902	31,566	31,245	30,961	30,908	30,998	32,476	33,134
31 Other	9,433	9,544	9,483	9,396	9,335	9,110	9,087	8,886	9,197
32 Borrowings from other than directly related institutions	118,298	116,939	117,215	116,206	110,249	115,015	111,101	111,615	106,986
33 Federal funds purchased ⁶	55,695	52,248	52,394	44,106	44,281	48,309	42,987	45,902	42,491
34 From commercial banks in the United States	29,047	25,429	23,475	22,070	21,228	22,558	19,588	20,491	22,520
35 From others	26,648	26,819	28,919	22,036	23,053	25,751	23,399	25,411	19,971
36 Other liabilities for borrowed money	62,603	64,691	64,821	72,100	65,968	66,706	68,114	65,713	64,495
37 To commercial banks in the United States	35,334	36,065	35,830	38,703	38,432	38,625	38,005	37,374	35,039
38 To others	27,269	28,626	28,991	33,397	27,536	28,081	30,109	28,339	29,456
39 Other liabilities to nonrelated parties . . .	32,964	33,096	33,056	33,458	33,598	33,366	34,296	33,467	33,459
40 Net due to related institutions	30,459	30,168	35,250	31,058	38,672	34,971	42,794	40,422	44,871
41 Total liabilities	227,178	225,578	230,570	225,629	227,221	227,664	232,873	231,202	232,250
MEMO									
42 Total loans (gross) and securities adjusted ⁷ .	136,915	136,720	137,249	136,203	138,019	139,891	142,022	143,006	143,730
43 Total loans (gross) adjusted ⁷	118,139	117,369	117,555	117,428	119,219	120,774	121,535	122,647	124,014

1. Effective Jan. 4, 1989, the reporting panel includes a new group of large U.S. branches and agencies of foreign banks. Earlier data included 65 U.S. branches and agencies of foreign banks that included those branches and agencies with assets of \$750 million or more on June 30, 1980, plus those branches and agencies that had reached the \$750 million asset level on Dec. 31, 1984. These data also appear in the Board's H.4.2 (S04) release. For address, see inside front cover.

2. Includes securities purchased under agreements to resell.

3. Effective Jan. 4, 1989, loans secured by real estate are being reported as a

separate component of Other loans, gross. Formerly, these loans were included in "All other", line 21.

4. Includes credit balances, demand deposits, and other checkable deposits.

5. Includes savings deposits, money market deposit accounts, and time deposits.

6. Includes securities sold under agreements to repurchase.

7. Exclusive of loans to and federal funds sold to commercial banks in the United States.

1.32 COMMERCIAL PAPER AND BANKERS DOLLAR ACCEPTANCES OUTSTANDING

Millions of dollars, end of period

Instrument	1986 Dec.	1987 Dec.	1988 Dec.	1989 Dec.	1990 Dec.	1990					
						July	Aug.	Sept.	Oct.	Nov.	Dec.
	Commercial paper (seasonally adjusted unless noted otherwise)										
1 All issuers	329,991	358,056	457,297	529,055	565,116	545,849	546,691	559,593	557,731	561,448	565,116
Financial companies ¹											
Dealer-placed paper ²											
2 Total	101,072	102,844	160,094	187,084	219,823	199,466	199,099	205,093	203,987	214,199	219,823
3 Bank-related (not seasonally adjusted) ³	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 ⁴											
4 Total	151,820	173,980	194,537	212,210	200,800	202,829	202,217	204,065	204,273	203,289	200,800
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 ⁵	77,099	81,232	102,666	129,761	144,493	143,554	145,375	150,435	149,471	143,960	144,493
	Bankers dollar acceptances (not seasonally adjusted) ⁶										
7 Total	64,974	70,565	66,631	62,972	51,863	52,006	52,324	50,469	52,093	53,968	51,863
Holder											
8 Accepting banks	13,423	10,943	9,086	9,433	9,045	9,628	9,944	9,366	9,189	8,751	9,045
9 Own bills	11,707	9,464	8,022	8,510	7,698	8,395	7,895	7,944	7,868	7,535	7,698
10 Bills bought	1,716	1,479	1,064	924	1,327	1,233	2,049	1,421	1,321	1,217	1,327
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	1,571	1,560	1,333	1,145	880	918
13 Others	50,234	58,658	56,052	52,473	41,900	40,806	40,821	39,770	41,760	44,337	41,900
Basis											
14 Imports into United States	14,670	16,483	14,984	15,651	12,696	13,691	13,188	12,723	12,408	12,758	12,696
15 Exports from United States	12,960	15,227	14,410	13,683	12,686	12,186	12,221	11,889	13,238	13,865	12,686
16 All other	37,344	38,855	37,237	33,638	26,481	26,129	26,915	25,856	26,447	27,345	26,481

1. Institutions engaged primarily in activities such as, but not limited to, commercial savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities.

2. Includes all financial company paper sold by dealers in the open market.

3. Beginning January 1989, bank-related series have been discontinued.

4. As reported by financial companies that place their paper directly with investors.

5. Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

6. Beginning January 1988, the number of respondents in the bankers acceptance survey were reduced from 155 to 111 institutions—those with \$100 million or more in total acceptances. The panel is revised every January and currently has about 100 respondents. The current reporting group accounts for over 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— Feb. 2	8.50	1988	9.32	1989— Jan.	10.50	1990— Jan.	10.11
May 11	9.00	1989	10.87	Feb.	10.93	Feb.	10.00
July 14	9.50	1990	10.01	Mar.	11.50	Mar.	10.00
Aug. 11	10.00			Apr.	11.50	Apr.	10.00
Nov. 28	10.50	1988— Jan.	8.75	May	11.50	May	10.00
		Feb.	8.51	June	11.07	June	10.00
1989— Feb. 10	11.00	Mar.	8.50	July	10.98	July	10.00
May 24	11.50	Apr.	8.50	Aug.	10.50	Aug.	10.00
June 5	11.00	May	8.84	Sept.	10.50	Sept.	10.00
July 31	10.50	June	9.00	Oct.	10.50	Oct.	10.00
		July	9.29	Nov.	10.50	Nov.	10.00
1990— Jan. 8	10.00	Aug.	9.84	Dec.	10.50	Dec.	10.00
		Sept.	10.00				
1991— Feb. 4	9.00	Oct.	10.00			1991— Jan.	9.52
		Nov.	10.05			Feb.	9.05
		Dec.	10.50				

NOTE. These data also appear in the Board's H.15 (519) and G.13 (415) releases. For 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.

Instrument	1988	1989	1990	1990			1991	1990, week ending	1991, week ending			
				Oct.	Nov.	Dec.			Jan.	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
MONEY MARKET RATES												
1 Federal funds ^{1,2,3}	7.57	9.21	8.10	8.11	7.81	7.31	6.91	7.16	7.17	6.40	6.77	6.88
2 Discount window borrowing ^{2,11}	6.20	6.93	6.98	7.00	7.00	6.79	6.50	6.50	6.50	6.50	6.50	6.50
Commercial paper ^{3,4,5}												
3 1-month	7.58	9.11	8.15	8.04	7.84	8.28	7.12	9.01	7.57	7.22	7.27	6.83
4 3-month	7.66	8.99	8.06	7.98	7.91	7.80	7.10	8.14	7.31	7.15	7.25	6.92
5 6-month	7.68	8.80	7.95	7.81	7.74	7.49	7.02	7.66	7.17	7.08	7.15	6.86
Finance paper, directly placed ^{3,4,6}												
6 1-month	7.44	8.99	8.00	7.92	7.64	7.62	6.95	7.59	7.19	7.01	7.09	6.68
7 3-month	7.38	8.72	7.87	7.80	7.75	7.32	6.92	7.14	7.02	6.97	7.06	6.77
8 6-month	7.14	8.16	7.53	7.50	7.42	6.95	6.59	6.73	6.70	6.60	6.60	6.55
Bankers acceptances ^{3,4,7}												
9 3-month	7.56	8.87	7.93	7.85	7.82	7.60	6.96	7.95	7.08	7.05	7.13	6.76
10 6-month	7.60	8.67	7.80	7.67	7.58	7.25	6.84	7.38	6.90	6.96	7.00	6.63
Certificates of deposit, secondary market ^{3,8}												
11 1-month	7.59	9.11	8.15	8.03	7.92	8.27	7.10	9.17	7.39	7.28	7.26	6.77
12 3-month	7.73	9.09	8.15	8.06	8.03	7.82	7.17	8.13	7.35	7.30	7.33	6.94
13 6-month	7.91	9.08	8.17	8.05	7.95	7.64	7.17	7.78	7.31	7.30	7.34	6.97
14 Eurodollar deposits, 3-month ^{3,9}	7.85	9.16	8.16	8.06	8.04	7.87	7.23	8.19	7.67	7.40	7.39	7.20
U.S. Treasury bills												
Secondary market ^{3,4}												
15 3-month	6.67	8.11	7.50	7.17	7.06	6.74	6.22	6.48	6.47	6.31	6.07	6.12
16 6-month	6.91	8.03	7.46	7.16	7.03	6.70	6.28	6.59	6.44	6.36	6.20	6.20
17 1-year	7.13	7.92	7.35	7.06	6.85	6.61	6.25	6.51	6.37	6.30	6.22	6.19
Auction average ^{3,4,12}												
18 3-month	6.68	8.12	7.51	7.19	7.07	6.81	6.30	6.52	6.52	6.52	6.12	6.14
19 6-month	6.92	8.04	7.47	7.20	7.04	6.76	6.34	6.57	6.48	6.51	6.21	6.21
20 1-year	7.17	7.91	7.36	7.01	6.81	6.58	6.22	n.a.	n.a.	n.a.	6.22	n.a.
CAPITAL MARKET RATES												
U.S. Treasury notes and bonds												
Constant maturities ¹³												
21 1-year	7.65	8.53	7.89	7.55	7.31	7.05	6.64	6.95	6.78	6.71	6.62	6.58
22 2-year	8.10	8.57	8.16	7.88	7.60	7.31	7.13	7.28	7.12	7.15	7.18	7.09
23 3-year	8.26	8.55	8.26	8.07	7.74	7.47	7.38	7.49	7.34	7.41	7.43	7.35
24 5-year	8.47	8.50	8.37	8.33	8.02	7.73	7.70	7.79	7.62	7.77	7.77	7.66
25 7-year	8.71	8.52	8.52	8.59	8.28	8.00	7.97	8.08	7.93	8.06	8.02	7.92
26 10-year	8.85	8.49	8.55	8.72	8.39	8.08	8.09	8.15	8.00	8.18	8.15	8.04
27 30-year	8.96	8.45	8.61	8.86	8.54	8.24	8.27	8.31	8.18	8.38	8.31	8.22
Composite ¹⁴												
28 Over 10 years (long-term)	8.98	8.58	8.74	8.93	8.60	8.31	8.33	8.41	8.24	8.44	8.38	8.28
State and local notes and bonds												
Moody's series ¹⁵												
29 Aaa	7.36	7.00	6.96	7.23	6.75	6.63	6.57	6.60	6.63	6.63	6.51	6.51
30 Baa	7.83	7.40	7.29	7.43	7.22	7.10	7.17	7.10	7.17	7.27	7.15	7.10
31 Bond Buyer series ¹⁶	7.68	7.23	7.27	7.49	7.18	7.09	7.08	7.14	7.09	7.15	7.10	7.06
Corporate bonds												
Seasoned issues ¹⁷												
32 All industries	10.18	9.66	9.77	10.03	9.85	9.63	9.62	9.65	9.58	9.66	9.65	9.61
33 Aaa	9.71	9.26	9.32	9.53	9.30	9.05	9.04	9.04	9.02	9.05	9.08	9.05
34 Aa	9.94	9.46	9.56	9.77	9.59	9.39	9.37	9.40	9.35	9.40	9.39	9.36
35 A	10.24	9.74	9.82	10.06	9.88	9.64	9.61	9.67	9.58	9.67	9.64	9.58
36 Baa	10.83	10.18	10.36	10.74	10.62	10.43	10.45	10.47	10.40	10.51	10.51	10.44
37 A-rated, recently offered utility bonds ¹⁸	10.20	9.79	10.01	10.23	10.07	9.95	9.83	9.99	9.85	9.96	9.77	9.80
MEMO: Dividend/price ratio ¹⁹												
38 Preferred stocks	9.23	9.05	n.a.	9.10	8.88	8.72	8.71	8.68	8.76	8.67	8.83	8.69
39 Common stocks	3.64	3.45	n.a.	4.01	3.91	3.74	3.82	3.74	3.80	3.98	3.92	3.75

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. Quoted on a discount basis.

5. An average of offering rates on commercial paper placed by several leading dealers for firms whose bond rating is AA or the equivalent.

6. An average of offering rates on paper directly placed by finance companies.

7. Representative closing yields for acceptances of the highest rated money center banks.

8. An average of dealer offering rates on nationally traded certificates of deposit.

9. Bid rates for Eurodollar deposits at 11 a.m. London time.

10. One of several base rates used by banks to price short-term business loans.

11. Rate for the Federal Reserve Bank of New York.

12. Auction date for daily data; weekly and monthly averages computed on an issue-date basis.

13. Yields on actively traded issues adjusted to constant maturities. Source: U.S. Treasury.

14. Unweighted average of rates on all outstanding bonds neither due nor callable in less than 10 years, including one very low yielding "flower" bond.

15. General obligation based on Thursday figures; Moody's Investors Service.

16. General obligations only, with 20 years to maturity, issued by 20 state and local governmental units of mixed quality. Based on figures for Thursday.

17. Daily figures from Moody's Investors Service. Based on yields to maturity on selected long-term bonds.

18. 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.

19. 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								1991	
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.		Jan.
	Prices and trading (averages of daily figures)												
<i>Common stock prices</i>													
1 New York Stock Exchange (Dec. 31, 1965 = 50)	149.97	180.13	183.48	191.35	196.68	196.61	181.45	173.22	168.05	172.21	179.57	177.95	
2 Industrial	180.83	228.04	225.81	234.85	242.42	245.86	226.73	216.81	208.58	212.81	221.86	220.69	
3 Transportation	134.09	174.90	158.64	173.53	177.37	173.18	147.41	136.95	131.99	132.96	141.31	145.89	
4 Utility	72.22	94.33	90.61	93.29	93.65	89.85	85.81	83.30	87.27	89.69	91.56	88.59	
5 Finance	127.41	162.01	133.23	142.94	147.93	143.11	128.14	118.59	108.01	113.76	122.18	121.39	
6 Standard & Poor's Corporation (1941-43 = 10) ¹	265.88	323.05	334.63	350.25	360.39	360.03	330.75	315.41	307.12	315.29	328.75	325.49	
7 American Stock Exchange (Aug. 31, 1973 = 50) ²	295.08	356.67	338.36	353.82	361.62	359.09	333.49	318.53	296.67	294.88	305.54	304.08	
<i>Volume of trading (thousands of shares)</i>													
8 New York Stock Exchange	161,386	165,568	156,842	163,486	153,634	160,490	174,446	142,054	159,590	149,916	155,836	166,323	
9 American Stock Exchange	9,955	13,124	13,155	14,005	12,421	12,529	15,881	11,668	11,294	10,368	11,620	10,870	
	Customer financing (end-of-period balances, in millions of dollars)												
10 Margin credit at broker-dealers ³	32,740	34,320	28,210 ⁴	31,600	31,720	32,130	30,350	29,640	28,650	27,820	28,210 ⁴	27,390	
<i>Free credit balances at brokers⁴</i>													
11 Margin-account ⁵	5,660	7,040	8,050	6,215	6,490	6,385	7,140	7,285	7,245	7,300	8,050	7,435	
12 Cash-account	16,595	18,505	19,285 ⁵	15,470	15,625	17,035	16,745	16,185	15,820	17,025	19,285 ⁵	18,825	
	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.

1.37 SELECTED FINANCIAL INSTITUTIONS Selected Assets and Liabilities

Millions of dollars, end of period

Account	1988	1989	1990									
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
SAIF-insured institutions												
1 Assets	1,350,500	1,249,055	1,225,087	1,223,350	1,210,338	1,197,787	1,174,675	1,162,555	1,157,158	1,124,903	↑	↑
2 Mortgages	764,513	733,729	721,450	717,687	715,422	708,550	691,239	689,084	684,975	665,960		
3 Mortgage-backed securities	214,587	170,532	167,260	167,683	166,167	165,741	159,173	158,142	156,393	154,190		
4 Contra-assets to mortgage assets ¹	37,950	25,457	22,729	23,073	21,999	22,044	20,337	19,550	19,321	18,451		
5 Commercial loans	33,889	32,150	31,770	31,069	30,931	30,351	28,753	28,483	27,868	26,774		
6 Consumer loans	61,922	58,685	56,821	56,805	56,639	55,659	55,171	54,661	53,381	50,512		
7 Contra-assets to non-mortgage loans ²	3,056	3,592	2,279	2,476	2,227	1,771	1,980	1,977	2,022	1,957	↑	↑
8 Cash and investment securities	186,986	166,053	157,314	162,313	153,346	152,391	155,674	150,400	153,057	148,028	n.a.	n.a.
9 Other ³	129,610	116,955	115,480	113,341	112,059	108,910	106,922	103,311	102,827	99,847	↑	↑
10 Liabilities and net worth	1,350,500	1,249,055	1,225,087	1,223,350	1,210,338	1,197,787	1,174,675	1,162,555	1,157,158	1,124,903	↓	↓
11 Savings capital	971,700	945,656	926,439	929,910	916,069	902,653	890,497	885,272	878,730	857,686		
12 Borrowed money	299,400	252,230	248,135	246,875	246,646	241,943	230,169	222,442	221,872	212,240		
13 FHLBB	134,168	124,577	120,633	117,489	115,620	114,047	109,733	106,127	105,882	101,694		
14 Other	165,232	127,653	127,502	129,386	131,026	127,896	120,436	116,315	115,990	110,546		
15 Other	24,216	27,556	28,096	25,997	27,341	28,807	25,151	26,743	28,240	23,862		
16 Net worth	n.a.	23,612	22,417	20,568	20,282	24,379	28,803	28,099	28,317	31,116		
SAIF-insured federal savings banks												
17 Assets	425,966	498,522	581,983	595,644	593,345	570,795	583,392	580,847	584,632	591,136	↑	↑
18 Mortgages	230,734	283,844	330,366	332,995	333,300	317,985	323,516	328,236	328,895	332,927		
19 Mortgage-backed securities	64,957	70,499	77,016	80,059	81,030	77,781	78,001	80,474	80,994	82,418		
20 Contra-assets to mortgage assets ¹	13,140	13,548	11,615	11,844	11,590	10,798	10,200	9,227	9,339	9,964		
21 Commercial loans	16,731	18,143	20,244	20,366	20,324	19,713	19,683	18,810	18,662	18,767		
22 Consumer loans	24,222	28,212	20,244	20,365	20,324	32,407	32,745	31,003	31,183	30,750		
23 Contra-assets to non-mortgage loans ²	889	1,193	986	1,001	908	707	970	870	813	980		
24 Finance leases plus interest	880	1,101	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	↑	↑
25 Cash and investment	61,029	64,538	70,054	76,158	72,618	70,999	75,081	71,354	73,756	73,602	n.a.	n.a.
26 Other	35,412	39,981	46,238	46,371	46,180	44,840	47,723	44,150	44,129	46,043	↑	↑
27 Liabilities and net worth	425,966	498,522	581,983	595,644	593,345	570,795	583,392	580,847	584,632	591,136		
28 Savings capital	298,197	360,547	419,246	433,000	429,469	413,009	427,379	423,472	424,260	434,705		
29 Borrowed money	99,286	108,448	124,171	126,253	126,240	123,415	121,721	118,393	120,592	119,991		
30 FHLBB	46,265	57,032	63,026	63,550	63,120	61,057	60,666	61,287	62,209	61,605		
31 Other	53,021	51,416	61,145	62,703	63,120	62,358	61,055	57,106	58,383	58,386		
32 Other	8,075	9,041	10,347	9,435	9,982	10,307	8,889	9,245	10,128	8,253		
33 Net worth	20,218	22,716	25,723	24,169	23,505	21,138	21,944	26,424	26,420	24,859		

1.37—Continued

Account	1988	1989	1990									
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
	Credit unions ⁴											
34 Total assets/liabilities and capital.....	174,593	183,688	186,119	192,718	193,208	195,020	195,302	194,523	196,625	197,272	↑	↑
35 Federal.....	114,566	120,666	122,885	126,690	127,250	128,648	128,142	127,564	128,715	129,086	↑	↑
36 State.....	60,027	63,022	63,234	66,028	65,958	66,372	67,160	66,959	67,910	68,186	↑	↑
37 Loans outstanding.....	113,191	122,608	121,968	121,660	122,616	123,205	123,968	124,343	126,156	127,341	n.a.	n.a.
38 Federal.....	73,766	80,272	79,715	79,407	80,205	80,550	81,063	81,063	82,040	82,823	↑	↑
39 State.....	39,425	42,336	42,253	42,253	42,411	42,655	42,905	43,280	44,116	44,518	↑	↑
40 Savings.....	159,010	167,371	168,609	175,942	175,745	176,701	178,127	176,360	178,081	177,532	↓	↓
41 Federal.....	104,431	109,653	111,246	115,714	115,554	116,402	116,717	115,305	116,411	115,469	↓	↓
42 State.....	54,579	57,718	57,363	60,228	60,191	60,299	61,408	61,056	61,670	62,063	↓	↓
	Life insurance companies ⁵											
43 Assets.....	↑	↑	↑	1,299,756	↑	↑	1,376,660	↑	↑	1,387,463	↑	↑
Securities.....	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
44 Government.....	↑	↑	↑	178,141	↑	↑	195,287	↑	↑	202,962	↑	↑
45 United States ⁶	↑	↑	↑	153,361	↑	↑	167,735	↑	↑	175,156	↑	↑
46 State and local.....	↑	↑	↑	9,028	↑	↑	10,963	↑	↑	11,818	↑	↑
47 Foreign.....	↑	↑	↑	15,752	↑	↑	16,589	↑	↑	15,988	↑	↑
48 Business.....	n.a.	n.a.	n.a.	663,677	n.a.	n.a.	705,070	n.a.	n.a.	709,470	n.a.	n.a.
49 Bonds.....	↑	↑	↑	538,063	↑	↑	570,245	↑	↑	588,251	↑	↑
50 Stocks.....	↑	↑	↑	125,614	↑	↑	134,825	↑	↑	121,219	↑	↑
51 Mortgages.....	↑	↑	↑	254,215	↑	↑	264,865	↑	↑	266,063	↑	↑
52 Real estate.....	↑	↑	↑	39,908	↑	↑	44,188	↑	↑	44,544	↑	↑
53 Policy loans.....	↑	↑	↑	57,439	↑	↑	63,144	↑	↑	60,641	↑	↑
54 Other assets.....	↑	↑	↑	106,376	↑	↑	104,106	↑	↑	103,783	↑	↑

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. Holding of stock in Federal Home Loan Bank and Finance leases plus interest are included in "Other" (line 9).

4. Data include all federally insured credit unions, both federal and state chartered, serving natural persons.

5. Data are no longer available on a monthly basis for life insurance companies.

6. Direct and guaranteed obligations. Excludes federal agency issues not guaranteed, which are shown in the table under "Business" securities.

7. Issues of foreign governments and their subdivisions and bonds of the International Bank for Reconstruction and Development.

NOTE. SAIF-insured institutions: Estimates by the OTS for all institutions insured by the SAIF and based on the OTS thrift 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 Financial Report.

Credit unions: Estimates by the National Credit Union Administration for federally chartered and federally insured state-chartered credit unions serving natural persons.

Life insurance companies: Estimates of the American Council of Life Insurance for all life insurance companies in the United States. Annual figures are annual-statement asset values, with bonds carried on an amortized basis and stocks at year-end market value. Adjustments for interest due and accrued and for differences between market and book values are not made on each item separately but are included, in total, in "other assets."

1.38 FEDERAL FISCAL AND FINANCING OPERATIONS

Millions of dollars

Type of account or operation	Fiscal year 1988	Fiscal year 1989	Fiscal year 1990	Calendar year					
				1990					1991
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
<i>U.S. budget¹</i>									
1 Receipts, total	908,166	990,701	1,031,463	78,486	102,874	78,711	72,819	102,266	101,802
2 On-budget	666,675	727,035	749,809	56,284	78,542	58,751	47,843	82,425	71,112
3 Off-budget	241,491	263,666	281,654	22,202	24,332	19,960	24,976	19,841	30,690
4 Outlays, total	1,063,318	1,144,020	1,251,850	131,206	82,026	109,995 ^r	120,529 ^r	109,578 ^r	100,042
5 On-budget	860,627	933,109	1,026,785	89,717	80,613	91,083 ^r	99,081 ^r	95,046 ^r	80,124
6 Off-budget	202,691	210,911	225,065	41,489	1,413	18,912	21,448	14,532	19,918
7 Surplus, or deficit (-), total	-155,152	-153,319	-220,387	-52,719	20,848	-31,285 ^r	-47,711 ^r	-7,311 ^r	1,760
8 On-budget	-193,952	-206,074	-276,976	-33,432	-2,071	-32,332 ^r	-51,238 ^r	-12,620 ^r	-9,012
9 Off-budget	38,800	52,755	56,589	-19,287	22,919	1,048	3,528	5,309	10,772
Source of financing (total)									
10 Borrowing from the public	166,139	141,806	264,453	47,329	-2,595	32,265	46,776	19,700	31,764
11 Operating cash (decrease, or increase (-))	-7,962	3,425	818	2,433	17,832	4,720	12,533	-9,286	-30,627
12 Other	-3,025	8,088	-44,884	2,957	-421	-5,700 ^r	-11,598 ^r	-3,103 ^r	-2,897
MEMO									
13 Treasury operating balance (level, end of period)	44,398	40,973	40,155	22,323	40,155	35,435	22,902	32,188	62,815
14 Federal Reserve Banks	13,023	13,452	7,638	4,453	7,638	7,607	5,495	8,960	27,810
15 Tax and loan accounts	31,375	27,521	32,517	17,869	32,517	27,828	17,406	23,228	35,006

1. In accordance with the *Balanced Budget and Emergency Deficit Control Act* of 1985, all former off-budget entries are now presented on-budget. The Federal Financing Bank (FFB) activities are now shown as separate accounts under the agencies that use the FFB to finance their programs. The act has also moved two social security trust funds (Federal old-age survivors insurance and Federal disability insurance trust funds) off-budget.

2. Includes SDRs; reserve position on the U.S. quota in the IMF; loans to

international monetary fund; other cash and monetary assets; accrued interest payable to the public; allocations of special drawing rights; deposit funds; miscellaneous liability (including checks outstanding) and asset accounts; seigniorage; increment on gold; net gain/loss for U.S. currency valuation adjustment; net gain/loss for IMF valuation adjustment; and profit on the sale of gold.

SOURCE: *Monthly Treasury Statement of Receipts and Outlays of the U.S. Government* and the *Budget of the U.S. Government*.

1.39 U.S. BUDGET RECEIPTS AND OUTLAYS¹

Millions of dollars

Source or type	Fiscal year 1989	Fiscal year 1990	Calendar year						
			1989		1990		1990		1991
			H1	H2	H1	H2	Nov.	Dec.	Jan.
RECEIPTS									
1 All sources	990,701	1,031,462	527,574	470,329	548,977	507,513	72,819	102,266	101,802
2 Individual income taxes, net	445,690	466,884	233,572	218,706	243,087	230,745	27,156	46,471	50,882
3 Withheld	361,386	390,480	174,230	193,296	190,219	207,469	27,505	44,560	29,390
4 Presidential Election Campaign Fund	32	32	28	3	30	3	0	0	0
5 Nonwithheld	154,839	149,189	121,563	33,303	117,675	31,728	1,606	2,605	21,799
6 Refunds	70,567	72,817	62,251	7,898	64,838	8,455	1,956	694	308
Corporation income taxes									
7 Gross receipts	117,015	110,017	61,585	52,269	58,830	54,044	2,132	23,425	5,025
8 Refunds	13,723	16,510	7,259	6,842	8,326	7,603	837	902	1,197
9 Social insurance taxes and contributions, net	359,416	380,047	200,127	162,574	210,476	178,468	33,723	25,480	39,604
10 Employment taxes and contributions ²	332,859	353,891	184,569	152,407	195,269	167,224	31,209	24,918	38,472
11 Self-employment taxes and contributions ³	18,504	21,795	16,371	1,947	19,017	2,638	0	0	1,795
12 Unemployment insurance	22,011	21,635	13,279	7,909	12,929	8,996	2,098	217	778
13 Other net receipts ⁴	4,546	4,522	2,277	2,260	2,278	2,249	416	345	354
14 Excise taxes	34,386	35,345	16,814	16,799	18,153	17,535	2,953	3,005	2,931
15 Customs deposits	16,334	16,707	7,918	8,667	8,096	8,568	1,354	1,281	1,324
16 Estate and gift taxes	8,745	11,500	4,583	4,451	6,442	5,333	845	741	906
17 Miscellaneous receipts ⁵	22,839	27,470	10,235	13,704	12,222	20,423	5,494	2,765	2,326
OUTLAYS									
18 All types	1,144,020	1,251,850	565,425	587,448	640,982	651,614 ⁶	120,529 ⁷	109,578 ⁷	100,042
19 National defense	303,559	299,335	148,098	149,613	152,733	153,757	29,868	26,021	21,874
20 International affairs	9,574	13,760	6,567	5,971	6,770	8,943 ⁷	4,652 ⁷	4,888 ⁷	395
21 General science, space, and technology	12,838	14,420	6,238	7,091	6,974	8,081	1,231	1,486	1,013
22 Energy	3,702	2,470	2,221	1,449	1,216	979	269	190	71
23 Natural resources and environment	16,182	17,009	7,022	9,183	7,343	9,930	3,103	1,138	1,398
24 Agriculture	16,948	11,998	9,619	4,132	7,450	6,878	1,903	2,742	1,516
25 Commerce and housing credit	29,091	67,495	4,129	22,295	38,672	37,491 ⁶	4,276	4,597 ⁷	-144
26 Transportation	27,608	29,495	12,953	14,982	13,754	16,218	2,494	2,919	2,658
27 Community and regional development	5,361	8,466	1,833	4,879	3,987	3,939	1,325	-37	663
28 Education, training, employment, and social services	36,694	37,479	18,083	18,663	19,537	18,988	3,120	3,863	4,045
29 Health	48,390	58,101	24,078	25,339	29,488	31,424	5,235	5,206	5,663
30 Social security and medicare	317,506	346,383	162,195	162,322	175,997	176,353	29,973	29,301	30,625
31 Income security	136,031	148,299	70,937	67,950	78,475	75,948	13,758	13,904	14,299
32 Veterans benefits and services	30,066	29,112	14,891	14,864	15,217	15,479	4,033	2,446	962
33 Administration of justice	9,422	10,076	4,801	4,963	4,983	5,397	1,050	860	978
34 General government	9,124	10,822	3,858	4,760	4,916	6,982	1,875	976	1,071
35 General-purpose fiscal assistance	n.a.	n.a.	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
36 Net interest ⁸	169,317	183,790	86,009	87,927	91,155	94,650	15,138	16,362	16,064
37 Undistributed offsetting receipts ⁷	-37,212	-36,615	-18,131	-18,935	-17,688	-19,829	-2,775	-2,891	-3,109

1. Functional details do not add 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 and 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

Billions of dollars

Item	1988	1989				1990			
	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31	Mar. 31	June 30	Sept. 30	Dec. 31
1 Federal debt outstanding	2,707.3	2,763.6	2,824.0	2,881.1	2,975.5	3,081.9	3,175.5	3,266.1	3,397.3 ¹
2 Public debt securities	2,684.4	2,740.9	2,799.9	2,857.4	2,953.0	3,052.0	3,143.8	3,233.3	3,364.8
3 Held by public	2,095.2	2,133.4	2,142.1	2,180.7	2,245.2	2,329.3	2,368.8	2,437.6	n.a.
4 Held by agencies	589.2	607.5	657.8	676.7	707.8	722.7	775.0	795.8	n.a.
5 Agency securities	22.9	22.7	24.0	23.7	22.5	29.9	31.7	32.8	n.a.
6 Held by public	22.6	22.3	23.6	23.5	22.4	29.8	31.6	32.6	n.a.
7 Held by agencies .....	.3	.4	.5	.1	.1	.2	.2	.2	n.a.
8 Debt subject to statutory limit	2,669.1	2,725.6	2,784.6	2,829.8	2,921.7	2,988.9	3,077.0	3,161.2	3,281.7
9 Public debt securities	2,668.9	2,725.5	2,784.3	2,829.5	2,921.4	2,988.6	3,076.6	3,160.9	3,281.3
10 Other debt .....	.2	.2	.2	.3	.3	.3	.4	.4	.4
11 MEMO: Statutory debt limit	2,800.0	2,800.0	2,800.0	2,870.0	3,122.7	3,122.7	3,122.7	3,195.0	4,145.0

1. Includes 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

Billions of dollars, end of period

Type and holder	1987	1988	1989	1990	1990			
					Q1	Q2	Q3	Q4
1 Total gross public debt	2,431.7	2,684.4	2,953.0	3,364.8	3,052.0	3,143.8	3,233.3	3,364.8
By type								
2 Interest-bearing debt	2,428.9	2,663.1	2,931.8	3,362.0	3,029.5	3,121.5	3,210.9	3,362.0
3 Marketable	1,724.7	1,821.3	1,945.4	2,195.8	1,995.3	2,028.0	2,092.8	2,195.8
4 Bills	389.5	414.0	430.6	527.4	453.1	453.5	482.5	527.4
5 Notes	1,037.9	1,083.6	1,151.5	1,265.2	1,169.4	1,192.7	1,218.1	1,265.2
6 Bonds	282.5	308.9	348.2	388.2	357.9	366.8	377.2	388.2
7 Nonmarketable ¹	704.2	841.8	986.4	1,166.2	1,034.2	1,093.5	1,118.2	1,166.2
8 State and local government series	139.3	151.5	163.3	160.8	163.5	164.3	161.3	160.8
9 Foreign issues ²	4.0	6.6	6.8	43.5	37.1	36.4	36.0	43.5
10 Government	4.0	6.6	6.8	43.5	37.1	36.4	36.0	43.5
11 Public .....	.0	.0	.0	.0	.0	.0	.0	.0
12 Savings bonds and notes	99.2	107.6	115.7	124.1	118.0	120.1	122.2	124.1
13 Government account series ³	461.3	575.6	695.6	813.8	705.1	758.7	779.4	813.8
14 Non-interest-bearing debt	2.8	21.3	21.2	2.8	22.4	22.3	22.4	2.8
By holder ⁴								
15 U.S. government agencies and trust funds	477.6	589.2	707.8	↑	722.7	775.0	795.8	↑
16 Federal Reserve Banks	222.6	238.4	228.4	↑	219.3	231.4	232.5	↑
17 Private investors	1,731.4	1,858.5	2,015.8	↑	2,115.1	2,141.8	2,207.3	↑
18 Commercial banks	201.5	193.8	180.6	↑	182.0	195.0	n.a.	↑
19 Money market funds	14.6	11.8	14.4	↑	31.3	28.1	n.a.	↑
20 Insurance companies	104.9	107.3	107.9	↑	108.0	n.a.	n.a.	↑
21 Other companies	84.6	87.1	98.7	n.a.	102.2	112.1	114.6	n.a.
22 State and local Treasuries	284.6	313.6	337.1	↑	342.0	n.a.	n.a.	↑
Individuals								
23 Savings bonds	101.1	109.6	117.7	↑	119.9	121.9	123.9	↑
24 Other securities	71.3	79.2	93.8	↑	95.0	n.a.	n.a.	↑
25 Foreign and international ⁵	299.7	362.2	393.4	↑	386.9	392.7	n.a.	↑
26 Other miscellaneous investors ⁶	569.1	593.4	672.5	↑	749.5	n.a.	n.a.	↑

1. Includes (not shown separately): Securities issued to the Rural Electrification Administration; depository bonds, retirement plan bonds, and individual retirement bonds.

2. Nonmarketable dollar-denominated and foreign currency-denominated series held by foreigners.

3. Held almost entirely by U.S. Treasury agencies and trust funds.

4. Data for Federal Reserve Banks and U.S. Treasury agencies and trust funds are actual holdings; data for other groups are Treasury estimates.

