MONETARY POLICY

AND

OPEN MARKET OPERATIONS

DURING 1994

A Report Prepared for the Federal Open Market Committee
by the Open Market Function
of the Federal Reserve Bank of New York
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TABLE OF CONTENTS

	Page
LIST OF TABLES	iii
LIST OF CHARTS	v
NOTES TO CHARTS	vi
SECTIONS	
I. Introduction	1
II. Monetary Policy and Financial Market Response	2
III. Implementation of Policy	9
APPENDIXES	
A. Desk Activity for the System Open Market Account	A-1
B. The Monetary Aggregates	B-1
C. Desk Activity for Customer Accounts	C-1
D. Developments among Primary Dealers	D-1
E. Statistical Summary	E-1
F. Summary of Policy Guides and Actions	F-1

LIST OF TABLES

(Tables appear following the page indicated, except in Appendix E)

Table		Page
1	Specifications from Directives of the Federal Open Market Committee and Related Information	2
2	Output and Prices	3
3	Measures of Performance and Activity in Domestic Securities Markets	8
A-1	Bank Reserves and Factors Affecting Reserves	A-1
A-2	System Outright Operations	A-1
A-3	System Portfolio: Summary of Holdings	A-1
A-4	System Portfolio of Treasury and Agency Securities	A-1
A-5	Weighted Average Maturity of Marketable Treasury Debt	A-1
A-6	System Temporary Transactions	A-1
A-7	Approximate Mean Absolute Forecast Errors for Various Forecasts of Reserves and Operating Factors	A-1
A-8	Federal Reserve Lending of Treasury Securities to Primary Dealers	A-3
A-9	Dollar Volume of Transactions Executed by Trading Desk 1994 and 1993	A-3
C-1	Dollar Volume of Transactions for Accounts Other Than the System	C-1
C-2	Number of Transactions Processed for Customer Accounts	C-3
C-3	Transactions in 1994 on Behalf of Customers of the Federal Reserve with Dealers and Brokers	C-3
D-1	List of the Primary Government Securities Dealers	D-2
	Operations in United States Government Securities and Federal Agency Securities	E-1
	Transactions Between Federal Reserve and Government Security Dealers - 1994	E-2

Table	Page
U.S. Treasury and Federal Agency Security Holdings in System Open Market Account	E-3
Holdings of Treasury Bills by the System Open Market Account	E-4
Participation in the System Open Market Account	E-5
System Account Earnings	E-5
Market Value of Portfolio	E-6
Repurchase Agreements Against U.S. Government and Federal Agency Securities-Federal Reserve Bank of New York	E-7
Matched Transactions-System Open Market Account	E-7
Customer-Related Transactions	E-7

LIST OF CHARTS
(Charts appear following the page indicated)

Chart		Page
1	Yield Curves for Selected U.S. Treasury Securities	6
2	Short-Term Interest Rates	6
3	Long-Term Interest Rates	6
4	Implied Volatility of Treasury Bond Futures Prices	9
5	Borrowing, Federal Funds Rate, and Discount Rate	11
6	Seasonal Borrowing	12
7	Required Operating Balances	17
B-1	M2: Levels and Targets M3: Levels and Targets M1: Levels Domestic Nonfinancial Debt: Levels and Monitoring Ranges	B-1

NOTES TO CHARTS

Chart 1: **Yield Curves for Selected U.S. Treasury Securities**

Yields on issues dated within one year are bond-equivalent yields on Treasury bills, based on offering prices. Longer maturity yields are constant maturity values.

Chart 2: **Short-Term Interest Rates**

Three-month Treasury bill rates are bank discount rates in the secondary market (Wednesday weekly averages). The two-year Treasury note yields are constant maturity values. Federal Reserve discount rates are those in effect on Wednesdays at the Federal Reserve Bank of New York. Commercial paper rates are 90-day rates (Wednesday weekly averages). Federal funds rates are the average effective rate (Wednesday weekly averages).

Chart 3: **Long-Term Interest Rates**

Yields include Moody's Indexes of Aaa-rated corporate and municipal bond yields (Wednesday weekly averages). The bonds used to derive the indexes have average maturities of 20 years. The ten-year Treasury note and 30-year Treasury bond yields are constant maturity values. The two-year Treasury note yields are constant maturity values, and are included for comparison purposes.

Chart 4: **Implied Volatility of Treasury Bond Futures Prices**

The chart presents the monthly average of daily implied annual Treasury bond future price volatility for at-the-money call options for the near-month futures contract.

Chart 5: **Borrowing, Federal Funds Rate, and Discount Rate**

Adjustment and seasonal borrowing levels, as well as the Federal funds and discount rates, are maintenance period averages. The data are not seasonally adjusted.

Chart 5: **Seasonal Borrowing**

Seasonal borrowing levels are maintenance period averages and are not seasonally adjusted.

Chart 7: **Required Operating Balances**

Required operating balances at the Federal Reserve are the sum of required reserve balances and required clearing balances. Required reserve balances are all reserves held at the Fed to meet reserve requirements. These balances are equal to the level of required reserves less applied vault cash. All data are maintenance period averages.

Chart B-1: **M2: Levels and Targets**

M2 consists of M1, 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, savings deposits (including money market deposit accounts), small-denomination time deposits (those in amounts less than $100,000), retail RPs, and balances in both taxable and tax-exempt general purpose and broker/dealer money market mutual funds; M2 excludes individual retirement accounts and Keogh balances at depository institutions and at money market funds. It 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. The chart is based on seasonally adjusted data available as of January 26, 1995. The target ranges are for Q4 1992 to Q4 1993 and Q4 1993 to Q4 1994.

M3: Levels and Targets

M3 consists of M2, large-denomination time deposits (those in amounts of $100,000 or more), term RP liabilities 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. M3 excludes amounts of any component held by depository institutions, the U.S. Government, money market funds, and foreign banks and official institutions, or by institution-only money market mutual funds. The chart is based on seasonally adjusted data available as of January 26, 1995. The target ranges are for Q4 1992 to Q4 1993 and Q4 1993 to Q4 1994.

M1: Levels

M1 consists of currency held outside the U.S. Treasury, Federal Reserve Banks, and the vaults of depository institutions; travelers checks; 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 other interest bearing checkable deposits. The chart is based on seasonally adjusted data available as of January 26, 1995.

Domestic Nonfinancial Debt: Levels and Monitoring Ranges

Total domestic nonfinancial debt consists of the outstanding credit market debt of the U.S. Government, state and local governments, and private nonfinancial sectors. Private debt includes corporate bonds, mortgages, consumer credit (including bank loans), other bank loans, commercial paper, bankers' acceptances, and other debt instruments. The chart is based on seasonally adjusted data as of March 3, 1995. The monitoring ranges are for Q4 1992 to Q4 1993 and Q4 1993 to Q4 1994.

MONETARY POLICY AND OPEN MARKET OPERATIONS DURING 1994

I. Introduction

In 1994, the operating techniques for implementing monetary policy remained similar to those of recent years; however, the prompt announcement of the Federal Open Market Committee's policy actions gave the Trading Desk at the Federal Reserve Bank of New York slightly more flexibility in conducting open market operations because these operations were no longer used as the principal means of communicating the stance of policy. Most of the Desk's operations added reserves. Cumulative reserve needs were substantial for the fourth consecutive year, reflecting continued rapid currency expansion--in part the result of heavy shipments abroad. Nonetheless, reserve provision fell short of the previous record because monetary policy tightening and the responses by banks and the public weakened transactions deposits and reduced balances held at Federal Reserve Banks. For much of the year, aggregate reserve balances were above levels prevailing in the previous three years, giving banks more flexibility in managing reserves within a two-week maintenance period. The declines in reserve levels over the year, however, reduced balances, reintroducing the potential for operating difficulties associated with low balances by year-end.

The second section of the report briefly reviews the course of monetary policy in 1994 and describes the responses in the fixed-income securities markets to economic and policy developments. Monetary policy moved away from the accommodative stance that had been in place for some time as the robust pace of economic growth cut into remaining excess productive capacity. With the economy expanding rapidly and the Federal Reserve acting to reign in inflationary pressures, interest rates moved sharply higher and the yield curve flattened. The extent of the rise in yields took many market participants by surprise, contributing to losses and a few bankruptcies, particularly by accounts that were highly leveraged.

The final section discusses the implementation by the Open Market Trading Desk of the objectives established by the Federal Open Market Committee (FOMC). It reviews policy techniques and the factors affecting reserve supplies and demands over the year. In 1994, the Desk added a net $32 billion to its securities portfolio, the second biggest annual increase. Repurchase agreements, most with relatively short maturities, were used extensively to manage reserves within two-week reserve maintenance periods because they were well adapted to handle the short-term variation in reserve levels and the frequent revisions to estimated reserve needs. Pricing of daylight overdrafts, which began in April, had the potential to complicate policy implementation, but the actual effects on operations turned out to be minimal.

II. Monetary Policy and Financial Market Response

The Course of Monetary Policy

Monetary policy was formulated against a background of rapid economic growth and rising resource utilization but generally modest aggregate price increases. The FOMC increased reserve pressures at five of eight meetings and once between meetings, resulting in an increase of 2 1/2 percentage points in the Federal funds rate (Table 1). Asymmetric directives were adopted at the three meetings where no change was made to existing pressures to indicate that further increases in rates were likely. Meanwhile, the Board of Governors approved three increases in the discount rate totaling 1 3/4 percentage points. When determining the stance of policy, the Committee continued to

TABLE 1

SPECIFICATIONS FROM DIRECTIVES OF THE FEDERAL OPEN MARKET COMMITTEE AND RELATED INFORMATION

Date of Meeting	Specified Short-term Growth Rates (Percent) M2 M3	Discount Rate (Percent)	Borrowing Assumption for Deriving NBR Path (Millions of Dollars)	Associated Federal Funds Rate[1] (Percent)	Effect on Degree of Reserve Pressure	Guidelines for Modifying Reserve Pressure between Meetings[2]
12/21/93	Moderate growth over coming months	3	50	3	Maintain	Slightly greater reserve restraint or slightly lesser reserve restraint <u>might</u> be acceptable.
2/3 to 2/4/94	Moderate growth over the first half of the year	3	50 75 on 2/4†	3.25	Increase slightly	"
3/22/94	Moderate growth over the first half of the year	3	75 100 on 3/23† 125 on 4/18† 150 on 5/5* 175 on 5/12*	3.50 3.75 on 4/18	Increase slightly	"
5/17/94	Modest growth over coming months	3.50	175‡ 200 on 5/19* 225 on 5/26* 325 on 6/23*	4.25	Increase somewhat	"
7/5 to 7/6/94	Modest growth over coming months	3.50	325 375 on 7/7* 425 on 7/21* 450 on 7/28*	4.25	Maintain	Slightly greater reserve restraint <u>would</u> or slightly lesser reserve restraint <u>might</u> be acceptable.
8/16/94	Modest growth over coming months	4	450‡ 475 on 8/18* 500 on 8/25* 475 on 9/1*	4.75	Increase somewhat	Slightly greater reserve restraint or slightly lesser reserve restraint <u>would</u> be acceptable.
9/27/94	Modest growth over the balance of the year	4	475 450 on 10/6* 425 on 10/13* 375 on 10/20* 325 on 10/27* 275 on 11/3* 225 on 11/10*	4.75	Maintain	Somewhat greater reserve restraint <u>would</u> or slightly lesser reserve restraint <u>might</u> be acceptable.
11/15/94	Modest growth over coming months	4.75	225‡ 175 on 11/24* 125 on 12/8*	5.50	Increase significantly	Somewhat greater reserve restraint or somewhat lesser reserve restraint <u>would</u> be acceptable.
12/20/94	Modest growth over coming months	4.75	125	5.50	Maintain	Somewhat greater reserve restraint <u>would</u> or slightly lesser reserve restraint <u>might</u> be acceptable.

[1] The Federal funds rate trading area that is expected to be consistent with the borrowing assumption.

[2] Modifications to reserve pressures are evaluated "in the context of the Committee's long-run objectives for price stability and sustainable economic growth" and "giving careful consideration to economic, financial, and monetary developments."

* Change in borrowing assumption reflects technical adjustment to account for actual or prospective behavior of seasonal borrowing.

† Change in borrowing assumption reflects adjustment to reserve pressures.

‡ The assumption was unchanged because the full effect of the discount rate increase was allowed to show through to the market.

monitor a broad range of economic and financial indicators. Annual targets were still set for the broader monetary aggregates, but the FOMC placed limited weight on the aggregates because of the considerable uncertainty that persisted about the behavior of their velocities.[1]

Economic background

The economic expansion remained on solid footing throughout 1994, with personal consumption, business investment, and inventory accumulation the mainstays of growth (Table 2). Consumer outlays for durable goods were particularly robust. Producer durable equipment purchases remained buoyant for the third consecutive year. The rate of inventory investment picked up over the first two quarters, and it remained at relatively high levels for the balance of the year. The pace of expansion was slowed by developments in other sectors. Residential construction activity cooled off as the year progressed, government expenditures trended lower, and the trade balance remained a modest drag. By the end of the year, the rapid pace of output expansion had brought resource utilization rates up to levels associated historically with rising inflationary pressures. The unemployment rate fell to 5.4 percent in December, and the industry operating rate stood at 85.4 percent.

Although slack in the economy steadily diminished, aggregate price increases for final goods and services remained modest. Inflation as measured by the fixed-weight GDP deflator and consumer price index showed no deterioration, increases in producer prices remained low, and labor cost increases were restrained. Nonetheless, evidence accumulated that price

[1]The behavior of the monetary aggregates and the Committee's targets for them are discussed in Appendix B.

TABLE 2

Output and Prices

Seasonally Adjusted Annual Rates of Change, Except as Noted

Output

	1993	1994				1992-IV to	1993-IV to
	IV	I	II	III	IV	1993-IV	1994-IV
Real GDP	6.3	3.3	4.1	4.0	4.6	3.1	4.0
Change in inventory accumulation*	-2.2	14.6	33.8	-2.1	-9.0	4.2	37.3
Final Sales	6.4	2.2	1.5	4.3	5.3	3.0	3.3
Consumption	4.0	4.7	1.3	3.1	5.0	3.0	3.5
Durables	15.5	8.8	0.4	5.8	20.3	9.0	8.6
Nondurables	2.4	3.8	2.2	3.3	3.3	1.3	3.2
Services	2.0	4.0	1.1	2.2	2.1	2.5	2.3
Producers durable equipment	27.5	18.6	6.1	18.1	18.2	21.3	15.1
Nonresidential structures	3.3	-11.8	20.6	1.6	9.3	1.6	4.2
Residential fixed investment	28.2	10.0	7.0	-6.0	0.7	8.1	2.7
Change in net exports*	4.1	-21.8	-7.8	-5.2	7.4	-43.7	-27.4
Government purchases	-0.1	-4.9	-1.2	6.7	-3.8	-1.0	-0.9
Addenda							
Savings rate (percent of disposable income)	4.0	3.6	4.1	4.1	4.6	-2.2 #	0.6 #
Industrial production	5.3	7.0	6.2	4.9	5.7	3.6	5.9
Capacity utilization rate (level)	82.3	83.2	83.8	84.3	84.9	1.2 #	2.6 #
Civilian unemployment rate (level)	6.5	6.6	6.2	6.0	5.6	-0.8 #	-1.0 #
Change in nonfarm payroll employment (thousands)	608	613	1019	913	866	2235	3411
Change in manufacturing payroll	-9	31	47	59	102	-119	239

Prices

	1993 IV	1994 I	1994 II	1994 III	1994 IV	1992-IV to 1993-IV	1993-IV to 1994-IV
Consumer price index							
Total	3.3	2.1	2.6	3.6	2.2	2.7	2.6
Excluding food and energy	2.8	2.9	3.0	3.0	2.3	3.1	2.8
Producer price index							
Finished goods	-0.1	2.7	0.2	2.1	0.3	0.2	1.3
Excluding food and energy	-0.6	2.9	1.9	1.9	0.0	0.2	1.7
Intermediate goods	0.8	2.2	1.6	5.0	6.5	1.1	3.8
Implicit GDP deflator	1.3	2.9	2.9	1.9	1.3	1.8	2.3
Fixed-weight GDP index	2.6	2.9	3.2	2.8	2.8	2.8	2.9
Employment cost index	3.4	3.0	3.3	3.3	2.6	3.4	3.1

* Billions of 1987 dollars.
# Change in rate.

Data are as of March 3, 1995.

pressures could be intensifying. Producer price increases at the intermediate stage of production accelerated, and manufacturers increasingly reported paying higher prices for their inputs.

Policy initiatives

The initial monetary policy move came at the February FOMC meeting; it represented the first change in reserve conditions since September 1992 and the first move towards tightening since early 1989. A limited measure, associated with a 1/4 percentage point rise in the Federal funds rate, was adopted because of the likelihood that this first step towards firming in some time might be magnified in financial markets. At the same time, it was felt that this action would effectively signal the Committee's anti-inflation intentions.