5. Consists of investments of foreign and international accounts. Excludes non-interest-bearing notes issued to the International Monetary Fund.

6. 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 and the Treasury Bulletin.

1.42 U.S. GOVERNMENT SECURITIES DEALERS Transactions¹

Millions of dollars, daily averages

Item	1990			1990				1991, week ending				
	Oct.	Nov.	Dec.	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30
IMMEDIATE TRANSACTIONS²												
<i>By type of security</i>												
U.S. government securities												
1 Bills	31,703	32,259	32,387	27,897	34,908*	38,353	27,373	31,087	39,907	36,908	37,132	28,449
Coupon securities												
2 Maturing in less than 3.5 years	29,840	33,722	28,498	29,207	30,842	34,040	22,107	25,299	40,250	32,314	48,320	32,661
3 Maturing in 3.5 to 7.5 years	25,896	25,249	24,702	30,839	33,550	28,773	12,353	17,613	33,281	27,219	29,319	25,534
4 Maturing in 7.5 to 15 years	11,386	15,451	11,161	13,845	15,248	13,104	7,169	5,081	12,498	8,466	12,060	10,583
5 Maturing in 15 years or more	13,365	15,364	13,055	14,837	18,638	15,853	6,898	7,568	17,105	13,455	17,415	13,780
Federal agency securities												
Debt												
6 Maturing in less than 3.5 years	4,397	4,562	4,968	5,966	5,203	5,194	3,811	5,129	5,410	4,210	4,459	4,671
7 Maturing in 3.5 to 7.5 years	534	626	509	672	719	583	312	201	544	486	427	392
8 Maturing in 7.5 years or more	836	605	614	460	1,064	653	379	344	2,261	1,292	583	505
Mortgage-backed												
9 Pass-throughs	9,005	8,646	12,308	10,428	14,447	15,097	10,793	8,502	15,847	10,970	8,615	9,468
10 All others	1,247	1,440	1,340	1,304	2,263	1,262	1,020	502	1,128	1,172	1,042	1,106
<i>By type of counterparty</i>												
Primary dealers and brokers												
11 U.S. government securities	70,998	74,510	66,700	72,565	82,598*	81,552	43,555	48,160	91,380	71,471	92,219	67,754
Federal agency												
12 Debt securities	2,007	1,900	1,842	2,163	2,336	2,012	1,169	1,537	2,780	2,123	1,537	1,702
13 Mortgage backed securities	4,834	5,036	7,230	5,829	8,149	8,397	7,333	4,982	8,019	6,151	5,187	5,355
Customers												
14 U.S. government securities	41,193	47,535	43,102	44,060	50,588	48,570	32,344	38,487	51,661	46,891	52,026	43,253
Federal agency												
15 Debt securities	3,760	3,894	4,248	4,934	4,649	4,417	3,332	4,136	5,435	3,864	3,932	3,865
16 Mortgage-backed securities	5,418	5,050	6,418	5,904	8,560	7,962	4,480	4,022	8,956	5,991	4,470	5,219
FUTURE AND FORWARD TRANSACTIONS⁴												
<i>By type of deliverable security</i>												
U.S. government securities												
17 Bills	3,694	5,402	4,833	7,540	8,577	4,009	1,852	2,228	7,624	5,259	10,793	3,089
Coupon securities												
18 Maturing in less than 3.5 years	1,306	1,556	1,093	1,384	1,197	1,241	934	646	1,669	1,126	1,298	1,839
19 Maturing in 3.5 to 7.5 years	523	797	810	1,093	1,114	928	399	510	829	883	849	750
20 Maturing in 7.5 to 15 years	873	1,295	1,037	1,111	1,249	1,177	745	864	1,100	871	795	532
21 Maturing in 15 years or more	8,957	10,185	7,861	9,472	10,699*	9,377	4,572	4,477	12,065	8,582	11,562	7,256
Federal agency securities												
Debt												
22 Maturing in less than 3.5 years	81	47	113	46	86*	133	210	30	26	116	72	320
23 Maturing in 3.5 to 7.5 years	53	57	36	38	14	85	26	6	4	21	150	4
24 Maturing in 7.5 years or more	96	36	39	41	62	32	38	11	190	44	26	15
Mortgage-backed												
25 Pass-throughs	8,427	9,025	6,603	6,651	9,302	8,057	4,226	3,598	12,348	11,465	9,498	5,741
26 All others	721	1,151	780	1,276	917	791	542	434	1,369	1,034	1,268	974
OPTION TRANSACTIONS⁵												
<i>By type of underlying securities</i>												
U.S. government securities												
27 Bills	60	63	10	0	41*	0	0	0	58	14	38	160
Coupon securities												
28 Maturing in less than 3.5 years	715	661	650	574	737*	754	453	735	1,631	1,112	920	715
29 Maturing in 3.5 to 7.5 years	223	240	270	187	616*	167	94	241	84	414	90	394
30 Maturing in 7.5 to 15 years	182	202	195	136	401*	201	100	62	192	163	215	231
31 Maturing in 15 years or more	2,152	2,299	1,648	1,195	2,028*	1,676	1,872	1,048	2,580	3,299	3,426	2,032
Federal agency securities												
Debt												
32 Maturing in less than 3.5 years	6	5	1	0	1	2	0	0	0	0	0	101
33 Maturing in 3.5 to 7.5 years	0	0	0	0	1	1	0	0	1	1	0	0
34 Maturing in 7.5 years or more	0	1	0	0	0	0	0	0	1	0	0	0
Mortgage-backed												
35 Pass-throughs	482	370	382	386	815	277	110	284	538	274	331	306
36 All others	1	0	0	0	0	0	0	0	0	0	8	0

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 securities such as CMOs, REMICs, IOs, and 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. government 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. government and federal agency securities.

1.43 U.S. GOVERNMENT SECURITIES DEALERS Positions and Financing¹

Millions of dollars

Item	1990			1990, week ending				1991, week ending				
	Oct.	Nov.	Dec.	Dec. 5	Dec. 12	Dec. 19	Dec. 26	Jan. 2	Jan. 9	Jan. 16	Jan. 23	Jan. 30
Positions ²												
NET IMMEDIATE ³												
By type of security												
U.S. government securities												
1 Bills	3,258	11,077	14,443	11,048	14,720	16,256	12,751	17,283	10,781	11,211	12,237	10,004
Coupon securities												
2 Maturing in less than 3.5 years	-2,016	3,964	7,333	3,813	4,154	7,911	10,434	10,156	4,136	559	5,193	5,082
3 Maturing in 3.5 to 7.5 years	-5,885	-6,343	-1,780	-2,727	-2,211	-2,160	-1,868	424	902	-768	-3,413	-1,857
4 Maturing in 7.5 to 15 years	-6,987	-6,674	-7,711	-7,485	-8,021	-8,673	-7,187	-6,890	-6,831	-7,520	-7,441	-8,500
5 Maturing in 15 years or more	-15,377	-10,609	-9,616	-9,725	-8,553	-9,987	-9,599	-10,498	-13,960	-14,961	-13,985	-13,324
Federal agency securities												
Debt												
6 Maturing in less than 3.5 years	4,169	4,471	3,867	4,788	3,188	4,108	4,032	3,327	3,287	5,617	3,428	3,892
7 Maturing in 3.5 to 7.5 years	1,737	1,662	2,135	2,285	2,091	2,183	2,143	1,968	2,046	1,821	1,824	1,975
8 Maturing in 7.5 years or more	4,115	4,656	4,407	4,438	4,409	4,473	4,465	4,201	7,962	7,569	7,573	7,363
Mortgage-backed												
9 Pass-throughs	17,886	21,001	21,431	18,628	22,061	22,746	20,680	22,564	27,809	22,343	21,408	21,778
10 All others ⁴	11,548 ⁵	12,067 ⁵	12,881	12,560 ⁵	13,518	13,235	12,693	12,076	11,022	10,961	9,988	10,360
Other money market instruments												
11 Certificates of deposit	2,559	1,993	2,526	1,927	2,850	2,612	2,725	2,271	2,584	3,040	3,043	3,189
12 Commercial paper	6,423	5,995	7,132	5,217	8,517	6,695	7,816	6,762	6,200	6,162	5,759	6,531
13 Bankers' acceptances	1,214	1,407	863	1,157	879	902	693	732	1,072	960	999	1,214
FUTURE AND FORWARD ⁵												
By type of deliverable security												
U.S. government securities												
14 Bills	-17,120	-10,671	-19,084	-11,323	-17,066	-22,043	-21,009	-22,834	-23,447	-23,467	-19,460	-18,872
Coupon securities												
15 Maturing in less than 3.5 years	-685	-1,605	-1,347	-447	-750	-1,295	-2,231	-1,919	-1,363	-1,688	-2,518	705
16 Maturing in 3.5 to 7.5 years	-1,541	-890	-3,308	-2,406	-2,484	-3,614	-3,851	-4,178	-3,791	-3,103	-2,571	-2,867
17 Maturing in 7.5 to 15 years	-982	-1,726	-1,000	-1,419	-1,847	-587	-456	-734	-1,270	-676	-920	-937
18 Maturing in 15 years or more	-2,256	-5,330	-5,865	-4,804	-6,398	-5,390	-6,516	-5,934	-5,838	-3,837	-5,764	-6,157
Federal agency securities												
Debt												
19 Maturing in less than 3.5 years	166	69	189	145	282	208	149	132	123	189	225	434
20 Maturing in 3.5 to 7.5 years	96	45	54	-4	66	45	93	51	-34	-37	110	10
21 Maturing in 7.5 years or more	118	-35	-117	-136	-238	-57	-76	-67	-76	-92	-124	-50
Mortgage-backed												
22 Pass-throughs	-8,186	-11,250	-9,587	-10,040	-9,847	-9,621	-8,133	-10,757	-15,511	-10,196	-8,911	-9,161
23 All others ⁴	-812 ⁵	-2,604 ⁵	-2,150	-1,679 ⁵	-2,732	-2,825	-1,880	-1,241	-1,100	-285	31	-677
Other money market instruments												
24 Certificates of deposit	86,147	85,459	48,860	55,816	47,634	46,620	49,743	45,519	47,017	61,280	56,755	50,752
25 Commercial paper	0	0	0	0	0	0	0	0	0	0	0	0
26 Bankers' acceptances	0	0	0	0	0	0	0	0	0	0	0	0
Financing ⁶												
Reverse repurchase agreements												
27 Overnight and continuing	175,353	169,357	145,088	158,449	151,109	139,864	132,538	148,182	168,573	160,269	158,837	163,110
28 Term	226,083	224,231	211,555	215,257	217,777	218,034	216,107	183,698	214,825	230,712	226,668	225,547
Repurchase agreements												
29 Overnight and continuing	248,211	235,064	244,723	244,003	239,361	245,899	242,359	254,613	263,060	268,767	258,038	258,273
30 Term	183,745	205,441	176,412	181,829	184,766	182,153	181,651	143,930	183,723	193,099	196,142	195,086
Securities borrowed												
31 Overnight and continuing	50,122	48,043	55,446	53,270	57,206	56,689	54,971	54,080	54,913	53,648	52,199	51,965
32 Term	19,182	22,067	22,406	22,313	21,488	22,629	22,970	22,685	23,950	25,409	24,576	24,099
Securities lent												
33 Overnight and continuing	5,362 ⁷	5,518 ⁷	6,176	6,434 ⁷	4,951	6,474	6,615	6,600	6,773	6,452	6,352	6,196
34 Term	621	1,922	1,206	846	784	1,422	1,936	832	401	829	835	778
Collateralized loans												
35 Overnight and continuing	4,421	4,434	6,097	4,790	5,715	6,318	7,449	5,736	5,457	5,930	6,062	6,291
36 Term	1,101	1,078	890	943	1,061	1,228	695	396	918	779	1,392	1,320
MEMO: Matched book ⁷												
Reverse repurchases												
37 Overnight and continuing	110,533	105,308	94,705	100,604	100,762	91,572	85,221	97,987	109,437	103,973	104,915	109,985
38 Term	179,414	179,011	168,822	170,754	175,527	174,938	170,680	146,342	179,319	186,140	185,169	183,574
Repurchases												
39 Overnight and continuing	141,338	126,078	123,020	129,834	127,199	118,842	115,356	126,933	145,740	142,360	138,640	142,516
40 Term	142,489	152,980	129,305	135,487	138,562	132,258	130,387	104,515	136,971	139,944	144,241	146,257

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 CMOs, REMICs, IOs, and 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. government 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 a requirement for 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 listed above. The reverse repurchase and repurchase numbers are not always equal due to the "matching" of securities of different values or types of collateralization.

1.44 FEDERAL AND FEDERALLY SPONSORED CREDIT AGENCIES Debt Outstanding

Millions of dollars, end of period

Agency	1986	1987	1988	1989	1990				
					Aug.	Sept.	Oct.	Nov.	Dec.
1 Federal and federally sponsored agencies	307,361	341,386	381,498	411,805	421,554	421,308	431,519	430,842	0
2 Federal agencies	36,958	37,981	35,668	35,664	42,323	42,420	42,685	42,191	42,159
3 Defense Department ¹	33	13	8	7	7	7	7	7	7
4 Export-Import Bank ^{2,3}	14,211	11,978	11,033	10,985	11,150	11,346	11,346	11,346	11,376
5 Federal Housing Administration ⁴	138	183	150	328	316	357	382	387	393
6 Government National Mortgage Association participation certificates ⁵	2,165	1,615	0	0	0	0	0	0	0
7 Postal Service ⁶	3,104	6,103	6,142	6,445	6,948	6,948	6,948	6,948	6,948
8 Tennessee Valley Authority	17,222	18,089	18,335	17,899	23,902	23,762	24,002	23,510	23,435
9 United States Railway Association ⁶	85	0	0	0	0	0	0	0	0
10 Federally sponsored agencies ⁷	270,553	303,405	345,830	375,407	379,231	378,388	388,834	388,651	0
11 Federal Home Loan Banks	88,758	115,727	135,836	136,108	118,380	116,336	117,120	116,627	117,895
12 Federal Home Loan Mortgage Corporation	13,589	17,645	22,797	26,148	27,589	27,985	29,073	30,035	0
13 Federal National Mortgage Association	93,563	97,057	105,459	116,064	119,248	118,826	119,775	122,257	123,403
14 Farm Credit Banks ⁸	62,478	55,275	53,127	54,864	54,015	54,382	56,788	53,469	53,590
15 Student Loan Marketing Association ⁹	12,171	16,503	22,073	28,705	32,605	33,376	33,592	33,777	34,194
16 Financing Corporation ¹⁰	0	1,200	5,850	8,170	8,170	8,170	8,170	8,170	8,170
17 Farm Credit Financial Assistance Corporation ¹¹	0	0	690	847	1,172	1,261	1,261	1,261	1,261
18 Resolution Funding Corporation ¹²	0	0	0	4,522	18,052	18,052	23,055	23,055	23,055
MEMO									
19 Federal Financing Bank debt¹³	157,510	152,417	142,850	134,873	166,017	173,318	180,538	177,620	179,083
<i>Lending to federal and federally sponsored agencies</i>									
20 Export-Import Bank ³	14,205	11,972	11,027	10,979	11,144	11,340	11,340	11,340	11,370
21 Postal Service ⁶	2,854	5,853	5,892	6,195	6,698	6,698	6,698	6,698	6,698
22 Student Loan Marketing Association	4,970	4,940	4,910	4,880	4,880	4,880	4,880	4,850	4,850
23 Tennessee Valley Authority	15,797	16,709	16,955	16,519	14,522	14,382	14,622	14,130	14,055
24 United States Railway Association ⁶	85	0	0	0	0	0	0	0	0
<i>Other Lending¹⁴</i>									
25 Farmers Home Administration	65,374	59,674	58,496	53,311	52,211	52,049	52,324	52,324	52,324
26 Rural Electrification Administration	21,680	21,191	19,246	19,265	19,043	19,042	18,966	18,968	18,890
27 Other	32,545	32,078	26,324	23,724	57,519	64,927	71,708	69,310	70,896

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. Off-budget Aug. 17, 1974, through Sept. 30, 1976; on-budget thereafter.

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 1981, the Association obtained financing through the Federal Financing Bank (FFB). Borrowing excludes that obtained from the FFB, which is shown on line 21.

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. 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.

14. 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.

1.45 NEW SECURITY ISSUES Tax-Exempt State and Local Governments

Millions of dollars

Type of issue or issuer, or use	1988	1989	1990	1990							1991
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1 All issues, new and refunding ¹	114,522	113,646	120,261	13,323	8,513	10,899	13,930	8,434	9,961	12,250	7,230
<i>Type of issue</i>											
2 General obligation	30,312	35,774	39,076	4,124	2,624	3,400	3,763	3,169	3,024	3,536	2,343
3 Revenue	84,210	77,873	81,751	9,199	5,889	7,499	10,167	5,265	6,937	8,714	4,887
<i>Type of issuer</i>											
4 State	8,830	11,819	15,148	1,090	965	1,568	2,317	1,470	1,337	1,396	713
5 Special district and statutory authority ²	74,409	71,022	73,140	8,556	5,883	6,962	8,188	4,521	5,879	7,032	4,563
6 Municipalities, counties, and townships	31,193	30,805	32,341	3,977	1,666	2,369	3,425	2,530	2,745	3,822	1,954
7 Issues for new capital, total	79,665	84,062	103,157 ²	9,842	7,123	9,061	12,713	7,858 ²	9,058	10,707	6,977
<i>Use of proceeds</i>											
8 Education	15,021	15,133	16,846	1,962	1,413	1,345	1,472	1,667	1,009	1,418	1,079
9 Transportation	6,825	6,870	11,635	1,340	683	540	920	1,060	727	2,008	711
10 Utilities and conservation	8,496	11,427	11,509	1,239	694	1,002	687	620	1,301	776	1,196
11 Social welfare	19,027	16,703	23,058	1,456	1,741	2,554	3,995	1,153	1,992	2,001	891
12 Industrial aid	5,624	5,036	5,876	415	509	700	674	445	540	933	607
13 Other purposes	24,672	28,894	35,252	3,430	2,083	2,919	4,965	2,913	4,392	3,571	2,493

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							
				May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1 All issues ¹	410,707 ²	376,410 ²	235,059	25,226 ²	29,157 ²	19,966 ²	13,769 ²	14,917 ²	20,361 ²	24,929 ²	21,089
2 Bonds ²	352,906 ²	318,539 ²	n.a.	22,875 ²	26,284 ²	17,719 ²	12,961 ²	14,491 ²	19,399 ²	23,694 ²	19,300
Type of offering											
3 Public, domestic	202,028 ²	181,059 ²	188,692	19,725 ²	23,073 ²	14,414 ²	11,765 ²	12,582 ²	17,534 ²	22,003 ²	18,500
4 Private placement, domestic ³	127,700	114,629	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5 Sold abroad	23,178	22,851 ²	22,929	3,150	3,211	3,305	1,196	1,909	1,865	1,706 ²	800
Industry group											
6 Manufacturing	70,569 ²	76,345	35,187	2,580	3,813 ²	1,755 ²	854 ²	2,512 ²	3,371 ²	6,082 ²	2,683
7 Commercial and miscellaneous	62,089	49,317 ²	10,704	1,155 ²	3,135 ²	1,822 ²	234 ²	138 ²	548 ²	794 ²	980
8 Transportation	10,075	10,105	4,931	927	1,001	270	500	533	230 ²	453 ²	349
9 Public utility	19,528	17,059	13,758	1,004	2,561	703	818 ²	928 ²	796 ²	2,168 ²	1,928
10 Communication	5,952	8,503	4,792	364 ²	411	137	68 ²	268	288 ²	654 ²	1,340
11 Real estate and financial	184,692	157,213 ²	142,253	16,845	15,364 ²	13,031 ²	10,488	10,112 ²	14,166 ²	13,542 ²	12,020
12 Stocks ²	57,802	57,870	n.a.	2,351	2,873	2,247	808	426	962	1,235	1,789
Type											
13 Preferred	6,544	6,194	3,998	665	310	350	145	100	550	265	175
14 Common	35,911	26,030	19,443	1,686	2,563	1,897	663	327	412	970	1,614
15 Private placement ³	15,346	25,647	23,439	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.	86	265	348	125	0	60	154	46
17 Commercial and miscellaneous	8,449	7,446	5,026	706	748	507	251	172	194	42	110
18 Transportation	1,535	1,929	126	22	21	0	71	0	7	0	5
19 Public utility	1,898	3,090	4,229	471	0	173	139	39	297	462	288
20 Communication	515	1,904	416	380	29	0	0	0	0	0	6
21 Real estate and financial	37,798	34,028	11,055	686	1,799	862	218	215	400	574	1,327

1. Figures which represent gross proceeds of issues maturing in more than one year, are 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

Item	1989	1990	1990							
			May	June	July	Aug.	Sept.	Oct.	Nov. ⁷	Dec.
INVESTMENT COMPANIES ¹										
1 Sales of own shares ²	306,445	345,780	27,431	28,301	29,444	29,227	23,387	27,511	25,583	34,553
2 Redemptions of own shares ³	272,165	289,573	23,337	23,340	22,933	24,837	21,053	23,112	22,085	29,484
3 Net sales	34,280	56,207	4,094	4,961	6,511	4,390	2,334	4,399	3,498	5,069
4 Assets ⁴	553,871	570,744	574,302	582,190	586,526	554,722	535,787	538,306	557,676	570,744
5 Cash position ⁵	44,780	48,638	52,741	49,861	48,944	51,103	51,128	51,847	52,829	48,638
6 Other	509,091	522,106	521,560	532,329	537,582	503,619	484,659	486,459	504,847	522,106

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 redemption 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. government securities and other short-term debt securities.

NOTE: 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	1988	1989				1990		
				Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
1 Corporate profits with inventory valuation and capital consumption adjustment.....	337.6	311.6	298.7	349.6	327.3	321.4	306.7	290.9	296.8	306.6	300.7
2 Profits before tax.....	316.7	307.7	307.4	331.1	335.1	314.6	291.4	289.8	296.9	299.3	318.5
3 Profits tax liability.....	136.2	135.1	135.0	142.1	148.3	140.8	127.8	123.5	129.9	133.1	139.1
4 Profits after tax.....	180.5	172.6	172.4	189.1	186.7	173.8	163.6	166.3	167.1	166.1	179.4
5 Dividends.....	110.0	123.5	133.9	115.3	119.1	122.1	125.0	127.7	130.3	133.0	135.1
6 Undistributed profits.....	70.5	49.1	38.6	73.8	67.6	51.7	38.6	38.6	36.8	33.2	44.3
7 Inventory valuation.....	-27.0	-21.7	-13.6	-22.5	-43.0	-23.1	-6.1	-14.5	-11.4	-5	-19.8
8 Capital consumption adjustment.....	47.8	25.5	4.9	40.9	35.2	29.9	21.4	15.6	11.3	7.7	2.0

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	1989			1990				1991
				Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1 Total nonfarm business	507.40	533.91	546.67	502.05	514.95	519.58	532.45	535.49	534.86	532.84	557.92
Manufacturing											
2 Durable goods industries	82.56	83.70	83.01	82.44	83.60	83.41	86.35	84.34	82.67	81.42	82.79
3 Nondurable goods industries	101.24	108.60	110.57	98.47	102.40	108.47	105.02	110.82	111.81	106.74	108.28
Nonmanufacturing											
4 Mining	9.21	9.81	9.38	9.24	9.24	9.38	9.58	9.84	9.98	9.84	10.24
5 Transportation											
6 Railroad	6.26	6.30	6.62	5.81	6.36	6.80	6.45	6.66	5.60	6.48	6.22
7 Air	6.73	9.02	10.82	6.84	8.89	5.75	9.35	9.36	10.05	7.31	11.03
8 Other	5.85	6.14	6.35	5.78	5.78	5.69	6.33	5.84	5.76	6.63	6.51
Public utilities											
9 Electric	44.81	43.99	45.72	46.37	44.44	44.66	43.37	42.62	43.63	46.34	47.33
10 Gas and other	21.47	22.97	22.16	21.72	20.75	21.15	22.34	21.65	23.85	24.05	24.43
Commercial and other ²	229.28	243.39	252.04	225.39	233.50	234.25	243.66	244.37	241.51	244.02	261.08

▲ Trade and services are no longer being reported separately. They are included in Commercial and other, line 10.

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 Liabilities¹

Billions of dollars, end of period

Account	1985	1986	1987	1989				1990		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3
ASSETS										
Accounts receivable, gross ²										
1 Consumer.....	111.9	134.7	141.1	139.1	143.9	146.3	140.8	137.9	138.6	140.9
2 Business.....	157.5	173.4	207.4	243.3	250.9	246.8	256.0	262.9	274.8	275.4
3 Real estate.....	28.0	32.6	39.5	45.1	47.1	48.7	48.9	52.1	55.4	57.7
4 Total.....	297.4	340.6	388.1	427.5	441.9	441.8	445.8	452.8	468.8	474.0
Less:										
5 Reserves for unearned income.....	39.2	41.5	45.3	51.0	52.2	52.9	52.0	51.9	54.3	55.1
6 Reserves for losses.....	4.9	5.8	6.8	7.4	7.5	7.7	7.7	7.9	8.2	8.6
7 Accounts receivable, net.....	253.3	293.3	336.0	369.2	382.2	381.3	386.1	393.0	406.3	410.3
8 All other.....	45.3	58.6	58.3	75.1	81.4	85.2	91.6	92.5	95.5	102.8
9 Total assets.....	298.6	351.9	394.2	444.3	463.6	466.4	477.6	485.5	501.9	513.1
LIABILITIES										
10 Bank loans.....	18.0	18.6	16.4	11.3	12.1	12.2	14.5	13.9	15.8	15.6
11 Commercial paper.....	99.2	117.8	128.4	147.8	149.0	147.2	149.5	152.9	152.4	148.6
Debt										
12 Other short-term.....	12.7	17.5	28.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13 Long-term.....	94.4	117.5	137.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
14 Due to parent.....	n.a.	n.a.	n.a.	56.9	59.8	60.3	63.8	70.5	72.8	82.0
15 Not elsewhere classified.....	n.a.	n.a.	n.a.	133.6	140.5	145.1	147.8	145.7	153.0	156.6
16 All other liabilities.....	41.5	44.1	52.8	58.1	63.5	61.8	62.6	61.7	66.1	68.7
17 Capital, surplus, and undivided profits.....	32.8	36.4	31.5	36.6	38.8	39.8	39.4	40.7	41.8	41.6
18 Total liabilities and capital.....	298.6	351.9	394.2	444.3	463.6	466.4	477.6	485.5	501.9	513.1

1. Components may not add to totals because of rounding.

2. Excludes pools of securitized assets.

1.52 DOMESTIC FINANCE COMPANIES Business Credit Outstanding and Net Change¹

Millions of dollars, seasonally adjusted

Type	1988	1989	1990	1990					
				July	Aug.	Sept.	Oct.	Nov.	Dec.
1 Total	234,578	258,504	291,694	277,616	283,043	285,654	287,921	287,819	291,694
Retail financing of installment sales									
2 Automotive	36,957	39,139	37,771	38,931	38,610	38,470	39,150	38,600	37,771
3 Equipment	28,199	29,674	31,991	30,623	30,707	30,607	30,487	30,729	31,991
4 Pools of securitized assets ²	n.a.	698	951	800	987	946	902	927	951
Wholesale									
5 Automotive	32,357	33,074	33,247	33,158	34,429	37,082	35,258	33,111	33,247
6 Equipment	5,954	6,896	11,346	9,929	9,812	9,791	10,698	10,847	11,346
7 All other	9,312	9,918	9,309	9,722	9,707	9,597	9,477	9,447	9,309
8 Pools of securitized assets ²	n.a.	0	415	0	650	863	679	649	415
Leasing									
9 Automotive	24,875	27,074	39,317	30,210	30,942	30,453	31,303	31,601	39,317
10 Equipment	57,658	68,112	76,594	76,316	78,714	79,158	80,833	81,427	76,594
11 Pools of securitized assets ²	n.a.	1,247	1,849	1,760	1,703	1,655	1,724	1,884	1,849
12 Loans on commercial accounts receivable and factored commercial accounts receivable	18,103	19,081	22,037	20,077	19,974	20,538	20,740	21,652	22,037
13 All other business credit	21,162	23,590	26,867	26,089	26,809	26,495	26,670	26,944	26,867
Net change (during period)									
14 Total	22,434	22,580	30,973	3,830	5,427	2,611	2,267	-101	3,875
Retail financing of installment sales									
15 Automotive	819	2,182	-1,368	-785	-321	-141	680	-549	-829
16 Equipment	1,386	1,475	2,319	132	84	-100	-120	243	1,262
17 Pools of securitized assets ²	n.a.	-26	253	158	187	-41	-44	25	24
Wholesale									
18 Automotive	2,288	716	173	1,343	1,271	2,653	-1,823	-2,147	135
19 Equipment	377	940	2,231	434	-118	-21	907	149	499
20 All other	983	605	-608	-321	-16	-110	-120	-29	-138
21 Pools of securitized assets ²	n.a.	0	415	0	650	213	-184	-30	-234
Leasing									
22 Automotive	2,777	2,201	12,243	636	731	-488	850	298	7,716
23 Equipment	9,752	9,187	8,483	1,400	2,398	444	1,675	594	-4,833
24 Pools of securitized assets ²	n.a.	526	602	213	-57	-48	69	160	-35
25 Loans on commercial accounts receivable and factored commercial accounts receivable	-65	979	2,954	208	-103	564	202	912	384
26 All other business credit	4,119	3,796	3,278	412	721	-314	175	273	-76

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

Millions of dollars; exceptions noted.

Item	1988	1989	1990	1990						1991
				July	Aug.	Sept.	Oct.	Nov.	Dec.		Jan.
	Terms and yields in primary and secondary markets									
PRIMARY MARKETS										
Conventional mortgages on new homes										
Terms ¹										
1 Purchase price (thousands of dollars).....	150.0	159.6	153.2	163.5	161.5	156.6	146.1	151.5	156.3	148.3
2 Amount of loan (thousands of dollars).....	110.5	117.0	112.4	120.9	118.3	114.8	105.1	111.2	115.4	112.3
3 Loan/price ratio (percent).....	75.5	74.5	74.8	75.3	74.5	74.7	73.5	75.0	74.9	77.2
4 Maturity (years).....	28.0	28.1	27.3	28.0	27.2	27.2	26.9	27.1	28.6	28.1
5 Fees and charges (percent of loan amount) ²	2.19	2.06	1.93	1.93	2.07	1.78	1.80	1.68	1.85	1.75
6 Contract rate (percent per year).....	8.81	9.76	9.68	9.75	9.75	9.60	9.68	9.61	9.45	9.36
Yield (percent per year)										
7 OTS series ³	9.18	10.11	10.01	10.08	10.11	9.90	9.98	9.90	9.76	9.65
8 HUD series ⁴	10.30	10.21	10.08	9.94	10.12	10.18	10.11	9.86	9.66	9.53
SECONDARY MARKETS										
Yield (percent per year)										
9 FHA mortgages (HUD series) ⁵	10.49	10.24	10.17	10.11	10.28	10.24	10.23	9.81	9.66	9.58
10 GNMA securities ⁶	9.83	9.71	9.51 ⁷	9.48	9.59 ⁷	9.65	9.66	9.46	9.08	8.87
	Activity in secondary markets									
FEDERAL NATIONAL MORTGAGE ASSOCIATION										
Mortgage holdings (end of period)										
11 Total.....	101,329	104,974	113,329	113,378	113,507	113,718	114,216	115,085	116,628	117,445
12 FHA/VA-insured.....	19,762	19,640	21,028	21,059	21,101	21,364	21,495	21,530	21,751	21,854
13 Conventional.....	81,567	85,335	92,302	92,319	92,406	92,354	92,721	93,555	94,877	95,591
Mortgage transactions (during period)										
14 Purchases.....	23,110	22,518	23,959	2,304	2,134	2,123	2,077	2,078	2,410	1,781
Mortgage commitments ⁷										
15 Issued (during period) ⁸	n.a.	n.a.	n.a.	2,215	2,302	2,073	1,849	2,426	2,104	1,889
16 To sell (during period) ⁹	n.a.	n.a.	n.a.	874	761	644	92	0	0	0
FEDERAL HOME LOAN MORTGAGE CORPORATION										
Mortgage holdings (end of period) ⁹										
17 Total.....	15,105	20,105	n.a.	20,127	20,564	20,508	20,790	n.a.	n.a.	n.a.
18 FHA/VA.....	620	590	n.a.	546	541	536	530	n.a.	n.a.	n.a.
19 Conventional.....	14,485	19,516	n.a.	19,581	20,023	19,972	20,260	n.a.	n.a.	n.a.
Mortgage transactions (during period)										
20 Purchases.....	44,077	78,588	n.a.	4,527	5,417	5,798	6,118	n.a.	n.a.	n.a.
21 Sales.....	39,780	73,446	68,383	4,248	4,808	5,707	5,734	5,280	5,519	4,507
Mortgage commitments ¹⁰										
22 Contracted (during period).....	66,026	88,519	n.a.	5,851	5,646	6,643	10,972	n.a.	n.a.	n.a.

1. Weighted averages based on sample surveys of mortgages originated by major institutional lender groups; compiled by the Federal Home Loan Bank 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 Department of Housing and Urban Development.

5. Average gross yields on 30-year, minimum-downpayment, Federal Housing Administration-insured first mortgages 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 permissible contract rates.