In a departure from past practice, the Chairman issued a brief public statement announcing this decision in order to ensure a prompt and clear understanding of the Committee's actions by market participants. Similar brief statements were issued to announce each of the FOMC's policy changes during 1994.

The Committee raised reserve pressures by another 1/4 percentage point at its March meeting, again limiting the size of the move to avoid any overreaction in financial markets. A third slight upward adjustment in reserve pressures was made in mid-April between meetings. At its May meeting, with the economy evidently expanding on a self-sustaining basis, the FOMC voted to have the full 1/2 percentage point increase in the discount rate approved that day by the Board of Governors show through to reserve conditions. The Committee felt that financial markets were in a good position to absorb this more aggressive policy adjustment. The Federal Reserve press release announcing these moves stated that "these actions, combined with the three adjustments initiated earlier this year by the FOMC, substantially remove the degree of monetary accommodation that prevailed throughout 1993."

At the conclusion of the July FOMC meeting, at which no policy change was initiated, a press spokesman indicated that the meeting had adjourned and that no formal announcement would be made. In authorizing this step, the Committee recognized that the statement would be interpreted as indicating that no policy change had been adopted, a decision the Committee took to avoid uncertainty about its intentions. Similar statements were authorized following the other two Committee meetings at which no rate actions were taken.

The FOMC next raised reserve pressures at its August meeting when the full amount of a 1/2 percentage point hike in the discount rate approved by the Board that same day was passed through to reserve markets. A press statement indicated that "these measures were taken against the background of evidence of continuing strength in the economic expansion and high levels of resource utilization," and went on to add that "these actions are expected to be sufficient, at least for a time, to meet the objective of sustained, noninflationary growth."

The economy continued to display considerable forward momentum over the autumn, and there was some sense that past policy actions might be having less effect than expected, even in interest rate sensitive sectors. At the November meeting, the Committee agreed that a substantial firming in policy was appropriate, and it voted to pass through to reserve conditions the full effect of a 3/4 percentage point hike in the discount rate approved that day by the Board.

The public announcements of short-term policy actions were authorized on a case-by-case basis.[2] In February 1995, the Committee formally adopted new procedures for conveying information to the public that include the announcement of all changes in the stance of monetary policy on the day they are made.

Financial Market Developments

Interest rates across the maturity spectrum rose sharply in 1994. Yields on Treasury coupon securities ended the year from 150 to nearly 350 basis points higher, and by the year-end, the coupon yield curve had flattened substantially (Charts 1 through 3).

Yields rose dramatically in the first few months after the Federal Reserve began to tighten policy in early February. By mid-May, the yield on Treasury two-year notes had risen about 280 basis points, and the thirty-year bond yield was up over 110 basis points. Market analysts sensed that the economy retained significant forward momentum and that the Federal Reserve would respond forcefully to ward off inflationary pressures, which dramatically lifted rates on many short- and intermediate-term securities. A wide spread emerged between these yields and the Federal funds rate.

Longer term yields rose as investors grew anxious about whether the gains made in reducing inflation in recent years might begin to erode. Participants focused on the inflation risks posed by the shrinking degree of economic slack, and they were disturbed by evidence turning up in

[2]Most announcements of policy changes were made early in the afternoon shortly after the FOMC had completed its meeting. However, at the two-day meeting in February, the announcement was made in the morning on the second day, soon after the Committee made its decision. In that instance, the Committee preferred to make the information available before the weekend and ahead of the Desk's regular 11:30 a.m. operating time. The one action taken between meetings was also announced in the morning.

Chart 1
Yield Curves for Selected U.S. Treasury Securities

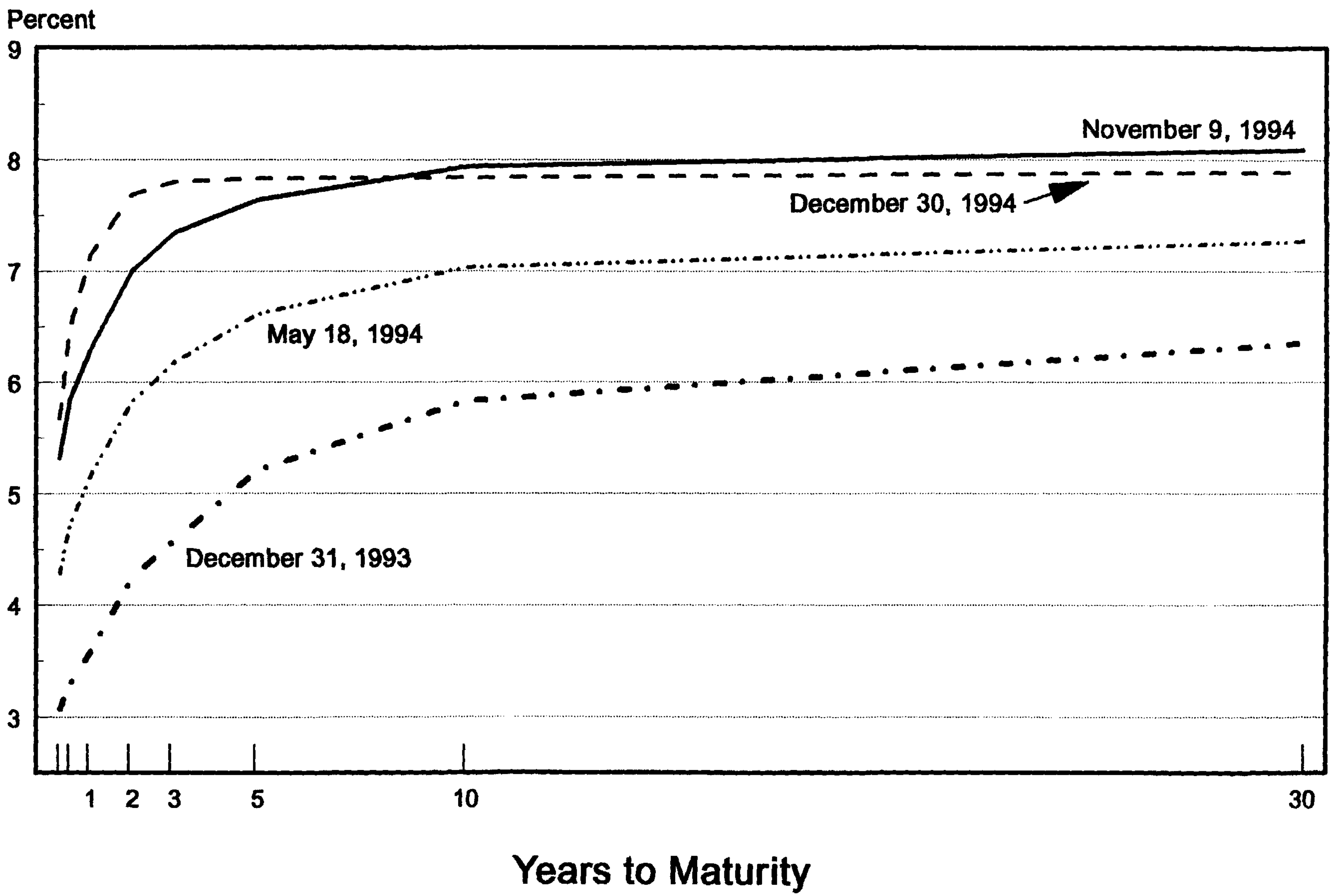


Chart 2
Short-Term Interest Rates

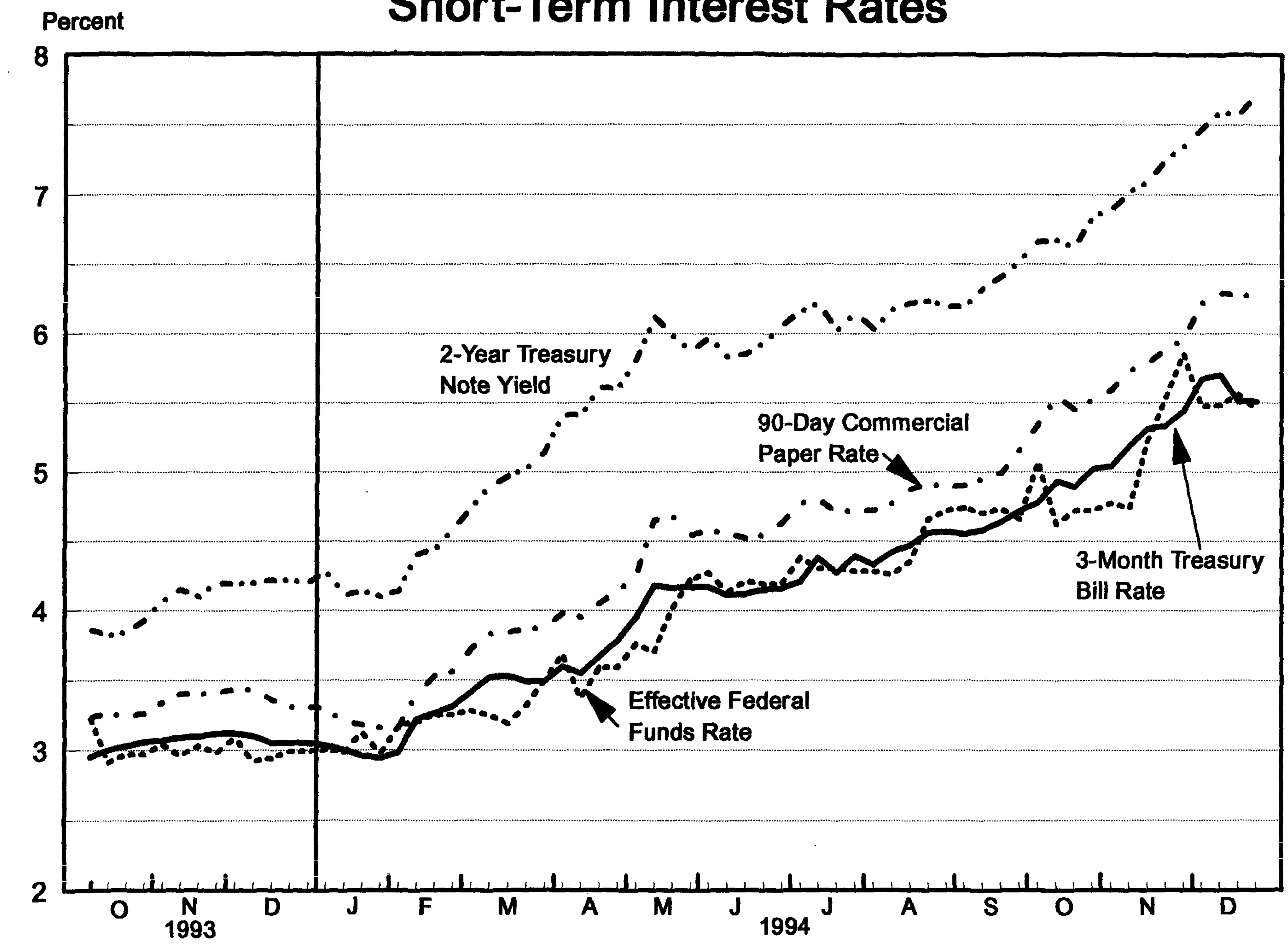
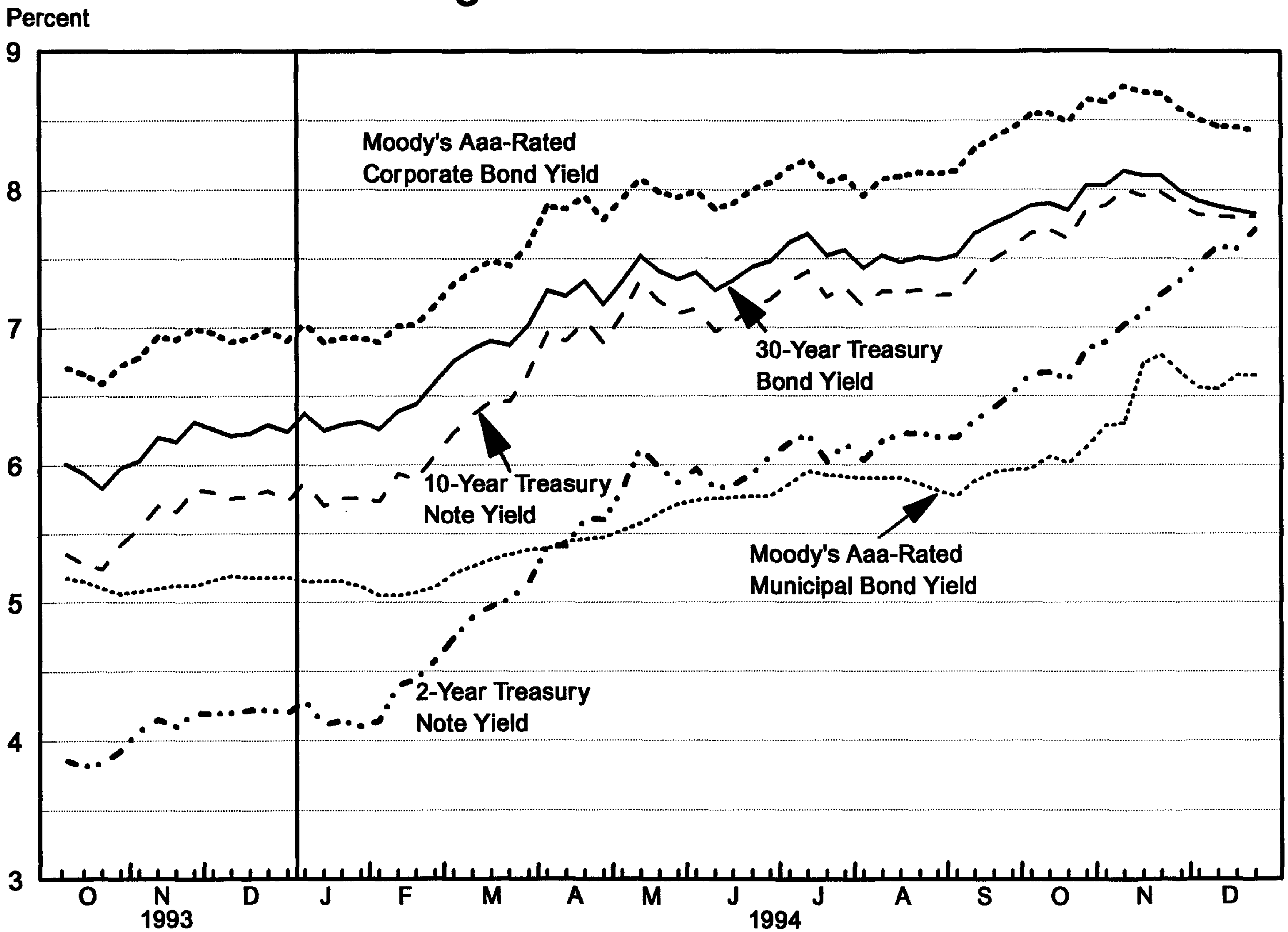


Chart 3
Long-Term Interest Rates



manufacturers' surveys and some commodity price movements that suggested an intensification of price pressures. Moves to higher interest rates in European countries and weakness in the dollar spilled back and reinforced the upward momentum in domestic yields. Rates on intermediate-term Treasury securities were pushed up further by hedging activity in the market for mortgage-backed debt, a sector that was particularly hard-hit by the move to higher yields.[3]

From mid-May through August, yields moved in a broad trading range. Large rate movements were often followed by abrupt reversals, leaving net changes generally small. Investors responded to economic data that presented a mixed picture. Episodes of dollar weakness continued to weigh on sentiment, as they did intermittently throughout the year. Meanwhile, the monetary policy adjustments in May and August were believed to have brought policy to a more neutral position, and both actions gave rise to brief rallies in the debt markets.

Interest rates at most maturities resumed their climb from September to early-November, rising another 65 to 85 basis points, driven largely by a spate of strong economic statistics. Measures of resource utilization notched higher, and a string of reports showing a resilient housing sector raised questions about the impact of previous interest rate hikes. Results of surveys of input price pressures faced by manufacturers continued to flash warning signals. By late autumn, the economy was felt to be bumping up against its long-run capacity limits, and many traders began to fear that the

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[3]Higher interest rates extended the expected durations of mortgage-backed securities, which compounded the downward pressure on prices for this debt. Mortgage-backed investors often hedge their exposures by selling intermediate-term Treasury debt.

Federal Reserve could be falling behind the need to reign in inflationary pressures. The yield on the most recently auctioned thirty-year Treasury bond breached 8 percent in late-October for the first time in over two years.