6. Average net yields to investors on Government National Mortgage Association guaranteed, mortgage-backed, fully modified pass-through securities, assuming prepayment in 12 years on pools of 30-year FHA/VA mortgages 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 1- to 4-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. 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 OUTSTANDING¹

Millions of dollars, end of period

Type of holder, and type of property	1987	1988	1989	1989		1990		
				Q3	Q4	Q1	Q2	Q3 ²
1 All holders	2,971,019	3,264,348	3,538,305	3,472,516	3,538,305	3,599,880	3,666,728	3,726,071
2 1- to 4-family	1,958,400	2,186,292	2,404,272	2,347,563	2,404,272	2,449,981	2,512,799	2,569,327
3 Multifamily	272,500	289,128	304,068	301,160	304,068	308,865	307,683	307,631
4 Commercial	651,323	702,113	744,626	737,484	744,626	756,323	761,698	764,933
5 Farm	88,797	86,816	85,339	86,309	85,339	84,710	84,548	84,180
6 Selected financial institutions	1,657,937	1,826,668	1,918,938	1,914,074	1,918,938	1,924,626	1,925,053	1,917,435
7 Commercial banks	592,449	669,237	763,415	742,442	763,415	783,379	811,174	826,721
8 1- to 4-family	275,613	317,585	368,518	355,096	368,518	376,306	395,082	403,142
9 Multifamily	32,756	33,158	37,996	37,201	37,996	39,127	39,172	39,971
10 Commercial	269,648	302,989	340,204	333,606	340,204	351,135	359,747	366,085
11 Farm	14,432	15,505	16,697	16,539	16,697	16,811	17,173	17,523
12 Savings institutions ³	860,467	924,606	910,254	932,373	910,254	891,921	860,540	835,219
13 1- to 4-family	602,408	671,722	669,220	683,148	669,220	658,405	641,864	627,758
14 Multifamily	106,359	110,775	106,014	108,447	106,014	103,841	97,314	92,479
15 Commercial	150,943	141,433	134,370	140,096	134,370	129,056	120,795	114,428
16 Farm	757	676	650	682	650	619	567	554
17 Life insurance companies	205,021	232,825	245,269	239,259	245,269	249,326	253,339	255,496
18 1- to 4-family	12,676	15,299	13,812	13,275	13,812	14,158	14,560	15,038
19 Multifamily	21,644	23,583	27,174	26,351	27,174	28,161	29,247	30,207
20 Commercial	160,874	184,273	194,722	190,003	194,722	197,472	199,990	200,714
21 Farm	9,828	9,671	9,561	9,630	9,561	9,535	9,542	9,537
22 Finance companies ⁴	29,716	37,846	45,476	43,157	45,476	45,808	47,104	48,531
23 Federal and related agencies	192,721	200,570	209,498	205,809	209,498	216,146	228,362	237,497
24 Government National Mortgage Association	444	26	23	24	23	22	21	20
25 1- to 4-family	25	26	23	24	23	22	21	20
26 Multifamily	419	0	0	0	0	0	0	0
27 Farmers Home Administration ⁵	43,051	42,018	41,176	41,117	41,176	41,125	41,175	41,330
28 1- to 4-family	18,169	18,347	18,422	18,405	18,422	18,419	18,434	18,445
29 Multifamily	8,044	8,513	9,054	8,916	9,054	9,199	9,361	9,513
30 Commercial	6,603	5,343	4,443	4,366	4,443	4,510	4,545	4,732
31 Farm	10,235	9,815	9,257	9,430	9,257	8,997	8,835	8,641
32 Federal Housing and Veterans Administration	5,574	5,973	6,087	6,023	6,087	6,355	6,792	6,912
33 1- to 4-family	2,557	2,672	2,875	2,900	2,875	3,027	3,054	3,121
34 Multifamily	3,017	3,301	3,212	3,123	3,212	3,328	3,738	3,790
35 Federal National Mortgage Association	96,649	103,013	110,721	107,052	110,721	112,353	112,855	114,828
36 1- to 4-family	89,666	95,833	102,295	99,168	102,295	103,300	103,431	105,466
37 Multifamily	6,983	7,180	8,426	7,884	8,426	9,053	9,424	9,362
38 Federal Land Banks	34,131	32,115	29,640	30,943	29,640	29,325	29,595	29,212
39 1- to 4-family	2,008	1,890	1,210	1,821	1,210	1,197	1,741	1,782
40 Farm	32,123	30,225	28,430	29,122	28,430	28,128	27,854	27,430
41 Federal Home Loan Mortgage Corporation	12,872	17,425	21,851	20,650	21,851	19,823	19,979	19,994
42 1- to 4-family	11,430	15,077	18,248	17,659	18,248	16,772	17,316	17,320
43 Multifamily	1,442	2,348	3,603	2,992	3,603	3,051	2,663	2,674
44 Mortgage pools or trusts ⁶	718,297	810,887	942,432	898,241	942,432	979,936	1,020,293	1,064,675
45 Government National Mortgage Association	317,555	340,527	368,367	360,097	368,367	376,962	385,456	393,879
46 1- to 4-family	309,806	331,257	358,142	349,838	358,142	366,300	374,960	383,532
47 Multifamily	7,749	9,270	10,225	10,259	10,225	10,662	10,496	10,347
48 Federal Home Loan Mortgage Corporation	212,634	226,406	272,870	257,938	272,870	281,736	295,340	309,415
49 1- to 4-family	205,977	219,988	266,060	251,232	266,060	274,084	287,232	300,931
50 Multifamily	6,657	6,418	6,810	6,706	6,810	7,652	8,108	8,484
51 Federal National Mortgage Association	139,960	178,250	228,232	208,894	228,232	246,391	263,330	283,415
52 1- to 4-family	137,988	172,331	219,577	200,302	219,577	237,916	254,811	274,675
53 Multifamily	1,972	5,919	8,655	8,592	8,655	8,475	8,519	8,740
54 Farmers Home Administration ⁷	245	104	80	82	80	76	72	70
55 1- to 4-family	121	26	21	22	21	20	19	18
56 Multifamily	0	0	0	0	0	0	0	0
57 Commercial	63	38	26	26	26	25	24	24
58 Farm	61	40	33	35	33	31	30	28
59 Individuals and others ⁷	402,064	426,223	467,438	454,392	467,438	479,172	493,021	506,464
60 1- to 4-family	242,053	258,639	292,967	283,445	292,967	301,573	312,670	324,020
61 Multifamily	75,458	78,663	82,899	80,689	82,899	84,873	86,935	88,264
62 Commercial	63,192	68,037	70,861	69,387	70,861	72,136	72,868	73,713
63 Farm	21,361	20,884	20,711	20,871	20,711	20,589	20,548	20,467

1. Based on data from various institutional and governmental sources, with 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 1- to 4-family loans.

5. Farmers Home Administration-guaranteed securities 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 pools backing 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 CREDIT¹ Total Outstanding, and Net Change, seasonally adjusted

Millions of dollars, amounts outstanding, end of period

Holder, and type of credit	1989	1990	1990								
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ¹	Dec.
			Seasonally adjusted								
1 Total	716,624	737,910	720,835	724,485	724,601	729,329	732,385	735,222	736,595	739,357	737,910
2 Automobile	290,770	285,269	288,936	288,931	287,168	286,791	285,283	285,261	284,402	284,483	285,269
3 Revolving	197,110	218,531	203,965	207,153	208,362	212,138	214,492	216,804	218,381	219,757	218,531
4 Mobile home	22,343	21,730	22,702	22,815	22,733	22,795	22,976	22,672	22,491	22,518	21,730
5 Other	206,401	212,380	205,232	205,585	206,338	207,605	209,635	210,484	211,320	212,599	212,380
Not seasonally adjusted											
6 Total	727,561	749,852	715,801	720,045	722,953	727,196	734,511	737,260	737,252	740,346	749,852
By major holder											
7 Commercial banks	343,865	351,198	337,576	339,328	335,998	339,124	342,987	344,941	344,875	346,128	351,198
8 Finance companies	140,832	135,641	138,174	138,384	138,642	138,796	139,496	140,890	141,329	139,195	135,641
9 Credit unions	90,875	91,203	89,689	89,913	90,137	90,631	91,306	91,311	91,406	91,174	91,203
10 Retailers ²	42,638	42,111	37,207	37,347	37,382	36,804	37,231	36,682	36,047	37,470	42,111
11 Savings institutions	57,228	49,594	53,606	53,301	52,902	52,503	52,399	51,358	50,787	50,310	49,594
12 Gasoline companies	3,935	4,747	3,928	4,024	4,192	4,396	4,722	4,723	4,718	4,701	4,747
13 Pools of securitized assets ²	48,188	75,358	55,621	57,748	63,700	64,942	66,370	67,355	68,090	71,368	75,358
By major type of credit ³											
14 Automobile	290,421	284,841	286,220	287,140	287,254	287,479	288,221	289,255	287,730	285,877	284,841
15 Commercial banks	126,613	133,687	126,483	127,056	126,988	126,986	128,079	128,937	128,133	127,039	133,687
16 Finance companies	82,721	74,396	79,295	78,927	78,273	77,716	77,205	78,116	78,033	75,224	74,396
17 Pools of securitized assets ²	18,191	24,198	19,406	20,151	21,043	21,692	21,562	21,239	20,786	23,159	24,198
18 Revolving	208,188	230,769	201,783	204,854	206,820	209,582	213,119	214,853	216,285	219,713	230,769
19 Commercial banks	130,956	133,687	124,039	125,433	122,116	124,369	125,967	126,995	127,950	129,111	133,687
20 Retailers	37,967	37,535	32,721	32,857	32,884	32,325	32,735	32,212	31,601	32,993	37,535
21 Gasoline companies	3,935	4,747	3,928	4,024	4,192	4,396	4,722	4,723	4,718	4,701	4,747
22 Pools of securitized assets ²	22,977	43,808	29,403	30,913	36,076	36,786	38,194	39,606	40,798	41,797	43,808
23 Mobile home	22,283	21,671	22,484	22,610	22,644	22,873	23,033	22,815	22,720	22,646	21,671
24 Commercial banks	9,155	10,048	9,231	9,295	9,296	9,443	9,541	9,396	9,363	9,351	10,048
25 Finance companies	4,716	3,756	5,168	5,224	5,266	5,328	5,358	5,423	5,400	5,364	3,756
26 Other	206,669	212,571	205,314	205,441	206,235	207,252	210,138	210,337	210,517	212,110	212,571
27 Commercial banks	77,141	81,413	77,823	77,544	77,598	78,126	79,400	79,613	79,429	80,627	81,413
28 Finance companies	53,395	57,488	53,711	54,233	55,103	55,752	56,933	57,351	57,896	58,607	57,488
29 Retailers	4,671	4,576	4,486	4,490	4,498	4,479	4,496	4,470	4,446	4,477	4,576
30 Pools of securitized assets ²	7,020	7,352	6,812	6,684	6,581	6,464	6,614	6,510	6,506	6,412	7,352

1. The Board's series cover 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 CREDIT¹

Percent unless noted otherwise

Item	1988	1989	1990	1990						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
INTEREST RATES										
Commercial banks ²										
1 48-month new car ³	10.85	12.07	11.78	n.a.	n.a.	11.89	n.a.	n.a.	11.62	n.a.
2 24-month personal	14.68	15.44	15.46	n.a.	n.a.	15.46	n.a.	n.a.	15.69	n.a.
3 120-month mobile home ³	13.54	14.11	14.02	n.a.	n.a.	14.09	n.a.	n.a.	13.99	n.a.
4 Credit card	17.78	18.02	18.17	n.a.	n.a.	18.18	n.a.	n.a.	18.23	n.a.
Auto finance companies										
5 New car	12.60	12.62	12.54	12.58	12.68	12.62	12.34	12.57	12.74	12.86
6 Used car	15.11	16.18	15.99	16.00	15.96	15.98	16.03	16.12	16.07	16.04
OTHER TERMS ⁴										
Maturity (months)										
7 New car	56.2	54.2	54.6	54.8	54.9	54.8	54.3	54.6	54.6	54.7
8 Used car	46.7	46.6	46.1	46.2	46.2	46.2	46.1	46.1	46.0	45.8
Loan-to-value ratio										
9 New car	94	91	87	87	86	86	85	85	85	85
10 Used car	98	97	95	95	96	96	95	95	95	94
Amount financed (dollars)										
11 New car	11,663	12,001	12,071	12,108	12,125	11,939	11,837	11,917	11,986	12,140
12 Used car	7,824	7,954	8,289	8,296	8,401	8,415	8,403	8,423	8,494	8,530

1. These data also appear in the Board's G.19 (421) release. For address, see inside front cover.

2. Data for midmonth 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, sector	1985	1986	1987	1988	1989	1989				1990		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
Nonfinancial sectors												
1 Total net borrowing by domestic nonfinancial sectors	848.1	836.9	687.0	760.8	678.2	746.9	666.8	678.8	620.2	762.1	624.6	708.6
By sector and instrument												
2 U.S. government	223.6	215.0	144.9	157.5	151.6	147.3	100.1	173.9	185.0	247.6	228.7	286.7
3 Treasury securities	223.7	214.7	143.4	140.0	150.0	148.5	95.0	166.8	189.6	218.1	223.4	288.0
4 Agency issues and mortgages	-1	.4	1.5	17.4	1.6	-1.2	5.1	7.1	-4.6	29.6	5.4	-1.3
5 Private domestic nonfinancial sectors	624.5	621.9	542.1	603.3	526.6	599.6	566.7	504.9	435.2	514.5	395.8	422.0
6 Debt capital instruments	451.2	465.8	453.2	459.2	379.8	412.8	390.1	369.2	347.0	366.2	331.4	294.0
7 Tax-exempt obligations	135.4	22.7	49.3	49.8	30.4	39.7	28.7	34.1	19.1	13.0	21.9	25.9
8 Corporate bonds	73.5	126.8	79.4	102.9	73.7	58.2	86.5	62.7	87.4	44.6	66.9	38.1
9 Mortgages	242.2	316.3	324.5	306.5	275.7	314.9	275.0	272.4	240.5	308.6	242.7	230.0
10 Home mortgages	156.8	218.7	234.9	231.0	218.0	225.5	211.3	221.0	214.3	237.3	225.4	207.9
11 Multifamily residential	29.8	33.5	24.4	16.7	16.4	23.1	21.4	11.8	9.5	21.9	-4.3	.0
12 Commercial	62.2	73.6	71.6	60.8	42.7	68.6	41.5	40.9	19.9	50.7	24.6	23.0
13 Farm	-6.6	-9.5	-6.4	-2.1	-1.5	-2.3	.9	-1.3	-3.2	-1.4	-3.0	-9
14 Other debt instruments	173.3	156.1	88.9	144.1	146.8	186.8	176.5	135.6	88.2	148.3	64.4	128.0
15 Consumer credit	82.5	58.0	33.5	50.2	39.1	38.2	36.9	37.1	44.1	14.6	9.8	27.7
16 Bank loans n.e.c.	40.6	66.9	10.0	39.8	39.9	55.9	45.1	50.8	7.7	19.6	6.5	10.5
17 Open market paper	14.6	-9.3	2.3	11.9	20.4	32.3	39.5	16.9	-6.9	69.7	-6.0	17.5
18 Other	35.6	40.5	43.2	42.2	47.4	60.4	55.0	30.9	43.3	44.4	54.1	72.2
19 By borrowing sector	624.5	621.9	542.1	603.3	526.6	599.6	566.7	504.9	435.2	514.5	395.8	422.0
20 State and local governments	90.9	36.2	48.8	45.6	29.6	40.1	33.3	28.6	16.5	9.0	14.9	20.5
21 Households	284.5	293.0	302.2	314.9	285.0	293.4	264.0	290.8	291.8	300.0	270.2	283.4
22 Nonfinancial business	249.1	292.7	191.0	242.8	211.9	266.1	269.4	185.4	126.9	205.4	110.7	118.1
23 Farm	-14.5	-16.3	-10.6	-7.5	1.6	4.7	-5.0	-2.1	8.9	4.3	-6.1	3.9
24 Nonfarm noncorporate	129.3	99.2	77.9	65.7	50.8	71.0	56.9	40.2	35.0	38.4	25.5	24.3
25 Corporate	134.3	209.7	123.7	184.6	159.5	190.3	217.4	147.3	83.1	162.8	91.3	89.9
26 Foreign net borrowing in United States	1.2	9.7	4.5	6.3	10.9	3.2	-6.9	30.4	16.9	-3.5	41.1	26.3
27 Bonds	3.8	3.1	7.4	6.9	5.3	2.5	11.5	8.1	-1.0	28.3	27.0	1.6
28 Bank loans n.e.c.	-2.8	-1.0	-3.6	-1.8	-1.1	3.2	-3.2	3.7	-4.3	-6.7	-2.1	2.7
29 Open market paper	6.2	11.5	2.1	8.7	13.3	16.9	-6.6	20.7	22.2	-16.5	23.0	27.3
30 U.S. government loans	-6.0	-3.9	-1.4	-7.5	-7.5	-19.4	-8.7	-2.1	.1	-8.6	-6.9	-5.3
31 Total domestic plus foreign	849.3	846.6	691.5	767.1	689.1	750.1	659.9	709.2	637.1	758.6	665.7	734.9
Financial sectors												
32 Total net borrowing by financial sectors	201.3	285.1	300.2	247.6	205.5	356.6	154.1	123.9	187.3	198.5	172.5	214.3
By instrument												
33 U.S. government related	101.5	154.1	171.8	119.8	151.0	194.0	128.8	124.8	156.4	176.2	183.7	167.4
34 Sponsored credit agency securities	20.6	15.2	30.2	44.9	25.2	70.0	22.5	13.2	-4.7	14.5	17.3	17.9
35 Mortgage pool securities	79.9	139.2	142.3	74.9	125.8	124.0	106.3	111.6	161.1	161.7	166.4	149.4
36 Loans from U.S. government	1.1	-4	-8	.0	.0	.0	.0	.0	.0	.0	.0	.0
37 Private financial sectors	99.7	131.0	128.4	127.8	54.5	162.6	25.3	-9	30.9	22.3	-11.2	46.9
38 Corporate bonds	50.9	82.9	78.9	51.7	36.8	52.3	28.5	26.7	39.6	37.7	64.1	39.5
39 Mortgages	.1	.1	.4	.3	.0	.3	.0	.3	-4	-7	.8	-1.4
40 Bank loans n.e.c.	2.6	4.0	-3.2	1.4	1.8	1.0	-1	2.0	4.2	-2.2	-7	1.7
41 Open market paper	32.0	24.2	27.9	54.8	26.9	50.1	10.1	11.0	36.3	9.4	-44.7	37.3
42 Loans from Federal Home Loan Banks	14.2	19.8	24.4	19.7	-11.0	58.9	-13.1	-41.0	-48.8	-21.8	-30.7	-30.3
By sector												
43 Total	201.3	285.1	300.2	247.6	205.5	356.6	154.1	123.9	187.3	198.5	172.5	214.3
44 Sponsored credit agencies	21.7	14.9	29.5	44.9	25.2	70.0	22.5	13.2	-4.7	14.5	17.3	17.9
45 Mortgage pools	79.9	139.2	142.3	74.9	125.8	124.0	106.3	111.6	161.1	161.7	166.4	149.4
46 Private financial sectors	99.7	131.0	128.4	127.8	54.5	162.6	25.3	-9	30.9	22.3	-11.2	46.9
47 Commercial banks	-4.9	-3.6	6.2	-3.0	-1.4	-11.1	2.5	3.5	-7	-4.9	-7.9	-14.4
48 Bank affiliates	16.6	15.2	14.3	5.2	6.2	9.4	2.9	16.5	-3.9	-12.8	-32.6	-22.7
49 Savings and loan associations	17.3	20.9	19.6	19.9	-14.1	60.8	-16.3	-44.7	-56.2	-15.8	-52.7	-38.0
50 Mutual savings banks	1.5	4.2	8.1	1.9	-1.4	-4.1	.0	-2.3	.7	-8.3	5.9	1.2
51 Finance companies	57.7	54.7	40.8	67.7	46.3	68.8	40.4	23.5	52.6	29.8	27.8	87.1
52 REITs	-1	.8	.3	3.5	-1.9	-1.8	-2.8	-3.1	.1	-5	-2.0	-1.5
53 SCO Issuers	11.5	39.0	39.1	32.5	20.8	40.6	-1.4	5.7	38.2	34.7	50.3	35.3

1.57—Continued

Transaction category, sector		1985	1986	1987	1988	1989	1989				1990		
							Q1	Q2	Q3	Q4	Q1	Q2	Q3
All sectors													
54	Total net borrowing	1,050.6	1,131.7	991.7	1,014.7	894.5	1,106.7	814.0	833.0	824.4	957.1	838.2	949.2
55	U.S. government securities	324.2	369.5	317.5	277.2	302.6	341.3	228.9	298.7	341.4	423.8	412.5	454.0
56	State and local obligations	135.4	22.7	49.3	49.8	30.4	39.7	28.7	34.1	19.1	13.0	21.9	25.9
57	Corporate and foreign bonds	128.2	212.8	165.7	161.5	115.8	113.0	126.5	97.6	125.9	110.5	158.0	79.2
58	Mortgages	242.2	316.4	324.9	306.7	275.7	315.2	275.0	272.7	240.1	307.9	243.5	228.7
59	Consumer credit	82.5	58.0	33.5	50.2	39.1	38.2	36.9	37.1	44.1	14.6	9.8	27.7
60	Bank loans n.e.c.	40.3	69.9	3.2	39.4	41.5	60.2	41.9	56.5	7.5	10.6	3.7	15.0
61	Open market paper	52.8	26.4	32.3	75.4	60.6	99.3	42.9	48.5	51.6	62.7	-27.7	82.1
62	Other loans	45.0	56.1	65.5	54.4	28.9	99.9	33.2	-12.2	-5.4	14.0	16.5	36.6
63	MEMO: U.S. government, cash balance	14.4	.0	-7.9	10.4	-5.9	-14.3	20.7	-22.7	-7.3	21.5	-40.5	18.8
Totals net of changes in U.S. government cash balances													
64	Net borrowing by domestic nonfinancial	833.7	836.9	694.9	750.4	684.1	761.2	646.1	701.6	627.6	740.6	665.1	689.8
65	Net borrowing by U.S. government	209.3	215.0	152.8	147.1	157.5	161.6	79.4	196.7	192.4	226.2	269.2	267.9
External corporate equity funds raised in United States													
66	Total net share issues	17.2	86.8	10.9	-124.2	-63.7	-165.8	-43.0	-61.0	14.9	-4.8	50.5	-11.9
67	Mutual funds	84.4	159.0	73.9	1.1	41.3	1.0	34.0	57.9	72.4	53.1	76.5	51.7
68	All other	-67.2	-72.2	-63.0	-125.3	-105.1	-166.8	-77.0	-118.9	-57.6	-57.9	-26.0	-63.7
69	Nonfinancial corporations	-84.5	-85.0	-75.5	-129.5	-124.2	-172.3	-98.7	-146.3	-79.3	-69.0	-48.0	-74.0
70	Financial corporations	13.6	11.6	14.6	3.3	2.4	1.0	4.3	-1.1	4.5	9.9	.3	8.4
71	Foreign shares purchased in United States	3.7	1.2	-2.1	.9	16.7	4.5	17.4	27.5	17.2	1.2	21.7	2.0

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	1985	1986	1987	1988	1989	1989				1990		
						Q1	Q2	Q3	Q4	Q1	Q2	Q3
1 Total funds advanced in credit markets to domestic nonfinancial sectors	848.1	836.9	687.0	760.8	678.2	746.9	666.8	678.8	620.2	762.1	624.6	708.6
<i>By public agencies and foreign</i>												
2 Total net advances	202.0	280.2	248.8	210.7	187.6	312.8	15.5	218.3	203.8	233.7	313.3	283.0
3 U.S. government securities	45.9	69.4	70.1	85.2	30.7	83.1	-103.3	115.7	27.1	16.9	93.5	97.3
4 Residential mortgages	94.6	136.3	139.1	86.3	137.9	126.0	119.7	127.7	178.3	182.1	210.6	181.7
5 FHLB advances to thrifts	14.2	19.8	24.4	19.7	-11.0	58.9	-13.1	-41.0	-48.8	-21.8	-30.7	-30.3
6 Other loans and securities	47.3	54.7	15.1	19.4	30.0	44.8	12.1	15.8	47.1	56.5	39.8	34.2
Total advanced, by sector												
7 U.S. government	17.8	9.7	-7.9	-9.4	-2.4	-2	-6.0	-9.3	5.7	33.6	42.7	30.9
8 Sponsored credit agencies	103.5	153.3	169.3	112.0	125.3	188.2	28.0	126.4	158.4	184.0	165.8	150.5
9 Monetary authorities	18.4	19.4	24.7	10.5	-7.3	8.1	-1.6	-31.2	-4.6	-6.7	39.7	23.7
10 Foreign	62.3	97.8	62.7	97.6	72.1	116.7	-4.9	132.4	44.2	22.8	65.0	77.9
Agency and foreign borrowing not in line 1												
11 Sponsored credit agencies and mortgage pools	101.5	154.1	171.8	119.8	151.0	194.0	128.8	124.8	156.4	176.2	183.7	167.4
12 Foreign	1.2	9.7	4.5	6.3	10.9	3.2	-6.9	30.4	16.9	-3.5	41.1	26.3
<i>Private domestic funds advanced</i>												
13 Total net advances	748.8	720.5	614.5	676.2	652.5	631.3	773.3	615.7	589.7	701.1	536.1	619.3
14 U.S. government securities	278.2	300.1	247.4	192.1	271.9	258.2	332.2	183.0	314.3	406.9	318.9	356.7
15 State and local obligations	135.4	22.7	49.3	49.8	30.4	39.7	28.7	34.1	19.1	13.0	21.9	25.9
16 Corporate and foreign bonds	40.6	89.7	66.9	91.3	66.1	36.8	91.1	65.6	70.6	56.8	71.4	35.5
17 Residential mortgages	91.8	115.9	120.2	161.3	96.5	122.6	113.0	105.1	45.5	77.2	10.5	26.2
18 Other mortgages and loans	216.9	212.0	155.2	201.4	176.6	232.9	195.2	186.9	91.5	125.4	82.7	144.7
19 Less: Federal Home Loan Bank advances	14.2	19.8	24.4	19.7	-11.0	58.9	-13.1	-41.0	-48.8	-21.8	-30.7	-30.3
<i>Private financial intermediation</i>												
20 Credit market funds advanced by private financial institutions	578.0	730.0	528.4	562.3	511.1	474.1	600.9	345.9	623.4	326.9	241.7	418.6
21 Commercial banking	188.4	198.1	135.4	156.3	177.3	180.4	160.9	183.7	184.3	187.9	125.8	106.3
22 Savings institutions	87.9	107.6	136.8	120.4	-90.9	16.5	-42.3	-135.8	-201.9	-56.4	-215.8	-158.9
23 Insurance and pension funds	150.1	160.1	179.7	198.7	177.9	182.1	188.1	136.1	205.1	138.0	201.9	176.8
24 Other finance	151.6	264.2	76.6	86.9	246.8	95.1	294.2	161.9	436.0	57.3	129.8	294.4
25 Sources of funds	578.0	730.0	528.4	562.3	511.1	474.1	600.9	345.9	623.4	326.9	241.7	418.6
26 Private domestic deposits and RPs	212.1	277.1	162.8	229.2	225.2	140.9	267.4	284.4	208.0	117.0	18.3	78.4
27 Credit market borrowing	99.7	131.0	128.4	127.8	54.5	162.6	25.3	-9	30.9	22.3	-11.2	46.9
28 Other sources	266.1	321.8	237.1	205.3	231.4	170.6	308.2	62.3	384.6	187.6	234.6	293.3
29 Foreign funds	19.7	12.9	43.7	9.3	-9.9	-14.1	-35.4	30.4	-20.6	45.3	11.6	125.6
30 Treasury balances	10.3	1.7	-5.8	7.3	-3.4	-12.6	13.9	-19.9	5.0	11.9	-15.4	16.2
31 Insurance and pension reserves	131.7	119.9	135.4	177.6	140.5	162.3	123.2	82.6	193.9	120.3	179.5	142.0
32 Other, net	104.4	187.3	63.9	11.0	104.2	35.1	206.4	-30.8	206.3	10.0	58.9	9.5
<i>Private domestic nonfinancial investors</i>												
33 Direct lending in credit markets	270.5	121.5	214.6	241.7	195.9	319.7	197.7	268.9	-2.8	396.5	283.3	247.6
34 U.S. government securities	157.8	27.0	86.0	129.0	134.3	199.8	136.2	196.8	4.3	281.2	185.7	244.2
35 State and local obligations	37.7	-19.9	61.8	53.5	28.4	56.7	5.1	39.0	12.8	9	9.2	12.2
36 Corporate and foreign bonds	3.8	52.9	23.3	-9.4	-7	-16.5	9.4	-4.7	14.6	28.4	14.1	-19.1
37 Open market paper	51.6	9.9	15.8	36.4	5.4	47.3	17.8	21.4	-64.6	43.3	43.2	-29.8
38 Other	19.6	51.7	27.6	32.2	27.1	32.5	29.2	16.4	30.1	42.7	31.1	40.1
39 Deposits and currency	222.8	297.5	179.3	232.8	241.3	182.2	290.6	261.8	230.6	141.6	41.2	117.3
40 Currency	12.4	14.4	19.0	14.7	11.7	17.8	12.8	6.0	10.1	25.9	22.9	32.0
41 Checkable deposits	41.4	96.4	-9	12.9	1.5	-33.0	-41.7	14.7	65.8	-10.9	-4.1	13.1
42 Small time and savings accounts	138.5	120.6	76.0	122.4	100.5	30.7	99.0	163.1	109.1	112.0	9.4	38.3
43 Money market fund shares	7.2	43.2	28.9	20.2	85.2	39.4	119.2	116.7	65.6	72.8	5.8	120.9
44 Large time deposits	7.4	-3.2	37.2	40.8	23.1	68.5	61.1	-23.8	-13.4	-22.2	-7.4	-78.2
45 Security RPs	17.7	20.2	21.6	32.9	14.9	35.4	29.8	13.7	-19.2	-34.8	14.6	-15.7
46 Deposits in foreign countries	-1.7	5.9	-2.5	-11.2	4.4	23.5	10.4	-28.6	12.4	-1.3	0	7.0
47 Total of credit market instruments, deposits, and currency	493.3	419.0	393.9	474.5	437.2	502.0	488.3	530.7	227.7	538.1	324.4	364.9
48 Public holdings as percent of total	23.8	33.1	36.0	27.5	27.2	41.7	2.3	30.8	32.0	30.8	47.1	38.5
49 Private financial intermediation (in percent)	77.2	101.3	86.0	83.2	78.3	75.1	77.7	56.2	105.7	46.6	45.1	67.6
50 Total foreign funds	82.0	110.7	106.4	106.9	62.2	102.6	-40.3	162.8	23.6	68.1	76.6	203.5
MEMO: Corporate equities not included above												
51 Total net issues	17.2	86.8	10.9	-124.2	-63.7	-165.8	-43.0	-61.0	14.9	-4.8	50.5	-11.9
52 Mutual fund shares	84.4	159.0	73.9	1.1	41.3	1.0	34.0	57.9	72.4	53.1	76.5	51.7
53 Other equities	-67.2	-72.2	-63.0	-125.3	-105.1	-166.8	-77.0	-118.9	-57.6	-57.9	-26.0	-63.7
54 Acquisitions by financial institutions	46.9	50.9	32.0	-2.9	17.2	-2	-14.1	6.1	76.9	63.4	114.7	41.8
55 Other net purchases	-29.7	35.9	-21.2	-121.4	-80.9	-165.6	-28.9	-67.1	-62.1	-68.2	-64.2	-53.7

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 27 plus line 33. Also sum of lines 28 and 47 less lines 40 and 46.
18. Includes farm and commercial mortgages.
26. Line 39 less lines 40 and 46.
27. Excludes equity issues and investment company shares. Includes line 19.
29. 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 in foreign banks.
30. Demand deposits and note balances at commercial banks.

31. Excludes net investment of these reserves in corporate equities.

32. Mainly retained earnings and net miscellaneous liabilities.

33. Line 13 less line 20 plus line 27.

34-38. Lines 14-18 less amounts acquired by private finance plus amounts borrowed by private finance. Line 38 includes mortgages.

40. Mainly an offset to line 9.

47. Lines 33 plus 39, or line 13 less line 28 plus 40 and 46.

48. Line 2/line 1.

49. Line 20/line 13.

50. Sum of lines 10 and 29.

51, 53. 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, sector	1985	1986	1987	1988	1989				1990		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3
Nonfinancial sectors											
1 Total credit market debt owed by domestic nonfinancial sectors	6,804.5	7,646.3	8,343.9	9,096.0	9,267.7	9,438.7	9,605.1	9,805.2	9,975.7	10,136.3	10,309.4
By sector and instrument											
2 U.S. government	1,600.4	1,815.4	1,960.3	2,117.8	2,155.7	2,165.7	2,206.1	2,269.4	2,360.9	2,401.7	2,470.2
3 Treasury securities	1,597.1	1,811.7	1,955.2	2,095.2	2,133.4	2,142.1	2,180.7	2,245.2	2,329.3	2,368.8	2,437.6
4 Agency issues and mortgages	3.3	3.6	5.2	22.6	22.3	23.6	25.4	24.2	31.6	32.9	32.6
5 Private domestic nonfinancial sectors	5,204.1	5,831.0	6,383.6	6,978.2	7,112.0	7,273.0	7,399.0	7,535.8	7,614.8	7,734.6	7,839.2
6 Debt capital instruments	3,485.2	3,962.7	4,427.9	4,886.4	4,989.1	5,091.4	5,189.9	5,283.3	5,355.5	5,443.2	5,523.0
7 Tax-exempt obligations	655.5	679.1	728.4	790.8	798.6	804.9	816.4	821.2	822.4	826.7	836.3
8 Corporate bonds	542.6	669.4	748.8	851.7	866.3	887.9	903.5	925.4	936.5	953.3	962.8
9 Mortgages	2,287.1	2,614.2	2,950.7	3,243.8	3,324.2	3,398.6	3,470.0	3,536.6	3,596.6	3,663.3	3,724.0
10 Home mortgages	1,490.2	1,720.8	1,943.1	2,173.9	2,229.0	2,287.6	2,347.6	2,404.3	2,450.0	2,512.8	2,569.3
11 Multifamily residential	213.0	246.2	270.0	286.7	293.1	298.3	301.2	304.4	307.8	306.5	306.6
12 Commercial	478.1	551.4	648.7	696.4	716.2	725.9	734.9	742.6	754.1	759.4	763.9
13 Farm	105.9	95.8	88.9	86.8	86.0	86.8	86.3	85.3	84.7	84.5	84.2
14 Other debt instruments	1,718.9	1,868.2	1,955.7	2,091.9	2,122.9	2,181.6	2,209.1	2,252.6	2,259.3	2,291.4	2,316.2
15 Consumer credit	601.8	659.8	693.2	743.5	741.7	756.7	771.0	790.6	774.3	783.3	794.4
16 Bank loans n.e.c.	602.3	666.0	673.3	713.1	725.6	740.3	750.7	763.0	756.3	761.8	762.6
17 Open market paper	72.2	62.9	73.8	85.7	96.1	110.1	113.3	107.1	126.0	128.7	131.8
18 Other	442.6	479.6	515.3	549.6	559.4	574.5	574.1	591.9	602.6	617.6	627.4
19 By borrowing sector	5,204.1	5,831.0	6,383.6	6,978.2	7,112.0	7,273.0	7,399.0	7,535.8	7,614.8	7,734.6	7,839.2
20 State and local governments	473.9	510.1	558.9	604.5	612.4	619.9	629.9	634.1	634.3	636.8	645.1
21 Households	2,296.0	2,596.1	2,879.1	3,191.5	3,257.9	3,330.7	3,411.4	3,501.8	3,544.5	3,619.8	3,698.1
22 Nonfinancial business	2,434.2	2,724.8	2,945.6	3,182.2	3,241.7	3,322.5	3,357.6	3,400.0	3,436.1	3,478.0	3,496.1
23 Farm	173.4	156.6	145.5	137.6	136.7	139.5	139.2	139.2	138.2	140.7	141.8
24 Nonfarm noncorporate	898.3	997.6	1,075.4	1,145.1	1,163.9	1,177.6	1,183.0	1,195.9	1,206.5	1,212.4	1,213.9
25 Corporate	1,362.4	1,570.6	1,724.6	1,899.5	1,941.0	2,005.3	2,035.5	2,064.8	2,091.4	2,124.8	2,140.4
26 Foreign credit market debt held in											
27 United States	236.7	238.3	244.6	253.9	254.0	252.2	257.7	261.5	260.4	271.7	277.3
28 Bonds	71.8	74.9	82.3	89.2	90.4	92.1	94.2	94.5	102.1	107.5	108.0
29 Bank loans n.e.c.	27.9	26.9	23.3	21.5	21.6	21.5	22.6	21.4	19.0	19.3	20.0
30 Open market paper	33.9	37.4	41.2	49.9	54.4	52.7	57.5	63.0	59.3	65.1	71.5
31 U.S. government loans	103.0	99.1	97.7	93.2	87.5	85.8	83.4	82.6	80.0	79.8	77.8
31 Total domestic plus foreign	7,041.1	7,884.7	8,588.5	9,349.9	9,521.7	9,690.8	9,862.8	10,066.8	10,236.1	10,408.0	10,586.6
Financial sectors											
32 Total credit market debt owed by financial sectors	1,213.2	1,529.8	1,836.8	2,084.4	2,191.3	2,234.1	2,263.8	2,322.4	2,356.3	2,403.4	2,455.2
By instrument											
33 U.S. government related	632.7	810.3	978.6	1,098.4	1,140.8	1,169.5	1,203.6	1,249.3	1,286.1	1,328.0	1,372.9
34 Sponsored credit agency securities	257.8	273.0	303.2	348.1	364.3	369.0	370.4	373.3	376.0	378.9	381.1
35 Mortgage pool securities	368.9	531.6	670.4	745.3	771.5	795.6	828.2	871.0	905.2	944.2	986.8
36 Loans from U.S. government	6.1	5.7	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
37 Private financial sectors	580.5	719.5	858.2	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,070.2	1,075.3	1,082.3
38 Corporate bonds	204.5	287.4	366.3	418.0	458.6	466.1	472.7	482.7	491.7	508.2	518.0
39 Mortgages	2.7	2.7	3.1	3.4	3.5	3.5	3.5	3.4	3.2	3.5	3.1
40 Bank loans n.e.c.	32.1	36.1	32.8	34.2	32.2	33.8	34.1	36.0	33.2	34.8	34.9
41 Open market paper	252.4	284.6	322.9	377.7	392.5	399.4	398.8	409.1	409.1	402.5	408.5
42 Loans from Federal Home Loan Banks	88.8	108.6	133.1	152.8	163.8	161.9	151.1	141.8	132.9	126.3	117.9
43 Total, by sector	1,213.2	1,529.8	1,836.8	2,084.4	2,191.3	2,234.1	2,263.8	2,322.4	2,356.3	2,403.4	2,455.2
44 Sponsored credit agencies	263.9	278.7	308.2	353.1	369.3	374.0	375.4	378.3	381.0	383.8	386.1
45 Mortgage pools	368.9	531.6	670.4	745.3	771.5	795.6	828.2	871.0	905.2	944.2	986.8
46 Private financial sectors	580.5	719.5	858.2	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,070.2	1,075.3	1,082.3
47 Commercial banks	79.2	75.6	81.8	78.8	73.3	75.7	77.0	77.4	73.4	73.3	70.2
48 Bank affiliates	106.2	116.8	131.1	136.2	140.0	141.2	144.0	142.5	140.8	133.0	126.0
49 Savings and loan associations	98.9	119.8	139.4	159.3	170.1	167.9	155.7	145.2	137.1	125.8	114.8
50 Mutual savings banks	4.4	8.6	16.7	18.6	17.8	17.7	17.5	17.2	15.4	16.6	17.4
51 Finance companies	261.2	328.1	378.8	446.1	464.3	478.0	481.2	496.2	500.3	511.1	529.9
52 REITs	5.6	6.5	7.3	11.4	11.1	10.6	10.0	10.1	10.1	9.8	9.5
53 SCO issuers	25.0	64.0	103.1	135.7	173.8	173.5	174.9	184.4	193.1	205.7	214.5
All sectors											
54 Total credit market debt	8,254.4	9,414.4	10,425.3	11,434.3	11,713.0	11,925.0	12,126.6	12,389.1	12,592.4	12,811.4	13,041.8
55 U.S. government securities	2,227.0	2,620.0	2,933.9	3,211.1	3,291.5	3,330.3	3,404.7	3,513.7	3,642.0	3,724.8	3,838.1
56 State and local obligations	655.5	679.1	728.4	790.8	798.6	804.9	816.4	821.2	822.4	826.7	836.3
57 Corporate and foreign bonds	818.9	1,031.7	1,197.4	1,358.9	1,415.2	1,446.1	1,470.5	1,502.6	1,530.3	1,569.0	1,588.8
58 Mortgages	2,289.8	2,617.0	2,953.8	3,247.2	3,327.7	3,402.1	3,473.6	3,540.1	3,599.9	3,666.7	3,727.1
59 Consumer credit	601.8	659.8	693.2	743.5	741.7	756.7	771.0	790.6	774.3	783.3	794.4
60 Bank loans n.e.c.	662.4	729.0	729.5	768.9	779.5	795.6	807.4	820.3	808.6	815.9	817.6
61 Open market paper	358.5	384.9	437.9	513.4	543.0	562.2	569.6	579.2	594.5	596.3	611.7
62 Other loans	640.5	693.1	751.1	800.5	815.7	827.1	813.5	821.4	820.5	828.7	828.0

1.60 SUMMARY OF CREDIT MARKET CLAIMS, BY HOLDER

Billions of dollars, except as noted; period-end levels.

Transaction category, or sector	1985	1986	1987	1988	1989				1990		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3
1 Total funds advanced in credit markets to domestic nonfinancial sectors	6,804.5	7,646.3	8,343.9	9,096.0	9,267.7	9,438.7	9,605.1	9,805.2	9,975.7	10,136.3	10,309.4
<i>By public agencies and foreign</i>											
2 Total held	1,474.0	1,779.4	2,006.6	2,199.7	2,256.0	2,263.5	2,317.4	2,379.3	2,419.9	2,503.1	2,574.2
3 U.S. government securities	435.4	509.8	570.9	651.5	665.0	642.7	668.6	682.1	679.2	706.1	727.4
4 Residential mortgages	518.2	678.5	814.1	900.4	927.2	954.4	991.1	1,038.4	1,077.7	1,127.6	1,178.2
5 FHLB advances to thrifts	88.8	108.6	133.1	152.8	163.8	161.9	151.1	141.8	132.9	126.3	117.9
6 Other loans and securities	431.6	482.4	488.6	495.1	500.0	504.5	506.6	517.0	530.2	543.1	550.7
7 Total held, by type of lender	1,474.0	1,779.4	2,006.6	2,199.7	2,256.0	2,263.5	2,317.4	2,379.3	2,419.9	2,503.1	2,574.2
8 U.S. government	248.6	255.3	240.0	217.6	212.9	211.5	207.8	207.1	216.2	228.1	235.3
9 Sponsored credit agencies and mortgage pools	659.8	835.9	1,001.0	1,113.0	1,151.1	1,157.8	1,193.5	1,238.2	1,274.0	1,315.0	1,356.8
10 Monetary authority	186.0	205.5	230.1	240.6	235.4	238.4	227.6	233.3	224.4	237.8	240.8
11 Foreign	379.5	482.8	535.5	628.5	656.6	655.7	688.5	700.6	705.2	722.1	741.4
Agency and foreign debt not in line 1											
12 Sponsored credit agencies and mortgage pools	632.7	810.3	978.6	1,098.4	1,140.8	1,169.5	1,203.6	1,249.3	1,286.1	1,328.0	1,372.9
13 Foreign	236.7	238.3	244.6	253.9	254.0	252.2	257.7	261.5	260.4	271.7	277.3
<i>Private domestic holdings</i>											
14 Total private holdings	6,199.9	6,915.6	7,560.4	8,248.5	8,406.5	8,596.9	8,749.0	8,936.8	9,102.3	9,233.0	9,385.3
15 U.S. government securities	1,791.6	2,110.1	2,363.0	2,559.7	2,626.5	2,687.6	2,736.1	2,831.6	2,962.8	3,018.6	3,110.6
16 State and local obligations	655.5	679.1	728.4	790.8	798.6	804.9	816.4	821.2	822.4	826.7	836.3
17 Corporate and foreign bonds	517.3	606.6	674.3	765.6	776.5	797.7	814.5	831.6	847.5	863.3	872.6
18 Residential mortgages	1,185.1	1,288.5	1,399.0	1,560.2	1,594.9	1,631.5	1,657.7	1,670.4	1,680.1	1,691.8	1,697.7
19 Other mortgages and loans	2,139.3	2,339.8	2,528.7	2,724.9	2,773.7	2,837.0	2,875.3	2,923.8	2,922.4	2,958.9	2,986.0
20 Less: Federal Home Loan Bank advances	88.8	108.6	133.1	152.8	163.8	161.9	151.1	141.8	132.9	126.3	117.9
<i>Private financial intermediation</i>											
21 Credit market claims held by private financial institutions	5,289.4	6,018.0	6,564.5	7,128.6	7,269.9	7,424.6	7,507.8	7,662.7	7,747.2	7,813.2	7,913.6
22 Commercial banking	1,989.5	2,187.6	2,323.0	2,479.3	2,501.4	2,549.0	2,599.6	2,656.6	2,680.4	2,720.7	2,751.6
23 Savings institutions	1,191.2	1,297.9	1,445.5	1,567.7	1,570.6	1,561.0	1,530.3	1,480.7	1,461.5	1,408.4	1,372.7
24 Insurance and pension funds	1,365.3	1,525.4	1,705.1	1,903.8	1,954.4	1,999.0	2,031.6	2,081.6	2,121.7	2,169.1	2,211.5
25 Other finance	743.4	1,007.1	1,091.0	1,177.9	1,243.5	1,315.6	1,346.2	1,443.8	1,483.6	1,515.0	1,577.8
26 Sources of funds	5,289.4	6,018.0	6,564.5	7,128.6	7,269.9	7,424.6	7,507.8	7,662.7	7,747.2	7,813.2	7,913.6
27 Private domestic deposits and RPs	2,926.1	3,199.0	3,354.2	3,599.1	3,627.7	3,679.1	3,742.5	3,824.3	3,847.5	3,833.5	3,845.2
28 Credit market debt	580.5	719.5	858.2	986.1	1,050.5	1,064.6	1,060.2	1,073.0	1,070.2	1,075.3	1,082.3
29 Other sources	1,782.9	2,099.5	2,352.1	2,543.5	2,591.7	2,680.9	2,705.1	2,765.5	2,829.5	2,904.4	2,986.1
30 Foreign funds	5.6	18.6	62.3	71.5	59.3	49.4	55.0	61.6	63.4	66.3	95.4
31 Treasury balances	25.8	27.5	21.6	29.0	13.5	34.4	30.3	25.6	16.7	32.1	36.6
32 Insurance and pension reserves	1,289.3	1,398.5	1,527.8	1,692.5	1,737.3	1,770.0	1,785.7	1,826.0	1,860.8	1,907.8	1,941.7
33 Other, net	462.1	655.0	740.3	750.5	781.5	827.2	834.0	852.3	888.6	898.2	912.4
<i>Private domestic nonfinancial investors</i>											
34 Credit market claims	1,491.0	1,617.0	1,854.1	2,106.0	2,187.1	2,236.9	2,301.5	2,347.1	2,425.3	2,495.1	2,554.0
35 U.S. government securities	803.3	848.7	936.7	1,072.2	1,100.0	1,122.9	1,171.3	1,206.4	1,264.1	1,296.9	1,357.4
36 Tax-exempt obligations	231.5	212.6	274.4	340.9	348.8	353.8	363.1	369.3	362.8	368.1	371.3
37 Corporate and foreign bonds	37.1	90.5	114.0	100.4	126.4	128.2	131.1	130.5	154.1	157.6	156.9
38 Open market paper	135.2	145.1	178.5	218.0	225.8	236.7	239.3	228.7	229.6	247.7	237.6
39 Other	283.8	320.1	350.4	374.4	386.0	395.3	396.8	412.1	414.7	424.8	430.8
40 Deposits and currency	3,116.8	3,410.1	3,583.9	3,832.3	3,864.2	3,926.2	3,979.0	4,073.6	4,095.8	4,092.6	4,108.9
41 Currency	171.9	186.3	205.4	220.1	220.7	226.4	224.4	231.8	234.4	242.7	247.2
42 Checkable deposits	420.3	516.6	515.4	527.2	494.2	495.0	486.1	528.7	501.3	510.7	500.2
43 Small time and savings accounts	1,831.9	1,948.3	2,017.1	2,156.2	2,168.9	2,189.3	2,224.4	2,256.7	2,289.8	2,288.1	2,292.3
44 Money market fund shares	225.6	268.9	297.8	318.0	342.7	362.1	391.0	403.3	436.7	426.3	456.7
45 Large time deposits	339.9	336.7	373.9	414.7	430.8	435.7	440.0	437.8	431.5	417.9	409.0
46 Security RPs	108.3	128.5	150.1	182.9	191.1	196.9	200.9	197.9	188.3	190.5	186.9
47 Deposits in foreign countries	18.8	24.8	24.3	13.1	15.8	20.7	12.1	17.6	13.9	16.4	16.6
48 Total of credit market instruments, deposits, and currency	4,607.8	5,027.2	5,438.0	5,938.2	6,051.2	6,163.0	6,280.5	6,420.7	6,521.1	6,587.7	6,663.0
49 Public holdings as percent of total	20.9	22.6	23.4	23.5	23.7	23.4	23.5	23.6	23.6	24.0	24.3
50 Private financial intermediation (in percent)	85.3	87.0	86.8	86.4	86.5	86.4	85.8	85.7	85.1	84.6	84.3
51 Total foreign funds	385.1	501.3	597.8	700.1	715.9	705.1	743.5	762.3	768.6	788.4	836.7
MEMO: Corporate equities not included above											
52 Total market value	2,823.9	3,360.6	3,325.0	3,619.8	3,730.5	4,069.7	4,395.4	4,378.9	4,170.2	4,336.2	3,769.7
53 Mutual fund shares	240.2	413.5	460.1	478.3	486.3	514.8	543.9	555.1	550.3	587.9	547.3
54 Other equities	2,583.7	2,947.1	2,864.9	3,141.6	3,244.2	3,555.0	3,851.5	3,823.8	3,620.0	3,748.3	3,222.4
55 Holdings by financial institutions	800.3	974.6	1,039.5	1,176.1	1,237.2	1,343.0	1,478.5	1,492.3	1,440.4	1,558.3	1,334.2
56 Other holdings	2,023.6	2,385.9	2,285.5	2,443.7	2,493.3	2,726.8	2,917.0	2,886.6	2,729.8	2,778.0	2,435.4

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.
12. Credit market debt of federally sponsored agencies, and net issues of federally related mortgage pool securities.
14. Line 1 less line 2 plus line 12 and 13. Also line 21 less line 28 plus line 34.
- Also sum of lines 29 and 48 less lines 41 and 47.
19. Includes farm and commercial mortgages.
27. Line 40 less lines 41 and 47.
28. Excludes equity issues and investment company shares. Includes line 20.
30. Foreign deposits at commercial banks plus bank borrowings from foreign affiliates, less claims on foreign affiliates and deposits by banking in foreign banks.
31. Demand deposits and note balances at commercial banks.

32. Excludes net investment of these reserves in corporate equities.

33. Mainly retained earnings and net miscellaneous liabilities.

34. Line 14 less line 21 plus line 28.

35–39. Lines 15–19 less amounts acquired by private finance plus amounts borrowed by private finance. Line 39 includes mortgages.

41. Mainly an offset to line 10.

48. Lines 34 plus 40, or line 14 less line 29 plus 41 and 47.

49. Line 2/line 1 and 13.

50. Line 21/line 14.

51. Sum of lines 11 and 30.

52–54. 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

1977 = 100; monthly and quarterly data are seasonally adjusted. Exceptions noted.

Measure	1988	1989	1990	1990								1991
				May	June	July	Aug.	Sept.	Oct.	Nov. ⁷	Dec. ⁷	
1 Industrial production (1987 = 100) ¹	105.4	108.1	109.2 ^r	109.4	110.1	110.4	110.5	110.6	109.9 ^r	108.2	107.0	106.5
Market groupings												
2 Products, total (1987 = 100)	105.3	108.6	110.1	110.5	110.9	110.9	110.9	111.4	111.0 ^r	109.2	108.3	107.9
3 Final, total (1987 = 100)	105.6	109.1	110.8 ^r	111.2	111.7	111.7	111.9	112.6	112.3 ^r	110.1	109.1	108.9
4 Consumer goods (1987 = 100)	104.0	106.7	107.3	107.4	107.8	107.5	107.8	108.7	108.6 ^r	106.5	105.8	105.7
5 Equipment (1987 = 100)	107.6	112.3	115.4 ^r	116.2	116.8	117.2	117.2	117.8	117.0	114.9	113.3	113.0
6 Intermediate (1987 = 100)	104.4	106.8	107.7 ^r	108.3	108.3	108.4	107.9	107.4	107.0 ^r	106.3	105.9	105.0
7 Materials (1987 = 100)	105.6	107.4	107.7	107.7	108.8	109.6	109.7	109.4	108.3 ^r	106.6	104.9	104.4
Industry groupings												
8 Manufacturing (1987 = 100)	105.8	108.9	109.9	110.3	110.8	111.1	111.1	111.2	110.7 ^r	108.9	107.3	106.9
Capacity utilization (percent) ²												
9 Manufacturing	83.9	83.9	82.3 ^r	82.9 ^r	83.1 ^r	83.1 ^r	82.9 ^r	82.8 ^r	82.2 ^r	80.7	79.3	78.8
10 Construction contracts (1982 = 100) ³	166.7	172.9	153.2 ^r	165.0	164.0	153.0	149.0	146.0	147.0	146.0	130.0	132.0
11 Nonagricultural employment, total ⁴	128.0	131.6	133.8	134.1	134.4	134.3	134.1	134.1	133.9	133.6	133.4	133.1
12 Goods-producing, total	103.7	105.3	102.7	103.5	103.4	103.1	102.8	102.4	101.8	100.7	100.3	99.4
13 Manufacturing, total	98.6	99.6	96.8	97.4	97.3	97.2	96.9	96.6	96.3	95.2	95.0	94.6
14 Manufacturing, production-worker	93.7	94.6	91.5	92.1	92.0	92.0	91.7	91.2	90.9	89.6	89.4	89.0
15 Service-producing	138.2	142.7	146.8	147.0	147.4	147.3	147.3	147.4	147.4	147.4	147.3	147.2
16 Personal income, total	253.2	272.7	289.0	287.5	288.7	290.1	290.8	292.2	292.1	293.3	294.9	293.6
17 Wages and salary disbursements	244.6	258.9	272.2	271.2	272.8	274.4	274.5	276.4	274.8	274.8	277.1	275.7
18 Manufacturing	196.5	203.1	205.0	205.8	206.8	206.9	206.7	207.0	206.0	202.9	205.5	202.5
19 Disposable personal income ⁵	252.2	270.1	286.1	284.4	285.8	286.9	287.6	288.7	288.6 ^r	289.9	291.4	289.9
20 Retail sales ⁶	228.0	240.7 ^r	249.8 ^r	246.1	248.9	250.1	250.2	252.4	252.7	252.7	249.1	246.8
Prices ⁷												
21 Consumer (1982-84 = 100)	118.3	124.0	130.7	129.2	129.9	130.4	131.6	132.7	133.5	133.8	133.8	134.6
22 Producer finished goods (1982 = 100) ...	108.0	113.6	119.2	117.7	117.8	118.2	119.3	120.4 ^r	122.3	122.9	121.9	121.9

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 Federal Reserve, McGraw-Hill Economics Department, 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 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 prior 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	1990							1991
				June	July	Aug.	Sept.	Oct.	Nov. ^r	Dec.		Jan.
HOUSEHOLD SURVEY DATA											
1 Noninstitutional population ¹	186,837	188,601	190,216	190,122	190,275	190,411	190,568	190,717	190,854	190,999	191,116
2 Labor force (including Armed Forces) ¹	123,893	126,077	126,954	126,942	126,848	126,855	127,137	127,067	126,880	127,307	126,777
3 Civilian labor force	121,669	123,869	124,787	124,797	124,709	124,705	124,970	124,875	124,723	125,174	124,638
Employment											
4 Nonagricultural industries ²	111,800	114,142	114,728	114,958	114,774	114,538	114,689	114,558	114,201	114,321	113,759
5 Agriculture	3,169	3,199	3,186	3,279	3,108	3,152	3,194	3,175	3,185	3,253	3,163
Unemployment											
6 Number	6,701	6,528	6,874	6,560	6,827	7,015	7,087	7,142	7,337	7,600	7,715
7 Rate (percent of civilian labor force)	5.5	5.3	5.5	5.3	5.5	5.6	5.7	5.7	5.9	6.1	6.2
8 Not in labor force	62,944	62,524	63,262	63,180	63,427	63,556	63,431	63,650	63,974	63,692	64,339
ESTABLISHMENT SURVEY DATA											
9 Nonagricultural payroll employment ³	105,584	108,573	110,330	110,829	110,740	110,613	110,612	110,432	110,165	110,017 ^r	109,785
10 Manufacturing	19,403	19,611	19,064	19,148	19,131	19,084	19,019	18,951	18,744	18,699 ^r	18,630
11 Mining	721	722	735	744	745	735	736	733	738	740 ^r	735
12 Contract construction	5,125	5,302	5,205	5,270	5,229	5,194	5,176	5,093	5,029	4,987 ^r	4,832
13 Transportation and public utilities	5,548	5,703	5,838	5,846	5,841	5,846	5,870	5,870	5,866	5,881 ^r	5,886
14 Trade	25,139	25,807	26,151	26,205	26,225	26,222	26,214	26,147	26,082	26,011 ^r	26,082
15 Finance	6,676	6,814	6,833	6,844	6,842	6,852	6,851	6,843	6,833	6,831	6,823
16 Service	25,600 ^a	26,889	28,209	28,225	28,287	28,387	28,440	28,475	28,548	28,556 ^r	28,539
17 Government	17,372	17,726	18,299	18,547	18,440	18,293	18,306	18,320	18,325	18,312 ^r	18,258

1. Persons 16 years of age and over. Monthly figures, which are based on sample data, relate to the calendar week that contains the 12th 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 12th 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 UTILIZATION¹

Seasonally adjusted

Series		1990 ¹												
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
		Output (1987 = 100)				Capacity (percent of 1987 output)				Utilization rate (percent)				
1	Total industry	108.3	109.4	110.5	108.4	130.3	131.1	131.9	132.8	83.1	83.5	83.7	81.6	
2	Manufacturing	109.2	110.2	111.1	109.0	132.1	133.0	134.0	135.0	82.7	82.8	82.9	80.7	
3	Primary processing	106.4	106.3	107.6	104.6	124.1	124.8	125.5	126.1	85.7	85.2	85.8	82.9	
4	Advanced processing	110.5	112.1	112.8	111.0	135.8	136.9	138.0	139.1	81.4	81.9	81.7	79.8	
5	Durable	110.4	112.4	113.6	109.9	136.1	137.1	138.0	139.0	81.1	82.0	82.3	79.1	
6	Lumber and products	105.1	102.3	101.5	96.2	123.0	123.5	124.0	124.6	85.5	82.8	81.8	77.2	
7	Primary metals	106.1	107.4	112.2	106.8	127.2	127.4	127.7	127.9	83.4	84.2	87.9	83.5	
8	Iron and steel	107.1	107.5	114.3	108.8	132.0	132.2	132.5	132.7	81.1	81.3	86.3	82.0	
9	Nonferrous	104.6	107.1	109.2	104.1	120.4	120.6	120.9	121.1	86.9	88.8	90.3	85.9	
10	Nonelectrical machinery	124.4	126.7	128.5	126.1	151.5	153.1	154.7	156.3	82.1	82.8	83.1	80.6	
11	Electrical machinery	111.1	112.2	112.4	110.0	137.3	138.7	140.0	141.4	80.9	80.9	80.3	77.8	
12	Motor vehicles and parts	91.5	102.6	103.7	89.1	132.2	132.4	132.7	132.9	69.2	77.5	78.2	67.0	
13	Aerospace and miscellaneous transportation equipment	111.6	113.6	114.5	112.8	133.4	134.3	135.2	136.1	83.6	84.6	84.7	82.9	
14	Nondurable	107.7	107.5	108.1	107.8	126.9	127.9	128.9	129.9	84.8	84.0	83.8	83.0	
15	Textile mill products	101.1	102.4	101.3	98.3	115.9	116.3	116.6	117.0	87.2	88.1	86.9	84.0	
16	Paper and products	103.9	104.5	107.2	105.4	113.9	114.5	115.1	115.7	91.2	91.3	93.2	91.2	
17	Chemicals and products	109.9	109.9	110.8	110.3	133.4	134.6	135.9	137.1	82.4	81.6	81.5	80.4	
18	Plastics materials	111.7	116.3	117.2	.....	126.1	128.4	130.6	.....	88.6	90.6	89.7	.....
19	Petroleum products	109.9	106.0	110.0	106.9	121.1	121.2	121.3	121.4	90.7	87.4	90.7	88.1	
20	Mining	101.3	102.5	103.4	102.3	115.6	115.0	114.5	114.0	87.6	89.1	90.3	89.8	
21	Utilities	105.7	107.8	110.5	107.9	126.1	126.6	127.1	127.6	83.8	85.2	86.9	84.6	
22	Electric	108.4	111.0	112.9	110.9	121.2	121.9	122.6	123.2	89.4	91.1	92.1	90.0	
		Previous cycle ²		Latest cycle ³		1990 ⁴								1991
		High	Low	High	Low	Jan.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ⁵
		Capacity utilization rate (percent)												
23	Total industry	89.2	72.6	87.3	71.8	82.7	83.8	83.8	83.7	83.6	83.0	81.5	80.4	79.9
24	Manufacturing	88.9	70.8	87.3	70.0	82.0	83.1	83.1	82.9	82.8	82.2	80.7	79.3	78.8
25	Primary processing	92.2	68.9	89.7	66.8	85.7	85.6	86.1	86.1	85.1	84.3	83.0	81.4	80.3
26	Advanced processing	87.5	72.0	86.3	71.4	80.5	82.0	81.8	81.6	81.8	81.3	79.7	78.5	78.2
27	Durable	88.8	68.5	86.9	65.0	79.9	82.5	82.3	82.3	82.2	81.2	79.0	77.1	76.6
28	Lumber and products	90.1	62.2	87.6	60.9	86.3	82.5	83.6	81.0	80.7	78.9	76.1	76.5	75.4
29	Primary metals	100.6	66.2	102.4	46.8	82.6	85.9	86.4	89.8	87.4	85.0	85.3	80.4	76.6
30	Iron and steel	105.8	66.6	110.4	38.3	79.3	83.4	83.5	89.3	86.0	83.2	84.8	77.9	73.3
31	Nonferrous	92.9	61.3	90.5	62.2	87.8	89.7	90.9	90.5	89.6	87.7	85.9	84.2	81.7
32	Nonelectrical machinery	96.4	74.5	92.1	64.9	81.9	83.0	83.2	83.2	82.8	82.2	80.7	79.0	78.1
33	Electrical machinery	87.8	63.8	89.4	71.1	80.5	81.1	80.4	80.4	80.1	78.6	78.1	76.7	76.7
34	Motor vehicles and parts	93.4	51.1	93.0	44.5	58.1	81.5	77.4	76.1	81.0	78.1	64.5	58.4	61.3
35	Aerospace and miscellaneous transportation equipment	77.0	66.6	81.1	66.9	83.4	84.5	85.4	84.4	84.3	84.0	82.6	82.1	81.2
36	Nondurable	87.9	71.8	87.0	76.9	84.9	83.9	84.1	83.8	83.6	83.6	82.9	82.4	81.9
37	Textile mill products	92.0	60.4	91.7	73.8	86.9	89.0	88.3	86.1	86.3	86.6	83.4	82.2	81.7
38	Paper and products	96.9	69.0	94.2	82.0	91.3	90.9	93.8	92.5	93.3	92.5	90.3	90.7	90.2
39	Chemicals and products	87.9	69.9	85.1	70.1	82.6	81.7	81.5	81.8	81.4	81.0	80.6	79.7	78.9
40	Plastics materials	102.0	50.6	90.9	63.4	88.5	90.0	90.5	89.7	88.9	90.0	90.2	.....	.....
41	Petroleum products	96.7	81.1	89.5	68.2	89.7	87.8	91.1	90.8	90.1	89.5	88.6	86.3	86.2
42	Mining	94.4	88.4	96.6	80.6	87.8	89.0	90.7	89.4	90.9	89.9	89.7	89.9	89.9
43	Utilities	95.6	82.5	88.3	76.2	84.8	86.6	86.4	87.6	86.7	85.6	83.7	84.4	83.7
44	Electric	99.0	82.7	88.3	78.7	89.5	92.6	91.6	92.7	91.9	91.2	89.0	89.7	89.1

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.

A48 Domestic Nonfinancial Statistics □ April 1991

2.13 INDUSTRIAL PRODUCTION Indexes and Gross Value¹

Monthly data are seasonally adjusted

Groups	1987 pro- portion	1990 avg.	1990												1991	
			Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^r	Nov. ^r	Dec. ^r		Jan. ^p
			Index (1987 = 100)													
MAJOR MARKET																
1 Total index	100.0	109.2	107.5	108.5	108.9	108.8	109.4	110.1	110.4	110.5	110.6	109.9	108.2	107.0	106.5	
2 Products	60.8	110.1	108.4	109.4	110.1	109.8	110.5	110.9	110.9	110.9	111.4	111.0	109.2	108.3	107.9	
3 Final products	46.0	110.8	108.5	109.7	110.7	110.4	111.2	111.7	111.9	111.9	112.6	112.3	110.1	109.1	108.9	
4 Consumer goods	26.0	107.3	106.0	107.0	107.5	107.2	107.4	107.8	107.5	107.8	108.7	108.6	106.5	105.8	105.7	
5 Durable consumer goods	5.6	106.2	99.4	106.2	110.8	107.3	109.3	112.1	108.3	107.4	110.4	106.9	99.4	96.1	97.1	
6 Automotive products	2.5	102.3	85.2	99.3	109.3	102.4	107.0	112.2	106.7	104.6	111.8	107.1	93.6	86.8	90.4	
7 Autos and trucks	1.5	97.4	66.3	92.7	107.7	95.8	105.6	112.9	104.8	101.5	113.0	107.5	84.2	74.6	79.6	
8 Autos, consumer .....	.9	92.2	62.1	86.9	100.5	87.7	96.8	103.8	98.0	97.2	111.5	104.6	80.7	77.2	83.2
9 Trucks, consumer .....	.6	106.1	73.3	102.3	120.0	109.3	120.4	128.3	116.1	108.8	115.4	112.2	90.2	70.2	73.7
10 Auto parts and allied goods	1.0	109.6	113.6	109.4	111.6	112.2	108.9	111.2	109.5	109.3	110.0	106.4	107.8	105.1	106.6	
11 Other	3.1	109.4	110.6	111.6	112.0	111.2	111.1	112.0	109.5	109.6	109.3	106.8	103.9	103.4	102.4	
12 Appliances, A/C, and TV .....	.8	102.0	108.4	107.8	108.1	104.4	103.6	107.5	100.2	101.9	101.0	94.6	90.8	89.9	90.1
13 Carpeting and furniture .....	.9	104.9	103.7	104.7	105.9	107.5	107.6	107.8	106.0	104.9	106.0	103.8	99.2	101.1	98.7
14 Miscellaneous home goods	1.4	116.3	116.2	118.2	118.0	117.3	117.5	117.2	116.9	116.8	116.1	115.5	114.2	112.5	111.7	
15 Nondurable consumer goods	20.4	107.6	107.8	107.2	106.6	107.1	106.9	106.6	107.3	107.9	108.2	109.1	108.4	108.5	108.1	
16 Foods and tobacco	9.1	105.9	105.5	106.2	105.8	105.6	105.2	104.4	105.1	105.7	105.3	106.7	107.9	107.7	107.2	
17 Clothing	2.6	95.8	100.6	99.6	97.0	96.0	96.4	95.7	95.6	94.6	95.3	94.2	91.7	92.4	91.5	
18 Chemical products	3.5	113.3	112.7	112.0	111.0	113.5	113.0	112.8	112.4	114.3	115.1	115.9	114.5	113.3	113.5	
19 Paper products	2.5	119.7	116.2	117.6	116.4	118.1	118.6	118.3	120.3	119.3	121.9	123.4	121.9	123.4	123.1	
20 Energy	2.7	105.7	107.9	101.5	103.1	104.1	104.1	105.3	106.7	109.0	108.0	108.8	105.4	106.0	105.6	
21 Fuels .....	.7	102.9	105.1	106.6	101.8	101.6	98.2	102.6	104.6	106.0	105.6	104.0	101.1	98.3	99.2
22 Residential utilities	2.0	106.8	109.0	99.6	103.6	105.0	106.3	106.3	107.5	110.0	108.9	110.6	107.0	108.9	108.0	
23 Equipment, total	20.0	115.4	111.8	113.3	114.9	114.7	116.2	116.8	117.2	117.2	117.8	117.0	114.9	113.3	113.0	
24 Business equipment	13.9	123.0	118.0	120.1	122.2	121.6	123.5	124.4	125.0	125.4	126.4	122.7	120.7	120.7	120.5	
25 Information processing and related	5.6	127.2	124.0	124.7	126.0	126.4	126.6 ^r	126.3 ^r	128.0 ^r	128.5	129.5	130.1	128.7	126.9	125.6	
26 Office and computing	1.9	149.4	142.7	144.3	147.2	149.3	148.9	150.6	152.7	152.2	153.6	155.3	149.3	144.8	142.7	
27 Industrial	4.0	115.4	113.5	113.4	113.9	114.2	115.8 ^r	116.0 ^r	117.2 ^r	117.9	117.4	115.4	115.2	113.5	114.0	
28 Transit	2.5	129.6	111.4	122.7	130.6	126.2	132.5	137.4	135.5	135.4	140.5	137.5	125.3	121.4	123.1	
29 Autos and trucks	1.2	96.8	69.6	91.7	104.5	95.2	105.7	112.2 ^r	103.1 ^r	101.5	111.0	106.5	83.9	75.3	79.8	
30 Other	1.9	118.3	118.7	117.4	117.8	117.6	119.4 ^r	119.9 ^r	119.2 ^r	119.8	118.5	117.0	117.2	117.1	115.9	
31 Defense and space equipment	5.4	97.2	97.5	97.6	97.5	97.3	97.6	97.6	97.8	97.7	97.3	97.3	96.1	95.6	95.1	
32 Oil and gas well drilling .....	.6	109.0	98.3	100.1	106.0	114.3	118.6	119.5	116.2	106.9	107.4	107.1	109.7	107.3	106.4
33 Manufactured homes .....	.2	90.8	91.6	94.3	92.9	89.7	91.3	92.8	90.0	93.4	91.8	89.0	87.3	83.4	83.0
34 Intermediate products, total	14.7	107.7	108.0	108.4	108.2	108.0	108.3	108.3	108.4	107.9	107.4	107.0	106.3	105.9	105.0	
35 Construction supplies	6.0	105.2	107.9	108.2	107.3	106.4	105.5	106.0	106.7	105.3	103.8	103.1	101.5	100.6	98.8	
36 Business supplies	8.7	109.4	108.0	108.5	108.9	109.1	110.2	109.8	109.5	109.7	109.9	109.7	109.5	109.5	109.3	
37 Materials, total	39.2	107.7	106.2	107.1	107.1	107.3	107.7	108.8	109.6	109.7	109.4	108.3	106.6	104.9	104.4	
38 Durable goods materials	19.4	111.8	109.4	110.8	110.9	110.9	112.5	113.8	114.0	114.9	114.1	112.5	110.2	107.2	106.4	
39 Durable consumer parts	4.2	103.9	96.5	102.8	104.5	103.2	108.5	108.5	108.1	110.4	109.0	106.0	98.5	90.1	90.8	
40 Equipment parts	7.3	118.1	116.5	117.6	117.6	117.4	118.1	119.1	119.2	119.4	119.8	118.6	117.4	117.0	116.2	
41 Other	7.9	110.2	109.7	108.7	108.1	108.9	109.6	111.8	112.4	113.1	111.6	110.4	109.7	107.2	105.6	
42 Basic metal materials	2.8	111.9	108.5	109.9	107.5	110.2	109.2	113.6	115.5	116.3	115.8	112.0	112.8	109.1	106.0	
43 Nondurable goods materials	9.0	106.1	105.4	105.8	105.2	106.1	105.2	106.1	107.8	106.8	106.9	106.5	105.7	105.0	104.3	
44 Textile materials	1.2	96.8	94.6	96.2	94.9	95.6	97.4	99.4	100.2	97.8	98.1	97.9	95.2	91.7	92.8	
45 Pulp and paper materials	1.9	106.4	105.0	105.3	103.0	106.0	104.5	104.8	109.0	106.9	109.4	108.6	107.2	107.8	108.0	
46 Chemical materials	3.8	106.8	105.8	107.3	107.5	107.4	105.4	107.3	108.5	108.0	106.6	105.6	106.0	105.8	104.6	
47 Other	2.1	109.6	110.9	108.8	108.7	109.8	109.8	108.8	109.9	109.3	110.1	110.8	109.5	108.4	106.6	
48 Energy materials	10.9	101.9	101.2	101.7	102.0	101.8	101.1	102.1	103.3	103.0	103.0	102.3	101.1	100.8	100.9	
49 Primary energy	7.2	101.1	101.1	102.1	101.2	100.3	100.1	101.2	103.3	102.1	101.0	100.7	100.1	99.8	100.6	
50 Converted fuel materials	3.7	103.6	101.4	100.9	103.4	104.6	102.9	103.9	103.4	104.9	107.0	105.3	103.0	102.8	101.4	
SPECIAL AGGREGATES																
51 Total excluding autos and trucks	97.3	109.5	108.6	108.9	109.0	109.2	109.5	110.0	110.6	110.7	110.6	110.0	108.9	107.9	107.3	
52 Total excluding motor vehicles and parts	95.3	109.8	109.0	109.2	109.2	109.5	109.7	110.2	110.8	110.9	110.7	110.2	109.3	108.4	107.8	
53 Total excluding office and computing machines	97.5	108.2	106.6	107.6	108.0	107.8	108.4	109.1	109.3	109.4	109.5	108.8	107.2	106.0	105.6	
54 Consumer goods excluding autos and trucks	24.5	107.9	108.4	107.8	107.5	107.9	107.6	107.5	107.6	108.2	108.4	108.7	107.8	107.7	107.3	
55 Consumer goods excluding energy	23.3	107.5	105.8	107.6	108.0	107.5	107.8 ^r	108.1 ^r	107.6 ^r	107.7	108.7	108.6	106.6	105.8	105.7	
56 Business equipment excluding autos and trucks	12.7	125.6	122.8	122.9	124.0	124.2	125.3	125.6	127.2	127.8	128.0	127.2	126.5	125.2	124.5	
57 Business equipment excluding office and computing equipment	12.0	118.7	114.0	116.2	118.2	117.2	119.4	120.2	120.5	121.1	122.0	120.6	118.4	116.8	116.9	
58 Materials excluding energy	28.4	110.0	108.1	109.2	109.1	109.4	110.2	111.4	112.1	112.3	111.8	110.6	108.8	106.5	105.7	