The final six weeks of the year beginning just ahead of the mid-November FOMC meeting were marked by a further flattening of the Treasury coupon yield curve. Short-term Treasury coupon yields rose another 65 basis points while long-term yields edged down about 20 basis points. The Committee's action at its November meeting, which market participants felt was aggressive, and continued strong economic statistics convinced most analysts that further policy tightening moves were in store, putting upward pressure on shorter term rates. Selling in the front-end of the yield curve was exacerbated by liquidations and hedging of portfolios that had been made unprofitable because of higher interest rates. Disposal of the securities held by the Orange County, California, Investment Pool after the steep financial losses suffered by that facility became known added to the pressure.[4] Meanwhile, the November policy action and continued favorable aggregate price statistics instilled renewed confidence that the Federal Reserve would succeed in preventing a significant deterioration in inflation, helping to bring down longer term yields.

The sharp increases in interest rates in 1994 had profound effects on investor returns, financial flows, and borrowers' issuance in fixed income markets (Table 3). As measured by the Lehman Brothers Long Treasury Bond Index, investors would have sustained net losses of 7 1/2 percent on a portfolio consisting of longer maturity securities, the first yearly decline

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[4]Roughly $20 billion of securities in the portfolio of the highly leveraged Orange County fund were sold. Most of these securities were Government agency notes, many of them so-called "structured notes."

TABLE 3

MEASURES OF PERFORMANCE AND ACTIVITY IN DOMESTIC SECURITIES MARKETS

	1994	1993
Portfolio returns (in percent)		
Longer run Treasury issues	-7.6%	17.3%
Bond mutual funds		
Long-term Treasury debt	-6.3	13.3
Intermediate-term Treasury debt	-3.9	10.0
Short-term Treasury debt	-0.9	6.1
Intermediate-term corporate debt	-3.3	9.8
High-yield corporate debt	-3.9	19.5
General municipal debt	-6.5	12.4
Gross Debt Issuance (in billions of dollars)		
Investment-grade corporate debt	$206	$314
Below investmemt-grade corporates	27	50
Municipal securities	153	280
Mortgage-backed securities	177	415
Financial Flows		
Net mutual bond fund inflows	-44	114

Sources: Returns on longer run Treasury issues are based on the Lehman Brothers Long Treasury Bond Index and reflect changes in principal value and coupon income. Returns for the various categories of mutual funds are from Lipper Analytical Services. Debt issuance data are from Securities Data Company. Data on mutual fund investment flows are from the Investment Company Institute.

in the index since 1987 and the steepest decline in the twenty-two years it spans. Other broad-based measures of financial returns paint a similar picture for a variety of markets. For example, total returns for all major categories of bond mutual funds turned negative in 1994, in many cases after posting strong earnings the previous year. Numerous instances where individual institutions suffered steep financial losses in domestic securities markets were reported throughout the year. In some cases, exposures to derivative instruments that magnified the effect of yield movements on interest payments exacerbated the losses.

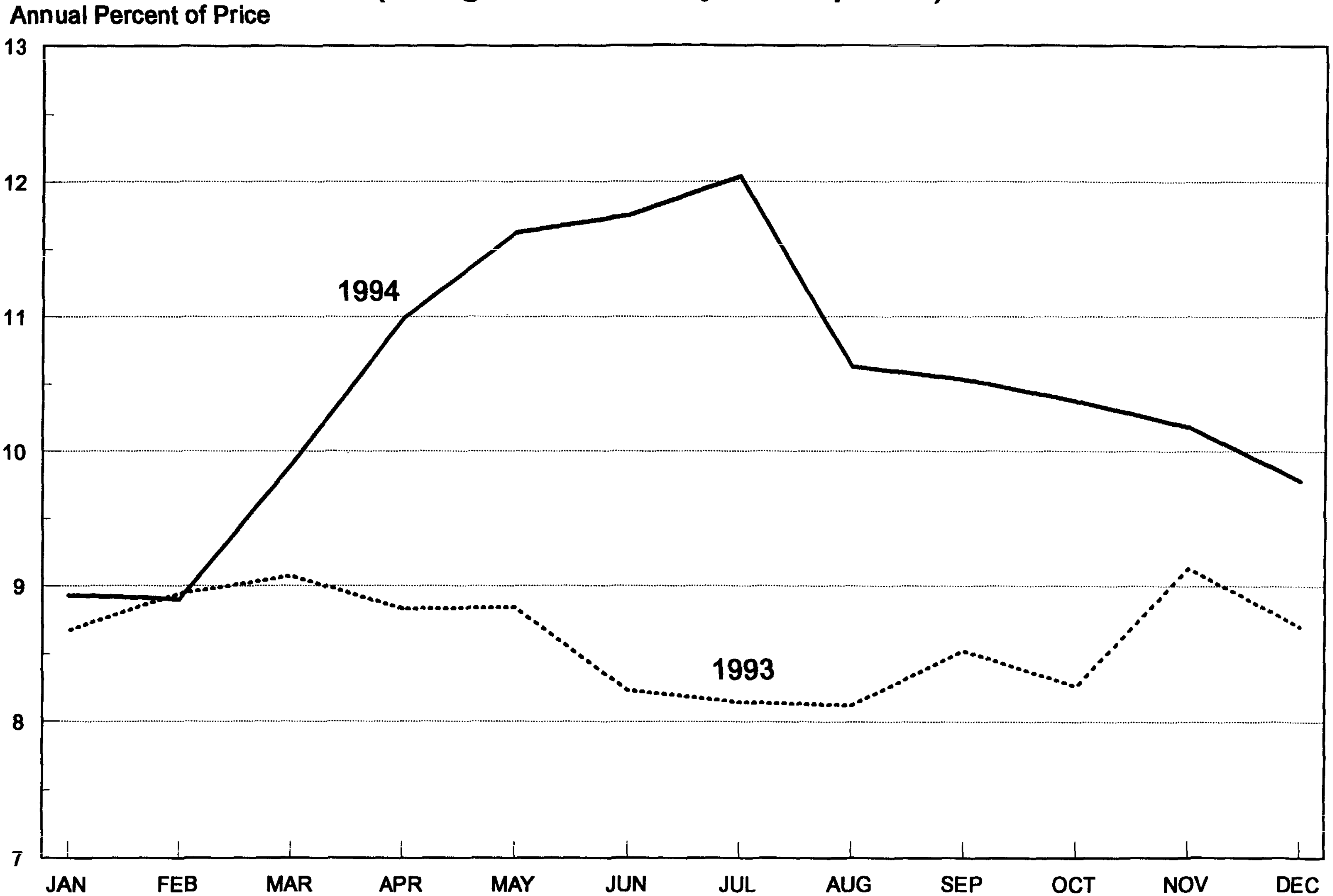
Efforts to eliminate exposures or to enhance returns in the rising rate environment set in motion huge reinvestment flows in financial markets. As part of this activity, redemptions from bond mutual funds soared following a year of heavy inflows, and in many months withdrawals outpaced inflows as investors reacted to reports of poor performance. The growth in noncompetitive awards at Treasury auctions suggests that many participants began to redirect investments directly into securities markets. Associated with these elevated flows was a heightened sense of uncertainty in financial markets. Implied price volatility in longer term Treasury issues was up substantially in many months in 1994 compared with 1993 (Chart 4). Meanwhile, new issuance in major sectors was down significantly, in part reflecting the higher borrowing costs.

III. **Implementation of Policy**

Operating Procedures

In 1994, the FOMC continued to express its policy directives in terms of a desired degree of reserve pressure. Reserve pressures effectively refer to the costs and other conditions under which the Federal Reserve makes

Chart 4
Implied Volatility of Treasury Bond Futures Prices
(Using At-the-Money Call Options)



Source: Bloomberg Financial Markets

reserves available to the banking system. Since the late 1980s, the FOMC has informally used the Federal funds rate as a guide to evaluating conditions of reserve availability.

In addition, the FOMC has continued to express reserve pressures in terms of borrowed reserves, an approach that involves satisfying most but not all of the banking system's demand for reserves with nonborrowed reserves while forcing the banks to meet remaining needs at the discount window where access is rationed. The FOMC has adjusted desired borrowing upward (or downward) when it has increased (or reduced) reserve pressures without a change in the discount rate. The adjustments have been based on the premise that the more the banks are forced to borrow at the discount window to meet their demand for reserves, the more they would be expected to bid up the Federal funds rate relative to the discount rate. In the 1980s, however, the relationship had broken down, in part because a series of banking crises encouraged an association of discount window borrowing with financial difficulties, making banks extremely reluctant to borrow. If borrowing were forced to be much above frictional levels, the Federal funds rate would soar. In recent years, the Desk has continued to develop objectives for nonborrowed reserves calculated as estimated demands for total reserves less the allowance for adjustment and seasonal borrowing. When actual discount window borrowing differed significantly from the allowance, however, the Desk accepted the deviation and informally modified the nonborrowed reserve objective rather than force unwanted changes in the Federal funds rate.[5]

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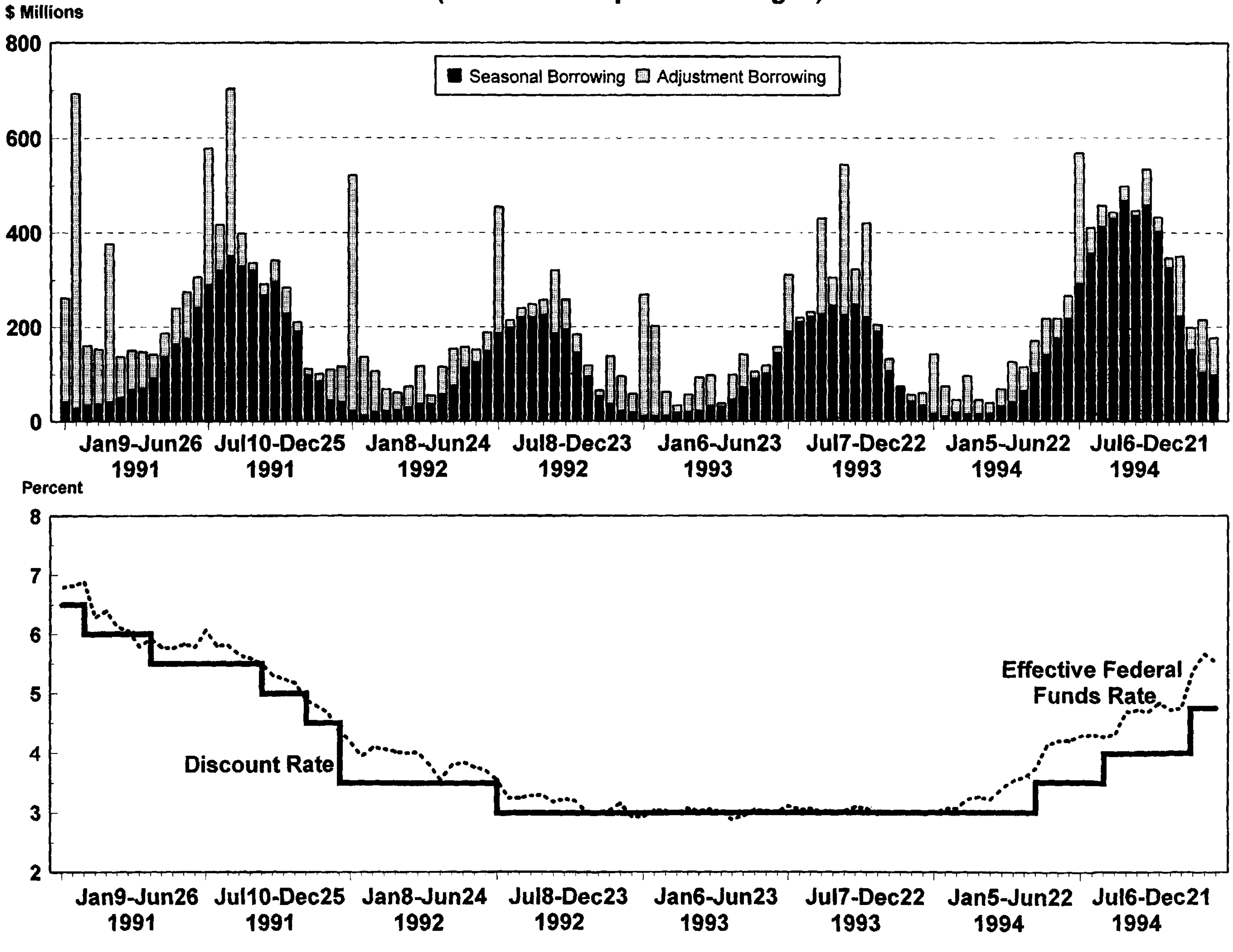
[5]The borrowing relationship has been discussed more extensively in previous years' reports.

Between February and April, the FOMC's reserve tightening actions lifted the anticipated spread between the Federal funds and discount rates from zero, where it had been since September 1992, to 75 basis points. The spread remained at 75 basis points for the balance of the year because the last three policy steps involved equal changes in both rates. (Actual levels of borrowing and the effective Federal funds and discount rates are presented in Chart 5.) Given this widening of the spread, borrowing could have been expected to behave in a more traditional way. Nonetheless, adjustment borrowing actually decreased slightly in 1994 averaging $65 million compared with $75 million in the prior year. While surprising on its face, closer examination of the figures shows some indications of the expected association between borrowing and the funds rate. Adjustment borrowing did pick up on reserve management settlement days and for most size classes of banks. Settlement day adjustment borrowing averaged $336 million in 1994, almost double the $180 million average in 1993. The borrowing decline was entirely the result of a reduction in non-settlement day borrowing by large money center banks. These banks have traditionally concentated their borrowing on settlement days, and in 1994 all of their borrowing occurred on those days. During 1993, in contrast, members of this group borrowed seven times on non-settlement days, reflecting either operational difficulties or temporarily elevated funds rates.

Adjustment borrowing by small and medium-sized banks did increase in 1994, but only modestly. Use of adjustment borrowing by these banks has been held down because over 3,000 commercial banks, or about 30 percent of the total, have become members of the Federal Home Loan Bank System since membership became an option in 1989. FHLB members are expected to turn first

Chart 5
Borrowing, Federal Funds Rate, and Discount Rate
(maintenance period averages)



to their Home Loan Bank for credit. They would normally only borrow from the Federal Reserve in unusual situations, such as a serious unexpected reserve shortfall at the end of the day. In the past, when adjustment borrowing had been more common, small and medium-sized banks usually accounted for a considerable portion of non-settlement day borrowing.

In the case of seasonal borrowing, the rate incentive for stepped up borrowing in 1994 was small because the rate charged on seasonal borrowing moves with Federal funds and certificate of deposit rates. Nonetheless, seasonal borrowing was persistently higher than in 1993 and averaged $193 million, compared with $109 million the year before. It still followed the typical seasonal pattern, which responds to demands for agricultural loans (Chart 6). As a result, during 1994, the Desk made ten upward technical adjustments to the formal borrowing allowance between May and August and then nine downward adjustments over the remainder of the year. The increased use of the facility was encouraged when small banks in the Midwest experienced a marked rise in demands for farm credit at the same time that strong demands for loans at larger banks drew on funds that might otherwise have been earmarked to finance the seasonal credit needs of their small bank customers.[6]

<u>The Desk's Approach to Reserve Management</u>[7]

Reserve patterns over the year

The behavior of M1 had an important influence on reserve supplies and demands over the year.[8] Currency registered another year of strong growth,

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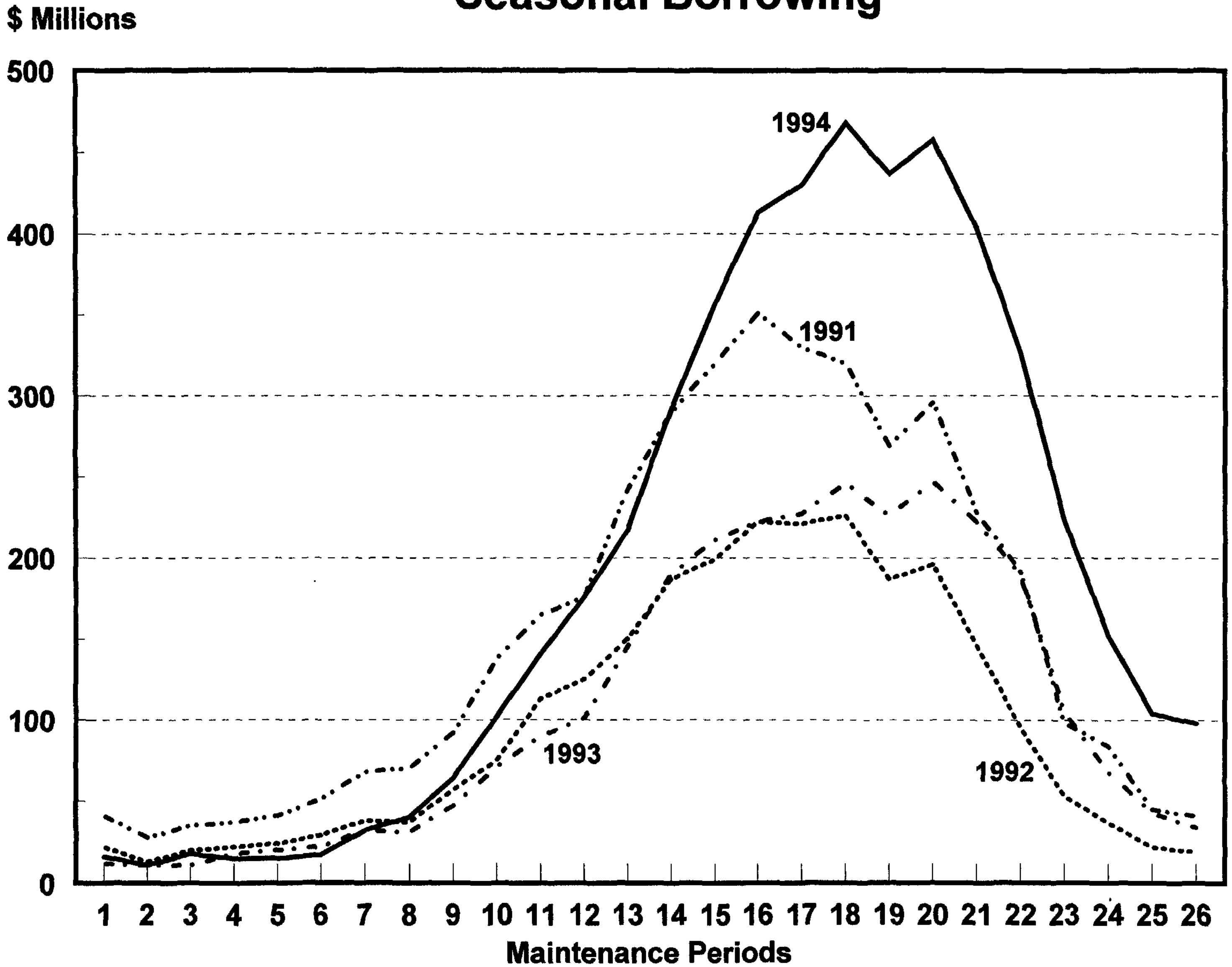
[6]Only small banks are eligible for the seasonal credit program.