2.13—Continued

Groups	SIC code	1987 proportion	1990 avg.	1990												1991
				Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^f	Nov. ^f	Dec. ^f	Jan. ^p
				Index (1987 = 100)												
MAJOR INDUSTRY																
1 Total index		100.0	109.2	107.5	108.5	108.9	108.8	109.4	110.1	110.4	110.5	110.6	109.9	108.2	107.0	106.5
2 Manufacturing		84.4	109.9	108.1	109.6	109.8	109.5	110.3	110.8	111.1	111.1	111.2	110.7	108.9	107.3	106.9
3 Primary processing		26.7	106.2	106.2	106.9	106.0	105.9	106.1	107.0	107.9	108.0	106.9	106.2	104.7	102.9	101.6
4 Advanced processing		57.7	111.6	109.0	110.9	111.7	111.3	112.4	112.6	112.5	112.5	113.2	112.8	110.8	109.4	109.3
5 Durable		47.3	111.6	108.6	110.7	111.9	111.1	112.6	113.4	113.4	113.5	113.8	112.5	109.8	107.3	106.9
6 Lumber and products	24	2.0	101.7	106.0	104.3	105.0	103.3	101.7	102.0	103.6	100.5	100.3	98.2	94.9	95.4	94.1
7 Furniture and fixtures	25	1.4	105.9	105.1	104.8	105.9	107.6	108.0	108.7	108.0	106.7	106.9	104.4	102.4	102.1	101.4
8 Clay, glass, and stone products	32	2.5	105.7	110.0	108.0	107.7	105.1	106.4	106.1	106.0	106.6	104.5	104.4	103.8	102.0	100.2
9 Primary metals	33	3.3	108.2	105.0	107.9	105.4	106.4	106.2	109.5	110.3	114.6	111.6	108.6	109.0	102.9	98.1
10 Iron and steel	331.2	1.9	109.6	104.6	110.6	106.1	106.7	105.5	110.3	110.6	118.3	113.9	110.3	112.5	103.5	97.4
11 Raw steel .....		.1	109.6	109.9	109.0	105.9	104.9	107.6	111.8	113.9	118.5	111.6	112.8	109.5	100.6	97.6
12 Nonferrous	333-6.9	1.4	106.3	105.6	104.0	104.3	105.9	107.1	108.3	109.8	109.4	108.4	106.2	104.1	102.0	99.1
13 Fabricated metal products	34	5.4	105.8	105.1	105.6	105.5	105.0	107.1	106.7	107.7	107.9	106.8	106.4	104.3	101.6	100.8
14 Nonelectrical machinery	35	8.6	126.4	123.7	124.2	125.2	125.7	126.9	127.5	128.3	128.8	128.5	128.1	126.2	123.9	123.0
15 Office and computing machines	357	2.5	149.4	142.7	144.3	147.3	149.3	149.0	150.6	152.7	152.2	153.6	155.3	149.3	144.7	142.7
16 Electrical machinery	36	8.6	111.4	110.1	111.0	112.3	111.3	112.4	112.8	112.2	112.5	112.5	110.8	110.4	108.8	109.1
17 Transportation equipment	37	9.8	105.4	94.7	103.5	107.9	105.1	109.0	111.0	109.3	107.9	111.1	109.2	99.8	95.7	97.0
18 Motor vehicles and parts	371	4.7	96.8	76.8	94.1	103.5	95.8	104.0	108.0	102.7	101.0	107.5	103.8	85.8	77.7	81.6
19 Autos and light trucks		2.3	96.6	65.7	91.8	106.7	94.6	104.3	111.6	103.8	100.9	112.8	107.1	83.7	74.9	80.1
20 Aerospace and miscellaneous transportation equipment	372-6.9	5.1	113.1	111.0	111.9	111.9	113.4	113.5	113.8	115.2	114.1	114.2	114.0	112.4	111.9	111.0
21 Instruments	38	3.3	116.9	116.0	116.2	115.7	115.8	116.5	115.0	116.9	117.5	118.4	118.1	118.3	118.3	117.5
22 Miscellaneous manufacturers	39	1.2	120.0	117.0	118.1	118.6	118.6	119.1	119.6	120.4	121.8	121.3	121.5	122.1	120.3	120.4
23 Nondurable	37.2	107.8	107.5	108.3	107.2	107.5	107.4	107.6	108.1	108.1	108.0	108.4	107.7	107.4	107.4	106.9
24 Foods	20	8.8	107.7	106.8	107.4	107.1	107.0	106.8	106.1	107.1	107.7	107.6	108.8	109.7	109.3	109.1
25 Tobacco products	21	1.0	98.5	101.3	102.3	100.0	98.8	97.2	95.6	98.5	96.3	96.4	97.8	98.6	100.0	99.5
26 Textile mill products	22	1.8	100.9	100.6	103.0	99.8	100.9	102.7	103.6	102.9	100.4	100.7	101.2	97.5	96.2	95.7
27 Apparel products	23	2.4	98.9	102.4	102.1	99.8	98.7	99.2	99.3	99.2	98.8	98.4	97.2	95.5	95.3	93.8
28 Paper and products	26	3.6	105.2	103.8	105.0	102.8	105.3	104.0	104.2	107.8	106.5	107.5	106.8	104.5	105.0	104.7
29 Printing and publishing	27	6.4	112.0	110.7	112.1	111.4	112.0	112.8	112.0	111.4	110.9	111.6	112.9	112.8	113.3	113.3
30 Chemicals and products	28	8.6	110.3	109.9	110.5	109.5	110.3	109.2	110.3	110.4	111.1	110.9	110.7	110.5	109.7	108.9
31 Petroleum products	29	1.3	108.1	108.6	112.0	109.1	106.8	104.6	106.5	110.5	110.2	109.3	108.6	107.6	104.7	104.6
32 Rubber and plastic products	30	3.0	110.1	110.7	109.1	109.8	109.0	110.9	112.8	110.9	112.0	110.3	110.6	108.2	106.7	106.3
33 Leather and products	31	.3	100.0	104.3	102.9	103.3	102.6	103.5	102.0	102.5	99.6	100.3	95.3	89.9	92.3	90.3
34 Mining		7.9	102.4	101.7	101.0	101.1	102.9	102.2	102.2	104.0	102.4	103.9	102.6	102.2	102.3	102.2
35 Metal	10	3	153.0	144.8	143.4	141.4	152.7	148.7	156.7	164.8	155.7	163.6	146.8	153.5	159.9	154.6
36 Coal	11.12	1.2	113.2	114.1	111.9	112.9	114.2	110.0	113.5	118.5	110.2	116.8	114.7	112.9	110.6	112.0
37 Oil and gas extraction	13	5.7	95.3	94.4	94.1	94.6	95.7	96.0	94.6	95.5	95.8	95.8	95.8	95.7	95.4	95.7
38 Stone and earth minerals	14	.7	119.5	121.2	120.0	116.5	120.2	119.9	121.1	121.8	120.1	121.7	118.0	114.0	118.7	115.6
39 Utilities		7.6	107.9	106.8	104.0	106.2	106.7	107.1	109.7	109.7	111.4	110.3	109.2	106.8	107.9	107.1
40 Electric	491.3PT	6.0	110.8	108.3	107.1	109.7	109.7	110.3	113.1	112.1	113.6	112.9	112.1	109.7	110.8	110.1
41 Gas	492.3PT	1.6	97.1	101.2	92.3	93.3	95.5	95.2	97.4	100.7	103.3	100.9	98.1	96.1	97.0	95.9
SPECIAL AGGREGATES																
42 Manufacturing excluding motor vehicles and parts		79.8	110.7	109.9	110.5	110.2	110.3	110.7	111.0 ^f	111.6 ^f	111.7	111.4	111.1	110.2	109.1	108.4
43 Manufacturing excluding office and computing machines		82.0	108.7	107.1	108.6	108.7	108.3	109.2 ^f	109.6 ^f	109.8 ^f	109.9	110.0	109.4	107.7	106.2	105.8
Gross value (billions of 1982 dollars, annual rates)																
MAJOR MARKET																
44 Products, total		1734.8	1,910.6	1,863.6	1,903.3	1,922.6	1,906.2	1,922.2	1,937.0	1,923.5	1,929.5	1,941.6	1,939.6	1,882.8	1,850.2	1,852.1
45 Final		1350.9	1,496.7	1,447.9	1,488.3	1,507.5	1,493.9	1,506.0	1,523.4	1,508.7	1,516.3	1,529.1	1,523.7	1,470.8	1,439.5	1,442.5
46 Consumer goods		833.4	882.2	864.3	888.6	893.4	883.9	885.9	893.8	886.0	885.9	895.2	892.7	865.2	850.9	852.4
47 Equipment		517.5	614.4	583.6	599.8	614.1	610.0	620.1	629.6	622.7	630.4	633.9	631.0	605.6	588.6	590.2
48 Intermediate		384.0	414.0	415.7	415.0	415.1	412.3	416.2	413.6	414.9	413.1	412.5	415.9	412.0	410.7	409.6

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									
				Mar.	Apr.	May	June	July	Aug.	Sept.	Oct. ^r	Nov. ^r	Dec.
Private residential real estate activity (thousands of units)													
NEW UNITS													
1 Permits authorized	1,456	1,339	1,096	1,232	1,108	1,065	1,108	1,082	1,050	992	920	906	844
2 1-family	994	932	792	912	813	802	796	780	762	737	708	671	645
3 2-or-more-family	462	407	304	320	295	263	312	302	288	255	212	235	199
4 Started	1,488	1,376	1,193	1,298 ^r	1,217 ^r	1,208 ^r	1,187 ^r	1,155 ^r	1,131	1,106	1,026	1,130	975
5 1-family	1,081	1,003	895	988 ^r	901 ^r	897	890 ^r	876 ^r	835 ^r	858 ^r	839	769	749
6 2-or-more-family	407	373	298	310 ^r	316 ^r	311 ^r	297 ^r	279 ^r	296 ^r	248 ^r	187	361	226
7 Under construction, end of period ¹ ..	919	850	721	887	876	857	849	833	815	792	766	760	751
8 1-family	570	535	455	567	559	546	540	529	517	505	496	488	483
9 2-or-more-family	350	315	266	320	317	311	309	304	298	287	270	272	268
10 Completed	1,530	1,423	1,307	1,378	1,295	1,363	1,295	1,300	1,314	1,333	1,269	1,242	1,150
11 1-family	1,085	1,026	965	1,037	942	1,008	946	981	954	970	931	918	872
12 2-or-more-family	445	396	342	341	353	355	349	319	360	363	338	324	278
13 Mobile homes shipped	218	198	188	192 ^r	190 ^r	190 ^r	190 ^r	187 ^r	193 ^r	184 ^r	186	181	167
Merchant builder activity in 1-family units													
14 Number sold	675	650	537	558	533	536	550	541	527	505 ^r	475	496	463
15 Number for sale, end of period ¹	367	362	319	363	363	360	354	351	345	338 ^r	334	327	319
Price (thousands of dollars) ²													
16 Median	113.3	120.4	122.9	119.4	130.0	125.0	125.0	118.7	118.4	113.0 ^r	120.0	120.0	133.0
17 Average	139.0	148.3	150.0	144.6	153.4	150.6	150.4	149.8	144.7	142.1	152.7	145.7	163.5
EXISTING UNITS (1-family)													
18 Number sold	3,594	3,439	3,300	3,400	3,330	3,300	3,330	3,330	3,500	3,170	3,050	3,150	3,220
Price of units sold (thousands of dollars) ²													
19 Median	89.2	93.0	95.2	96.3	95.6	95.6	97.5	98.3	97.1	94.4	92.9	91.8	91.9
20 Average	112.5	118.0	118.3	119.5	117.8	118.7	121.1	122.0	120.5	116.7	115.9	115.5	114.0
Value of new construction ³ (millions of dollars)													
CONSTRUCTION													
21 Total put in place	422,076	432,068	434,937	457,272	444,737	443,805	441,088	437,010	436,338	423,941	423,320	417,097	415,110
22 Private	327,102	333,514	325,095	347,366	338,780	333,992	329,556	331,269	323,518	317,516	311,397	303,241	299,954
23 Residential	198,101	196,551	187,423	206,868	200,234	196,055	189,462	187,083	184,409	179,713	176,824	171,464	167,541
24 Nonresidential, total	129,001	136,963	137,672	140,498	138,546	137,937	140,094	144,186	139,109	137,803	134,573	131,777	132,413
25 Buildings	14,931	18,506	20,582	21,086	21,039	20,847	20,405	23,609	20,239	19,862	19,616	19,548	20,906
26 Industrial	58,104	59,389	54,673	57,210	55,765	54,698	56,581	56,951	55,347	53,648	51,996	49,529	50,253
27 Commercial	17,278	17,848	18,826	17,646	18,227	18,379	19,272	19,792	19,801	20,267	19,634	19,382	18,378
28 Other	38,688	41,220	43,591	44,556	43,515	44,013	43,836	43,834	43,722	44,026	43,327	43,318	42,876
29 Public utilities and other	94,971	98,551	109,841	109,906	105,957	109,813	111,532	105,741	112,820	106,425	111,923	113,856	115,156
30 Military	3,579	3,520	3,789	5,099	5,057	5,459	5,868	3,308	2,888	2,543	2,401	2,821	2,292
31 Highway	30,140	29,502	32,044	32,374	29,714	30,658	30,311	28,775	31,865	31,322	33,398	35,324	36,271
32 Conservation and development	4,726	4,969	4,718	4,996	4,979	5,504	3,958	4,460	4,776	3,482	4,944	5,056	5,308
33 Other	56,526	60,560	69,290	67,437	66,207	68,192	71,395	69,198	73,291	69,078	71,180	70,655	71,285

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.

NOTE. 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 beginning with 1978.

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 Jan. 1991
	1990 Jan.	1991 Jan.	1990'				1990'				1991 Jan.	
			Mar.	June	Sept.	Dec.	Sept.	Oct.	Nov.	Dec.		
CONSUMER PRICES ² (1982-84=100)												
1 All items	5.2	5.7	7.5	4.1	8.2	4.9	.8	.6	.3	.3	.4	134.6
2 Food	6.7	4.1	10.4	2.5	4.6	3.9	.3	.4	.4	.1	.6	135.8
3 Energy items	9.7	9.7	12.0	1.2	44.2	18.0	5.3	4.2	.5	-.4	-2.4	107.1
4 All items less food and energy	4.4	5.6	6.5	4.6	6.0	3.8	.4	.3	.3	.4	.8	139.4
5 Commodities	2.6	4.0	5.7	2.0	3.3	2.3	.3	.2	.2	.2	1.0	125.9
6 Services	5.3	6.3	6.9	5.5	7.2	4.8	.4	.3	.4	.4	.7	147.1
PRODUCER PRICES (1982=100)												
7 Finished goods	5.9	3.7	6.4	1.0	11.3	4.4	1.3	1.2	.4	-.6	-.1	121.9
8 Consumer foods	6.2	.6	8.8	-1.6	2.3	1.3	-.5	.6	.2	-.5	-.3	124.6
9 Consumer energy	19.6	12.7	16.9	-4.6	118.7	17.7	11.3	9.1	.2	-4.7	-2.5	81.9
10 Other consumer goods	4.2	4.0	3.9	3.8	3.5	3.1	.5	.1	.7	.0	.8	132.1
11 Capital equipment	3.5	3.5	4.4	2.7	3.6	3.3	.3	.2	.2	.3	.3	125.4
12 Intermediate materials ³	2.7	2.9	1.4	.4	13.4	3.8	1.7	1.5	.3	-.8	-.4	116.7
13 Excluding energy .....	.3	2.0	1.0	.7	4.0	2.0	.5	.3	.2	-.1	.1	122.4
Crude materials												
14 Foods .....	.9	-5.4	4.7	-3.8	-7.8	-5.3	-1.2	.5	-1.2	-.7	-1.5	107.4
15 Energy	15.6	20.3	.5	-39.2	305.8	-20.2	13.0	18.0	-10.3	-10.7	6.3	99.0
16 Other	-5.8	1.0	3.7	13.5	5.9	-18.5	-.9	-1.4	-2.2	-1.6	.3	133.4

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	1989	1990				
				Q4	Q1	Q2	Q3	Q4	
GROSS NATIONAL PRODUCT									
1 Total	4,873.7	5,200.8	5,463.0	5,289.3	5,375.4	5,443.3	5,514.6	5,518.9	
By source									
2 Personal consumption expenditures	3,238.2	3,450.1	3,658.1	3,518.5	3,588.1	3,622.7	3,693.4	3,728.1	
3 Durable goods	457.5	474.6	481.6	471.2	492.1	478.4	482.3	473.5	
4 Nondurable goods	1,060.0	1,130.0	1,194.2	1,148.8	1,174.7	1,179.0	1,205.0	1,218.3	
5 Services	1,720.7	1,845.5	1,982.3	1,898.5	1,921.3	1,965.3	2,006.2	2,036.3	
6 Gross private domestic investment	747.1	771.2	745.0	762.7	747.2	759.0	759.7	714.0	
7 Fixed investment	720.8	742.9	747.2	737.7	758.9	745.6	750.7	733.6	
8 Nonresidential	488.4	511.9	524.3	511.8	523.1	516.5	532.8	525.0	
9 Structures	139.9	146.2	147.2	147.1	148.8	147.2	149.8	142.8	
10 Producers' durable equipment	348.4	365.7	377.2	364.7	374.3	369.3	383.0	382.2	
11 Residential structures	232.5	231.0	222.9	225.9	235.9	229.1	217.9	208.6	
12 Change in business inventories	26.2	28.3	-2.2	25.0	-11.8	13.4	9.0	-19.5	
13 Nonfarm	29.8	23.3	-4.7	24.1	-17.0	13.0	6.8	-21.6	
14 Net exports of goods and services	-74.1	-46.1	-38.0	-35.3	-30.0	-24.9	-41.3	-55.9	
15 Exports	552.0	626.2	670.4	642.8	661.3	659.7	672.7	687.7	
16 Imports	626.1	672.3	708.4	678.1	691.3	684.6	714.1	743.7	
17 Government purchases of goods and services	962.5	1,025.6	1,098.0	1,043.3	1,070.1	1,086.4	1,102.8	1,132.7	
18 Federal	380.3	400.0	424.2	399.9	410.6	421.9	425.8	438.5	
19 State and local	582.3	625.6	673.8	643.4	659.6	664.6	677.0	694.2	
By major type of product									
20 Final sales, total	4,847.5	5,172.5	5,465.3	5,264.3	5,387.2	5,429.9	5,505.6	5,538.4	
21 Goods	1,908.9	2,044.4	2,146.5	2,060.9	2,122.8	2,133.1	2,161.4	2,168.9	
22 Durable	840.3	894.7	938.2	894.2	941.4	930.1	943.4	937.9	
23 Nondurable	1,068.6	1,149.7	1,208.4	1,166.7	1,181.4	1,203.0	1,218.0	1,231.0	
24 Services	2,488.6	2,671.2	2,860.5	2,747.5	2,791.3	2,834.2	2,889.6	2,926.8	
25 Structures	450.0	456.9	458.2	455.9	473.0	462.5	454.6	442.7	
26 Change in business inventories	26.2	28.3	-2.2	25.0	-11.8	13.4	9.0	-19.5	
27 Durable goods	19.9	11.9	-5.6	13.2	-21.6	.0	9.8	-10.4	
28 Nondurable goods	6.4	16.4	3.3	11.9	9.8	13.4	-8	-9.1	
MEMO									
29 Total GNP in 1982 dollars	4,016.9	4,117.7	4,155.8	4,133.2	4,150.6	4,155.1	4,170.0	4,147.6	
NATIONAL INCOME									
30 Total	3,984.9	4,223.3	4,417.5	4,267.1	4,350.3	4,411.3	4,452.4	n.a.	
31 Compensation of employees	2,905.1	3,079.0	3,244.2	3,128.6	3,180.4	3,232.5	3,276.9	3,286.9	
32 Wages and salaries	2,431.1	2,573.2	2,705.3	2,612.7	2,651.6	2,696.3	2,734.2	2,739.1	
33 Government and government enterprises	446.6	476.6	508.0	486.7	497.1	505.7	511.3	518.1	
34 Other	1,984.5	2,096.6	2,197.3	2,126.0	2,154.5	2,190.6	2,222.9	2,221.0	
35 Supplement to wages and salaries	474.0	505.8	538.9	515.9	528.8	536.1	542.7	547.8	
36 Employer contributions for social insurance	248.5	263.9	280.8	268.4	276.0	279.7	282.7	284.6	
37 Other labor income	225.5	241.9	258.1	247.5	252.8	256.4	260.0	263.2	
38 Proprietors' income ¹	354.2	379.3	402.4	381.7	404.0	401.7	397.9	406.1	
39 Business and professional ¹	310.5	330.7	352.5	336.0	346.6	350.8	355.6	357.2	
40 Farm ¹	43.7	48.6	49.9	45.7	57.4	51.0	42.4	48.9	
41 Rental income of persons ²	16.3	8.2	6.7	4.1	5.5	4.3	8.4	8.5	
42 Corporate profits ¹	337.6	311.6	297.1	290.9	296.8	306.6	300.7	n.a.	
43 Profits before tax ³	316.7	307.7	305.4	289.8	296.9	299.3	318.5	n.a.	
44 Inventory valuation adjustment	-27.0	-21.7	-13.2	-14.5	-11.4	-5	-19.8	-21.2	
45 Capital consumption adjustment	47.8	25.5	4.9	15.6	11.3	7.7	2.0	-1.4	
46 Net interest	371.8	445.1	467.1	461.7	463.6	466.2	468.3	470.2	

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	1989	1990				
				Q4	Q1	Q2	Q3	Q4	
PERSONAL INCOME AND SAVING									
1 Total personal income	4,070.8	4,384.3	4,645.6	4,469.2	4,562.8	4,622.2	4,678.5	4,719.0	
2 Wage and salary disbursements	2,431.1	2,573.2	2,705.3	2,612.7	2,651.6	2,696.3	2,734.2	2,739.4	
3 Commodity-producing industries	696.4	720.6	729.2	721.4	724.6	731.1	735.3	725.6	
4 Manufacturing	524.0	541.8	546.7	540.9	541.2	548.1	551.8	545.6	
5 Distributive industries	572.0	604.7	637.1	614.6	627.0	637.3	642.7	641.5	
6 Service industries	716.2	771.4	831.0	790.0	802.9	822.2	844.9	853.9	
7 Government and government enterprises	446.6	476.6	508.0	486.7	497.1	505.7	511.3	518.1	
8 Other labor income	225.5	241.9	258.1	247.5	252.8	256.4	260.0	263.2	
9 Proprietors' income ¹	354.2	379.3	402.4	381.7	404.0	401.7	397.9	406.1	
10 Business and professional ¹	310.5	330.7	352.5	336.0	346.6	350.8	355.6	357.2	
11 Farm ¹	43.7	48.6	49.9	45.7	57.4	51.0	42.4	48.9	
12 Rental income of persons ²	16.3	8.2	6.7	4.1	5.5	4.3	8.4	8.5	
13 Dividends	102.2	114.4	123.8	118.2	120.5	122.9	124.9	126.7	
14 Personal interest income	547.9	643.2	680.9	664.9	670.5	678.0	685.3	690.1	
15 Transfer payments	587.7	636.9	694.6	655.9	680.9	686.7	696.4	714.3	
16 Old-age survivors, disability, and health insurance benefits	300.5	325.3	350.7	334.1	347.2	347.6	351.1	356.8	
17 LESS: Personal contributions for social insurance	194.1	212.8	226.2	215.8	222.9	224.1	228.6	229.0	
18 EQUALS: Personal income	4,070.8	4,384.3	4,645.6	4,469.2	4,562.8	4,622.2	4,678.5	4,719.0	
19 LESS: Personal tax and nontax payments	591.6	658.8	699.8	669.6	675.1	696.5	709.5	718.1	
20 EQUALS: Disposable personal income	3,479.2	3,725.5	3,945.8	3,799.6	3,887.7	3,925.7	3,969.1	4,000.9	
21 LESS: Personal outlays	3,333.6	3,553.7	3,766.8	3,625.5	3,696.4	3,730.6	3,802.6	3,837.4	
22 EQUALS: Personal saving	145.6	171.8	179.1	174.1	191.3	195.1	166.5	163.5	
MEMO									
Per capita (1982 dollars)									
23 Gross national product	16,302.4	16,550.2	16,530.6	16,546.0	16,575.9	16,554.2	16,560.8	16,426.1	
24 Personal consumption expenditures	10,578.3	10,678.5	10,669.1	10,688.2	10,692.1	10,672.5	10,710.1	10,597.2	
25 Disposable personal income	11,368.0	11,531.0	11,508.0	11,541.0	11,586.0	11,564.0	11,511.0	11,374.0	
26 Saving rate (percent)	4.2	4.6	4.5	4.6	4.9	5.0	4.2	4.1	
GROSS SAVING									
27 Gross saving	656.1	691.5	657.9	674.8	664.8	679.3	665.9	n.a.	
28 Gross private saving	751.3	779.3	783.9	786.4	795.0	806.7	772.2	n.a.	
29 Personal saving	145.6	171.8	179.1	174.1	191.3	195.1	166.5	163.5	
30 Undistributed corporate profits ¹	91.4	53.0	29.1	39.8	36.7	40.5	26.5	n.a.	
31 Corporate inventory valuation adjustment	-27.0	-21.7	-13.2	-14.5	-11.4	-5	-19.8	-21.2	
Capital consumption allowances									
32 Corporate	322.1	346.4	363.0	356.5	356.7	359.7	365.5	370.3	
33 Noncorporate	192.2	208.0	212.6	216.0	210.3	211.4	213.8	214.9	
34 Government surplus, or deficit (-), national income and product accounts	-95.3	-87.8	-126.0	-111.6	-130.2	-127.3	-106.4	n.a.	
35 Federal	-141.7	-134.3	-161.3	-150.1	-168.3	-166.0	-145.7	n.a.	
36 State and local	46.5	46.4	35.4	38.5	38.1	38.6	39.3	n.a.	
37 Gross investment	627.8	674.4	654.8	671.8	665.6	676.1	661.0	616.7	
38 Gross private domestic	747.1	771.2	745.0	762.7	747.2	759.0	759.7	714.0	
39 Net foreign	-119.2	-96.8	-90.1	-90.9	-81.6	-82.9	-98.7	-97.3	
40 Statistical discrepancy	-28.2	-17.0	-3.1	-3.0	.7	-3.2	-4.9	n.a.	

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	1987	1988	1989	1989		1990		
				Q3	Q4	Q1	Q2	Q3 ^p
1 Balance on current account	-162,315	-128,862	-110,035	-27,591	-26,692	-21,668	-22,485	-25,585
2 Not seasonally adjusted .....	.....	.....	.....	-31,620	-27,926	-17,922	-20,987	-29,989
3 Merchandise trade balance ²	-159,500	-126,986	-114,864	-29,803	-28,746	-26,283	-23,102	-29,752
4 Merchandise exports	250,266	320,337	360,465	89,349	91,738	96,262	96,758	96,159
5 Merchandise imports	-409,766	-447,323	-475,329	-119,152	-120,484	-122,545	-119,860	-125,911
6 Military transactions, net	-3,530	-5,452	-6,319	-1,114	-1,776	-1,287	-1,382	-1,648
7 Investment income, net	5,326	1,610	-913	17	561	1,995	-999	2,455
8 Other service transactions, net	9,964	16,971	26,783	6,839	7,900	7,292	7,364	7,465
9 Remittances, pensions, and other transfers	-4,299	-4,261	-3,758	-909	-889	-983	-865	-1,078
10 U.S. government grants	-10,276	-10,744	-10,963	-2,621	-3,742	-2,402	-3,501	-3,027
11 Change in U.S. government assets, other than official reserve assets, net (increase, -)	997	2,969	1,185	574	-47	-659	-808	-379
12 Change in U.S. official reserve assets (increase, -)	9,149	-3,912	-25,293	-5,996	-3,202	-3,177	371	1,739
13 Gold	0	0	0	0	0	0	0	0
14 Special drawing rights (SDRs)	-509	127	-535	-211	-204	-247	-216	363
15 Reserve position in International Monetary Fund	2,070	1,025	471	337	-23	234	493	8
16 Foreign currencies	7,588	-5,064	-25,229	-6,122	-2,975	-3,164	94	1,368
17 Change in U.S. private assets abroad (increase, -)	-73,092	-83,232	-102,953	-38,654	-45,496	36,713	-31,284	-27,811
18 Bank-reported claims ³	-42,119	-56,322	-50,684	-21,269	-32,658	52,353	-13,639	-7,603
19 Nonbank-reported claims	5,324	-2,847	1,391	1,877	47	1,202	-1,550	.....
20 U.S. purchase of foreign securities, net	-5,251	-7,846	-21,938	-9,623	-4,109	-7,496	-11,247	-913
21 U.S. direct investments abroad, net	-31,046	-16,217	-31,722	-9,639	-8,776	-9,346	-4,848	-19,295
22 Change in foreign official assets in United States (increase, +)	45,210	39,515	8,823	13,003	-7,016	-8,203	5,541	13,642
23 U.S. Treasury securities	43,238	41,741	333	12,771	-7,342	-5,897	2,442	12,008
24 Other U.S. government obligations	1,564	1,309	1,383	190	569	-521	346	134
25 Other U.S. government liabilities ⁴	-2,503	-710	332	-350	412	-381	1,089	234
26 Other U.S. liabilities reported by U.S. banks ³	3,918	-319	4,940	-251	-820	-1,278	1,918	1,539
27 Other foreign official assets ⁵	-1,007	-2,506	1,835	643	165	-126	-254	-273
28 Change in foreign private assets in United States (increase, +)	173,260	181,926	205,829	61,133	76,336	-24,786	19,954	38,829
29 U.S. bank-reported liabilities ³	89,026	70,235	61,199	27,845	36,674	-32,264	4,897	32,288
30 U.S. nonbank-reported liabilities	2,863	6,664	2,867	-2,175	1,732	290	1,317	.....
31 Foreign private purchases of U.S. Treasury securities, net	-7,643	20,239	29,951	12,618	5,671	-835	3,614	453
32 Foreign purchases of other U.S. securities, net	42,120	26,353	39,568	10,470	10,793	2,486	2,890	-1,543
33 Foreign direct investments in United States, net	46,894	58,435	72,244	12,375	21,466	5,537	7,236	7,631
34 Allocation of SDRs	0	0	0	0	0	0	0	0
35 Discrepancy	6,790	-8,404	22,443	-2,469	6,117	21,780	28,711	-435
36 Owing to seasonal adjustments .....	.....	.....	.....	-4,953	3,560	2,804	-988	-5,303
37 Statistical discrepancy in recorded data before seasonal adjustment	6,790	-8,404	22,443	2,484	2,558	18,976	29,699	4,868
MEMO								
Changes in official assets								
38 U.S. official reserve assets (increase, -)	9,149	-3,912	-25,293	-5,996	-3,202	-3,177	371	1,739
39 Foreign official assets in United States (increase, +) excluding line 25	47,713	40,225	8,491	13,353	-7,428	-7,822	4,452	13,408
40 Change in Organization of Petroleum Exporting Countries official assets in United States (part of line 22 above)	-9,956	-2,996	10,713	4,532	-1,379	2,953	208	-1,251

1. Seasonal factors are not calculated for lines 6, 10, 12-16, 18-20, 22-34, and 38-41.

2. Data are on an international accounts (IA) basis. Differs 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. Primarily associated 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.

NOTE. Data are from Bureau of Economic Analysis, *Survey of Current Business* (Department of Commerce).

3.11 U.S. FOREIGN TRADE¹

Millions of dollars; monthly data are seasonally adjusted.

Item	1988	1989	1990	1990						
				June	July	Aug.	Sept.	Oct.	Nov. ^f	Dec. ^g
1 EXPORTS of domestic and foreign merchandise excluding grant-aid shipments, f.a.s. value.....	322,426	363,812	394,045	34,221	32,125	32,549	32,010	35,006	34,194	33,460
GENERAL IMPORTS including merchandise for immediate consumption plus entries into bonded warehouses										
2 Customs value.....	440,952	473,211	495,042	39,561	41,244	42,283	41,337	45,994	43,106	39,712
Trade balance										
3 Customs value.....	-118,526	-109,399	-100,997	-5,340	-9,119	-9,734	-9,326	-10,988	-8,912	-6,252

1. The Census basis data differ from merchandise trade data shown in table 3.10, U.S. International Transactions Summary, for reasons 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 transac-

tions; military payments are excluded and shown separately as indicated above. As of Jan. 1, 1987 census data are released 45 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	1987	1988	1989	1990						1991
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p
1 Total	45,798	47,802	74,609	77,906	78,909	80,024	82,852	83,059	83,340	85,025
2 Gold stock, including Exchange Stabilization Fund ¹	11,078	11,057	11,059	11,064	11,065	11,063	11,060	11,059	11,058	11,058
3 Special drawing rights ^{2,3}	10,283	9,637	9,951	10,699	10,780	10,666	10,876	11,059	10,989	10,922
4 Reserve position in International Monetary Fund ⁴	11,349	9,745	9,048	8,686	8,890	8,881	9,066	8,871	9,076	9,468
5 Foreign currencies ⁴	13,088	17,363	44,551	47,457	48,174	49,414	51,850	52,070	52,217	53,577

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 IMF adopted a technique for valuing the 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 position

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 BANKS¹

Millions of dollars, end of period

Assets	1987	1988	1989	1990						1991
				July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^p
1 Deposits	244	347	589	279	337	360	297	264	369	271
Assets held in custody										
2 U.S. Treasury securities ²	195,126	232,547	224,911	256,585	261,051	261,321	266,749	272,399	278,499	286,722
3 Earmarked gold ³	13,919	13,636	13,456	13,422	13,412	13,419	13,415	13,389	13,387	13,377

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 Data¹

Millions of dollars, end of period

Asset account	1987	1988	1989	1990							
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
	All foreign countries										
1 Total, all currencies	518,618	505,595	545,366	524,010	531,418	551,346	546,140	552,510	558,608'	568,502	
2 Claims on United States	138,034	169,111	198,835	179,258	174,583	178,236	182,555	177,539	180,979	188,150	
3 Parent bank	105,845	129,856	157,092	138,384	133,682	137,558	140,865	135,536	140,352	148,491	
4 Other banks in United States	16,416	14,918	17,042	15,166	15,239	14,500	14,266	13,261	12,927	13,296	
5 Nonbanks	15,773	24,337	24,701	25,708	25,662	26,178	27,424	28,742	27,700	26,363	
6 Claims on foreigners	342,520	299,728	300,575	293,627	304,674	313,831	311,254	319,318	322,961	312,347	
7 Other branches of parent bank	122,155	107,179	113,810	108,464	115,353	121,705	123,359	128,747	135,179	134,567	
8 Banks	108,859	96,932	90,703	85,780	85,911	88,768	83,311	82,706	81,383	72,985	
9 Public borrowers	21,832	17,163	16,456	16,220	16,264	16,157	16,379	16,335	16,588	17,501	
10 Nonbank foreigners	89,674	78,454	79,606	83,163	87,146	87,201	88,205	91,530	89,811	87,294	
11 Other assets	38,064	36,756	45,956	51,125	52,161	59,279	52,331	55,653	54,668'	68,005	
12 Total payable in U.S. dollars	350,107	357,573	382,498'	349,864'	346,091'	357,669'	359,828'	362,128'	371,228'	390,175	
13 Claims on United States	132,023	163,456	191,184	171,551	166,294	169,714	173,978	168,956	172,145	179,561	
14 Parent bank	103,251	126,929	152,294	133,167	128,066	131,994	135,068	129,850	134,255	142,349	
15 Other banks in United States	14,657	14,167	16,386	14,575	14,375	13,513	13,416	12,441	12,078	12,513	
16 Nonbanks	14,115	22,360	22,504	23,809	23,853	24,207	25,494	26,665	25,812	24,699	
17 Claims on foreigners	202,428	177,685	169,690	158,452	157,910	163,152	163,650	168,345	174,397	173,712	
18 Other branches of parent bank	88,284	80,736	82,949	76,410	79,241	82,564	84,378	90,198	95,599	94,939	
19 Banks	63,707	54,884	48,396	42,918	38,815	40,733	39,419	37,531	37,740	36,439	
20 Public borrowers	14,730	12,131	10,961	10,956	10,652	10,939	11,166	11,201	11,199	12,297	
21 Nonbank foreigners	35,707	29,934	27,384	28,168	29,202	28,916	28,687	29,415	29,859	30,037	
22 Other assets	15,656	16,432	21,624'	19,861'	21,887'	24,803'	22,200'	24,827'	24,686'	36,902	
	United Kingdom										
23 Total, all currencies	158,695	156,835	161,947	167,885	175,254	184,933	178,484	184,660	188,182'	193,303	
24 Claims on United States	32,518	40,089	39,212	39,904	40,418	40,092	42,568	39,862	42,301	45,560	
25 Parent bank	27,350	34,243	35,847	35,924	36,564	36,140	39,042	35,904	38,453	42,413	
26 Other banks in United States	1,259	1,123	1,058	730	894	1,037	717	694	1,088	792	
27 Nonbanks	3,909	4,723	2,307	3,250	2,960	2,915	2,809	3,264	2,760	2,355	
28 Claims on foreigners	115,700	106,388	107,657	108,080	114,254	118,423	114,869	122,203	124,077	115,536	
29 Other branches of parent bank	39,903	35,625	37,728	38,068	41,181	43,581	44,408	47,390	49,501	46,367	
30 Banks	36,735	36,765	36,159	34,194	35,085	37,623	34,094	35,480	36,133	31,604	
31 Public borrowers	4,752	4,019	3,293	3,740	3,619	3,757	3,639	3,521	3,675	3,860	
32 Nonbank foreigners	34,310	29,979	30,477	32,078	34,369	33,462	32,728	35,812	34,768	33,705	
33 Other assets	10,477	10,358	15,078	19,901	20,582	26,418	21,047	22,595	21,804'	32,207	
34 Total payable in U.S. dollars	100,574	103,503	103,208'	100,641'	102,803'	106,891'	106,899'	109,950'	115,283'	125,328	
35 Claims on United States	30,439	38,012	36,404	36,158	36,230	35,979	37,991	35,429	37,668	41,259	
36 Parent bank	26,304	33,252	34,329	33,509	33,716	33,585	36,024	33,145	35,614	39,609	
37 Other banks in United States	1,044	964	843	552	681	721	460	419	611	334	
38 Nonbanks	3,091	3,796	1,232	2,097	1,833	1,673	1,507	1,865	1,443	1,316	
39 Claims on foreigners	64,560	60,472	59,062	57,802	58,278	60,390	59,817	63,720	66,876	63,701	
40 Other branches of parent bank	28,635	28,474	29,872	30,050	31,220	32,976	33,990	37,069	39,630	37,142	
41 Banks	19,188	18,494	16,579	14,625	13,621	14,570	13,212	13,571	13,915	13,135	
42 Public borrowers	3,313	2,840	2,371	2,942	2,839	2,896	2,866	2,790	2,862	3,143	
43 Nonbank foreigners	13,424	10,664	10,240	10,185	10,598	9,948	9,749	10,290	10,469	10,281	
44 Other assets	5,575	5,019	7,742'	6,681'	8,295'	10,522'	9,091'	10,801'	10,739'	20,368	
	Bahamas and Caymans										
45 Total, all currencies	160,321	170,639	176,006	154,354	145,813	150,695	153,234	153,497	153,615	161,968	
46 Claims on United States	85,318	105,320	124,205	107,244	99,918	103,521	106,574	106,977	106,517	112,643	
47 Parent bank	60,048	73,409	87,882	72,115	64,748	68,507	70,145	70,845	71,249	77,527	
48 Other banks in United States	14,277	13,145	15,071	13,603	13,412	12,625	12,539	11,605	11,007	11,869	
49 Nonbanks	10,993	18,766	21,252	21,526	21,758	22,389	23,890	24,527	24,261	23,247	
50 Claims on foreigners	70,162	58,393	44,168	39,812	38,393	39,595	39,573	38,062	38,611	41,354	
51 Other branches of parent bank	21,277	17,954	11,309	11,906	11,785	12,031	11,638	12,152	12,697	13,416	
52 Banks	33,751	28,268	22,611	18,492	16,761	17,543	18,076	15,994	16,244	16,309	
53 Public borrowers	7,428	5,830	5,217	4,393	4,307	4,554	4,818	4,876	4,772	5,806	
54 Nonbank foreigners	7,706	6,341	5,031	5,021	5,540	5,467	5,041	5,040	4,898	5,823	
55 Other assets	4,841	6,926	7,633	7,298	7,502	7,579	7,087	8,458	8,487	7,971	
56 Total payable in U.S. dollars	151,434	163,518	170,780	149,943	140,966	146,103	149,233	148,862	149,142	157,664	

1. Beginning with June 1984 data, 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	1987	1988	1989	1990						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	All foreign countries									
57 Total, all currencies	518,618	505,595	545,366	524,010	531,418	551,346	546,140	552,510	558,608 ^a	568,502
58 Negotiable CDs	30,929	28,511	23,500	23,504	21,805	22,917	21,977	22,089	21,521	18,060
59 To United States	161,390	185,577	197,239	169,769	163,275	167,410	172,882	167,543	171,575 ^a	189,065
60 Parent bank	87,606	114,720	138,412	113,151	105,401	109,818	117,352	113,066	115,613 ^a	138,802
61 Other banks in United States	20,355	14,737	11,704	9,092	9,454	10,264	8,976	7,984	9,140 ^a	7,336
62 Nonbanks	53,429	56,120	47,123	47,526	48,420	47,328	46,554	46,493	46,822 ^a	42,927
63 To foreigners	304,803	270,923	296,850	299,951	314,503	321,365	317,204	327,139	328,534 ^a	311,663
64 Other branches of parent bank	124,601	111,267	119,591	113,653	119,476	124,393	125,382	131,045	137,849 ^a	138,799
65 Banks	87,274	72,842	76,452	73,896	78,190	79,485	75,353	75,815	72,352	58,981
66 Official institutions	19,564	15,183	16,750	17,637	19,468	17,801	17,475	18,436	17,996	14,776
67 Nonbank foreigners	73,364	71,631	84,057	94,765	97,369	99,686	98,994	101,843	100,337	99,107
68 Other liabilities	21,496	20,584	27,777	30,786	31,835	39,654	34,077	35,739	36,978 ^a	49,714
69 Total payable in U.S. dollars	361,438	367,483	396,613	358,681	355,782	365,928	364,940	363,931	372,124	394,868
70 Negotiable CDs	26,768	24,045	19,619	18,928	16,519	17,588	17,219	17,022	16,845	14,094
71 To United States	148,442	173,190	187,286	158,173	150,943	155,171	159,027	153,318	156,779 ^a	175,366
72 Parent bank	81,783	107,150	132,563	106,818	98,928	103,355	109,458	104,619	106,828 ^a	130,623
73 Other banks in United States	18,951	13,468	10,519	7,741	7,884	8,791	7,501	6,486	7,686 ^a	5,925
74 Nonbanks	47,708	52,572	44,204	43,614	44,131	43,025	42,068	42,213	42,265 ^a	38,818
75 To foreigners	177,711	160,766	176,640	168,642	174,616	177,484	175,725	178,969	183,461 ^a	178,707
76 Other branches of parent bank	90,469	84,021	87,636	78,646	81,332	84,157	85,303	89,658	95,556 ^a	97,833
77 Banks	35,065	28,493	30,337	27,434	28,045	28,945	26,576	23,669	25,022	20,266
78 Official institutions	12,409	8,224	9,873	9,066	10,613	9,710	9,346	9,689	9,091	7,906
79 Nonbank foreigners	39,768	40,028	48,414	53,496	54,626	54,672	54,500	55,953	53,792	52,702
80 Other liabilities	8,517	9,482	13,248	12,938	13,704	15,685	12,969	14,622	15,039	26,701
	United Kingdom									
81 Total, all currencies	158,695	156,835	161,947	167,885	175,254	184,933	178,484	184,660	188,182 ^a	193,303
82 Negotiable CDs	26,988	24,528	20,056	19,672	17,795	18,703	17,542	17,557	17,144	14,256
83 To United States	23,470	36,784	36,036	32,291	32,320	33,365	35,483	32,143	36,500	39,928
84 Parent bank	13,223	27,849	29,726	23,158	21,952	23,399	25,461	22,013	26,165	31,806
85 Other banks in United States	1,536	2,037	1,256	1,615	1,626	1,535	1,765	1,430	1,671	1,505
86 Nonbanks	8,711	6,898	5,054	7,518	8,742	8,431	8,257	8,700	8,664	6,617
87 To foreigners	98,689	86,026	92,307	99,279	107,533	109,372	106,496	114,959	113,958	108,531
88 Other branches of parent bank	33,078	26,812	27,397	26,506	28,944	28,967	30,487	32,357	34,406	36,709
89 Banks	34,290	30,609	29,780	28,575	32,420	34,647	30,113	33,870	32,844	25,141
90 Official institutions	11,015	7,873	8,551	10,263	11,314	9,902	9,578	10,788	9,534	8,346
91 Nonbank foreigners	20,306	20,732	26,579	33,935	34,855	35,856	36,318	37,944	37,174	38,335
92 Other liabilities	9,548	9,497	13,548	16,643	17,606	23,493	18,963	20,001	20,580 ^a	30,588
93 Total payable in U.S. dollars	102,550	105,907	108,178	101,530	104,372	108,532	107,216	108,064	114,090	124,638
94 Negotiable CDs	24,926	22,063	18,143	17,233	14,831	15,758	15,502	15,237	15,100	12,710
95 To United States	17,752	32,588	33,056	28,160	27,967	28,779	30,368	26,867	31,117	34,756
96 Parent bank	12,026	26,404	28,812	22,190	21,208	22,423	23,963	20,334	24,381	30,014
97 Other banks in United States	1,308	1,752	1,065	1,325	1,175	1,228	1,471	1,035	1,318	1,156
98 Nonbanks	4,418	4,432	3,179	4,645	5,584	5,128	4,934	5,498	5,418	3,586
99 To foreigners	55,919	47,083	50,517	49,672	54,591	55,252	54,679	57,639	59,787	60,014
100 Other branches of parent bank	22,334	18,561	18,384	16,199	17,408	17,347	18,560	20,797	23,288	25,957
101 Banks	15,580	13,407	12,244	9,911	11,251	13,042	11,116	10,465	11,911	9,503
102 Official institutions	7,530	4,348	5,454	5,305	6,515	5,463	5,324	5,751	5,000	4,677
103 Nonbank foreigners	10,475	10,767	14,435	18,257	19,417	19,400	19,679	20,626	19,588	19,877
104 Other liabilities	3,953	4,173	6,462	6,465	6,983	8,743	6,667	8,321	8,086	17,158
	Bahamas and Caymans									
105 Total, all currencies	160,321	170,639	176,006	154,354	145,813	150,695	153,234	153,497	153,615	161,968
106 Negotiable CDs	885	953	678	535	548	553	553	560	561	646
107 To United States	113,950	122,332	124,859	103,592	95,904	100,622	104,211	103,545	103,852	114,391
108 Parent bank	53,239	62,894	75,188	58,880	51,415	56,092	62,276	62,474	61,227	74,995
109 Other banks in United States	17,224	11,494	8,883	5,984	6,228	7,039	5,398	4,959	5,798 ^a	4,399
110 Nonbanks	43,487	47,944	40,788	38,728	38,261	37,491	36,537	36,112	36,827 ^a	34,997
111 To foreigners	43,815	45,161	47,382	47,613	47,010	46,922	46,237	46,867	46,299	44,444
112 Other branches of parent bank	19,185	23,686	23,414	24,184	24,560	24,965	24,781	25,864	25,579	24,715
113 Banks	10,769	8,336	8,823	8,969	8,120	7,469	7,519	6,794	6,569	5,588
114 Official institutions	1,504	1,074	1,097	960	999	943	731	703	763	622
115 Nonbank foreigners	12,357	12,065	14,048	13,500	13,331	13,545	13,206	13,506	13,388	13,519
116 Other liabilities	1,671	2,193	3,087	2,614	2,351	2,598	2,233	2,525	2,903	2,487
117 Total payable in U.S. dollars	152,927	162,950	171,250	149,680	140,377	145,670	148,589	147,749	147,962	156,784

3.15 SELECTED U.S. LIABILITIES TO FOREIGN OFFICIAL INSTITUTIONS

Millions of dollars, end of period

Item	1988	1989	1990 ^a						
			June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^b
1 Total ¹	304,132	312,472	310,041	312,691	321,418	323,834	329,623	340,722	343,410
By type									
2 Liabilities reported by banks in the United States ²	31,519	36,496	37,971	38,986	40,501	39,842	44,146	42,997	38,825
3 U.S. Treasury bills and certificates ³	103,722	76,985	71,804	72,690	72,803	72,472	72,457	80,385	78,492
U.S. Treasury bonds and notes									
4 Marketable	152,429	179,264	178,016	178,740	185,534	189,334	190,716	195,481	203,343
5 Nonmarketable ⁴	523	568	3,644	3,668	3,692	3,717	3,741	3,765	4,491
6 U.S. securities other than U.S. Treasury securities ⁵	15,939	19,159	18,606	18,607	18,888	18,469	18,563	18,094	18,259
By area									
7 Western Europe ¹	123,752	133,417	147,167	149,845	152,777	156,432	163,383	169,573	170,816
8 Canada	9,513	9,482	6,961	8,415	11,083	10,171	8,903	8,639	8,618
9 Latin America and Caribbean	10,030	8,740	10,451	9,973	11,190	11,406	11,244	14,081	15,654
10 Asia	151,887	153,338	136,335	135,695	137,008	136,383	137,082	139,376	138,202
11 Africa	1,403	1,030	946	917	1,697	1,383	1,305	1,404	1,387
12 Other countries ⁶	7,548	6,469	8,183	7,848	7,665	8,058	7,707	7,650	8,031

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 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 Currencies¹

Millions of dollars, end of period

Item	1986	1987	1988	1989	1990		
				Dec.	Mar.	June	Sept.
1 Banks' own liabilities	29,702	55,438	74,980	67,822	63,244	68,547	69,683 ^a
2 Banks' own claims	26,180	51,271	68,983	65,127	61,100	66,655	67,965
3 Deposits	14,129	18,861	25,100	20,491	21,590	20,256	23,734
4 Other claims	12,052	32,410	43,884	44,636	39,510	46,399	44,231
5 Claims of banks' domestic customers ²	2,507	551	364	3,507	1,649	1,501	2,843 ^a

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 States¹
Payable in U.S. dollars
Millions of dollars, end of period

Holder and type of liability	1988	1989	1990	1990						
				June	July	Aug.	Sept.	Oct.	Nov. ²	Dec. ²
1 All foreigners	685,339	736,663	757,768	708,044	719,860	737,890	741,998	750,222²	746,976	757,768
2 Banks' own liabilities	514,532	577,283	579,364	544,775	554,516	570,277	572,174	576,823 ²	563,496	579,364
3 Demand deposits	21,863	22,030	21,733	20,347	19,723	20,505	22,086	20,320 ²	19,855	21,733
4 Time deposits ²	152,164	168,735	167,815	150,695	153,533	156,254	158,638	158,345 ²	162,070	167,815
5 Other ²	51,366	67,700	67,272	66,016	67,214	74,923	66,373	74,426 ²	71,411	67,272
6 Own foreign offices ³	289,138	318,818	322,545	307,718	314,046	318,594	325,077	323,731 ²	310,161	322,545
7 Banks' custody liabilities ⁵	170,807	159,380	178,404	163,269	165,344	167,614	169,823	173,400 ²	183,479	178,404
8 U.S. Treasury bills and certificates ⁶	115,056	91,100	98,383	90,082	91,884	93,038	91,464	94,971	101,430	98,383
9 Other negotiable and readily transferable instruments ⁷	16,426	19,526	17,286	17,865	17,596	16,983	17,198	17,681 ²	18,294	17,286
10 Other	39,325	48,754	62,734	55,322	55,864	57,593	61,162	60,747	63,755	62,734
11 Nonmonetary international and regional organizations⁸	3,224	4,772	5,720	4,994	4,112	4,290	5,206	4,507	4,381	5,720
12 Banks' own liabilities	2,527	3,156	4,338	3,594	2,790	2,330	3,894	3,472	2,236	4,338
13 Demand deposits	71	96	36	29	46	39	101	57	33	36
14 Time deposits ²	1,183	927	1,018	1,367	938	1,303	1,245	885	760	1,018
15 Other ²	1,272	2,133	3,284	2,198	1,807	987	2,548	2,529	1,443	3,284
16 Banks' custody liabilities ⁵	698	1,616	1,382	1,399	1,322	1,959	1,311	1,034	2,145	1,382
17 U.S. Treasury bills and certificates ⁶	57	197	365	147	148	1,095	479	248	1,077	365
18 Other negotiable and readily transferable instruments ⁷	641	1,417	1,017	1,253	1,159	819	817	782	1,022	1,017
19 Other	0	2	0	0	15	45	15	5	46	0
20 Official institutions⁹	135,241	113,481	117,317	109,774	111,676	113,304	112,313	116,602²	123,381	117,317
21 Banks' own liabilities	27,109	31,108	34,032	33,878	35,239	36,465	35,877	39,358 ²	37,891	34,032
22 Demand deposits	1,917	2,196	1,940	1,611	1,516	1,914	2,498	2,121	1,784	1,940
23 Time deposits ²	9,767	10,495	13,598	9,951	11,290	11,039	11,187	11,100 ²	12,702	13,598
24 Other ²	15,425	18,417	18,494	22,316	22,433	23,512	22,192	26,137 ²	23,406	18,494
25 Banks' custody liabilities ⁵	108,132	82,373	83,285	75,896	76,437	76,839	76,436	77,244	85,490	83,285
26 U.S. Treasury bills and certificates ⁶	103,722	76,985	78,492	71,804	72,690	72,803	72,472	72,457	80,385	78,492
27 Other negotiable and readily transferable instruments ⁷	4,130	5,028	4,590	3,650	3,596	3,685	3,676	4,361	4,725	4,590
28 Other	280	361	203	443	150	351	289	427	380	203
29 Banks¹⁰	459,523	515,229	540,203	497,345	507,243	524,512	529,813	528,751²	522,536	540,203
30 Banks' own liabilities	409,501	454,227	460,881	424,831	433,379	449,097	451,339	450,961 ²	441,354	460,881
31 Unaffiliated foreign banks	120,362	135,409	138,337	117,114	119,334	130,502	126,262	127,230 ²	131,193	138,337
32 Demand deposits	9,948	10,279	10,048	9,484	9,224	9,797	10,405	8,989 ²	8,995	10,048
33 Time deposits ²	80,189	90,557	89,063	72,618	74,103	77,585	80,214	80,350 ²	83,736	89,063
34 Other ²	30,226	34,573	39,226	35,012	36,007	43,120	35,643	37,892 ²	38,462	39,226
35 Own foreign offices ³	289,138	318,818	322,545	307,718	314,046	318,594	325,077	323,731 ²	310,161	322,545
36 Banks' custody liabilities ⁵	50,022	61,002	79,322	72,514	73,864	75,416	78,474	77,790 ²	81,182	79,322
37 U.S. Treasury bills and certificates ⁶	7,602	9,367	12,965	13,502	13,964	13,855	13,009	13,646	13,352	12,965
38 Other negotiable and readily transferable instruments ⁷	5,725	5,124	5,356	5,757	5,759	5,366	6,187	5,842 ²	5,837	5,356
39 Other	36,694	46,510	61,001	53,254	54,141	56,195	59,278	58,302	61,993	61,001
40 Other foreigners	87,351	103,182	94,527	95,931	96,828	95,784	94,666	100,362	96,678	94,527
41 Banks' own liabilities	75,396	88,793	80,113	82,471	83,107	82,385	81,063	83,031	82,016	80,113
42 Demand deposits	9,928	9,459	9,709	9,223	8,937	8,755	9,082	9,153	9,043	9,709
43 Time deposits ²	61,025	66,757	64,136	66,759	67,202	66,326	65,992	66,010	64,872	64,136
44 Other ²	4,443	12,577	6,268	6,489	6,968	7,304	5,990	7,868	8,100	6,268
45 Banks' custody liabilities ⁵	11,956	14,389	14,414	13,460	13,721	13,400	13,602	17,331	14,663	14,414
46 U.S. Treasury bills and certificates ⁶	3,675	4,351	6,561	4,630	5,082	5,285	5,504	8,621	6,616	6,561
47 Other negotiable and readily transferable instruments ⁷	5,929	7,958	6,323	7,205	7,082	7,113	6,518	6,697	6,710	6,323
48 Other	2,351	1,880	1,530	1,625	1,558	1,001	1,580	2,013	1,336	1,530
49 MEMO: Negotiable time certificates of deposit in custody for foreigners	6,425	7,203	6,522	6,429	5,909	5,713	6,346	6,199	6,466	6,522

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 include 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	1990						
				June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^P
1 Total	685,339	736,663	757,768	708,044	719,860	737,890	741,998	750,222 ^r	746,976 ^r	757,768
2 Foreign countries	682,115	731,892	752,048	703,051	715,747	733,601	736,792	745,716 ^r	742,595 ^r	752,048
3 Europe	231,912	237,489	254,802	234,412	236,010	245,188	244,157	245,830 ^r	247,534 ^r	254,802
4 Austria	1,155	1,233	1,229	1,531	1,498	1,544	1,436	1,401	1,385 ^r	1,229
5 Belgium-Luxembourg	10,022	10,648	12,407	10,078	10,598	11,537	12,126	12,207	11,507 ^r	12,407
6 Denmark	2,200	1,415	1,412	2,411	2,581	2,238	2,055	1,984	1,781	1,412
7 Finland	285	570	602	387	485	463	392	660	422	602
8 France	24,777	26,903	30,925	23,566	23,110	24,201	29,116	29,128	29,193	30,925
9 Germany	6,772	7,578	7,446	8,359	7,679	7,605	7,845	8,439	8,195	7,446
10 Greece	672	1,028	934	833	877	923	1,435	993	949	934
11 Italy	14,599	16,169	17,918	16,779	17,114	17,117	16,361	16,984 ^r	16,402 ^r	17,918
12 Netherlands	5,316	6,613	5,375	7,626	5,972	6,209	5,385	6,082	6,056 ^r	5,375
13 Norway	1,559	2,401	2,358	2,420	1,793	2,192	1,951	1,875	2,330 ^r	2,358
14 Portugal	903	2,407	2,943	3,082	3,073	2,934	2,992	2,970	2,944 ^r	2,943
15 Spain	5,494	4,364	7,701	4,391	4,922	4,447	4,343	5,312	7,347 ^r	7,701
16 Sweden	1,284	1,491	1,837	1,769	1,586	1,495	833	1,706	2,304 ^r	1,837
17 Switzerland	34,199	34,496	37,751	34,780	33,557	34,545	34,637	34,463 ^r	34,837 ^r	37,751
18 Turkey	1,012	1,818	1,133	1,596	1,654	1,897	1,634	1,451	1,358 ^r	1,133
19 United Kingdom	111,811	102,362	109,211	98,515	100,934	108,181	104,676	100,961	103,008 ^r	109,211
20 Yugoslavia	529	1,474	928	2,169	2,436	2,272	2,043	1,753	1,571 ^r	928
21 Other Western Europe ¹	8,598	13,563	11,025	12,360	14,619	14,057	13,145	15,934 ^r	14,339 ^r	11,025
22 U.S.S.R.	138	350	119	75	194	56	240	234	220	119
23 Other Eastern Europe ²	591	608	1,546	1,686	1,335	1,275	1,515	1,294	1,388 ^r	1,546
24 Canada	21,062	18,865	20,347	19,956	20,056	21,122	20,796	19,654	20,679 ^r	20,347
25 Latin America and Caribbean	271,146	310,948	329,610	313,130	316,656	320,056	325,927	333,603 ^r	321,441 ^r	329,610
26 Argentina	7,804	7,304	7,361	7,993	8,163	7,844	7,981	7,717	7,659	7,361
27 Bahamas	86,863	99,341	107,291	99,255	98,292	101,635	108,280	110,155 ^r	97,695	107,291
28 Bermuda	2,621	2,884	2,818	3,097	2,824	2,656	2,739	2,482 ^r	2,518 ^r	2,818
29 Brazil	5,314	6,334	5,833	6,052	6,083	6,329	6,058	5,892	6,448 ^r	5,833
30 British West Indies	113,840	138,263	143,320	137,169	142,722	142,050	140,947	146,477 ^r	144,473 ^r	143,320
31 Chile	2,936	3,212	3,145	3,449	3,540	3,491	3,135	3,170	3,422	3,145
32 Colombia	4,374	4,653	4,491	4,508	4,474	4,344	3,926	4,284	4,251	4,491
33 Cuba	10	10	11	15	15	10	49	9	9	11
34 Ecuador	1,379	1,391	1,379	1,368	1,349	1,348	1,348	1,314	1,310	1,379
35 Guatemala	1,195	1,312	1,534	1,473	1,523	1,496	1,517	1,485	1,478	1,534
36 Jamaica	269	209	243	224	209	213	217	219	228 ^r	243
37 Mexico	15,185	15,423	16,792	16,391	16,070	16,325	16,486	16,465	16,501 ^r	16,792
38 Netherlands Antilles	6,420	6,310	7,381	6,628	6,409	6,429	6,558	7,126	7,351	7,381
39 Panama	4,353	4,361	4,575	4,547	4,388	4,648	4,632	4,592	4,644	4,575
40 Peru	1,671	1,984	1,295	1,473	1,405	1,369	1,360	1,360	1,327	1,295
41 Uruguay	1,898	2,284	2,522	2,529	2,560	2,531	2,512	2,212	2,446	2,522
42 Venezuela	9,147	9,468	12,758	10,292	9,830	10,435	11,107	11,351	12,988	12,758
43 Other	5,868	6,206	6,861	6,673	6,803	6,901	7,113	6,951	6,693 ^r	6,861
44 Asia	147,838	156,201	138,262	126,223	134,134	137,793	136,902	137,236	143,943 ^r	138,262
45 China	1,895	1,773	2,421	1,871	1,890	2,324	2,115	2,173 ^r	2,493	2,421
46 Taiwan	26,058	19,588	11,268	11,006	12,611	12,639	12,468	12,237 ^r	11,512 ^r	11,268
47 Hong Kong	12,248	12,416	12,662	12,369	13,316	13,833	13,836	13,767	13,843	12,662
48 India	699	780	1,225	966	909	806	1,035	953	1,116	1,225
49 Indonesia	1,180	1,281	1,238	1,377	1,130	1,398	1,261	1,261	1,261	1,238
50 Israel	1,461	1,243	2,767	1,202	1,122	1,125	939	921	3,075	2,767
51 Japan	74,015	81,184	68,582	62,402	66,299	68,676	68,926	67,923	69,333 ^r	68,582
52 Korea	2,541	3,215	2,231	2,101	2,157	2,316	2,564	2,442	2,732	2,231
53 Philippines	1,163	1,769	1,510	1,329	1,314	1,350	1,340	1,274	1,549	1,510
54 Thailand	1,236	2,093	1,441	2,125	2,745	2,233	1,626	1,448	1,681	1,441
55 Middle-East oil-exporting countries ³	12,083	13,370	15,816	13,007	14,027	14,928	14,047	16,412 ^r	17,403	15,816
56 Other	13,260	17,491	17,100	16,314	16,367	16,433	16,609	16,426 ^r	17,947 ^r	17,100
57 Africa	3,991	3,823	4,580	3,650	3,412	4,638	4,152	4,223	4,388	4,580
58 Egypt	911	686	1,377	592	583	1,505	970	1,099	996	1,377
59 Morocco	68	78	101	81	95	77	93	87	90	101
60 South Africa	437	205	225	318	239	332	393	234	282	225
61 Zaire	85	86	53	41	38	43	44	45	55	53
62 Oil-exporting countries ⁴	1,017	1,121	1,109	890	873	1,072	966	1,050	1,288	1,109
63 Other	1,474	1,648	1,714	1,728	1,584	1,609	1,687	1,708	1,678	1,714
64 Other countries	6,165	4,564	4,447	5,680	5,480	4,803	4,858	5,169	4,610	4,447
65 Australia	5,293	3,867	3,672	5,052	4,892	4,122	4,127	4,371	3,804	3,672
66 All other	872	697	775	628	588	681	732	797	807	775
67 Nonmonetary international and regional organizations	3,224	4,772	5,720	4,994	4,112	4,290	5,206	4,507	4,381 ^r	5,720
68 International ⁵	2,503	3,825	4,193	3,856	2,981	3,150	3,982	3,392	3,260 ^r	4,193
69 Latin American regional	589	684	1,048	923	812	569	668	627	809	1,048
70 Other regional ⁶	133	263	479	215	319	571	556	487	312	479

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 States¹

Payable in U.S. Dollars

Millions of dollars, end of period

Area and country	1988	1989	1990	1990						
				June	July	Aug.	Sept.	Oct.	Nov. ^f	Dec. ^g
1 Total	491,165	534,022	511,941	489,170	488,235	494,987	493,239	494,833 ^f	504,527	511,941
2 Foreign countries	489,094	530,583	507,492	484,669	483,961	491,343	488,044	490,803 ^f	500,117	507,492
3 Europe	116,928	119,024	113,627	102,398	102,368	106,463	105,418	103,631	107,188	113,627
4 Austria	483	415	385	337	399	287	373	247	268	385
5 Belgium-Luxembourg	8,515	6,478	5,435	5,621	6,754	6,682	5,627	5,147	6,441	5,435
6 Denmark	483	582	497	590	503	676	669	489	870	497
7 Finland	1,065	1,027	1,062	1,035	1,112	1,177	962	814	876	1,062
8 France	13,243	16,146	14,530	14,794	13,746	14,288	14,398	13,750	13,343	14,530
9 Germany	2,329	2,865	3,418	2,870	2,595	2,939	3,403	3,242	3,634	3,418
10 Greece	433	788	729	514	529	610	686	729	720	729
11 Italy	7,936	6,662	5,989	5,131	4,615	4,498	4,634	5,070	5,171	5,989
12 Netherlands	2,541	1,904	1,725	2,041	1,744	1,636	2,219	1,711	1,849	1,725
13 Norway	455	609	787	745	692	716	744	732	661	787
14 Portugal	261	376	303	543	543	427	412	444	368	303
15 Spain	1,823	1,930	2,758	2,084	2,125	2,100	2,312	2,373	2,584	2,758
16 Sweden	1,977	1,773	2,068	2,614	3,362	3,407	2,447	2,577 ^f	2,251	2,068
17 Switzerland	3,895	6,141	4,472	5,249	4,297	3,712	3,928	3,475 ^f	3,995	4,472
18 Turkey	1,233	1,071	1,377	1,232	1,186	1,434	1,377	1,371	1,346	1,377
19 United Kingdom	65,706	65,527	65,317	53,592	54,804	58,630	57,830	58,267 ^f	59,919	65,317
20 Yugoslavia	1,390	1,329	1,142	1,095	1,070	1,029	1,120	1,226	1,160	1,142
21 Other Western Europe ²	1,152	1,302	582	821	960	694	697	667	619	582
22 U.S.S.R.	1,255	1,179	552	754	565	624	940	825 ^f	653	552
23 Other Eastern Europe ³	754	921	498	737	765	897	640	474	459	498
24 Canada	18,889	15,450	16,091	16,518	16,391	15,431	15,445	16,185 ^f	14,295	16,091
25 Latin America and Caribbean	214,264	230,392	230,072	208,180	199,729	204,012	211,783	216,741 ^f	228,533	230,072
26 Argentina	11,826	9,270	6,889	7,600	7,166	7,111	7,549	7,028	7,024	6,889
27 Bahamas	66,954	77,921	77,092	66,870	66,977	67,870	71,534	71,934 ^f	71,026	77,092
28 Bermuda	483	1,315	3,400	1,830	1,988	2,443	3,736	3,662 ^f	4,291	3,400
29 Brazil	25,735	23,749	17,850	20,683	20,180	18,906	18,651	18,626	18,393	17,850
30 British West Indies	55,888	68,709	85,905	74,601	66,437	70,980	73,530	77,539 ^f	86,263	85,905
31 Chile	5,217	4,353	3,269	3,489	3,433	3,489	3,264	3,372	3,373	3,269
32 Colombia	2,944	2,784	2,581	2,596	2,542	2,700	2,563	2,544	2,532	2,581
33 Cuba	1	1	0	0	1	2	0	0	1	0
34 Ecuador	2,075	1,688	1,387	1,485	1,515	1,507	1,498	1,487	1,498	1,387
35 Guatemala	198	197	191	188	196	207	215	211	152	191
36 Jamaica	212	297	173	258	262	243	254	262	265	173
37 Mexico	24,637	23,376	15,841	14,234	14,689	14,953	15,366	15,359	15,380	15,841
38 Netherlands Antilles	1,306	1,921	7,973	1,722	1,873	1,632	1,818	3,310	7,386	7,973
39 Panama	2,521	1,740	1,471	1,598	1,491	1,491	1,556	1,463	1,449	1,471
40 Peru	1,013	771	663	683	661	644	649	667	730	663
41 Uruguay	910	928	786	842	843	834	804	794	812	786
42 Venezuela	10,733	9,647	3,269	8,136	8,064	7,642	7,274	7,102	6,567	3,269
43 Other Latin America and Caribbean	1,612	1,726	1,333	1,399	1,355	1,417	1,523	1,383	1,391	1,333
44 Asia	130,881	157,474	140,263	149,197	158,028	157,933	147,568	146,800 ^f	142,555	140,263
45 China	762	634	620	537	554	586	542	639	689	620
46 Mainland	4,184	2,776	1,924	1,946	1,583	2,026	1,681	1,061	1,576	1,924
47 Hong Kong	10,143	11,128	10,644	9,271	9,434	9,473	9,026	8,478	8,506	10,644
48 India	560	621	640	802	852	628	867	506	540	640
49 Indonesia	674	651	948	801	814	836	826	896 ^f	923	948
50 Israel	1,136	813	773	777	738	785	698	688	758	773
51 Japan	90,149	111,300	92,075	107,753	114,663	114,973	106,543	106,369 ^f	100,071	92,075
52 Korea	5,213	5,323	5,765	5,128	5,515	5,614	5,679	5,533 ^f	5,533	5,765
53 Philippines	1,876	1,344	1,246	1,357	1,342	1,369	1,333	1,206	1,175	1,246
54 Thailand	848	1,140	1,562	1,279	1,242	1,245	1,279	1,444	1,523	1,562
55 Middle East oil-exporting countries ⁴	6,213	10,149	10,964	10,876	12,318	10,657	10,430	11,098	10,947	10,964
56 Other Asia	9,122	11,594	13,102	8,668	8,971	9,741	8,663	8,883	10,314	13,102
57 Africa	5,718	5,890	5,435	5,787	5,567	5,567	5,544	5,601	5,705	5,435
58 Egypt	507	377	469	421	449	430	411	383	377	469
59 Morocco	511	559	509	565	544	539	542	534	519	509
60 South Africa	1,681	1,628	1,525	1,573	1,560	1,571	1,594	1,576	1,726	1,525
61 Zaire	17	16	16	21	20	19	20	19	19	16
62 Oil-exporting countries ⁵	1,523	1,648	1,484	1,649	1,604	1,586	1,536	1,510	1,492	1,484
63 Other	1,479	1,537	1,525	1,511	1,418	1,403	1,422	1,551	1,566	1,525
64 Other countries	2,413	2,354	2,003	2,590	1,878	1,938	2,287	1,845 ^f	1,841	2,003
65 Australia	1,520	1,781	1,518	1,712	1,422	1,304	1,863	1,416	1,483	1,518
66 All other	894	573	485	878	456	634	424	429 ^f	358	485
67 Nonmonetary international and regional organizations ⁶	2,071	3,439	4,448	4,501	4,275	3,644	5,195	4,030	4,410	4,448

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, Beginning April 1978, also includes Eastern European countries not listed in line 23.