[7]The statistics for this section appear in a series of tables in Appendix A.

[8]Changes in the components of M1 and the reasons for their behavior are described in Appendix B.

Chart 6
Seasonal Borrowing



and the resulting record $37 billion increase of currency in circulation was the primary factor behind the substantial need to provide reserves in 1994.[9] Declines in the deposit components, however, limited the overall growth of M1 and contributed to a somewhat offsetting fall in the demand for reserves. As a consequence, the level of required reserves, the primary source of demand, slipped about $2 billion and lowered the need to add reserves over the year.

Several other factors also reduced modestly the Desk's need to provide reserves. Applied vault cash, a source of supply, increased about $3 billion, in part mirroring the currency expansion. Rising interest rates led banks to cut their clearing balances by about $2 billion as the rate at which they accumulated earned income credits rose, an action that lessened the overall need for reserves.[10] These balances had been increased sharply in 1991 and 1992, when banks were adapting to lower required reserve levels, and had been lifted modestly in 1993.[11]

On balance, cumulative changes in other supply and demand factors had smaller effects on total reserve needs over the year. The various foreign

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[9]Currency in circulation includes vault cash; for money supply calculations, however, vault cash is subtracted.

[10]Earned income credits accumulate at a rate that is linked to the Federal funds rate. The credits may only be used to pay for certain priced services provided by the Federal Reserve, and many large banks hold clearing balances up to the amount that will generate credits sufficient to pay for all the services they use. As the rate at which the credits are earned increases, the maximum useful level of a bank's clearing balance decreases.

[11]Technically, clearing balances are treated as a factor reducing the supply of reserves, although they are actually a source of demand for reserves.

exchange related activities on the System's balance sheet drained less than $1/2 billion.[12]

Outright transactions and changes in the System portfolio

The Desk met the ongoing needs to add reserves by increasing the System's portfolio of U.S. Government securities. Altogether, the Desk purchased about $25 billion through six operations conducted in the market, four of them involving Treasury coupon issues.[13] As in the past, the market entries were arranged at times when available forecasts suggested that large reserve shortages would persist for at least several maintenance periods. The market purchases were supplemented by nearly $11 billion of acquisitions from foreign accounts, almost entirely bills. These purchases, which were typically modest in size, were arranged when orders were compatible with estimated reserve needs.

For a second consecutive year, the Desk did not sell securities, although it did redeem some securities. Because the Treasury no longer sells seven-year notes, the System's holdings of these notes must be redeemed as they mature early in each quarter, and over $2 billion came due in 1994. The Desk also redeemed agency securities when there were no suitable replacement offerings and when issues were called. Holdings of these issues

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[12]The historical value of the foreign currency sold was $3.0 billion, about $0.7 billion below the market value. The value of the System's foreign exchange holdings was increased by $2.4 billion as a result of upward revaluations, while interest earnings totalled $0.9 billion. In the reserve factor categories, interest earnings and the historical value of foreign currency transactions appear under "foreign currency," while revaluations and the profit or loss on foreign currency transactions appear in the "other items" category.

[13]Based on par values, the Desk bought $3.3 billion of coupons on March 15, $5.0 billion of coupons on April 12 (a record volume), $3.8 billion of bills on June 1, $4.5 billion of coupons on August 30, $3.9 billion of bills on November 9, and $4.2 billion of coupons on November 29.

fell for the fourteenth year in a row, declining by almost $1 billion to $3.6 billion.

As a result of the Desk's outright activity, total holdings grew by $32 billion, somewhat less than the record increase of 1993 but still the second highest annual increase ever. The total par value of System holdings at the year's end stood at $376 billion. Slightly more than half of the increase occurred in Treasury bills, while growth in coupon holdings was strongest in the one-to five-year sector. Consequently, the weighted average maturity of the System's holdings was virtually unchanged in 1994.[14]

Temporary operations

The Desk used self-reversing operations to meet reserve shortages that developed between the outright operations and to address reserve imbalances created by short-lived movements in operating factors, which are often seasonal. Almost all of the temporary operations added reserves because of the underlying growth in reserve shortages and the Desk's preference for letting deficiencies build to a sizable level before arranging outright purchases. In fact, in 1994, the Desk entered only one maintenance period facing an estimated need to drain more than a very small amount of reserves, and even that surplus was subsequently erased by factor revisions. Consequently, only five matched sale-purchase agreements were arranged all year, none for more than one business day.

All told, the Desk arranged $362 billion of repurchase agreements for the System and another $113 billion that were customer-related. The number and average size of multiday System RPs both fell in 1994. A couple of

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[14]The average maturity of the portfolio is also affected by the reinvestment choices made for maturing securities at auctions.

factors contributed to these declines. A greater share of the year's reserve needs were met with outright operations, in part because purchases were based on forecasts showing large reserve needs, while the actual needs were often smaller than expected. In addition, the Desk increased further its use of fixed-term operations in 1994 (discussed below), which reduced the need for replacement RPs to offset early withdrawals.

Managing reserves within a maintenance period

The Desk developed strategies for each maintenance period that took account of the estimated day-to-day distribution of reserve shortages or excesses, the potential for revisions to reserve estimates, and bank reserve management strategies.[15] In view of uneven distributions and possible revisions, the Desk generally met each period's reserve needs gradually, often arranging a series of multiday RPs--frequently maturing in three or four days. The Desk also continued to take guidance from the Federal funds market. When faced with conflicting information between the funds rate and the forecasts of reserve supplies and demands, the Desk had to evaluate which indicator was more likely to be giving reliable information about reserve availability.

Banks' reserve management strategies can affect the funds rate because they influence reserve demands within the period. As detailed in several previous reports, the cuts in reserve requirement ratios implemented between 1990 and 1992 reduced the level of required operating balances at the Fed.[16] The lower levels increased the risks that a depository institution

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[15]The accuracy of the staff forecasts for reserve supply and demand is reviewed in Appendix A.

[16]Required operating balances are defined as required reserves plus required clearing balances less applied vault cash; they represent the working balances depository institutions have at the Federal Reserve for supporting payment transactions.

would be unable to work off an unwanted excess position without running an overnight overdraft. In consequence, depositories had tended to concentrate their reserve holdings late in a period, showing particular caution about holding excess reserves over the weekend when they count for three days. Their reluctance to hold reserves over the weekend was the main factor encouraging soft funds rates on Fridays.

These reserve management practices were used less aggressively in 1994. By the end of 1993, rapid growth in required reserves and clearing balances had restored required operating balances to levels that had prevailed just ahead of the initial round of cuts in reserve requirement ratios made in late 1990 (Chart 7). Perhaps reflecting this situation, the apparent distribution of demands for excess reserves within a maintenance period was less skewed in 1994 than it had been in the preceding few years.[17] Moreover, the degree of softness on Fridays was typically slight. Nonetheless, banks were still reluctant to accumulate large excess reserve holdings early in a maintenance period. By the end of 1994, the level of required operating balances had once again fallen back to the lower levels seen in late 1991 and in 1992, thus cutting into the scope for reserve management flexibility. This decline reflected the drops in required reserves and clearing balances noted earlier as well as the expansion in applied vault cash over the year.

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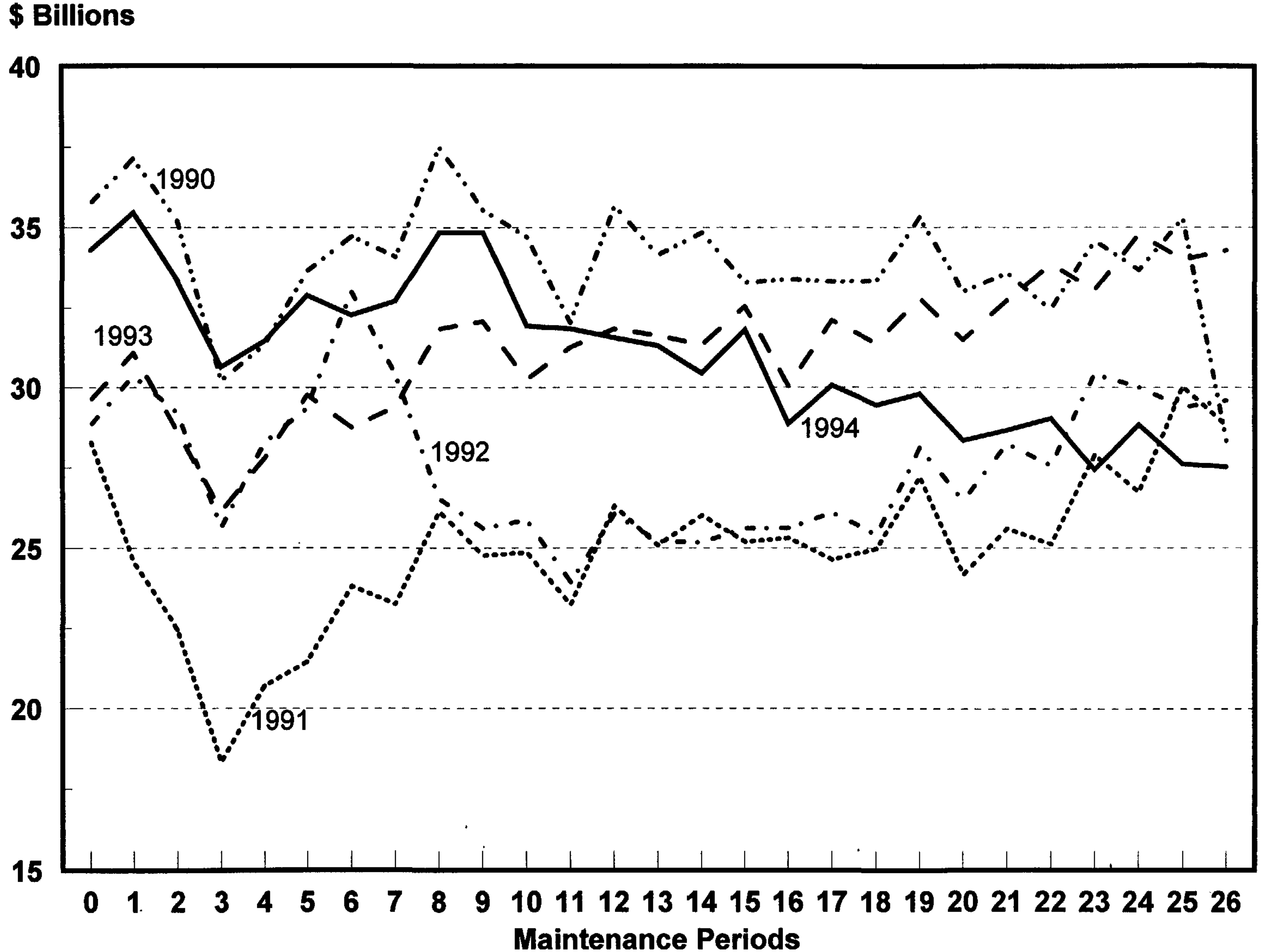
[17]The average levels of excess reserves in the first and second weeks of a maintenance period in 1994 were $725 million and $1,375 million, respectively. During 1993 the corresponding figures were $170 million and $1,980 million, and a similar distribution characterized 1992 after the round of reserve requirement cuts made in April of that year. Prior to December 1990, the distribution of excess reserves within the maintenance period was, on average, fairly even. Of course, Desk reserve provision strategies, which may not match *ex ante* demands, also contribute to the actual pattern for excess reserves.

Chart 7
Required Operating Balances



Note: For each set of annual observations, Period 1 covers the year-end, and Period 0 is equal to Period 26 from the preceding year.

The Desk further increased its use of fixed-term RPs on Thursdays to run through the weekend, which dealt with the tendency of the Federal funds rate to trade to the soft side on Fridays even when a large reserve need remained. If withdrawable RPs had been arranged on a Thursday, the dealers probably would have taken advantage of the opportunity to refinance at lower rates the next day, forcing the Desk to find another opportunity to add back the reserves. Use of fixed-term RPs was also expanded for the first Mondays through Wednesdays, again to avoid unwanted withdrawals and to reduce the number of operations.[18] Withdrawable RPs were still useful at times, particularly when it was felt that potential revisions to factors or to required reserves might sharply reduce or eliminate the estimated reserve need. In that context, withdrawable RPs continued to be used over the final few days of many maintenance periods.

Market speculation during the year that a tightening in monetary policy might be implemented sometimes put upward pressure on the funds rate that did not seem justified by estimates of reserve imbalances. The Desk remained sensitive to these situations in formulating its operations strategy to avoid any misunderstanding about the stance of policy on the part of market participants, who continued to view open market operations as a possible indicator of policy shifts.[19] Thus, on several occasions when the funds rate

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[18]A total of 44 fixed-term RPs were arranged in 1994, (30 of which were in place on Fridays) compared with 31 the previous year (23 covering Fridays). Just 9 fixed-term operations had been arranged in 1992.

[19]As an example of how misinterpretations can arise, on February 3, with Fed funds trading just 1/16 of a percentage point above the level associated with the desired degree of reserve pressures, the Desk took no market action to affect reserves because a shortage was not seen. With an FOMC meeting scheduled to start later that day, and against a background where a shift in policy was seen as a real possibility, some participants interpreted the Desk's inaction as indicating such a move. In fact, it was not, although the

was very high, the Desk arranged overnight System RPs, in part to prevent any perception that it was either paving the way for a firming in policy or even hinting at any leaning by the Committee towards a policy change.[20] As the year progressed and market analysts began to assume that the FOMC would indicate its policy actions through some form of public announcement, market participants came to feel that the Desk's open market activities were less likely to be used to communicate policy shifts. This perception afforded the Desk greater leeway in selecting its operations in order to meet its reserve objectives.

Trading Room Automated Processing System

In 1994, the Desk began arranging its open market operations using the Trading Room Automated Processing System (TRAPS). The Desk started using TRAPS for its temporary operations in July, and the first outright market purchase using the system came in August. Under the system, reserve operations are announced and dealers respond with their propositions through Fedline terminals. The automated system is also used to process the operation and to notify the dealers of the results. Further enhancements are planned.

<u>Daylight Overdraft Pricing</u>

On April 14, the Federal Reserve began charging banks a 10 basis point fee on overdrafts in their reserve account incurred during the day.[21]

FOMC did decide to firm pressures on the following day. Of course, this episode occurred before the FOMC began to announce policy changes.

[20]With expectations of a policy easing almost entirely absent in 1994, the Desk felt freer to add reserves when called for by its reserve projections even when funds were slightly soft, and it did so on numerous occasions.

[21]The 10 basis point charge reflects a 24 basis point annual rate using a standard ten-hour day for Fedwire operations. The charge is made on all end-of-minute overdrafts in excess of a deductible that is based on ten percent of the bank's capital. "Overview of the Federal Reserve's Payments System Risk

Previously, daylight overdrafts had been subject to size limitations related to a bank's capital but not to charges. For a few banks, such daylight overdrafts were substantial. The Open Market Desk anticipated that the charges might affect its own operations by encouraging changes in the functioning of the Federal funds and RP markets and in some banks' reserve management techniques. In preparation for the pricing, Federal Reserve personnel had conversations with market participants and undertook some contingency planning. In 1994, however, Desk operations turned out to be minimally affected.

Before daylight overdrafts were priced, reserve management focused on end-of-day reserve balances rather than on intraday balances. End-of-day balances meet reserve requirements. Furthermore, banks need reserve balances to avoid overnight overdrafts and the stiff associated charges. In fact, total reserve balances vary considerably over the day, rising whenever the Federal Reserve or any entities maintaining accounts at the Fed--the Federal Government and foreign official institutions--make payments and falling when they receive payments.[22] The most dramatic movements in intraday balances however, have been in the distribution of reserves, with large intraday balances at some banks and huge overdrafts at others during part of the day.[23]

Policy," published by the Federal Reserve System in October 1993, gives a detailed description of the calculations.

[22]Differences in posting times for check credits and debits also influence aggregate intraday reserve levels.

[23]In the six months before daylight overdraft charges took effect, peak overdraft levels averaged $124 billion. From mid-April through year-end they averaged $70 billion. To put the overdraft figures in perspective, total end-of-day reserve balances averaged $34.5 billion and $31 billion, respectively, in those two periods.

The absence of fees had encouraged practices which resulted in large daylight overdrafts. Many financial market transactions, such as interbank Federal funds and RP contracts, did not specify transaction settlement times. Yet receipt and return times do influence the intraday distribution of reserves. In Federal funds transactions, the sending bank controls the timing of the reserve transfer. Under daylight overdraft pricing, banks that faced intraday reserve charges might delay sending Federal funds in order to increase their intraday balances. If Fedwire traffic became concentrated near the end of the day, the funds market could lose liquidity, making the rate a less reliable indicator of reserve availability.

In practice, after daylight overdraft pricing began, the average sending time for funds transfers over Fedwire did move later in the day, but only slightly. Many banks did not change their practices because they did not face large enough daylight overdrafts from their funds transactions to justify the cost of making changes. The Federal funds brokers did report some requests for transactions that specified sending or returning funds during specific time periods and noted that some potential trades were rejected because the counterparty was reputed to be a "late sender." These restrictions affected only a small portion of trades and did not impede market liquidity.

Under RP contracts, the senders of the securities control the transaction times. Consequently, banks lose reserve balances when they receive securities, but they do not control the time that happens.[24] Dealers

[24]Under the delivery versus payment system used for the transfer of government securities, reserve balances are automatically moved from the account of the bank receiving the securities to that of the bank sending the securities when the transfer is processed.

rely heavily on RPs to finance inventories and traditionally had their clearing banks send the securities to their counterparties' custody banks between late morning and early afternoon. Then, on the maturity date, the counterparties' banks typically returned the securities at the opening of business. The prevalence of this timing pattern caused both the dealers' and their banks' accounts to be overdrawn during the morning because the dealers began the day with small working balances. In anticipation of the pricing, the clearing banks had informed their customers that they would pass on the overdraft charges.

In conversations, dealers indicated that they planned to speed up their negotiation and processing of RPs in the morning so that any securities being returned and then refinanced would leave their accounts more quickly. Some participants predicted that the speedup in RP operations would cause the market to be liquid only briefly early in the morning. Such a development would be of particular concern to the Federal Reserve since the Desk's temporary open market operations are routinely executed around 11:30 a.m. The Federal Reserve had chosen that time because information about reserve levels is received and analyzed gradually over the morning. Only part of the data flow could be accelerated. Consequently, arranging open market operations a couple of hours earlier would force the Desk to base its decisions on less reliable data.

The Desk did make one change in its procedures. It delayed the return time for the collateral on its own maturing RPs from the opening of business until 11 a.m. By doing so, it left reserves in the banking system for a larger part of the day. It was hoped that the later return times would make the dealers more willing to participate in the late morning operations.

The RP market did experience a shift toward somewhat more morning activity, but a number of customers continued to seek RP investments during the late morning and early afternoon, so market liquidity was retained. More rapid processing of trades has accounted for most of the reduction in peak and average overdrafts.[25] In addition, the volume of afternoon trades for next day delivery has increased.

The Desk saw essentially no change in participation rates in its RP operations. Dealers reported somewhat smaller inventories of securities left to finance at mid-morning, but they were nonetheless able to participate in reasonable size most days. Furthermore, customers of dealers increased their participation in Fed operations.

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[25]Average daylight overdrafts fell from $70 billion in the six months before pricing to $43 billion over the balance of 1994.

APPENDIX
A

DESK ACTIVITY FOR THE SYSTEM OPEN MARKET ACCOUNT

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DESK ACTIVITY FOR THE SYSTEM OPEN MARKET ACCOUNT

This appendix includes many of the background tables referenced in the discussion on the Desk's approach to reserve management. Another section reviews the forecast accuracy of both the New York and Board staff estimates of the factors that affect the supply and demand for reserves. Finally, there is a brief discussion of the System's lending activity.

I. Open Market Operations and Changes in the System Portfolio

The operating factors affecting bank reserves appear in Table A-1. The Desk's outright operations are summarized in Table A-2, and their effects on the System portfolio are presented in Tables A-3 through A-5. Temporary operations are reported in Table A-6.

II. Forecasting Reserves and Operating Factors

For the year as a whole, the accuracy of the forecasts for required reserves was similar to 1993 at each stage of the maintenance period (Table A-7). The Desk maintained the formal allowance of $1 billion for excess reserves during each of the twenty-six maintenance periods in 1994, but it often made informal allowances when demand for excess reserves was expected to be above or below the path allowance.[1]

The estimates available at the beginning of the period of the factors affecting the supply of nonborrowed reserves improved for the year as a whole. The smaller forecast errors were largely the result of better estimates for the Treasury balance and a lower distortion from the treatment of premiums on RPs, while currency projections showed some deterioration.

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[1]Excess reserves are estimated from a combination of models and observed behavior during the maintenance periods.

TABLE A-1

BANK RESERVES AND FACTORS AFFECTING RESERVES

Bank Reserves
(In millions of dollars; not seasonally adjusted)

	Maintenance Period Ended 1/4/95	Change during: 1994*	Change during: 1993**
Nonborrowed Reserves			
Excluding extended credit	61,372	(2,133)	6,100
Including extended credit	61,372	(2,133)	6,100
Extended Credit Borrowing	0	0	0
Borrowed Reserves			
Including extended credit	246	104	(127)
Adjustment plus Seasonal	246	104	(127)
Adjustment	151	25	(131)
Seasonal	95	79	4
Required Reserves ***	60,451	(1,954)	6,116
Excess Reserves	1,167	(74)	(144)

System Portfolio and Operating Factors #
(In billions of dollars)

	Maintenance Period Ended 1/4/95	Change during: 1994*	Change during: 1993**
System Portfolio and RPs Outstanding##	385.3	31.5	36.2
Operating Factors:			
Foreign Currency ###	17.3	(2.1)	0.7
U.S. Currency	403.0	(37.2)	(31.5)
Treasury Balance	7.1	1.4	(1.1)
Float	0.7	(0.5)	(1.2)
Special Drawing Rights	8.0	0	0
Gold Deposits	11.1	0	0
Foreign Deposits	0.2	(0.1)	0.1
Applied Vault Cash	36.4	3.1	2.2
Other Items	20.8	2.1	1.3
Foreign RP Pool +	8.1	(0.4)	(0.2)

* Change from maintenance period ended January 5, 1994 to that ended January 4, 1995.
** Change from maintenance period ended January 6, 1993 to that ended January 5, 1994.
*** Not adjusted for changes in required reserve ratios.
\# Sign indicates impact of changes in operating factors on bank reserves. All items are biweekly averages.
\## MSPs with foreign accounts are added back in.
\### Acquisition value plus interest. Revaluations of foreign currency holdings are included in "Other Items."
\+ Includes customer-related repurchase agreements.

Note: Figures may not add due to rounding.
Declines in holdings are shown in parenthessses.

TABLE A-2

SYSTEM OUTRIGHT OPERATIONS*
By Type of Transaction and by Counterparty
(In billions of dollars)

	1994	1993
Total Outright Transactions	38.5	38.6
By Type of Transaction:		
Purchases	35.3	36.9
Bills	17.5	17.7
Coupons	17.8	19.2
Sales	0	0
Bills	0	0
Coupons	0	0
Redemptions	3.2	1.7
Bills	0	0
Coupons	2.3	0.8
Agency issues	0.9	0.9
By Counterparty:		
Total Outright in Market	24.7	25.4
Purchases	24.7	25.4
Bills	7.7	8.6
Coupons	17.0	16.8
Sales	0	0
Bills	0	0
Coupons	0	0
Agency issues	0	0
Total Outright with Foreign Accounts	10.6	11.5
Purchases	10.6	11.5
Bills	9.8	9.1
Coupons	0.8	2.4
Sales	0	0
Bills	0	0
Coupons	0	0

*Commitment basis.

TABLE A-3

SYSTEM PORTFOLIO: SUMMARY OF HOLDINGS
(In billions of dollars)

	Year-End 1994	Change during 1994	Change during 1993
Total Holdings:	376.2	32.1	35.3
Bills	185.4	17.5	17.7
Coupons	187.1	15.5	18.4
Agency Issues	3.6	-0.9	-0.9

Notes: Values are on a commitment basis. Changes in holdings are from year-end to year-end. Figures may not add due to rounding.

TABLE A-4

SYSTEM PORTFOLIO OF TREASURY AND AGENCY SECURITIES *
(In millions of dollars)

		Treasury Securities											
				Coupon Issues									
End of	Total Portfolio	Bills	%	Under 1 year	%	1-5 years	%	5-10 years	%	Over 10 years	%	Federal Agency Securities	%
1960	26,984	2,900	10.7 %	11,955	44.3 %	10,680	39.6 %	1,178	4.4 %	271	1.0 %	0	0.0 %
1965	40,478	9,101	22.5	15,478	38.2	14,066	34.7	1,448	3.6	385	1.0	0	0.0
1970	62,142	25,965	41.8	10,373	16.7	19,089	30.7	6,046	9.7	669	1.1	0	0.0
1975	93,290	37,708	40.4	8,730	9.4	30,273	32.5	6,425	6.9	4,082	4.4	6,072	6.5
1980	131,344	46,994	35.8	12,749	9.7	34,505	26.3	13,354	10.2	15,002	11.4	8,739	6.7
1985	190,072	89,471	47.1	20,179	10.6	35,650	18.8	14,785	7.8	21,759	11.4	8,227	4.3
1986	210,249	108,571	51.6	18,863	9.0	36,469	17.3	15,451	7.3	23,066	11.0	7,829	3.7
1987	231,243	112,475	48.6	22,966	9.9	47,512	20.5	15,313	6.6	25,424	11.0	7,553	3.3
1988	245,756	117,910	48.0	26,123	10.6	55,279	22.5	12,568	5.1	26,909	10.9	6,966	2.8
1989	235,566	106,847	45.4	28,883	12.3	54,076	23.0	12,529	5.3	26,706	11.3	6,525	2.8
1990	247,586	118,675	47.9	25,963	10.5	58,749	23.7	13,121	5.3	24,736	10.0	6,342	2.6
1991	278,628	138,732	49.8	30,542	11.0	64,299	23.1	14,469	5.2	24,540	8.8	6,045	2.2
1992	308,848	150,219	48.6	37,758	12.2	68,750	22.3	18,903	6.1	27,805	9.0	5,413	1.8
1993	344,105	167,936	48.8	35,423	10.3	79,826	23.2	24,659	7.2	31,739	9.2	4,522	1.3
1994	376,197	185,419	49.3	35,841	9.5	88,401	23.5	28,053	7.5	34,845	9.3	3,637	1.0

* Commitment basis.
% As percent of total System Account portfolio.
Note: Figures may not add to totals due to rounding.

System Holdings of Treasury Securities as a Percentage of Total Marketable Debt Outstanding

		Within 1 year					
End of	Total Treasury Issues	Bills	Coupons	Total	1-5 years	5-10 years	Over 10 years
1960	14.3	7.4	34.8	20.1	14.8	6.3	1.1
1965	18.9	15.1	46.6	26.3	23.2	4.2	1.5
1970	25.1	29.5	29.2	29.4	23.2	26.8	3.4
1975	24.0	23.9	20.7	23.3	27.0	24.3	16.5
1980	19.7	21.7	15.7	20.1	17.5	21.7	22.4
1985	12.8	22.4	10.2	18.4	7.7	8.2	11.8
1986	12.6	25.4	9.0	20.0	6.9	7.1	10.3
1987	13.1	28.9	9.4	21.3	8.2	6.4	9.9
1988	13.2	28.5	10.1	21.4	9.1	5.1	9.5
1989	11.9	24.8	10.5	19.2	8.5	4.7	8.3
1990	11.1	22.5	9.2	17.9	8.0	4.6	7.0
1991	11.1	23.5	9.6	18.6	7.5	5.0	6.5
1992	11.1	22.8	10.3	18.4	7.1	5.9	6.4
1993	11.4	23.5	9.1	18.4	7.3	7.8	6.9
1994	12.0	25.3	9.3	19.8	7.2	8.8	7.7

TABLE A-5

Weighted Average Maturity of Marketable Treasury Debt
(in months)

End of	FR Holdings*	Holdings Outside FR	Total Outstanding
1960	19	61	55
1965	16	70	60
1970	24	45	40
1975	31	34	33
1980	55	46	48
1985	49	61	59
1986	46	64	62
1987	44	69	66
1988	42	71	67
1989	43	73	69
1990	41	71	68
1991	38	72	68
1992	36	71	67
1993	38	68	65
1994	38	66	63

*The effects of all outstanding temporary transactions, including RPs and MSPs with foreign accounts, are excluded from the calculation of the average maturity of the portfolio.

TABLE A-6

SYSTEM TEMPORARY TRANSACTIONS
(In billions of dollars)

	1994		1993	
	Number*	Volume	Number*	Volume
Repurchase Agreements				
System:	92	362.0	109	510.5
Maturing next business day	26	104.9	29	149.5
Term	66	257.1	80	361.0
Fixed term	44	175.3	31	127.2
Withdrawable	22	81.8	49	233.8
Customer-related	54	112.7	54	117.1
Matched Sale-Purchase Agreements				
In Market:	5	13.1	5	10.9
Maturing next business day	5	13.1	3	7.2
Term	0	0	2	3.8
With foreign accounts**	251	1,688.2	252	1,464.1
Total Temporary Transactions	402	2,176.0	420	2,102.7
In Market	151	487.8	168	638.6

Note: Figures may not add to totals due to rounding.

* Number of rounds. If the Desk arranged RPs with two different maturities on the same day, it is marked as one round. The Desk arranged such multiple RPs on two days in 1993. None were arranged in1994.

** Volumes exclude amounts arranged as customer-related RPs.

TABLE A-7

Approximate Mean Absolute Forecast Errors for
Various Forecasts of Reserves and Operating Factors
(In millions of dollars)

	1994 First Day	1994 Midperiod	1994 Final Day	1993 First Day	1993 Midperiod	1993 Final Day
Required Reserves	285-340	160-170	40-65	290-335	160-180	55-65
Factors	710-750	425-465	65-75	785-885	420-465	55-70
Treasury	610	285-305	45-50	750-760	365-485	40-45
Currency	500-515	180-205	15-25	330-400	160-210	10-20
Float	220-250	140-160	25-45	245	150	35-65
Pool	240	90	10	270	110	15
Other Items	190	90	35	250	135	20

Note: A range indicates different errors for the New York Reserve Bank and Board of Governors staffs forecasts, rounded to the nearest $5 million.

There was a marked improvement in the first day estimates of the Treasury's Fed balance in 1994, particularly around the important September and December tax payment dates. A surge in tax receipts can cause the Treasury's total cash holdings to exceed the capacities of the Treasury Tax & Loan note (TT&L) accounts at depository institutions, with any spillage flowing into the Treasury's balance at the Federal Reserve. Forecasting the balance in the Fed account can be particularly difficult around these times. In 1994, Treasury cash levels were above the capacity of the TT&L accounts on 14 days, much less frequently than in 1993 when capacity was exceeded on 32 days. Two developments accounted for much of the difference. In September 1994, the capacity was about $8-$10 billion higher than it was a year earlier, making room for more tax receipts. In December, approximately $35 billion of Treasury cash management bills matured without replacement, compared with $14 billion in December 1993. The enlarged maturities limited the size of the Treasury's total cash holdings.

Another factor that reduced measured forecast errors was a reduction in average premiums on RPs and on coupons securities purchased, elements in the "other items" category. The formal reserve impact of any reserve transaction is based on the par value of the securities. In fact, the Desk does allow for possible net premiums (premiums less discounts) when they are expected to be large so that premiums do not constitute actual forecast misses. Average net premiums in 1993 had grown to 8 percent on all RPs and to 15 percent on market purchases of coupons as a result of falling interest rates. Because of rising interest rates in 1994, the average net premiums on securities held under RP fell back to about 2 percent of the par value, with discounts outweighing premiums on some operations. Average net premiums fell to 8 percent on coupons purchased in the market.