3. Beginning April 1978 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 States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Type of claim	1988	1989	1990	1990						
				June	July	Aug.	Sept.	Oct. ^r	Nov. ^r	Dec. ^p
1 Total.....	538,689	592,616	.....	548,270	.....	.....	558,941 ^r	.....	.....	.....
2 Banks' own claims on foreigners.....	491,165	534,022	511,941	489,170	488,235	494,987	493,239	494,833	504,527	511,941
3 Foreign public borrowers.....	62,658	60,087	43,017	49,090	47,711	46,738	48,218	46,350	46,136	43,017
4 Own foreign offices ²	257,436	295,980	301,863	280,044	275,297	273,967	278,871	281,049	290,978	301,863
5 Unaffiliated foreign banks.....	129,425	134,870	119,504	121,827	128,436	137,784	124,988	124,887	121,355	119,504
6 Deposits.....	65,898	78,184	67,750	69,336	73,819	80,628	72,266	72,144	68,419	67,750
7 Other.....	63,527	56,686	51,755	52,491	54,617	57,156	52,722	52,743	52,937	51,755
8 All other foreigners.....	41,646	43,084	47,556	38,209	36,791	36,499	41,162	42,547	46,058	47,556
9 Claims of banks' domestic customers ³	47,524	58,594	.....	59,100	.....	.....	65,702 ^r	.....	.....	.....
10 Deposits.....	8,289	13,019	.....	15,708	.....	.....	14,707	.....	.....	.....
11 Negotiable and readily transferable instruments ⁴	25,700	30,983	.....	27,451	.....	.....	33,791 ^r	.....	.....	.....
12 Outstanding collections and other claims.....	13,535	14,592	.....	15,940	.....	.....	17,203	.....	.....	.....
13 MEMO: Customer liability on acceptances.....	19,596	12,899	.....	12,930	.....	.....	12,812	.....	.....	.....
Dollar deposits in banks abroad, reported by nonbanking business enterprises in the United States ⁵	45,565	45,675	n.a.	40,411	41,000	44,631	43,154	42,774	48,245	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 States¹
Payable in U.S. Dollars
Millions of dollars, end of period

Maturity; by borrower and area	1986	1987	1988	1989	1990		
				Dec.	Mar.	June	Sept. ^r
1 Total	232,295	235,130	233,184	237,684	211,809	208,559	213,747
<i>By borrower</i>							
2 Maturity of 1 year or less ²	160,555	163,997	172,634	177,907	160,299	159,280	166,556
3 Foreign public borrowers.....	24,842	25,889	26,562	23,493	23,253	20,650	21,560
4 All other foreigners.....	135,714	138,108	146,071	154,415	137,046	138,630	144,996
5 Maturity over 1 year.....	71,740	71,133	60,550	59,776	51,510	49,279	47,191
6 Foreign public borrowers.....	39,103	38,625	35,291	36,014	27,893	27,960	26,217
7 All other foreigners.....	32,637	32,507	25,259	23,762	23,617	21,320	20,974
<i>By area</i>							
8 Maturity of 1 year or less ²							
9 Europe.....	61,784	59,027	55,909	53,912	48,550	49,421	51,579
10 Canada.....	5,895	5,680	6,282	5,909	5,698	5,754	5,520
11 Latin America and Caribbean.....	56,271	56,535	57,991	52,989	46,374	44,293	43,961
12 Asia.....	29,457	35,919	46,224	57,755	51,894	51,182	56,366
13 Africa.....	2,882	2,833	3,337	3,225	3,165	2,991	2,951
14 All other ³	4,267	4,003	2,891	4,118	4,616	5,639	6,179
15 Maturity of over 1 year ²							
16 Europe.....	6,737	6,696	4,666	4,121	4,389	4,201	4,426
17 Canada.....	1,925	2,661	1,922	2,353	2,712	2,819	3,033
18 Latin America and Caribbean.....	56,719	53,817	47,547	45,816	35,530	33,190	31,276
19 Asia.....	4,043	3,830	3,613	4,172	5,552	5,866	5,646
20 Africa.....	1,539	1,747	2,301	2,630	2,764	2,739	2,544
21 All other.....	777	2,381	501	684	564	464	265

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	1986	1987	1988		1989				1990		
			Sept.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June	Sept.
1 Total	386.5	382.4	354.0	346.3	346.1	340.0	346.2	338.4	334.3	322.6	333.1
2 G-10 countries and Switzerland	156.6	159.7	148.7	152.7	145.4	145.1	146.4	152.9	147.1	140.1	144.3
3 Belgium-Luxembourg	8.4	10.0	9.5	9.0	8.6	7.8	6.9	6.3	6.6	6.2	6.5
4 France	13.6	13.7	10.3	10.5	11.2	10.8	11.1	11.7	10.5	10.3	11.1
5 Germany	11.6	12.6	9.2	10.3	10.2	10.6	10.4	10.5	11.2	11.2	11.2
6 Italy	9.0	7.5	5.6	6.8	5.2	6.1	6.8	7.4	6.0	5.5	4.5
7 Netherlands	4.6	4.1	2.9	2.7	2.8	2.8	2.4	3.1	3.1	2.7	3.8
8 Sweden	2.4	2.1	1.9	1.8	2.3	1.8	2.0	2.0	2.1	2.3	2.4
9 Switzerland	5.8	5.6	5.2	5.4	5.1	5.4	6.1	7.1	6.3	6.4	5.6
10 United Kingdom	70.9	68.8	67.6	66.2	65.6	64.5	63.7	67.2	64.0	60.0	62.1
11 Canada	5.2	5.5	4.9	5.0	4.0	5.1	5.9	5.4	4.8	5.2	5.1
12 Japan	25.1	29.8	31.6	34.9	30.5	30.2	31.0	32.2	32.6	30.4	32.1
13 Other developed countries	26.1	26.4	23.0	21.0	21.1	21.2	21.0	20.7	23.1	22.6	23.0
14 Austria	1.7	1.9	1.6	1.5	1.4	1.7	1.5	1.5	1.5	1.5	1.6
15 Denmark	1.7	1.7	1.2	1.1	1.1	1.4	1.1	1.1	1.1	1.1	1.0
16 Finland	1.4	1.2	1.3	1.1	1.0	1.0	1.1	1.0	1.1	.9	.8
17 Greece	2.3	2.0	2.1	1.8	2.1	2.3	2.4	2.5	2.6	2.7	2.8
18 Norway	2.4	2.2	2.0	1.8	1.6	1.8	1.4	1.4	1.7	1.4	1.5
19 Portugal	.9	.6	.4	.4	.4	.6	.4	.4	.4	.8	.6
20 Spain	5.8	8.0	6.3	6.2	6.6	6.2	6.9	7.1	8.3	7.9	8.5
21 Turkey	2.0	2.0	1.6	1.5	1.3	1.1	1.2	1.2	1.3	1.4	1.6
22 Other Western Europe	1.5	1.6	1.9	1.3	1.1	1.1	1.0	.7	1.0	1.1	.7
23 South Africa	3.0	2.9	2.7	2.4	2.2	2.1	2.1	2.0	2.0	1.9	1.9
24 Australia	3.4	2.4	1.8	1.8	2.4	1.9	2.1	1.6	2.1	1.9	2.0
25 OPEC countries ³	19.4	17.4	17.9	16.6	16.2	16.1	16.2	17.1	15.5	15.3	14.4
26 Ecuador	2.2	1.9	1.8	1.7	1.6	1.5	1.5	1.3	1.2	1.1	1.1
27 Venezuela	8.7	8.1	7.9	7.9	7.9	7.5	7.4	7.0	6.1	6.0	6.0
28 Indonesia	2.5	1.9	1.8	1.7	1.7	1.9	2.0	2.0	2.1	2.0	2.3
29 Middle East countries	4.3	3.6	4.6	3.4	3.3	3.4	3.5	5.0	4.3	4.4	3.3
30 African countries	1.8	1.9	1.9	1.9	1.7	1.6	1.9	1.7	1.8	1.8	1.7
31 Non-OPEC developing countries	99.6	97.8	87.2	85.3	85.9	83.4	81.2	77.5	68.8	66.0	66.3
<i>Latin America</i>											
32 Argentina	9.5	9.5	9.3	9.0	8.5	7.9	7.6	6.3	5.5	5.1	4.9
33 Brazil	25.3	24.7	22.4	22.4	22.8	22.1	20.9	19.0	17.5	16.0	15.0
34 Chile	7.1	6.9	6.3	5.6	5.7	5.2	4.9	4.6	4.3	3.7	3.6
35 Colombia	2.1	2.0	2.1	2.1	1.9	1.7	1.6	1.8	1.8	1.7	1.8
36 Mexico	24.0	23.5	20.4	18.8	18.3	17.7	17.2	17.7	12.7	12.6	13.1
37 Peru	1.4	1.1	.8	.8	.7	.6	.6	.6	.5	.5	.5
38 Other Latin America	3.1	2.8	2.5	2.6	2.7	2.6	2.9	2.8	2.7	2.3	2.4
<i>Asia</i>											
39 China											
40 Mainland	.4	.3	.2	.3	.5	.3	.3	.3	.3	.2	.2
41 Taiwan	4.9	8.2	3.2	3.7	4.9	5.2	5.0	4.5	3.8	3.6	3.9
42 India	1.2	1.9	2.0	2.1	2.6	2.4	2.7	3.1	3.5	3.6	3.6
43 Israel	1.5	1.0	1.0	1.2	.9	.8	.7	.7	.6	.7	.6
44 Korea (South)	6.7	5.0	6.0	6.1	6.1	6.6	6.5	5.9	5.3	5.6	6.2
45 Malaysia	2.1	1.5	1.7	1.6	1.7	1.6	1.7	1.7	1.8	1.8	1.8
46 Philippines	5.4	5.2	4.7	4.5	4.4	4.4	4.0	4.1	3.7	3.9	3.9
47 Thailand	.9	.7	1.2	1.1	1.0	1.0	1.3	1.3	1.1	1.3	1.5
48 Other Asia	.7	.7	.8	.9	.8	.8	1.0	1.0	1.2	1.1	1.2
<i>Africa</i>											
49 Egypt	.7	.6	.5	.4	.5	.6	.5	.4	.4	.5	.4
50 Morocco	.9	.9	.8	.9	.9	.9	.8	.9	.9	.9	.9
51 Zaire	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
52 Other Africa ⁴	1.6	1.3	1.2	1.1	1.1	1.1	1.0	1.0	.9	.9	.8
53 Eastern Europe	3.5	3.2	3.1	3.6	3.5	3.4	3.5	3.5	3.4	3.0	2.9
54 U.S.S.R.	.1	.3	.4	.7	.7	.6	.8	.7	.8	.4	.4
55 Yugoslavia	2.0	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.4	1.4	1.3
56 Other	1.4	1.1	1.0	1.1	1.1	1.1	1.1	1.3	1.3	1.2	1.2
57 Offshore banking centers	61.5	54.5	47.3	44.2	48.5	43.1	49.2	36.6	42.9	40.0	41.9
58 Bahamas	22.4	17.3	12.9	11.0	15.8	11.0	11.4	5.5	9.2	8.5	8.9
59 Bermuda	.6	.6	.9	.9	1.1	.7	1.3	1.7	.9	2.2	4.0
60 Cayman Islands and other British West Indies	12.3	13.5	11.9	12.9	12.0	10.8	15.3	8.9	10.9	8.5	9.0
61 Netherlands Antilles	1.8	1.2	1.2	1.0	.9	1.0	1.1	2.3	2.6	2.3	2.2
62 Panama ⁵	4.0	3.7	2.6	2.5	2.2	1.9	1.5	1.4	1.3	1.4	1.5
63 Lebanon	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
64 Hong Kong	11.1	11.2	10.5	9.6	9.6	10.4	10.7	9.7	9.8	10.0	9.0
65 Singapore	9.2	7.0	7.0	6.1	6.8	7.3	7.8	7.0	8.0	7.0	7.2
66 Others ⁶	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
67 Miscellaneous and unallocated ⁷	19.8	23.2	26.7	22.6	25.0	27.4	28.5	29.8	33.2	35.4	40.0

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 with June 1984 data, 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 States¹

Millions of dollars, end of period

Type, and area or country	1986	1987	1988	1989			1990		
				June	Sept.	Dec.	Mar.	June	Sept.
1 Total	25,587	28,302	32,938	38,400	36,530	38,413	38,554	39,474	44,555
2 Payable in dollars	21,749	22,785	27,320	33,312	31,669	33,569	34,265	34,962	39,429
3 Payable in foreign currencies	3,838	5,517	5,618	5,088	4,861	4,845	4,289	4,512	5,126
By type									
4 Financial liabilities	12,133	12,424	14,507	18,427	17,141	18,364	17,837	19,499	20,534
5 Payable in dollars	9,609	8,643	10,608	14,551	13,289	14,462	14,625	16,098	16,694
6 Payable in foreign currencies	2,524	3,781	3,900	3,875	3,852	3,902	3,213	3,401	3,840
7 Commercial liabilities	13,454	15,878	18,431	19,973	19,389	20,049	20,717	19,975	24,021
8 Trade payables	6,450	7,305	6,505	6,501	6,906	7,377	7,275	6,739	9,905
9 Advance receipts and other liabilities	7,004	8,573	11,926	13,472	12,483	12,672	13,441	13,237	14,116
10 Payable in dollars	12,140	14,142	16,712	18,760	18,380	19,107	19,640	18,864	22,735
11 Payable in foreign currencies	1,314	1,737	1,719	1,213	1,009	943	1,076	1,111	1,286
By area or country									
Financial liabilities									
12 Europe	7,917	8,320	9,962	12,575	11,213	11,607	10,960	12,026	11,527
13 Belgium-Luxembourg	270	213	289	357	308	340	333	347	350
14 France	661	382	359	257	242	258	217	156	503
15 Germany	368	551	699	618	592	521	482	676	735
16 Netherlands	542	866	880	835	855	946	900	934	948
17 Switzerland	646	558	1,033	938	799	541	529	667	740
18 United Kingdom	5,140	5,557	6,533	9,402	8,207	8,741	8,212	8,759	7,579
19 Canada	399	360	388	626	575	573	476	345	357
20 Latin America and Caribbean	1,944	1,189	839	1,262	1,367	1,268	1,814	2,508	3,337
21 Bahamas	614	318	184	165	186	157	272	249	368
22 Bermuda	4	0	0	7	7	0	0	0	0
23 Brazil	32	25	0	0	0	0	0	0	0
24 British West Indies	1,146	778	645	661	743	635	1,061	1,717	2,352
25 Mexico	22	13	1	17	4	6	5	4	4
26 Venezuela	0	0	0	0	0	0	0	0	0
27 Asia	1,805	2,451	3,312	3,863	3,886	4,814	4,483	4,561	4,831
28 Japan	1,398	2,042	2,563	3,100	3,130	3,963	3,445	3,559	3,871
29 Middle East oil-exporting countries ²	8	8	3	12	2	2	3	5	4
30 Africa	1	4	2	3	4	2	3	3	2
31 Oil-exporting countries ³	1	1	0	2	2	0	0	1	0
32 All other ⁴	67	100	4	97	97	100	102	55	479
Commercial liabilities									
33 Europe	4,446	5,516	7,305	7,776	8,321	8,885	9,133	8,304	9,719
34 Belgium-Luxembourg	101	132	158	114	137	178	233	295	246
35 France	352	426	455	535	806	871	881	928	1,186
36 Germany	715	909	1,699	1,188	1,185	1,364	1,143	959	1,019
37 Netherlands	424	423	587	688	548	699	688	606	700
38 Switzerland	385	559	417	447	531	621	583	607	708
39 United Kingdom	1,341	1,599	2,065	2,709	2,703	2,618	2,925	2,435	2,803
40 Canada	1,405	1,301	1,217	1,133	1,189	1,067	1,124	1,169	1,264
41 Latin America and Caribbean	924	864	1,090	1,673	1,086	1,187	1,304	1,277	1,553
42 Bahamas	32	18	49	34	27	41	37	22	18
43 Bermuda	156	168	286	388	305	308	516	412	371
44 Brazil	61	46	95	541	113	100	116	106	126
45 British West Indies	49	19	34	42	30	27	18	29	36
46 Mexico	217	189	217	235	220	304	241	285	505
47 Venezuela	216	162	114	131	107	154	85	119	120
48 Asia	5,080	6,565	6,915	7,045	7,088	7,040	6,886	6,949	8,763
49 Japan	2,042	2,578	3,094	2,708	2,676	2,774	2,624	3,068	3,167
50 Middle East oil-exporting countries ^{2,5}	1,679	1,964	1,385	1,482	1,442	1,401	1,393	1,125	2,321
51 Africa	619	574	576	762	648	844	753	885	1,315
52 Oil-exporting countries ³	197	135	202	263	255	307	263	277	593
53 All other ⁴	980	1,057	1,328	1,584	1,057	1,027	1,517	1,390	1,408

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 States¹

Millions of dollars, end of period

Type, and area or country	1986	1987	1988	1989			1990		
				June	Sept.	Dec.	Mar.	June	Sept.
1 Total	36,265	30,964	34,035	34,420	32,088	31,437	29,708	31,468	30,846 ^r
2 Payable in dollars	33,867	28,502	31,654	32,203	29,806	29,106	27,595	29,174	28,491 ^r
3 Payable in foreign currencies	2,399	2,462	2,381	2,217	2,282	2,330	2,114	2,294	2,355
<i>By type</i>									
4 Financial claims	26,273	20,363	21,869	21,920	19,135	17,689	16,481	17,975	16,527 ^r
5 Deposits	19,916	14,894	15,643	16,500	12,154	10,400	10,436	9,877	10,258 ^r
6 Payable in dollars	19,331	13,765	14,544	15,581	11,278	9,473	9,583	8,825	9,109 ^r
7 Payable in foreign currencies	585	1,128	1,099	919	877	927	853	1,053	1,149
8 Other financial claims	6,357	5,470	6,226	5,420	6,981	7,289	6,045	8,098	6,269 ^r
9 Payable in dollars	5,005	4,656	5,450	4,683	6,073	6,535	5,357	7,365	5,616 ^r
10 Payable in foreign currencies	1,352	814	777	737	908	754	688	733	652
11 Commercial claims	9,992	10,600	12,166	12,499	12,953	13,748	13,227	13,493	14,319 ^r
12 Trade receivables	8,783	9,535	11,091	11,068	11,472	12,140	11,635	11,807	12,506 ^r
13 Advance payments and other claims	1,209	1,065	1,075	1,432	1,481	1,608	1,592	1,686	1,813 ^r
14 Payable in dollars	9,530	10,081	11,660	11,939	12,455	13,099	12,655	12,985	13,765 ^r
15 Payable in foreign currencies	462	519	505	560	498	650	573	508	554
<i>By area or country</i>									
<i>Financial claims</i>									
16 Europe	10,744	9,531	10,279	8,919	7,528	7,040	6,949	9,587	7,905 ^r
17 Belgium-Luxembourg	41	7	18	161	166	28	22	126	27
18 France	138	332	203	176	173	153	198	141	143
19 Germany	116	102	120	149	120	192	505	93	97
20 Netherlands	151	350	348	297	292	303	315	332	315
21 Switzerland	185	65	218	68	111	95	122	137	176
22 United Kingdom	9,855	8,467	9,039	7,772	6,419	6,035	5,572	8,539	6,926 ^r
23 Canada	4,808	2,844	2,325	2,568	2,359	1,892	1,758	2,040	1,994
24 Latin America and Caribbean	9,291	7,012	8,160	9,319	8,315	7,590	6,921	5,431	5,666 ^r
25 Bahamas	2,628	1,994	1,846	1,875	1,699	1,516	1,599	920	969 ^r
26 Bermuda	6	7	19	33	33	7	4	3	12 ^r
27 Brazil	86	63	47	78	70	224	79	84	70
28 British West Indies	6,078	4,433	5,763	6,923	6,125	5,431	4,824	4,027	4,215
29 Mexico	174	172	151	114	105	94	152	153	158
30 Venezuela	21	19	21	31	36	20	21	20	23
31 Asia	1,317	879	844	995	826	831	763	815	832 ^r
32 Japan	999	605	574	525	460	439	416	473	450 ^r
33 Middle East oil-exporting countries ²	7	8	5	8	7	8	7	6	9
34 Africa	85	65	106	80	75	140	67	62	49
35 Oil-exporting countries ³	28	7	10	8	8	12	11	8	7
36 All other ⁴	28	33	155	40	31	195	23	41	81
<i>Commercial claims</i>									
37 Europe	3,725	4,180	5,181	5,302	5,429	6,168	6,026	6,041	6,427 ^r
38 Belgium-Luxembourg	133	178	189	205	220	241	219	207	189
39 France	431	650	672	775	829	956	958	908	1,140 ^r
40 Germany	444	562	669	675	686	687	699	662	638 ^r
41 Netherlands	164	133	212	413	396	478	450	475	490
42 Switzerland	217	185	344	231	222	305	270	235	300 ^r
43 United Kingdom	999	1,073	1,324	1,372	1,398	1,572	1,690	1,586	1,675 ^r
44 Canada	934	936	983	1,181	1,278	1,058	1,091	1,108	1,135 ^r
45 Latin America and Caribbean	1,857	1,930	2,241	2,103	2,147	2,177	2,061	2,214	2,389 ^r
46 Bahamas	28	19	36	13	10	57	22	17	25
47 Bermuda	193	170	230	238	271	323	243	284	340
48 Brazil	234	226	299	315	239	292	231	233	252 ^r
49 British West Indies	39	26	22	30	33	36	38	46	35
50 Mexico	412	368	461	439	509	509	525	594	649
51 Venezuela	237	283	227	229	189	147	188	222	223
52 Asia	2,755	2,915	2,993	3,154	3,316	3,538	3,257	3,379	3,568 ^r
53 Japan	881	1,158	946	999	1,176	1,184	1,061	1,046	1,209 ^r
54 Middle East oil-exporting countries ²	563	450	453	434	410	515	432	414	403
55 Africa	500	401	435	408	399	418	425	390	372
56 Oil-exporting countries ³	139	144	122	112	87	107	89	98	71
57 All other ⁴	222	238	333	351	383	389	367	360	429

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	1990	1990						
			Jan. - Dec.	June	July	Aug.	Sept.	Oct.	Nov. ^r	Dec. ^p
			U.S. corporate securities							
STOCKS										
1 Foreign purchases	214,061	173,035	173,035	18,211	17,447	20,653	8,812	11,636 ^r	12,551	13,317
2 Foreign sales	204,114	188,336	188,336	18,584	16,080	21,959	11,318	15,437 ^r	13,368	14,577
3 Net purchases, or sales (-)	9,946	-15,301	-15,301	-372	1,367	-1,306	-2,506	-3,801 ^r	-817	-1,261
4 Foreign countries	10,180	-15,372	-15,372	-336	1,315	-1,343	-2,452	-3,759 ^r	-812	-1,270
5 Europe	481	-8,579	-8,579	-590	-12	-1,379	-1,160	-1,415 ^r	-582	-489
6 France	-708	-1,183	-1,183	32	-25	-175	-148	-159	-80	-49
7 Germany	-830	-370	-370	-66	-41	-119	2	-87	-14	-144
8 Netherlands	79	-407	-407	-83	-30	-107	-48	-61	21	-46
9 Switzerland	-3,277	-2,884	-2,884	-198	-170	-253	-126	-213	-169	-263
10 United Kingdom	3,691	-3,122	-3,122	-114	252	-637	-718	-688	-282	147
11 Canada	-881	890	890	88	174	330	210	155	216	280
12 Latin America and Caribbean	3,042	-1,347	-1,347	-14	-90	-242	-218	-357	292	-282
13 Middle East ¹	3,531	-2,447	-2,447	-85	-36	187	-437	-558	-430	-251
14 Other Asia	3,577	-3,505	-3,505	243	1,056	-69	-712	-1,517 ^r	-420	-407
15 Japan	3,330	-2,907	-2,907	212	851	22	-737	-1,135 ^r	-194	-382
16 Africa	131	-60	-60	-7	13	16	1	-31	-5	-14
17 Other countries	299	-325	-325	30	211	-186	-135	-35	117	-108
18 Nonmonetary international and regional organizations	-234	71	71	-37	52	37	-55	-42	-5	9
BONDS ²										
19 Foreign purchases	120,540	118,011	118,011	12,562	10,915	11,846	7,484	8,699 ^r	11,230	9,335
20 Foreign sales	86,568	99,356	99,356	8,448	7,553	12,465	9,354	7,385 ^r	7,728	7,892
21 Net purchases, or sales (-)	33,972	18,655	18,655	4,114	3,362	-618	-1,870	1,314 ^r	3,502	1,443
22 Foreign countries	33,619	19,110	19,110	4,082	3,323	-588	-1,900	1,551 ^r	3,506	1,446
23 Europe	19,823	11,672	11,672	3,378	1,996	706	-819	667 ^r	1,951	585
24 France	372	378	378	293	54	-40	-103	-74	24	44
25 Germany	-238	-305	-305	80	33	172	3	-29	-59	-41
26 Netherlands	850	178	178	37	37	-15	-71	35	52	110
27 Switzerland	-189	515	515	186	570	-346	0	-84	53	-34
28 United Kingdom	18,459	11,112	11,112	2,761	1,145	722	-275	371 ^r	1,727	983
29 Canada	1,116	1,907	1,907	292	70	91	-87	127	237	-209
30 Latin America and Caribbean	3,686	4,222	4,222	578	273	-103	-208	214 ^r	343	517
31 Middle East ¹	-182	152	152	-120	13	-178	-65	-10 ^r	-35	74
32 Other Asia	9,063	1,384	1,384	11	999	-986	-692	603 ^r	1,035	479
33 Japan	6,331	1,007	1,007	-131	930	-632	-871	361	814	395
34 Africa	56	87	87	2	-4	-1	5	2	6	-9
35 Other countries	57	-314	-314	-59	-24	-118	-34	-53	-30	9
36 Nonmonetary international and regional organizations	353	-455	-455	32	39	-31	30	-237	-4	-2
				Foreign securities						
37 Stocks, net purchases, or sales (-) ³	-13,097	-8,406	-8,406	-2,861	-1,135	-142	446	-314 ^r	1,192	-1,716
38 Foreign purchases	109,789	122,486	122,486	11,041	11,425	12,360	7,522	9,277	10,022	7,323
39 Foreign sales ³	122,886	130,892	130,892	13,902	12,559	12,502	7,076	9,591 ^r	8,831	9,039
40 Bonds, net purchases, or sales (-)	-6,049	-22,350	-22,350	-1,939	-400	48	-599	-2,830 ^r	148	-4,302
41 Foreign purchases	234,215	313,576	313,576	25,762	23,367	29,826	25,746	35,254	32,759	32,798
42 Foreign sales	240,264	335,926	335,926	27,702	23,767	29,778	26,346	38,085 ^r	32,611	37,101
43 Net purchases, or sales (-), of stocks and bonds	-19,145	-30,756	-30,756	-4,800	-1,535	-94	-153	-3,144 ^r	1,339	-6,019
44 Foreign countries	-19,178	-28,073	-28,073	-4,347	-1,564	-538	-428	-2,340 ^r	1,314	-5,277
45 Europe	-17,811	-8,189	-8,189	-3,645	-390	-1,303	-73	-910 ^r	1,991	-935
46 Canada	-4,180	-6,920	-6,920	-223	-328	167	-4	-880 ^r	-1,659	-219
47 Latin America and Caribbean	426	-8,787	-8,787	417	-222	-64	-401	229	283	-2,652
48 Asia	2,540	-3,816	-3,816	-1,082	-211	606	-323	-697	720	-1,572
49 Africa	93	-137	-137	8	-83	-8	12	4	-69	28
50 Other countries	-246	-224	-224	178	-331	65	362	-87 ^r	48	73
51 Nonmonetary international and regional organizations	33	-2,684	-2,684	-453	30	444	275	-804	25	-741

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 securi-

ties 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	1990	1990						
			Jan. - Dec.	June	July	Aug.	Sept.	Oct.	Nov. ^r	Dec. ^p
			Transactions, net purchases or sales (-) during period ¹							
1 Estimated total ²	54,198	19,760	19,760	3,554	5,488	4,609	936	-1,134 ^r	5,936	6,473
2 Foreign countries ²	52,296	20,115	20,115	3,249	5,331	3,968	1,293	-1,107 ^r	5,601	6,494
3 Europe ²	36,286	18,791	18,791	2,587	3,643	-2,128	5,021	275	2,145	4,474
4 Belgium-Luxembourg	1,048	-16	-16	270	179	-395	-95	72	-67	-106
5 Germany ²	7,904	5,750	5,750	-1,061	-1	1,424	633	581	1,677	575
6 Netherlands	-1,141	1,012	1,012	313	196	1,253	956	-454	-223	625
7 Sweden	693	1,156	1,156	-34	133	-266	-33	163	279	727
8 Switzerland ²	1,098	146	146	-19	-799	-128	548	617	-6	238
9 United Kingdom	20,198	-2,159	-2,159	1,894	1,051	-3,776	1,599	-1,747	-1,581	210
10 Other Western Europe	6,508	12,880	12,880	1,223	2,884	-251	1,407	1,043	2,069	2,204
11 Eastern Europe	-21	13	13	0	0	11	0	0	-5	0
12 Canada	698	-4,556	-4,556	367	1,418	1,177	-868	-637	-463	155
13 Latin America and Caribbean	459	15,788	15,788	914	1,934	1,319	-1,953	4,676	4,306	1,551
14 Venezuela	311	-50	-50	48	-1	0	-49	-1	49	1
15 Other Latin America and Caribbean	-327	5,049	5,049	1,021	1,060	295	-1,157	591	967	1,149
16 Netherlands Antilles	475	10,788	10,788	-154	874	1,023	-747	4,086	3,290	401
17 Asia	13,297	-11,064	-11,064	-1,086	-1,672	3,304	-1,751	-5,192 ^r	-936	-73
18 Japan	1,681	-14,881	-14,881	-469	161	2,376	-2,092	-4,059 ^r	-1,154	-2,408
19 Africa	116	332	332	52	17	57	151	83	8	-3
20 All other	1,439	824	824	416	-9	239	692	-313	543	389
21 Nonmonetary international and regional organizations	1,902	-354	-354	305	158	641	-357	-27	335	-20
22 International	1,473	-150	-150	462	-25	444	-154	-87	209	-135
23 Latin America regional	231	-2	-2	-109	25	25	-75	-59	0	92
Memo										
24 Foreign countries ²	52,296	20,115	20,115	3,249	5,331	3,968	1,293	-1,107 ^r	5,601	6,494
25 Official institutions	26,835	24,079	24,079	924	724	6,794	3,799	1,382 ^r	4,766	7,862
26 Other foreign ²	25,461	-3,965	-3,965	2,325	4,607	-2,826	-2,506	-2,489 ^r	835	-1,368
Oil-exporting countries										
27 Middle East ³	8,148	-383	-383	-439	-2,095	-365	241	-1,247	-878	1,014
28 Africa ⁴	-1	0	-0	0	0	0	0	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 publicly issued to private foreign residents denominated in foreign currencies.

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 Feb. 28, 1991		Country	Rate on Feb. 28, 1991		Country	Rate on Feb. 28, 1991	
	Percent	Month effective		Percent	Month effective		Percent	Month effective
Austria	6.5	Oct. 1989	France ¹	9.25	Nov. 1990	Norway	10.50	July 1990
Belgium	10.5	Nov. 1989	Germany, Fed. Rep. of	6.50	Feb. 1991	Switzerland	6.0	Oct. 1989
Canada	9.97	Feb. 1991	Italy	12.5	May 1990	United Kingdom ² .....	.....	.....
Denmark	9.50	Jan. 1991	Japan	6.0	Aug. 1990			
			Netherlands	7.75	Feb. 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

Percent per year, averages of daily figures

Country, or type	1988	1989	1990	1990					1991	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1 Eurodollars	7.85	9.16	8.16	8.09	7.99	8.07	8.06	8.04	7.87	7.23
2 United Kingdom	10.28	13.87	14.73	14.92	14.95	14.88	14.02	13.57	13.75	13.91
3 Canada	9.63	12.20	13.00	13.58	13.13	12.63	12.58	12.36	11.95	11.13
4 Germany	4.28	7.04	8.41	8.17	8.36	8.39	8.51	8.79	9.17	9.25
5 Switzerland	2.94	6.83	8.71	8.81	8.71	8.11	7.88	8.39	8.65	8.44
6 Netherlands	4.72	7.28	8.57	8.16	8.44	8.42	8.39	8.73	9.27	9.31
7 France	7.80	9.27	10.20	9.91	10.03	10.24	9.92	9.88	10.14	10.14
8 Italy	11.04	12.44	12.11	11.38	11.49	10.65	11.40	12.42	13.45	13.13
9 Belgium	6.69	8.65	9.70	9.30	9.30	9.04	8.89	9.03	9.81	9.91
10 Japan	4.43	5.39	7.75	7.68	8.02	8.37	8.26	8.35	8.27	8.18

NOTE. Rates are for 3-month interbank loans except for Canada, finance company paper; Belgium, 3-month Treasury bills; and Japan, CD rate.

3.28 FOREIGN EXCHANGE RATES¹

Currency units per dollar

Country/currency	1988	1989	1990	1990				1991	
				Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
1 Australia/dollar ²	78.409	79.186	78.069	82.512	80.060	77.290	77.019	77.930	78.351
2 Austria/schilling	12.357	13.236	11.331	11.044	10.719	10.451	10.539	10.616	10.416
3 Belgium/franc	36.785	39.409	33.424	32.282	31.373	30.647	31.014	31.088	30.475
4 Canada/dollar	1.2306	1.1842	1.1668	1.1583	1.1600	1.1635	1.1603	1.1560	1.1549
5 China, P.R./yuan	1.7314	3.7673	4.7921	4.7342	4.7339	4.9714	5.2352	5.2352	5.2352
6 Denmark/krone	6.7412	7.3210	6.1899	5.9961	5.8117	5.6946	5.7735	5.8115	5.6953
7 Finland/markka	4.1933	4.2963	3.8300	3.7113	3.6187	3.5644	3.6341	3.6431	3.5941
8 France/franc	5.9595	6.3802	5.4467	5.2575	5.1032	5.0020	5.0895	5.1253	5.0398
9 Germany/deutsche mark	1.7570	1.8808	1.6166	1.5701	1.5238	1.4857	1.4982	1.5091	1.4805
10 Greece/drachma	142.00	162.60	158.59	154.93	153.17	152.27	156.08	159.70	158.82
11 Hong Kong/dollar	7.8072	7.8008	7.7899	7.7647	7.7722	7.7951	7.8034	7.7950	7.7943
12 India/rupee	13.900	16.213	17.492	17.860	18.074	18.098	18.127	18.339	18.860
13 Ireland/punt ³	152.49	141.80	165.76	170.91	176.04	180.18	177.77	168.68	179.81
14 Italy/lira	1,302.39	1,372.28	1,198.27	1,172.87	1,141.62	1,117.04	1,129.26	1,134.38	1,111.19
15 Japan/yen	128.17	138.07	145.00	138.44	129.59	129.22	133.89	133.70	130.54
16 Malaysia/ringgit	2.6190	2.7079	2.7057	2.6959	2.6995	2.6949	2.7030	2.7140	2.6969
17 Netherlands/guilder	1.9778	2.1219	1.8215	1.7699	1.7180	1.6761	1.6904	1.7015	1.6689
18 New Zealand/dollar ²	65.560	59.354	59.619	62.077	61.129	61.120	59.574	59.476	60.120
19 Norway/krone	6.5243	6.9131	6.2541	6.0735	5.8241	5.7996	5.8717	5.8993	5.7919
20 Portugal/escudo	144.27	157.53	142.70	139.18	134.41	130.87	132.82	134.43	130.45
21 Singapore/dollar	2.0133	1.9511	1.8134	1.7671	1.7257	1.7100	1.7275	1.7455	1.7180
22 South Africa/rand	2.2770	2.6214	2.5885	2.5712	2.5445	2.5247	2.5395	2.5643	2.5412
23 South Korea/won	734.52	674.29	710.64	717.87	717.76	717.03	718.58	720.83	723.97
24 Spain/peseta	116.53	118.44	101.96	98.49	95.59	94.07	95.75	95.08	92.61
25 Sri Lanka/rupee	31.820	35.947	40.078	39.953	40.285	40.355	40.244	40.300	40.598
26 Sweden/krona	6.1370	6.4559	5.9231	5.7663	5.6411	5.5633	5.6338	5.6345	5.5516
27 Switzerland/franc	1.4643	1.6369	1.3901	1.3069	1.2818	1.2569	1.2814	1.2714	1.2685
28 Taiwan/dollar	28.636	26.407	26.918	27.302	27.288	27.245	27.162	27.197	27.109
29 Thailand/baht	25.312	25.725	25.609	25.376	25.130	25.078	25.208	25.244	25.141
30 United Kingdom/pound	178.13	163.82	178.41	187.94	194.56	196.42	192.19	193.46	196.41
MEMO									
31 United States/dollar ³	92.72	98.60	89.09	86.10	83.43	82.12	83.35	83.51	82.12

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 obliga-

tions 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.