Projections for currency at the beginning of maintenance periods deteriorated in 1994. Currency often behaved in a manner at odds with past seasonal patterns, which are used for forecasting purposes. In the first and last maintenance periods of 1994, which are typically times of large seasonal swings, currency drained fewer reserves than initially anticipated.

III. System Lending Operations

The Desk lends U.S. Treasury securities from the System Open Market Account to primary dealers in order to facilitate the delivery of transactions in the U.S. Treasury market, although borrowing against short sales is not allowed. All loans are collateralized with U.S. Treasury securities which are of greater market value than those borrowed. The number of loans rose modestly in 1994 following several years of declines (Table A-8). Data on the daily average volume of outstanding loans show that lending of bills rose significantly in value while lending of coupon securities declined. This shift helped raise the average size of each loan because the maximum allowable size of a loan is much greater for a bill ($50 million) than for a coupon security ($10 million). The share of coupons in total lending volume plummeted to just over 25 percent from 65 percent in 1993.

TABLE A-8

FEDERAL RESERVE LENDING OF TREASURY SECURITIES TO PRIMARY DEALERS
(In millions of dollars)

	1994	1993	PERCENTAGE CHANGE IN TOTAL 1993-1994
Number of Loans	1,413	1,130	25.0 %
Amount	$35,778	$17,667	102.5

DAILY AVERAGES

	1994	1993	PERCENTAGE CHANGE IN TOTAL 1993-1994
Number of Loans	6	5	20.0 %
Amount	$143.7	$70.7	103.3
Balance Outstanding	$227.0	$137.8	64.7
Size of Each Loan	$24.0	$14.1	70.2

DISTRIBUTION OF LOANS OUTSTANDING
(daily averages)

	1994	1993	PERCENTAGE CHANGE IN TOTAL 1993-1994
Bills	$169.0	$47.8	253.6 %
Coupon Issues	$58.0	$90.0	-35.6
Total	$227.0	$137.8	64.7

TABLE A-9

DOLLAR VOLUME OF TRANSACTIONS EXECUTED BY TRADING DESK 1994 AND 1993
(In millions of dollars)
Source Account

	Total		System		Foreign		Treasury Investment Accounts		Retirement System and others	
	1994	1993	1994	1993	1994	1993	1994	1993	1994	1993
Counterparty										
Market	647,199	810,863	399,805	546,894	246,232	263,406	(b)	(b)	1,161	563
System Account	1,698,790	1,475,616	-	-	1,698,790	1,475,616	-	-	-	-
Treasury	3,222	1,541	3,222 (a)	1,541 (a)	-	-	-	-	-	-
Foreign	1,704,746	1,483,445	1,698,790	1,475,616	5,955	7,822	-	-	-	7
Total	4,053,956	3,771,465	2,101,817	2,024,051	1,950,978	1,746,844	(b)	(b)	1,161	570
Outright Transactions										
Purchases										
Treasury Bills	95,470	101,334	17,484	17,717	76,825	83,105	-	-	1,161	511
Treas. Coupon Issues	23,025	28,625	17,830	19,198	5,195	9,427	-	-	-	-
STRIPS	2,382	1,071	-	-	2,382	1,013	-	-	-	58
Cert. of Deposit	-	100	-	-	-	100	-	-	-	-
Bankers' Acceptances	270	891	-	-	270	891	-	-	-	-
Total Purchases	121,147	132,021	35,314	36,915	84,672	94,536	-	-	1,161	570
Sales and Redemptions										
Treasury Bills:										
Sales	53,658	49,229	-	-	53,658	49,229	-	-	-	-
Redemptions	-	-	-	-	-	-	-	-	-	-
Treasury Coupon Issues:										
Sales	1,461	4,015	-	-	1,461	4,015	(b)	(b)	-	-
Redemptions	2,337	767	2,337	767	-	-	-	-	-	-
STRIPS	-	6	-	-	-	6	-	-	-	-
Federal Agency Issues:										
Sales	-	-	-	-	-	-	-	-	-	-
Redemptions	885	774	885	774	-	-	-	-	-	-
Cert. of Deposit	-	-	-	-	-	-	-	-	-	-
Bankers' Acceptances	34	21	-	-	34	21	-	-	-	-
Total Sales and Redemptions	58,374	54,812	3,222	1,541	55,153	53,271	(b)	(b)	-	-
Net Purchases (+) or Sales and Redemptions (-)	+62,773	+77,208	+32,092	+35,374	+29,519	+41,264	(b)	(b)	+1,161	+570
Temporary Transactions (c)										
RPs										
In Market	474,648	627,655	361,972	510,510	112,676	117,145				
With System Account	1,688,162	1,464,141	-	-	1,688,162	1,464,141				
MSPs										
In Market	13,147	10,944	13,147	10,944	-	-				
With Foreign	1,688,162	1,464,141	1,688,162	1,464,141	-	-				
Reverse RPs in Market	-	-	-	-	-	-				
Fed Funds sales	10,315	17,757	-	-	10,315	17,757				

a Incorporates redemptions of called Treasury notes and maturing Federal agency securities.
b Less than $0.5 million.
c Repurchase agreements are on a delivery basis.

Outright transactions are on a commitment basis.
Includes only the initiation of the matched transactions and repurchase agreements.
Figures may not add to totals due to rounding.

APPENDIX B

THE MONETARY AGGREGATES

Growth of the broader monetary aggregates remained subdued in 1994. The FOMC voted in February to retain the low growth ranges for M2 and M3 adopted on a preliminary basis the previous summer in light of the substantial increases in velocity experienced in recent years. It reaffirmed these ranges in July. For the entire year, M2 advanced a mere 1.0 percent, while M3 rose only 1.2 percent, respectively at the lower end and within the lower half of their annual growth ranges (Chart B-1).[1] Growth in the broader aggregates was held down in 1994 by weakness in the liquid components, including savings and interest bearing checkable deposits.[2] These types of deposits were relatively unattractive because depositories raised rates at a much slower pace than market rates rose.[3] The preferences for market investments and the resultant increase in velocity were factors in the Committee's decisions to accept the weak aggregates.

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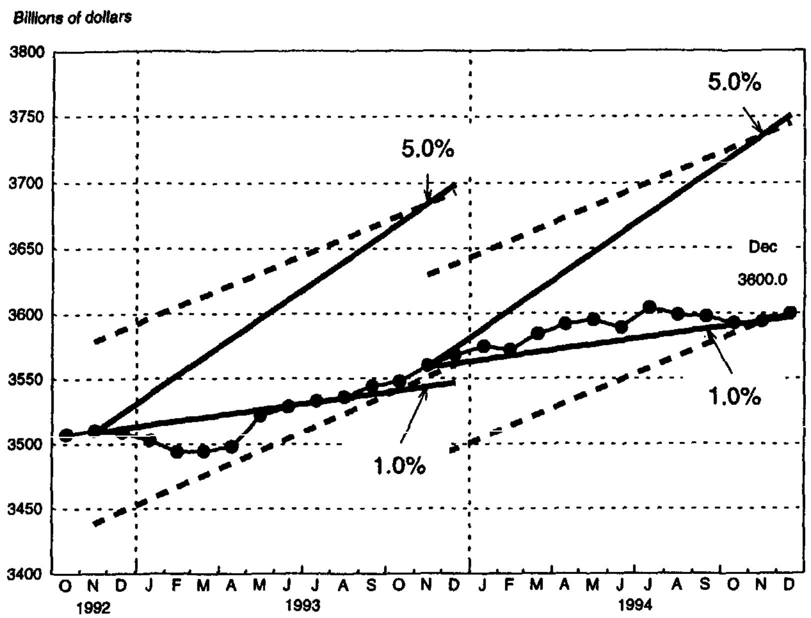
[1]The data on all the monetary aggregates are as of January 26, 1995, before the annual seasonal factor and benchmark revisions of February 2. The earlier data are used since they more closely approximate the information the Committee had when it made its policy decisions. The revisions generally had minimal effect on total growth in the year. On balance, the revisions redistributed a little more of the net increases in M1 and M2 into the first half of the year and shifted more of the growth in M3 into the second half of the year. The annual changes of the monetary aggregates are measured from the fourth quarter of 1993 to the fourth quarter of 1994. Data on nonfinancial debt reported in this section are as of March 3, 1995.

[2]The behavior of the monetary aggregates is described in more detail in the "Monetary Policy Report to the Congress Pursuant to the Full Employment and Balanced Growth Act of 1978," July 20, 1994 and February 21, 1995.

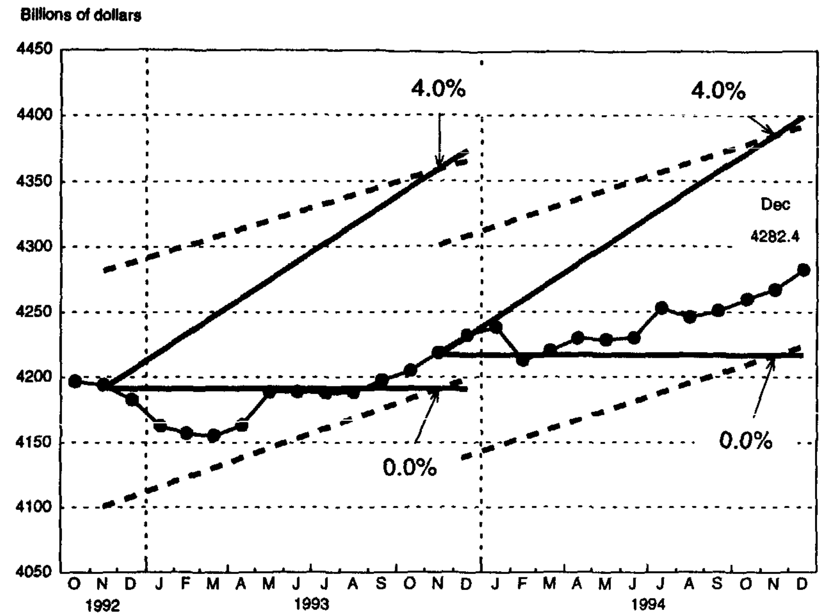
[3]Investors moving out of mutual funds favored instruments not included in the aggregates, such as the direct purchase of Treasury debt. As a result, M2 plus bond and stock mutual funds rose less than 1 percent in 1994, about the same as M2 and well below the nearly 7 percent gain the previous year.

CHART B-1

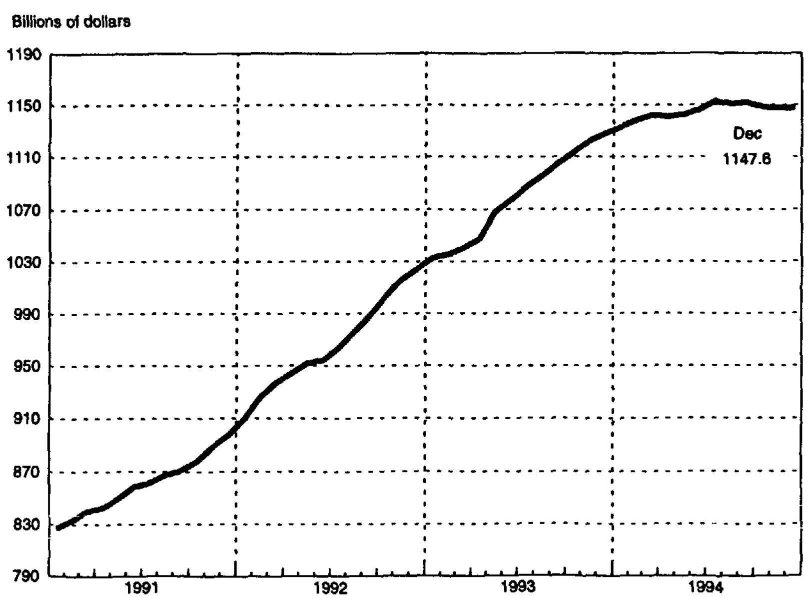
M2 : LEVELS AND TARGETS



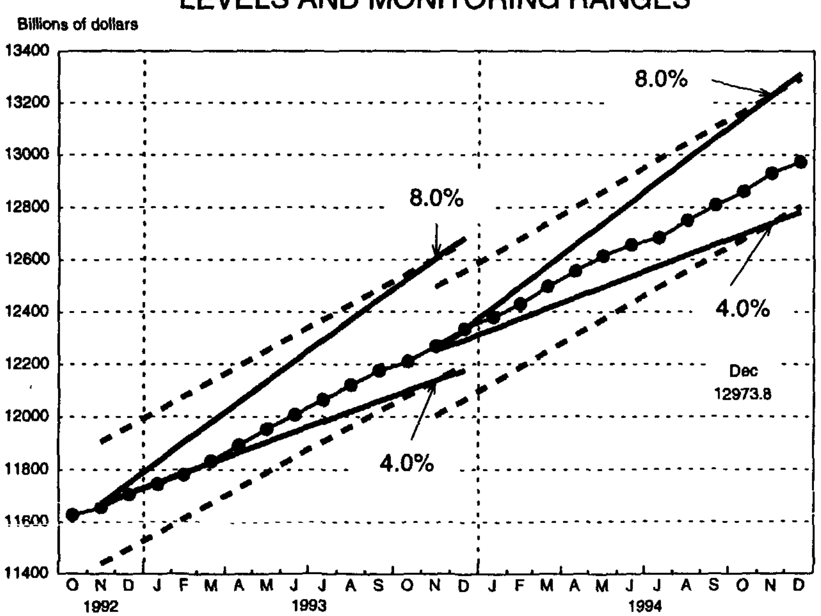
M3 : LEVELS AND TARGETS



M1 LEVELS



DOMESTIC NONFINANCIAL DEBT LEVELS AND MONITORING RANGES



Some components of the broader aggregates did show strength. Depositories sharply increased their issuance of both overnight Eurodollars and RPs, lifting M2. In addition, during the second half of the year issuance of consumer time deposits picked up. M3 received some support from large time deposits and term RPs and Eurodollars, while institutional money funds were very weak early in the year but showed more robust growth later. The strength in some of these components reflected expanded bank funding needs. Total bank credit rose 6.8 percent in 1994, after having grown 5.0 percent the previous year. The increase was concentrated in bank lending; aggregate holdings of securities fell modestly on balance over the year.[4]

Following three consecutive years of rapid growth, M1 rose only 2.4 percent in 1994. Substantial increases in opportunity costs depressed deposits. Reduced mortgage refinancing activity weakened demand deposits, and sweep programs initiated by several banks lowered other checkable deposits.[5] In contrast, currency registered another year of strong growth, expanding about 10 percent over the four quarters, buoyed by heavy shipments overseas.

Domestic nonfinancial debt grew by 4.8 percent in 1994. The improved balance sheet condition of many borrowers supported growth of nonfederal debt. Total debt ended the year toward the lower end of its monitoring range.

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[4]Credit expansion was partially funded by borrowing abroad, which nearly doubled over the year.

[5]In January, one large regional bank initiated a sweep program, transferring funds from other checkable deposits into money market deposit accounts. Another large regional bank phased in a similar program over September and October. Altogether, these programs lowered M1 growth by an estimated 3 percentage points in 1994. The sweep programs shifted funds between accounts included in M2 and therefore had no impact on the broader aggregates.

APPENDIX
C

DESK ACTIVITY FOR CUSTOMER ACCOUNTS

APPENDIX C

DESK ACTIVITY FOR CUSTOMER ACCOUNTS

The volume of the Desk's total outright trading activity on behalf of customer accounts declined moderately in 1994, the second annual decline after three years of increases. Meanwhile, temporary transactions in 1994 rose over 13 percent.

I. Outright Transactions

Total outright transactions on behalf of customer accounts declined by $7 billion to slightly less than $141 billion (Table C-1). Of this total, $124 billion was arranged in the market, which was about $4 billion lower than the prior year's total (Table C-3). As usual, the vast majority of the outright transactions were arranged for foreign and international accounts. Japan and Thailand remained the two largest participants. Meanwhile, Canada fell from third place, replaced by Indonesia, as it reduced its trading volume through the Desk and began arranging more of its own trades.

Almost all of the outright transactions were in Treasury securities, mostly bills. There was no activity in certificates of deposit, and bankers' acceptances trading was minuscule.

II. Temporary Transactions

The total volume of repurchase agreements arranged on behalf of foreign official accounts through the foreign RP "pool" facility was about $1.8 trillion. The average daily volume of the foreign RP pool was around $7.2 billion, up about $1.0 billion from the 1993 level.[1] Japan was the

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[1]All such RPs are arranged to mature on the following business day. The average daily volume is computed by weighting each transaction by the number of calendar days it was outstanding, including weekends and holidays.

TABLE C-1

DOLLAR VOLUME OF TRANSACTIONS FOR ACCOUNTS OTHER THAN THE SYSTEM
(In millions of dollars)

	Purchases		Sales		Total		Percentage Change in Total
	1994	1993	1994	1993	1994	1993	1993-1994
Total Outright	85,833	95,106	55,153	53,271	140,986	148,377	-5 %
Foreign & Int'l Accounts	84,672	94,536	55,153	53,271	139,825	147,807	-5
Treasury bills	76,825	83,105	53,658	49,229	130,483	132,334	-1
Treasury coupons	5,195	9,427	1,461	4,015	6,656	13,442	-50
STRIPS	2,382	1,013	0	6	2,382	1,013	135
Bankers' Acceptances	270	891	34	21	304	912	-67
Certificates of Deposit	0	100	0	0	0	100	-100
Treasury	0	0	#	#	#	#	
Other Accounts*	1,161	570	0	0	1,161	570	104
Repurchase Agreements**							
With System	1,688,162	1,464,141	--	--	1,688,162	1,464,141	15
In Market	112,676	117,145	--	--	112,676	117,145	-4
Federal Funds	0	0	10,315	17,757	10,315	17,757	-42

Less than $0.5 million.
* Includes retirement system and other accounts.
** Transacted on behalf of foreign and international accounts only.

Notes: The table includes only the initiation of RPs.
Includes transactions between two different foreign accounts, and transactions between foreign accounts and the System Account.

largest participant, investing funds in the pool on 34 days, mostly just ahead of settlement dates for Treasury auctions in which it participated. Korea and Saudi Arabia occupied second and third place, respectively.

About 6 percent of the RPs arranged on behalf of foreign customers were passed through to the market as customer-related RPs. The remainder were executed as matched sale-purchase transactions with the System Account. Total gross earnings on all foreign RP transactions were $309 million, up from $196 million in the previous year. This result primarily reflected higher market interest rates; the daily yield on these RPs was 4.22 percent, up from 3.12 percent the previous year.

The Desk continued its practice of placing funds for foreign accounts in the Federal funds market on those occasions when the funds arrived too late in the day for inclusion in the overnight investment pool. Reflecting the extension of the deadline for placing funds in the RP pool to 3:00 p.m. effective in February, total funds sales were down to $10.3 billion from $17.8 billion in the prior year.

TABLE C-2

NUMBER OF TRANSACTIONS PROCESSED FOR CUSTOMER ACCOUNTS IN THE MARKET*

	1994	1993	PERCENTAGE CHANGE IN TOTAL 1993-1994
Foreign and International Accounts			
Outright	6,092	6,788	-10 %
Customer-Related RPs	2,648	5,898	-55
Treasury	2	2	
Other Accounts **	83	66	26
Total	8,825	12,754	-31

* Excludes transactions with System Account.
** Includes retirement system and other accounts.

Note: Each transaction ticket for the Securities Trading and Clearance System is counted as one item.

TABLE C-3

TRANSACTIONS IN 1994 ON BEHALF OF CUSTOMERS OF THE FEDERAL RESERVE
WITH BROKERS AND DEALERS
(In millions of dollars)

	OUTRIGHT		REPURCHASE AGREEMENTS*	
Securities Dealers	Total Volume	Percentage Share	Total Volume	Percentage Share
Aubrey G. Lanston & Co., Inc.	6,656	5.4 %	1,935	1.7 %
CS First Boston Corporation	6,248	5.0	6,975	6.2
Merrill Lynch Government Securities, Inc.	5,319	4.3	1,500	1.3
Smith Barney Inc. (d)	5,203	4.2	295	0.3
Daiwa Securities America, Inc.	4,774	3.8	24,340	21.6
Lehman Government Securities, Inc.	4,369	3.5	11,090	9.8
Salomon Brothers, Inc.	4,326	3.5	1,200	1.1
UBS Securities Inc.	4,237	3.4	-	0.0
Chemical Securities, Inc.	4,226	3.4	1,100	1.0
Harris Nesbitt Thomson Securities Inc.	4,124	3.3	4,805	4.3
Barclays de Zoete Wedd Secs. Inc.	4,111	3.3	955	0.8
Morgan Stanley & Co., Inc.	4,071	3.3	500	0.4
Eastbridge Capital Inc.	4,060	3.3	996	0.9
J.P. Morgan Securities, Inc.	3,798	3.1	1,000	0.9
Prudential Securities Inc.	3,645	2.9	300	0.3
HSBC Securities, Inc. (c)	3,594	2.9	375	0.3
BT Securities Corporation	3,449	2.8	2,400	2.1
Bear, Stearns & Co., Inc.	3,306	2.7	1,450	1.3
NationsBanc Capital Markets, Inc.	3,292	2.7	3,957	3.5
Deutsche Bank Securities Corporation	3,087	2.5	885	0.8
Dillon, Read & Co., Inc.	2,857	2.3	1,228	1.1
Goldman, Sachs & Co.	2,767	2.2	3,400	3.0
Dean Witter Reynolds, Inc.	2,611	2.1	100	0.1
The Nikko Securities Co., Int'l Inc.	2,553	2.1	165	0.1
Paine Webber Inc.	2,512	2.0	2,990	2.7
Fuji Securities Inc.	2,471	2.0	3,919	3.5
SBC Government Securities, Inc.	2,409	1.9	445	0.4
Sanwa Securities (USA) Co., L.P. (a)	2,399	1.9	1,855	1.6
BA Securities, Inc. (b)	2,292	1.8	2,665	2.4
Donaldson, Lufkin & Jenrette Securities Corp.	2,232	1.8	2,175	1.9
Chase Securities, Inc.	2,230	1.8	8,220	7.3
Nomura Securities International, Inc.	1,936	1.6	1,025	0.9
Citicorp Securities, Inc.	1,779	1.4	2,290	2.0
First Chicago Capital Markets, Inc.	1,749	1.4	3,039	2.7
Greenwich Capital Markets, Inc.	1,703	1.4	1,803	1.6
Zions First National Bank	1,311	1.1	2,613	2.3
Yamaichi Int'l (America) Inc.	900	0.7	2,909	2.6
Kidder, Peabody & Co., Inc. (e)	792	0.6	4,622	4.1
S.G. Warburg & Co., Inc.	700	0.6	1,155	1.0
Total	124,099	100%	112,676	100%

CROSSES BETWEEN ACCOUNTS

Between Foreign Accounts and System Open Market Account:	
Outright	10,628
RPs	1,688,162
Other Crosses	5,955
FOREIGN ACCOUNT FEDERAL FUNDS SALES	10,315
GRAND TOTAL	1,715,061

TABLE C-3 (Cont'd)

TRANSACTIONS IN 1994 ON BEHALF OF CUSTOMERS OF THE FEDERAL RESERVE

		Change Effective
(a)	Formerly Sanwa-BGK Securities Co., L.P.	January 1
(b)	Formerly Bank of America N / T & S / A	April 18
(c)	Formerly Carroll McEntee & McGinley, Inc.	May 9
(d)	Formerly Smith Barney Shearson, Inc.	June 1
(e)	Removed from the list of authorized dealers	December 23

* Includes only the initiation of RP transactions.

Note: Includes Treasury and Federal agency securities.
Ranked according to volume of outright transactions.
Figures may not add to totals due to rounding.

APPENDIX
D

DEVELOPMENTS AMONG PRIMARY DEALERS

APPENDIX D

DEVELOPMENTS AMONG PRIMARY DEALERS

I. List of Primary Dealers

In 1994, the number of firms on the list of primary dealers decreased to 38, reflecting the acquisition of Kidder, Peabody & Co. by PaineWebber Group, Inc. Additionally, four name changes were recorded. The new names are as follows:

BA Securities, Inc. (formerly Bank of America N.T. & S.A.);

HSBC Securities, Inc. (formerly Carroll McEntee & McGinley Incorporated);

Sanwa Securities (USA) Co., L.P. (formerly Sanwa-BGK Securities Co., L.P.);

Smith Barney Inc. (formerly Smith Barney Shearson, Inc.).

One of the name changes reflected a structural reorganization; the remaining three were changes in nomenclature only. In April, Bank of America N.T. & S.A. was reorganized as a Section 20 investment subsidiary.

II. Primary Dealer Activity

Excluding Kidder, Peabody's earnings on its government securities operations, primary dealers' aggregate pretax profits dropped sharply in 1994 to about $160 million from $1.6 billion the previous year.[1] In general, dealer revenues suffered in the rising interest rate environment. The impact on mortgage-backed operations was particularly severe. As a group, dealers reported losses of about $650 million on these activities, a net deterioration of over $900 million from the previous year. The deterioration in performance

[1]Circumstances surrounding Kidder, Peabody's government securities activities are described in the following section.

was widespread, although one dealer, Salomon Brothers, saw its net losses on mortgage-backed securities shrink by $500 million. Aggregate dealer profits for operations in U.S. Treasury and non-mortgage-backed agency debt (excluding Kidder) were about $730 million, down from $1.1 billion in 1993.

III. Acquisition of Kidder, Peabody & Co.

Kidder Peabody & Co. was sold by its parent company, General Electric Co., to PaineWebber in the wake of revelations of a fraudulent trading scheme. In April, Kidder, Peabody publicly alleged that the head of its Government bond trading desk had generated over $350 million in phoney profits since 1991 by booking fake earnings on Treasury STRIPS trades. The firm took a charge to its reported income for March to cover the phantom profits. Kidder also sustained significant losses in its large mortgage-backed portfolio in 1994. The sale to PaineWebber became effective December 16.

TABLE D-1

LIST OF THE PRIMARY GOVERNMENT SECURITIES DEALERS REPORTING TO THE MARKET REPORTS DIVISION OF THE FEDERAL RESERVE BANK OF NEW YORK

BA Securities, Inc.
Barclays de Zoete Wedd Securities, Inc.
Bear, Stearns & Co., Inc.
BT Securities Corporation
Chase Securities, Inc.
Chemical Securities, Inc.
Citicorp Securities, Inc.
CS First Boston Corporation
Daiwa Securities America, Inc.
Dean Witter Reynolds, Inc.
Deutsche Bank Securities Corporation
Dillon, Read & Co., Inc.
Donaldson, Lufkin & Jenrette Securities Corporation
Eastbridge Capital Inc.
First Chicago Capital Markets, Inc.
Fuji Securities Inc.
Goldman, Sachs & Co.
Greenwich Capital Markets, Inc.
Harris Nesbitt Thomson Securities Inc.
HSBC Securities, Inc.
Aubrey G. Lanston & Co., Inc.
Lehman Government Securities, Inc.
Merrill Lynch Government Securities, Inc.
J.P. Morgan Securities, Inc.
Morgan Stanley & Co., Inc.
NationsBanc Capital Markets, Inc.
The Nikko Securities Co. International, Inc.
Nomura Securities International, Inc.
Paine Webber Incorporated
Prudential Securities Inc.
Salomon Brothers, Inc.
Sanwa Securities (USA) Co., L.P.
Smith Barney Inc.
SBC Government Securities, Inc.
UBS Securities Inc.
S.G. Warburg & Co., Inc.
Yamaichi International (America), Inc.
Zions First National Bank

December 31, 1994

Operations in United States Government Securities and Federal Agency Securities
(In thousands of dollars)

The total of United States Government securities and Federal agency securities held by the Federal Reserve System at the close of business on December 31, 1994, together with changes from holdings on December 31, 1993, are summarized in the following table on a delivery basis.

System Open Market Account	Purchases	Sales	Redemptions	Exchanges	Net Changes	Holdings 12/31/94	Holdings 12/31/93
Government Securities							
Treasury Bills:						177,378,390	160,367,594
Outright	17,484,000	-	-	380,326,526 (380,326,526)	17,484,000		
Matched Transactions	1,700,836,213	1,701,309,417	-		(473,204)		
Market	13,147,000	13,147,000	-	-	-		
Foreign official	1,687,689,213	1,688,162,417	-	-	(473,204)		
Treasury Notes and Bonds maturing:							
Within 1 year	682,500	-	2,336,650	(30,863,218)	(32,517,368)#	35,841,385	35,423,233
1 to 5 years	9,966,400	-	-	25,371,628	35,338,028 #	88,401,201	79,826,076
5 to 10 years	3,931,900	-	-	4,716,590	8,648,490 #	28,053,270	24,659,409
Over 10 years	3,249,000	-	-	775,000	4,024,000 #	34,844,993	31,738,979
Total Notes and Bonds	17,829,800	-	2,336,650	-	15,493,150	187,140,849	171,647,699
Total Govt. Secs.							
Incl. Matched Trans.	1,736,150,013	1,701,309,417	2,336,650	-	32,503,946	364,519,239	332,015,293
(Excl. Matched Trans.	35,313,800	-	2,336,650	-	32,977,150	372,560,593	339,583,443)
Federally Sponsored Agency issues maturing:							
Within 1 year	-	-	645,300	2,208,000 (2,382,650)	(819,950)##	1,736,710	1,822,950
1 to 5 years	-	-	180,650	-	(180,650)##	1,387,245	2,104,705
5 to 10 years	-	-	59,000	69,650	10,650 ##	487,750	569,000
Over 10 years	-	-	116,770	105,000	(11,770)##	25,000	141,770
Total Agency Issues	-	-	1,001,720	-	(1,001,720)	3,636,705	4,638,425
Total System Account							
Incl. Matched Trans.	1,736,150,013	1,701,309,417	3,338,370	-	31,502,226	368,155,944	336,653,718
(Excl. Matched Trans.	35,313,800	-	3,338,370	-	31,975,430	376,197,298	344,221,868)
F.R.B. of New York							
Repurchase Agreements for System	361,972,000	364,594,000	-	-	(2,622,000)	10,590,000	13,212,000
Customer-Related RPs passed through to the market	112,675,900	112,675,900	-	-	-	-	-

Does not include the following maturity shifts:
Does not include the following maturity shifts:

(In thousands of dollars)

	Within 1 year	1 to 5 years	5 to 10 years	Over 10 years
#	32,935,520	(26,762,905)	(5,254,629)	(917,986)
##	733,710	(536,810)	(91,900)	(105,000)

Declines appear in parentheses.

TRANSACTIONS BETWEEN FEDERAL RESERVE AND GOVERNMENT SECURITY DEALERS - 1994

Outright Transactions*
Gross purchases plus gross sales:
(In thousands of dollars)

Securities Dealers	Dollar Volume: Treasury Bills	Dollar Volume: Treasury Coupon Issues	Dollar Volume: Total Treasury Issues	Percentage Share: Treasury Bills	Percentage Share: Treasury Coupon Issues	Percentage Share: Total Treasury Issues
Salomon Brothers, Inc.	210,000	3,337,000	3,547,000	2.7%	19.6%	14.4%
Daiwa Securities America, Inc.	2,525,000	258,000	2,783,000	33.0	1.5	11.3
Morgan Stanley & Co., Inc.	336,200	1,744,500	2,080,700	4.4	10.2	8.4
Merrill Lynch Government Sec. Inc.	360,000	1,386,000	1,746,000	4.7	8.1	7.1
Greenwich Capital Markets, Inc.	-	1,562,000	1,562,000	-	9.2	6.3
Lehman Government Securities, Inc.	225,000	740,000	965,000	2.9	4.3	3.9
CS First Boston Corporation	510,000	330,000	840,000	6.7	1.9	3.4
Barclays de Zoete Wedd Secs. Inc.	100,000	725,000	825,000	1.3	4.3	3.3
UBS Securities Inc.	540,000	227,000	767,000	7.0	1.3	3.1
Paine Webber Inc.	273,000	490,000	763,000	3.6	2.9	3.1
Eastbridge Capital Inc.	310,000	324,900	634,900	4.0	1.9	2.6
BT Securities Corporation	50,000	567,000	617,000	0.7	3.3	2.5
J.P. Morgan Securities, Inc.	185,000	411,000	596,000	2.4	2.4	2.4
Donaldson, Lufkin & Jenrette Sec. Corp.	15,000	560,000	575,000	0.2	3.3	2.3
Fuji Securities Inc.	275,000	280,000	555,000	3.6	1.6	2.2
Smith Barney Inc. (d)	202,000	279,000	481,000	2.6	1.6	1.9
Goldman, Sachs & Co.	205,000	261,000	466,000	2.7	1.5	1.9
Bear, Stearns & Co., Inc.	-	459,300	459,300	-	2.7	1.9
Deutsche Bank Securities Corporation	93,000	328,000	421,000	1.2	1.9	1.7
Harris Nesbitt Thomson Securities Inc.	20,000	395,700	415,700	0.3	2.3	1.7
NationsBanc Capital Markets, Inc.	90,000	257,000	347,000	1.2	1.5	1.4
Prudential Securities Inc.	50,000	258,000	308,000	0.7	1.5	1.2
Chemical Securities, Inc.	75,000	214,000	289,000	1.0	1.3	1.2
SBC Government Securities, Inc.	110,000	173,000	283,000	1.4	1.0	1.1
Sanwa Securities (USA) Co., L.P. (a)	250,000	25,000	275,000	3.3	0.1	1.1
Citicorp Securities, Inc.	40,000	216,900	256,900	0.5	1.3	1.0
Dillon, Read & Co., Inc.	20,000	215,000	235,000	0.3	1.3	1.0
The Nikko Securities Co., Int'l Inc.	120,000	114,300	234,300	1.6	0.7	0.9
Aubrey G. Lanston & Co., Inc.	85,000	137,000	222,000	1.1	0.8	0.9
HSBC Securities, Inc. (c)	72,000	142,000	214,000	0.9	0.8	0.9
Chase Securities, Inc.	85,000	110,000	195,000	1.1	0.6	0.8
Zions First National Bank	100,000	60,000	160,000	1.3	0.4	0.6
Yamaichi Int'l (America) Inc.	100,000	11,000	111,000	1.3	0.1	0.4
S.G. Warburg & Co., Inc.	-	100,000	100,000	-	0.6	0.4
BA Securities, Inc. (b)	7,100	91,000	98,100	0.1	0.5	0.4
Nomura Securities International, Inc.	-	85,000	85,000	-	0.5	0.3
Dean Witter Reynolds, Inc.	-	80,000	80,000	-	0.5	0.3
Kidder, Peabody & Co., Inc. (e)	18,000	46,000	64,000	0.2	0.3	0.3
First Chicago Capital Markets, Inc.	5,000	24,200	29,200	0.1	0.1	0.1
Total	7,661,300	17,024,800	24,686,100	100%	100%	100%