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Anticipated schedule of release dates for periodic releases	December 1990	A92

SPECIAL TABLES—Published Irregularly, with Latest BULLETIN Reference

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<i>Assets and liabilities of U.S. branches and agencies of foreign banks</i>		
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<i>Pro forma balance sheet and income statements for priced service operations</i>		
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Special table follows.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 5-9, 1990¹

A. Commercial and Industrial Loans

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity ²	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate ⁶
				Weighted average effective ³	Standard error ⁴	Inter-quartile range ⁵			
			Days						
ALL BANKS									
1 Overnight ⁷	9,662,879	5,132	*	8.96	.11	8.58-9.14	76.6	4.3	Fed Funds
2 One month and under	9,615,512	973	18	9.21	.09	8.67-9.51	83.0	7.0	Other
3 Fixed rate	7,517,999	1,192	18	9.06	.10	8.67-9.48	81.2	7.4	Other
4 Floating rate	2,097,513	587	18	9.75	.28	8.73-10.51	89.3	5.2	Domestic
5 Over one month and under a year	11,129,241	160	145	10.14	.22	8.91-11.30	80.3	10.7	Prime
6 Fixed rate	5,004,619	172	112	9.85	.24	8.95-10.81	76.4	14.9	Other
7 Floating rate	6,124,622	152	173	10.37	.26	8.81-11.52	83.4	7.4	Prime
8 Demand ⁸	11,821,829	197	*	10.53	.18	9.25-11.57	80.7	5.6	Prime
9 Fixed rate	2,010,662	353	*	9.33	.28	8.52-9.92	79.2	3.0	Other
10 Floating rate	9,811,168	181	*	10.77	.18	10.25-11.63	81.0	6.2	Prime
11 Total short term	42,229,460	299	59	9.77	.14	8.72-10.54	80.2	7.0	Prime
12 Fixed rate (thousands of dollars)	24,196,158	563	32	9.21	.11	8.63-9.50	78.2	7.3	Other
13 1-24	192,991	7	129	12.54	.20	11.51-13.29	26.3	.0	Other
14 25-49	100,429	33	128	11.51	.27	11.00-12.57	24.2	3.0	Prime
15 50-99	158,689	62	132	11.64	.26	11.07-12.68	31.0	.5	Other
16 100-499	662,706	190	111	11.05	.35	10.33-12.01	51.0	12.5	Other
17 500-999	470,892	651	70	10.17	.22	9.11-11.02	77.8	5.4	Other
18 1000 and over	22,610,450	6,480	28	9.08	.11	8.60-9.38	80.1	7.4	Other
19 Floating rate (thousands of dollars)	18,033,302	184	133	10.52	.20	9.21-11.57	82.8	6.5	Prime
20 1-24	457,897	10	173	12.12	.13	11.46-12.75	76.2	.8	Prime
21 25-49	541,436	34	152	11.88	.10	11.11-12.56	79.7	2.7	Prime
22 50-99	864,207	66	175	11.62	.08	11.00-12.19	84.6	3.8	Prime
23 100-499	3,321,885	197	158	11.35	.06	10.52-11.91	86.7	7.6	Prime
24 500-999	1,667,147	652	201	11.06	.09	10.47-11.63	88.5	8.6	Prime
25 1000 and over	11,180,731	4,339	117	9.97	.20	8.70-10.93	81.1	6.4	Prime
			Months						
26 Total long term	4,472,762	210	50	10.82	.15	10.00-11.63	79.3	11.7	Prime
27 Fixed rate (thousands of dollars)	1,303,664	119	62	10.46	.28	9.11-11.49	61.0	4.2	Other
28 1-99	186,228	19	54	12.30	.18	11.49-13.24	14.0	6.1	Other
29 100-499	170,640	187	143	11.28	.21	10.80-11.91	40.7	4.5	None
30 500-999	21,984	661	50	11.10	.29	10.50-11.57	61.6	.0	Prime
31 1000 and over	924,811	4,085	49	9.92	.33	8.90-11.00	74.2	3.9	Domestic
32 Floating rate (thousands of dollars)	3,169,098	305	45	10.96	.17	10.38-12.01	86.8	14.8	Prime
33 1-99	190,343	26	43	12.06	.12	11.30-12.75	58.7	4.1	Prime
34 100-499	442,578	215	60	11.25	.11	10.47-11.73	72.3	13.9	Prime
35 500-999	255,716	665	39	11.04	.10	10.47-11.57	84.7	15.1	Prime
36 1000 and over	2,280,462	3,433	42	10.80	.20	10.00-11.91	92.2	15.8	Prime
			Days	Loan rate (percent)		Prime rate ¹⁰			
				Effective ³	Nominal ⁹				
LOANS MADE BELOW PRIME ¹¹									
37 Overnight ⁷	8,895,731	7,298	*	8.82	8.45	10.00	75.8	5.0	
38 One month and under	8,455,158	4,824	17	8.91	8.55	10.00	83.1	7.3	
39 Over one month and under a year	6,098,468	617	137	9.04	8.73	10.08	86.8	12.3	
40 Demand ⁸	3,907,308	1,054	*	8.96	8.70	10.09	68.3	4.3	
41 Total short term	27,356,665	1,652	42	8.92	8.58	10.03	79.4	7.3	
42 Fixed rate	21,126,152	2,139	28	8.90	8.55	10.01	79.0	7.9	
43 Floating rate	6,230,513	933	113	8.98	8.67	10.08	80.8	4.9	
			Months						
44 Total long term	1,162,938	360	50	9.15	8.84	10.16	86.7	12.8	
45 Fixed rate	590,555	285	44	9.09	8.83	10.14	89.0	13.5	
46 Floating rate	572,383	496	56	9.20	8.86	10.18	84.3	12.1	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 5-9, 1990¹—Continued

A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity ²	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate ⁶
				Weighted average effective ³	Standard error ⁴	Inter-quartile range ⁵			
			Days						
LARGE BANKS									
1 Overnight ⁷	7,771,693	6,515	*	9.04	.18	8.66-9.19	71.1	4.8	Fed Funds
2 One month and under	6,896,330	4,161	17	9.19	.11	8.67-9.52	81.4	5.7	Other
3 Fixed rate	5,195,998	5,350	18	9.07	.18	8.67-9.51	78.0	5.8	Other
4 Floating rate	1,700,332	2,478	16	9.53	.34	8.69-10.47	91.9	5.6	Domestic
5 Over one month and under a year	6,181,414	1,125	124	9.79	.26	8.79-10.54	90.1	13.6	Foreign
6 Fixed rate	2,936,542	3,256	87	9.75	.27	8.98-10.20	87.0	19.3	Other
7 Floating rate	3,244,872	706	158	9.83	.41	8.64-10.81	93.0	8.4	Prime
8 Demand ⁸	6,718,095	337	*	10.29	.31	8.94-11.46	73.5	6.1	Prime
9 Fixed rate	1,246,081	887	*	9.07	.29	8.41-9.45	81.7	4.6	Domestic
10 Floating rate	5,472,014	296	*	10.56	.30	9.75-11.57	71.6	6.4	Prime
11 Total short term	27,567,532	976	43	9.55	.19	8.70-10.47	78.5	7.3	Other
12 Fixed rate (thousands of dollars)	17,150,314	3,836	22	9.17	.18	8.67-9.45	76.7	7.6	Other
13 1-24	6,533	10	112	11.47	.26	10.79-12.00	33.9	.5	Prime
14 25-49	8,653	33	92	11.21	.44	11.00-11.94	37.0	.8	Prime
15 50-99	13,839	66	83	10.68	.21	10.38-11.50	54.9	1.5	Prime
16 100-499	146,842	230	53	10.06	.40	9.09-11.00	69.2	1.9	Prime
17 500-999	224,448	664	41	9.85	.26	9.11-10.52	75.7	7.8	Other
18 1000 and over	16,749,999	7,159	22	9.15	.18	8.67-9.42	76.8	7.6	Other
19 Floating rate (thousands of dollars) ...	10,417,218	438	109	10.17	.32	8.77-11.29	81.6	6.9	Prime
20 1-24	95,545	11	179	11.60	.18	10.75-12.19	83.4	.6	Prime
21 25-49	125,306	34	162	11.53	.13	10.75-12.13	89.9	1.1	Prime
22 50-99	251,836	67	158	11.42	.12	10.75-12.00	90.8	2.3	Prime
23 100-499	1,089,944	201	160	11.12	.06	10.47-11.63	89.3	4.5	Prime
24 500-999	628,414	663	161	10.84	.07	10.47-11.50	91.8	9.7	Prime
25 1000 and over	8,226,173	5,184	102	9.91	.37	8.68-11.02	79.4	7.3	Prime
			Months						
26 Total long term	2,702,411	886	40	10.57	.26	9.42-11.57	92.1	12.1	Prime
27 Fixed rate (thousands of dollars)	471,544	1,072	45	9.60	.51	8.36-10.96	89.0	4.5	Other
28 1-99	7,483	26	48	11.57	.33	10.69-12.46	38.5	2.5	None
29 100-499	13,547	245	62	10.30	.23	9.73-10.51	60.7	14.4	None
30 500-999	13,449	704	55	11.08	.28	10.47-11.44	71.9	.0	Prime
31 1000 and over	437,066	5,399	44	9.49	.65	8.36-10.77	91.2	4.4	Other
32 Floating rate (thousands of dollars) ...	2,230,867	855	39	10.78	.27	10.00-11.85	92.8	13.8	Prime
33 1-99	36,922	38	34	11.86	.17	11.02-12.55	79.4	7.2	Prime
34 100-499	221,859	231	40	11.24	.12	10.47-11.85	83.7	11.5	Prime
35 500-999	175,639	669	36	11.11	.12	10.47-11.73	86.7	18.6	Prime
36 1000 and over	1,796,447	4,309	39	10.67	.31	10.00-11.63	94.8	13.7	Prime
			Days	Loan rate (percent)		Prime rate ¹⁰			
				Effective ³	Nominal ⁹				
LOANS MADE BELOW PRIME ¹¹									
37 Overnight ⁷	7,036,229	7,689	*	8.88	8.51	10.00	69.5	5.8	
38 One month and under	6,037,689	6,204	16	8.88	8.52	10.00	80.3	5.7	
39 Over one month and under a year	4,152,477	4,711	123	9.07	8.77	10.00	90.1	13.4	
40 Demand ⁸	2,576,793	2,749	*	8.79	8.57	10.00	55.8	3.5	
41 Total short term	19,803,187	5,342	36	8.91	8.57	10.00	75.3	7.1	
42 Fixed rate	15,123,677	5,780	21	8.93	8.58	10.00	75.3	8.1	
43 Floating rate	4,679,510	4,292	100	8.84	8.56	10.00	75.3	3.7	
			Months						
44 Total long term	773,271	2,779	42	8.84	8.59	10.00	94.6	12.9	
45 Fixed rate	309,570	3,116	46	8.75	8.60	10.00	96.8	16.7	
46 Floating rate	463,701	2,592	39	8.90	8.58	10.00	93.1	10.3	

For notes see end of table.

4.23—Continued

A. Commercial and Industrial Loans—Continued

Characteristic	Amount of loans (thousands of dollars)	Average size (thousands of dollars)	Weighted average maturity ²	Loan rate (percent)			Loans made under commitment (percent)	Participation loans (percent)	Most common base pricing rate ⁶
				Days	Weighted average effective ³	Standard error ⁴				Inter-quartile range^{5}
OTHER BANKS									
1 Overnight ⁷	1,891,186	2,740	*	8.63	.08	8.39–8.86	99.5	2.1	Fed Funds
2 One month and under	2,719,182	330	20	9.29	.13	8.61–9.50	87.0	10.1	Domestic
3 Fixed rate	2,322,001	435	19	9.05	.10	8.57–9.46	88.5	11.2	Domestic
4 Floating rate	397,181	137	23	10.68	.23	9.33–11.58	78.0	3.9	Prime
5 Over one month and under a year	4,947,827	77	172	10.58	.32	9.08–11.76	68.0	7.1	Prime
6 Fixed rate	2,068,077	73	146	10.00	.39	8.87–11.57	61.5	8.5	Other
7 Floating rate	2,879,750	81	191	10.99	.27	10.47–11.85	72.7	6.1	Prime
8 Demand ⁸	5,103,734	128	*	10.85	.12	10.25–11.63	90.2	5.0	Prime
9 Fixed rate	764,580	178	*	9.76	.41	8.84–10.47	75.3	.4	Other
10 Floating rate	4,339,154	122	*	11.04	.14	10.47–11.63	92.9	5.8	Prime
11 Total short term	14,661,928	130	95	10.18	.08	8.79–11.43	83.3	6.3	Prime
12 Fixed rate (thousands of dollars)	7,045,844	183	55	9.29	.14	8.49–9.53	82.1	6.8	Other
13 1–24	186,459	6	129	12.57	.16	11.57–13.31	26.1	.0	Other
14 25–49	91,776	33	129	11.54	.29	11.07–12.57	23.0	3.3	Other
15 50–99	144,850	62	134	11.73	.34	11.30–12.75	28.7	.4	Other
16 100–499	515,864	181	123	11.33	.12	10.50–12.19	45.8	15.5	Other
17 500–999	246,444	640	93	10.47	.37	9.11–12.06	79.6	3.3	Prime
18 1000 and over	5,860,451	5,098	44	8.86	.13	8.45–9.11	89.4	6.6	Fed Funds
19 Floating rate (thousands of dollars)	7,616,084	102	170	11.00	.14	10.47–11.80	84.5	5.8	Prime
20 1–24	362,352	9	173	12.26	.07	11.57–12.75	74.3	.8	Prime
21 25–49	416,130	35	151	11.98	.06	11.36–12.68	76.7	3.2	Prime
22 50–99	612,371	66	178	11.70	.07	11.03–12.19	82.0	4.4	Prime
23 100–499	2,231,941	195	157	11.46	.06	10.75–12.13	85.5	9.2	Prime
24 500–999	1,038,732	646	220	11.19	.15	10.47–12.13	86.5	7.9	Prime
25 1000 and over	2,954,558	2,984	164	10.15	.17	9.14–10.93	85.8	3.9	Prime
			Months						
26 Total long term	1,770,351	97	64	11.19	.13	10.47–11.91	59.7	11.0	Prime
27 Fixed rate (thousands of dollars)	832,120	79	71	10.95	.20	9.96–11.63	45.1	4.1	Prime
28 1–99	178,746	19	54	12.33	.17	11.49–13.24	13.0	6.3	Other
29 100–499	157,094	183	150	11.37	.20	11.02–11.91	39.0	3.6	None
30 500–999	8,535	602	43	11.14	.71	10.57–11.57	45.4	.0	Prime
31 1000 and over	487,745	3,354	53	10.31	.27	9.11–11.35	58.9	3.4	Prime
32 Floating rate (thousands of dollars)	938,231	121	58	11.40	.16	10.52–12.13	72.5	17.2	Prime
33 1–99	153,421	24	46	12.11	.11	11.30–12.75	53.7	3.4	Prime
34 100–499	220,719	201	80	11.27	.18	10.47–11.63	60.8	16.4	Prime
35 500–999	80,076	658	45	10.90	.17	10.50–11.57	80.3	7.4	Prime
36 1000 and over	484,015	1,957	54	11.31	.27	10.52–12.19	82.6	23.5	Prime
			Days	Loan rate (percent)		Prime rate ¹⁰			
				Effective ³	Nominal ⁹				
LOANS MADE BELOW PRIME ¹¹									
37 Overnight ⁷	1,859,502	6,121	*	8.59	8.24	10.00	99.6	2.2	
38 One month and under	2,417,469	3,101	19	8.97	8.61	10.01	90.0	11.4	
39 Over one month and under a year	1,945,991	216	168	8.98	8.65	10.24	79.7	9.9	
40 Demand ⁸	1,330,516	481	*	9.30	8.95	10.26	92.4	5.7	
41 Total short term	7,553,478	588	60	8.94	8.59	10.11	90.2	7.7	
42 Fixed rate	6,002,475	827	45	8.82	8.48	10.05	88.3	7.5	
43 Floating rate	1,551,003	278	167	9.39	9.01	10.33	97.3	8.6	
			Months						
44 Total long term	389,666	132	66	9.75	9.34	10.48	71.0	12.7	
45 Fixed rate	280,985	142	42	9.47	9.07	10.30	80.5	9.9	
46 Floating rate	108,682	111	129	10.50	10.03	10.92	46.6	19.9	

For notes see end of table.

4.23 TERMS OF LENDING AT COMMERCIAL BANKS Survey of Loans Made, November 5-9, 1990—Continued

B. Loans to Farmers¹²

Characteristic	Size class of loans (thousands)						
	All sizes	\$1-9	\$10-24	\$25-49	\$50-99	\$100-249	\$250 and over
ALL BANKS							
1 Amount of loans (thousands of dollars).....	\$ 1,949,950	\$ 126,966	\$ 157,314	\$ 190,582	\$ 227,141	\$ 220,261	\$ 1,027,687
2 Number of loans.....	55,958	34,346	10,440	5,373	3,351	1,544	905
3 Weighted average maturity (months) ²	8.5	6.5	8.9	7.9	14.2	27.4	3.5
4 Weighted average interest rate (percent) ³	11.51	12.53	12.31	12.15	11.88	11.67	11.03
5 Standard error ⁴.....	.67	.22	.38	.32	.19	.30	1.25
6 Interquartile range ⁵	10.52-12.19	12.01-13.01	11.63-12.89	11.57-12.75	11.35-12.47	11.00-12.19	10.52-11.85
<i>By purpose of loan</i>							
7 Feeder livestock.....	11.62	12.56	12.22	12.01	11.95	11.61	11.40
8 Other livestock.....	12.23	12.83	12.41	12.49	12.18	12.24	11.85
9 Other current operating expenses.....	11.74	12.45	12.32	12.27	11.60	11.46	11.09
10 Farm machinery and equipment.....	12.35	12.67	12.53	12.28	*	*	*
11 Farm real estate.....	11.50	12.51	11.82	11.50	11.29	*	*
12 Other.....	10.78	12.51	12.47	12.21	12.16	11.31	10.52
<i>Percentage of amount of loans</i>							
13 With floating rates.....	58.5	54.4	48.6	55.3	57.9	85.7	55.4
14 Made under commitment.....	63.0	51.8	54.4	60.3	53.3	69.6	66.9
<i>By purpose of loan</i>							
15 Feeder livestock.....	33.2	10.5	17.2	32.2	41.5	38.7	35.5
16 Other livestock.....	8.4	12.5	13.5	8.3	16.1	13.8	4.3
17 Other current operating expenses.....	25.7	64.2	45.7	38.1	17.8	27.5	17.0
18 Farm machinery and equipment.....	2.3	6.6	10.0	5.9	*	*	*
19 Farm real estate.....	6.6	1.7	6.8	6.1	9.1	*	*
20 Other.....	23.9	4.6	6.9	9.4	12.2	8.6	37.4
LARGE FARM LENDERS¹²							
1 Amount of loans (thousands of dollars).....	\$ 1,192,264	\$ 15,505	\$ 31,472	\$ 44,314	\$ 61,036	\$ 110,503	\$ 929,429
2 Number of loans.....	9,480	3,850	2,091	1,260	903	721	654
3 Weighted average maturity (months) ²	3.7	7.1	7.0	7.9	8.0	7.0	2.6
4 Weighted average interest rate (percent) ³	11.11	12.17	11.92	11.76	11.68	11.33	10.98
5 Standard error ⁴.....	.65	.21	.38	.28	.10	.21	1.12
6 Interquartile range ⁵	10.52-11.85	11.58-12.75	11.39-12.47	11.20-12.19	11.07-12.19	10.66-11.76	10.52-11.57
<i>By purpose of loan</i>							
7 Feeder livestock.....	11.48	12.17	11.94	11.88	11.72	11.51	11.42
8 Other livestock.....	11.39	12.17	11.87	11.48	11.91	11.26	*
9 Other current operating expenses.....	11.21	12.19	11.95	11.72	11.59	11.13	11.00
10 Farm machinery and equipment.....	12.13	12.69	12.17	*	*	*	*
11 Farm real estate.....	11.60	11.70	11.89	11.70	*	*	*
12 Other.....	10.59	12.09	11.78	11.66	11.39	11.18	10.52
<i>Percentage of amount of loans</i>							
13 With floating rates.....	61.4	83.5	84.4	90.7	87.7	95.0	53.2
14 Made under commitment.....	68.9	80.8	77.8	81.6	75.7	82.9	65.7
<i>By purpose of loan</i>							
15 Feeder livestock.....	34.7	16.0	21.6	34.7	41.9	41.1	34.2
16 Other livestock.....	2.0	2.8	4.4	2.5	6.6	7.0	*
17 Other current operating expenses.....	22.8	59.1	50.9	40.0	30.9	38.4	17.9
18 Farm machinery and equipment.....	.4	4.8	2.6	*	*	*	*
19 Farm real estate.....	5.3	4.0	6.9	7.8	*	*	*
20 Other.....	34.8	13.4	13.5	13.7	10.8	10.4	41.3
OTHER BANKS¹²							
1 Amount of loans (thousands of dollars).....	\$ 757,686	\$ 111,461	\$ 125,843	\$ 146,268	\$ 166,106	\$ 109,752	\$ 98,257
2 Number of loans.....	46,479	30,496	8,348	4,113	2,448	823	251
3 Weighted average maturity (months) ²	14.4	6.4	9.2	7.9	15.8	44.2	12.8
4 Weighted average interest rate (percent) ³	12.14	12.58	12.41	12.27	11.96	12.01	11.54
5 Standard error ⁴.....	.10	.05	.04	.14	.16	.21	.52
6 Interquartile range ⁵	11.51-12.75	12.08-13.03	11.83-12.97	11.63-12.86	11.46-12.47	11.27-12.66	10.72-12.19
<i>By purpose of loan</i>							
7 Feeder livestock.....	11.88	12.65	12.31	12.06	12.04	11.73	*
8 Other livestock.....	12.37	12.85	12.45	12.57	12.22	*	*
9 Other current operating expenses.....	12.37	12.48	12.42	12.44	11.60	*	*
10 Farm machinery and equipment.....	12.37	12.67	12.55	12.31	*	*	*
11 Farm real estate.....	11.40	12.84	11.81	*	*	*	*
12 Other.....	12.38	12.75	12.92	12.49	*	*	*

For notes see end of table.

4.23—Continued

B. Loans to Farmers¹²—Continued

Characteristic	Size class of loans (thousands)						
	All sizes	\$1-9	\$10-24	\$25-49	\$50-99	\$100-249	\$250 and over
<i>Percentage of amount of loans</i>							
13 With floating rates	53.8	50.4	39.6	44.6	47.0	76.4	*
14 Made under commitment	53.6	47.7	48.5	53.8	45.1	56.2	*
<i>By purpose of loan</i>							
15 Feeder livestock	30.7	9.7	16.1	31.5	41.4	36.2	*
16 Other livestock	18.4	13.9	15.8	10.0	19.6	*	*
17 Other current operating expenses	30.3	64.9	44.4	37.6	13.0	*	*
18 Farm machinery and equipment	5.2	6.9	11.8	7.3	*	*	*
19 Farm real estate	8.7	1.3	6.7	*	*	*	*
20 Other	6.7	3.4	5.2	8.1	*	*	*

*Fewer than 10 sample loans.

1. The survey of terms of bank lending to business collects data on gross loan extensions made during the first full business week in the mid-month of each quarter by a sample of 340 commercial banks of all sizes. A sample of 250 banks reports loans to farmers. The sample data are blown up to estimate the lending terms at all insured commercial banks during that week. The estimated terms of bank lending are not intended for use in collecting the terms of loans extended over the entire quarter or residing in the portfolios of those banks. Mortgage loans, purchased loans, foreign loans, and loans of less than \$1,000 are excluded from the survey.

As of Dec. 31, 1989, assets of most of the large banks were at least \$7.0 billion. For all insured banks total assets averaged \$250 million.

2. Average maturities are weighted by loan size and exclude demand loans.

3. Effective (compounded) annual interest rates are calculated from the stated rate and other terms of the loan and weighted by loan size.

4. The chances are about two out of three that the average rate shown would differ by less than this amount from the average rate that would be found by a complete survey of lending at all banks.

5. The interquartile range shows the interest rate range that encompasses the middle 50 percent of the total dollar amount of loans made.

6. The most common base rate is that rate used to price the largest dollar

volume of loans. Base pricing rates include the prime rate (sometimes referred to as a bank's "basic" or "reference" rate); the federal funds rate; domestic money market rates other than the federal funds rate; foreign money market rates; and other base rates not included in the foregoing classifications.

7. Overnight loans are loans that mature on the following business day.

8. Demand loans have no stated date of maturity.

9. Nominal (not compounded) annual interest rates are calculated from survey data on the stated rate and other terms of the loan and weighted by loan size.

10. The prime rate reported by each bank is weighted by the volume of loans extended and then averaged.

11. The proportion of loans made at rates below prime may vary substantially from the proportion of such loans outstanding in banks' portfolios.

12. Among banks reporting loans to farmers (Table B), most "large banks" (survey strata 1 to 2) had over \$20 million in farm loans, and most "other banks" (survey strata 3 to 5) had farm loans below \$20 million.

The survey of terms of bank lending to farmers now includes loans secured by farm real estate. In addition, the categories describing the purpose of farm loans have now been expanded to include "purchase or improve farm real estate." In previous surveys, the purpose of such loans was reported as "other."

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How to Determine the Credit Needs of Your Community

Regulation Z: The Right of Rescission

The Right to Financial Privacy Act

Signature Rules in Community Property States: Regulation B

Signature Rules: Regulation B
 Timing Requirements for Adverse Action Notices: Regulation B
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Staff Studies 114–145 are out of print.

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159. NEW DATA ON THE PERFORMANCE OF NONBANK SUBSIDIARIES OF BANK HOLDING COMPANIES, by Nellie Liang and Donald Savage. February 1990. 12 pp.
160. BANKING MARKETS AND THE USE OF FINANCIAL SERVICES BY SMALL AND MEDIUM-SIZED BUSINESSES, by Gregory E. Elliehausen and John D. Wolken. September 1990. 35 pp.

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Some Bulletin articles are reprinted. The articles listed below are those for which reprints are available. Most of the articles reprinted do not exceed twelve pages.

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 U.S. Exchange Rate Policy: Bretton Woods to Present. 11/90.
 The Transmission Channels of Monetary Policy: How Have They Changed? 12/90.

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Federal Reserve Banks, Branches, and Offices

FEDERAL RESERVE BANK branch, or facility	Zip	Chairman Deputy Chairman	President First Vice President	Vice President in charge of branch
BOSTON*	02106	Richard N. Cooper Vacancy	Richard F. Syron Robert W. Eisenmenger	
NEW YORK*	10045	Cyrus R. Vance Ellen V. Futter	E. Gerald Corrigan James H. Oltman	James O. Aston
Buffalo	14240	Mary Ann Lambertsen		
PHILADELPHIA	19105	Peter A. Benoliel Jane G. Pepper	Edward G. Boehne William H. Stone, Jr.	
CLEVELAND*	44101	John R. Miller A. William Reynolds	W. Lee Hoskins William H. Hendricks	
Cincinnati	45201	Kate Ireland		Charles A. Cerino ¹
Pittsburgh	15230	Robert P. Bozzone		Harold J. Swart ¹
RICHMOND*	23219	Anne Marie Whittemore Henry J. Faison	Robert P. Black Jimmie R. Monhollon	
Baltimore	21203	John R. Hardesty, Jr.		Ronald B. Duncan ¹
Charlotte	28230	Anne M. Allen		Albert D. Tinkelenberg ¹
<i>Culpeper Communications and Records Center 22701</i>				John G. Stoides ¹
ATLANTA	30303	Larry L. Prince Edwin A. Huston	Robert P. Forrestal Jack Guynn	Donald E. Nelson ¹
Birmingham	35283	Roy D. Terry		Fred R. Herr ¹
Jacksonville	32231	Hugh H. Brown		James D. Hawkins ¹
Miami	33152	Dorothy C. Weaver		James T. Curry III
Nashville	37203	Shirley A. Zeitlin		Melvyn K. Purcell
New Orleans	70161	James A. Hefner		Robert J. Musso
CHICAGO*	60690	Charles S. McNeer Richard G. Cline	Silas Keehn Daniel M. Doyle	
Detroit	48231	Phyllis E. Peters		Roby L. Sloan ¹
ST. LOUIS	63166	H. Edwin Trusheim Robert H. Quenon	Thomas C. Melzer James R. Bowen	
Little Rock	72203	Wm. Earle Love		Karl W. Ashman
Louisville	40232	Lois H. Gray		Howard Wells
Memphis	38101	Katherine H. Smythe		Ray Laurence
MINNEAPOLIS	55480	Delbert W. Johnson Gerald A. Rauenhorst	Gary H. Stern Thomas E. Gainor	
Helena	59601	James E. Jenks		John D. Johnson
KANSAS CITY	64198	Fred W. Lyons, Jr. Burton A. Dole, Jr.	Roger Guffey Henry R. Czerwinski	
Denver	80217	Barbara B. Grogan		Kent M. Scott
Oklahoma City	73125	Ernest L. Holloway		David J. France
Omaha	68102	Herman Cain		Harold L. Shewmaker
DALLAS	75222	Hugh G. Robinson Leo E. Linbeck, Jr.	Robert D. McTeer, Jr. To be announced	Tony J. Salvaggio ¹
El Paso	79999	W. Thomas Beard, III		Sammie C. Clay
Houston	77252	Gilbert D. Gaedcke, Jr.		Robert Smith, III ¹
San Antonio	78295	Roger R. Hemminghaus		Thomas H. Robertson
SAN FRANCISCO	94120	Robert F. Erburu Carolyn S. Chambers	Robert T. Parry Carl E. Powell	
Los Angeles	90051	Yvonne B. Burke		Thomas C. Warren ²
Portland	97208	William A. Hilliard		Angelo S. Carella ¹
Salt Lake City	84125	D.N. Rose		E. Ronald Liggett ¹
Seattle	98124	Bruce R. Kennedy		Gerald R. Kelly ¹

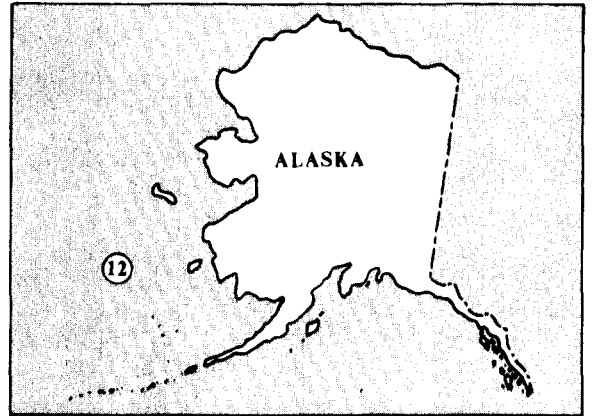
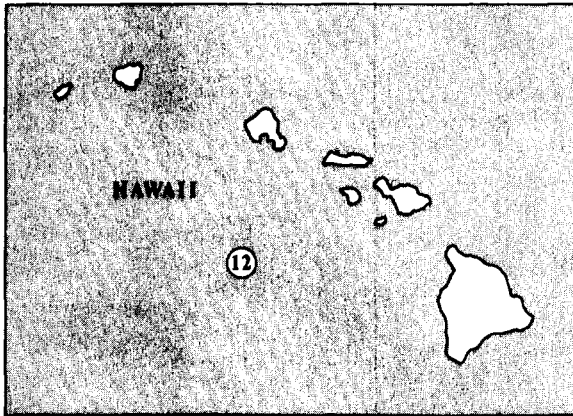
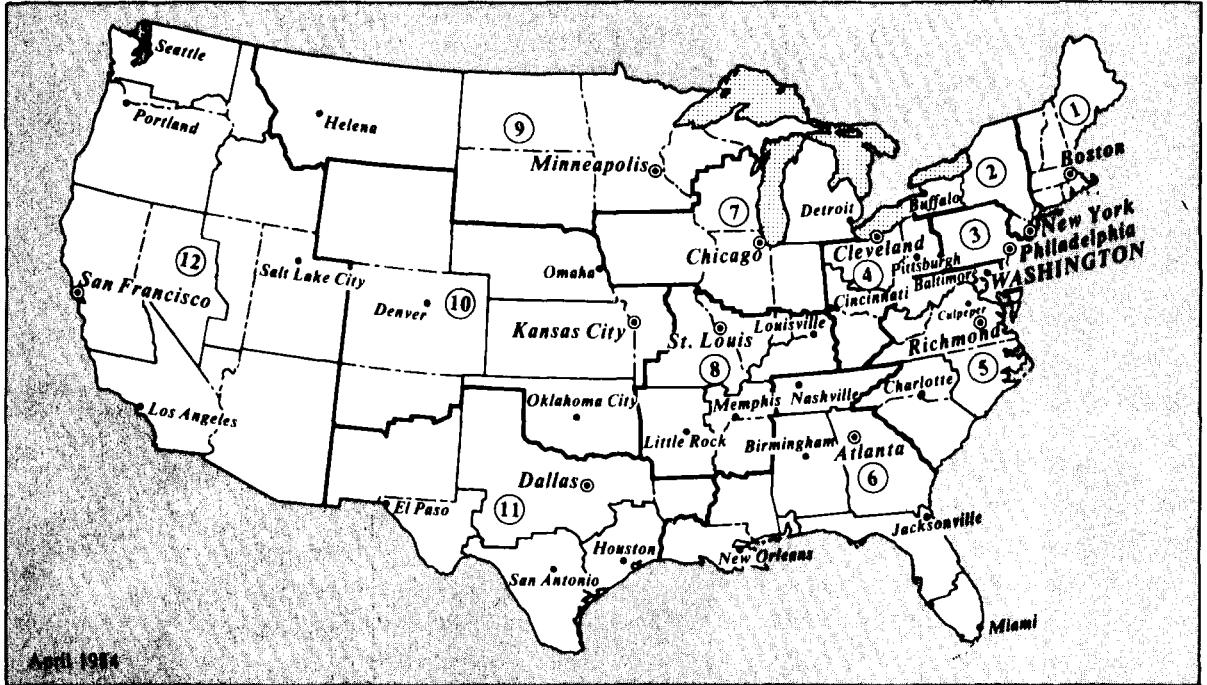
*Additional offices of these Banks are located at Lewiston, Maine 04240; Windsor Locks, Connecticut 06096; Cranford, New Jersey 07016; Jericho, New York 11753; Utica at Oriskany, New York 13424; Columbus, Ohio 43216; Columbia, South Carolina 29210; Charleston, West Virginia 25311; Des Moines, Iowa 50306; Indianapolis, Indiana 46204; and Milwaukee, Wisconsin 53202.

1. Senior Vice President.

2. Executive Vice President.

The Federal Reserve System

Boundaries of Federal Reserve Districts and Their Branch Territories



LEGEND

— Boundaries of Federal Reserve Districts

— Boundaries of Federal Reserve Branch Territories

★ Board of Governors of the Federal Reserve System

● Federal Reserve Bank Cities

• Federal Reserve Branch Cities

· Federal Reserve Bank Facility