TRANSACTIONS BETWEEN FEDERAL RESERVE AND GOVERNMENT SECURITY DEALERS - 1994

Temporary Transactions#

Securities Dealers	Repurchase Agreements	Percentage Share Securities Dealers	Customer Related	Percentage Share Securities Dealers	Matched Transactions	Percentage Share Securities Dealers
Daiwa Securities America, Inc.	66,528,000 (1)	18.4%	24,340,000 (1)	21.6%	-	-
Lehman Government Securities, Inc.	28,185,000 (2)	7.8	11,090,000 (2)	9.8	-	-
CS First Boston Corporation	23,169,000 (4)	6.4	6,975,000 (4)	6.2	300,000 (10)	2.3%
NationsBanc Capital Markets, Inc.	25,049,000 (3)	6.9	3,956,900 (7)	3.5	-	-
Harris Nesbitt Thomson Securities Inc.	22,632,000 (5)	6.3	4,805,000 (5)	4.3	50,000	0.4
Chase Securities, Inc.	16,652,000 (7)	4.6	8,220,000 (3)	7.3	1,400,000 (4)	10.6
First Chicago Capital Markets, Inc.	21,154,000 (6)	5.8	3,039,000 (10)	2.7	1,400,000 (5)	10.6
Kidder, Peabody & Co., Inc. (e)	16,496,000 (8)	4.6	4,622,000 (6)	4.1	-	-
J.P. Morgan Securities, Inc.	11,433,000	3.2	1,000,000	0.9	3,000,000 (1)	22.8
Paine Webber Inc.	12,235,000 (9)	3.4	2,990,000	-		-
BT Securities Corporation	11,353,000	3.1	2,400,000	2.1	900,000 (6)	6.8
Eastbridge Capital Inc.	11,651,000 (10)	3.2	996,000	0.9	1,775,000 (2)	13.5
Goldman, Sachs & Co.	9,120,000	2.5	3,400,000 (9)	3.0	1,750,000 (3)	13.3
Yamaichi Int'l (America) Inc.	10,679,000	3.0	2,909,000	2.6	-	-
Fuji Securities Inc.	6,898,000	1.9	3,919,000 (8)	3.5	-	-
Donaldson, Lufkin & Jenrette Securities Corp.	6,222,000	1.7	2,175,000	1.9	750,000 (7)	5.7
Citicorp Securities, Inc.	5,945,000	1.6	2,290,000	2.0	-	-
Merrill Lynch Government Securities, Inc.	6,525,000	1.8	1,500,000	1.3	-	-
Greenwich Capital Markets, Inc.	5,555,000	1.5	1,803,000	1.6	-	-
Zions First National Bank	3,912,000	1.1	2,613,000	2.3	-	-
Aubrey G. Lanston & Co., Inc.	4,239,000	1.2	1,935,000	1.7	10,000	0.1
S.G. Warburg & Co., Inc.	3,962,000	1.1	1,155,000	1.0	300,000	2.3
Sanwa Securities (USA) Co., L.P. (a)	2,950,000	0.8	1,855,000	1.6	500,000 (9)	3.8
Morgan Stanley & Co., Inc.	3,900,000	1.1	500,000	0.4	550,000 (8)	4.2
Bear, Stearns & Co., Inc.	2,780,000	0.8	1,450,000	1.3	-	-
BA Securities, Inc. (b)	1,493,000	0.4	2,665,000	2.4	50,000	0.4
Chemical Securities, Inc.	3,071,000	0.8	1,100,000	1.0	-	-
Salomon Brothers, Inc.	2,955,000	0.8	1,200,000	1.1	-	-
Nomura Securities International, Inc.	3,029,000	0.8	1,025,000	0.9	-	-
Barclays de Zoete Wedd Secs. Inc.	2,595,000	0.7	955,000	0.8	100,000	0.8
Dillon, Read & Co., Inc.	2,273,000	0.6	1,228,000	1.1	50,000	0.4
Deutsche Bank Securities Corporation	1,253,000	0.3	885,000	0.8	187,000	1.4
HSBC Securities, Inc. (c)	1,570,000	0.4	375,000	0.3	25,000	0.2
SBC Government Securities, Inc.	1,267,000	0.4	445,000	0.4	-	-
Smith Barney Inc. (d)	1,154,000	0.3	295,000	0.3	50,000	0.4
The Nikko Securities Co., Int'l Inc.	1,057,000	0.3	165,000	0.1	-	-
Prudential Securities Inc.	632,000	0.2	300,000	0.3	-	-
Dean Witter Reynolds, Inc.	399,000	0.1	100,000	0.1	-	-
UBS Securities Inc.	-	-	-	-	-	-
Subtotal	361,972,000	100%	112,675,900	100%	13,147,000	100%
Foreign & International Institutions	-		-		1,688,162,417	
Total	361,972,000		112,675,900		1,701,309,417	

TRANSACTIONS BETWEEN FEDERAL RESERVE AND GOVERNMENT SECURITY DEALERS - 1994

		Change Effective
(a)	Formerly Sanwa-BGK Securities Co., L.P.	January 1
(b)	Formerly Bank of America N / T & S / A	April 18
(c)	Formerly Carroll McEntee & McGinley, Inc.	May 9
(d)	Formerly Smith Barney Shearson, Inc.	June 1
(e)	Removed from the list of authorized dealers	December 23

Additional notes on Outright Transactions:

* Commitment basis. Dealers listed in descending order according to total volume.

Additional notes on Temporary Transactions:

#This table indicates only the initiation of each type of transaction.
Dealers listed in descending order according to total temporary transactions.
Figures in parentheses indicate rank order for that type of transaction.

U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN SYSTEM OPEN MARKET ACCOUNT

(In thousands of dollars)

		Holdings* 12/31/94	Net change since 12/31/93
Treasury Bills		177,378,390	17,010,796
Treasury Notes			
Matured in 1994			(32,656,287)
Issues outstanding			
4.625 %	12/31/94	1,225,000	-
7.625	12/31/94	1,204,665	-
8.625	01/15/95	621,000	110,000
4.250	01/31/95	737,440	-
5.500	02/15/95	2,373,720	1,000
7.750	02/15/95	102,900	49,900
11.250	02/15/95	1,453,000	-
3.875	02/15/95	1,145,290	-
3.875	03/31/95	2,095,510	159,000
8.375	04/15/95	369,700	82,000
3.875	04/30/95	702,750	50,000
5.875	05/15/95	3,829,300	37,300
8.500	05/15/95	273,500	54,000
11.250	05/15/95	798,000	-
4.125	05/31/95	1,227,460	218,000
4.125	06/30/95	1,392,435	120,000
8.875	07/15/95	300,020	25,000
4.250	07/31/95	561,970	50,000
4.625	08/15/95	2,911,005	-
8.500	08/15/95	866,100	93,000
10.500	08/15/95	1,096,728	-
3.875	08/31/95	724,830	103,200
3.875	09/30/95	961,380	-
8.625	10/15/95	485,475	86,000
3.875	10/31/95	1,087,430	271,000
5.125	11/15/95	3,080,135	-
8.500	11/15/95	768,500	126,000
9.500	11/15/95	273,000	-
4.250	11/30/95	752,475	106,000
4.250	12/31/95	1,680,000	130,000
9.250	01/15/96	1,227,984	208,500
4.000	01/31/96	338,730	338,730
7.500	01/31/96	1,268,000	25,000
4.625	02/15/96	3,828,580	140,000
7.875	02/15/96	1,427,015	330,000
8.875	02/15/96	616,545	25,000
7.500	02/29/96	1,255,700	92,700
4.625	02/29/96	447,620	447,620
5.125	03/31/96	1,979,720	1,979,720
7.750	03/31/96	1,118,500	97,500
9.375	04/15/96	786,855	36,000
5.500	04/30/96	800,000	800,000
7.625	04/30/96	926,000	27,000
4.250	05/15/96	2,228,215	350,000
7.375	05/15/96	2,073,909	105,000
5.875	05/31/96	693,000	693,000
7.625	05/31/96	393,000	-
6.000	06/30/96	1,765,000	1,765,000
7.875	06/30/96	412,000	5,000

		Holdings* 12/31/94	Net change since 12/31/93
Treasury Notes (Cont'd)			
7.875 %	07/15/96	595,752	15,000
6.125	07/31/96	1,196,750	1,196,750
7.875	07/31/96	270,000	60,000
4.375	08/15/96	3,074,300	150,000
7.250	08/31/96	499,300	59,800
6.250	08/31/96	500,000	500,000
7.000	09/30/96	364,000	26,000
6.500	09/30/96	1,200,000	1,200,000
8.000	10/15/96	374,800	60,000
6.875	10/31/96	1,245,000	620,000
4.375	11/15/96	4,526,933	312,000
7.250	11/15/96	1,056,035	60,000
6.500	11/30/96	210,000	-
7.250	11/30/96	265,000	265,000
6.125	12/31/96	200,000	-
8.000	01/15/97	498,500	264,500
6.250	01/31/97	150,000	10,000
4.750	02/15/97	1,669,796	1,669,796
6.750	02/28/97	472,000	90,000
6.875	03/31/97	484,000	56,000
8.500	04/15/97	640,500	235,000
6.875	04/30/97	965,000	100,000
6.500	05/15/97	3,410,000	3,410,000
8.500	05/15/97	564,000	135,000
6.750	05/31/97	324,000	55,000
6.375	06/30/97	430,000	50,000
8.500	07/15/97	765,710	215,300
5.500	07/31/97	400,000	100,000
8.625	08/15/97	497,000	25,000
6.500	08/15/97	2,262,945	2,262,945
5.625	08/31/97	574,000	20,000
5.500	09/30/97	541,000	141,000
8.750	10/15/97	581,000	150,000
5.750	10/31/97	315,000	30,000
8.875	11/15/97	595,000	50,000
7.375	11/15/97	2,800,000	2,800,000
6.000	11/30/97	245,700	39,000
6.000	12/31/97	500,780	-
7.875	01/15/98	709,800	113,000
5.625	01/31/98	374,000	-
8.125	02/15/98	279,000	-
5.125	02/28/98	454,000	-
5.125	03/31/98	1,295,000	-
7.875	04/15/98	559,500	150,000
5.125	04/30/98	495,000	125,000
9.000	05/15/98	478,000	-
5.625	05/31/98	715,000	50,000
5.125	06/30/98	1,446,000	405,000
8.250	07/15/98	1,170,140	384,000
5.250	07/31/98	357,000	12,000
9.250	08/15/98	730,000	67,000
4.750	08/31/98	591,000	82,000
4.750	09/30/98	900,000	-
7.125	10/15/98	968,593	77,000
4.750	10/31/98	818,900	68,900
8.875	11/15/98	490,000	2,000

* Delivery basis. (Includes matched sale-purchase transactions.)

Note: Declines in holdings are shown in parentheses.

U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN SYSTEM OPEN MARKET ACCOUNT

(In thousands of dollars)

Treasury Notes (Cont'd)		Holdings* 12/31/94	Net change since 12/31/93
5.125 %	11/30/98	869,000	269,000
5.125	12/31/98	1,479,662	120,000
6.375	01/15/99	851,545	76,000
5.000	01/31/99	325,000	325,000
8.875	02/15/99	637,000	21,000
5.500	02/28/99	435,000	435,000
5.875	03/31/99	1,850,000	1,850,000
7.000	04/15/99	1,048,700	445,000
6.500	04/30/99	969,620	969,620
9.125	05/15/99	877,500	116,000
6.750	05/31/99	515,990	515,990
6.750	06/30/99	1,556,820	1,556,820
6.375	07/15/99	287,000	80,000
6.875	07/31/99	895,000	895,000
8.000	08/15/99	625,000	-
6.875	08/31/99	551,480	551,480
7.125	09/30/99	1,078,752	1,078,752
6.000	10/15/99	406,115	133,900
7.500	10/31/99	448,315	448,315
7.875	11/15/99	667,000	52,000
7.750	11/30/99	264,845	264,845
6.375	01/15/00	689,545	155,000
8.500	02/15/00	757,000	127,000
5.500	04/15/00	310,000	10,000
8.875	05/15/00	480,000	-
8.750	08/15/00	816,000	296,000
8.500	11/15/00	816,000	169,000
7.750	02/15/01	649,000	156,000
8.000	05/15/01	747,000	95,000
7.875	08/15/01	1,052,000	410,000
7.500	11/15/01	1,223,000	330,000
7.500	05/15/02	971,009	64,000
6.375	08/15/02	1,980,000	285,000
6.250	02/15/03	1,995,000	280,000
5.750	08/15/03	3,465,000	65,000
5.875	02/15/04	550,000	550,000
7.250	05/15/04	1,868,550	1,868,550
7.250	08/15/04	750,000	750,000
7.875	11/15/04	1,603,040	1,603,040
Total Treasury Notes		144,143,313	12,067,186
Treasury Bonds			
Matured in 1994			(337,281)
Issues outstanding			
3.000 %	02/15/95	2,100	-
10.500	02/15/95	182,350	-
10.375	05/15/95	125,900	-

Treasury Bonds (Cont'd)		Holdings* 12/31/94	Net change since 12/31/93
12.625 %	05/15/95	417,317	-
11.500	11/15/95	63,000	1,000
3.500	11/15/98	30,750	-
8.500	05/15/99	-	(1,085,755)
7.875	02/15/00	766,490	3,000
8.375	08/15/00	2,205,975	50,000
11.750	02/15/01	160,803	-
13.125	05/15/01	165,726	-
8.000	08/15/01	505,810	-
13.375	08/15/01	251,092	20,000
15.750	11/15/01	172,904	10,000
14.250	02/15/02	159,800	34,000
11.625	11/15/02	339,650	57,000
10.750	02/15/03	537,250	153,000
10.750	05/15/03	206,000	35,000
11.125	08/15/03	347,400	115,000
11.875	11/15/03	404,240	157,000
12.375	05/15/04	517,786	305,000
13.750	08/15/04	156,000	110,000
11.625	11/15/04	434,200	110,000
8.250	05/15/05	1,497,660	5,000
12.000	06/15/05	214,476	110,000
10.750	05/15/05	525,000	72,000
9.375	02/15/06	20,000	-
7.625	02/15/07	1,389,164	-
7.875	11/15/07	378,500	100,000
8.375	08/15/08	788,500	-
8.750	11/15/08	1,588,500	-
9.125	05/15/09	756,205	50,000
10.375	11/15/09	1,050,939	-
11.750	02/15/10	717,400	12,000
10.000	05/15/10	1,171,556	-
12.750	11/15/10	1,260,865	25,000
13.875	05/15/11	1,028,542	60,000
14.000	11/15/11	885,091	40,000
10.375	11/15/12	1,601,741	95,000
12.000	08/15/13	2,855,772	60,000
13.250	05/15/14	439,450	5,000
12.500	08/15/14	799,720	145,000
11.750	11/15/14	1,110,000	-
11.250	02/15/15	1,215,733	195,000
10.625	08/15/15	880,000	105,000
9.875	11/15/15	371,500	85,000
9.250	02/15/16	688,000	229,000
7.250	05/15/16	990,000	25,000
7.500	11/15/16	1,045,000	90,000
8.750	05/15/17	384,000	185,000
8.875	08/15/17	718,000	268,000
9.125	05/15/18	296,900	55,000
9.000	11/15/18	156,000	50,000
8.875	02/15/19	468,000	43,000
8.125	08/15/19	1,324,900	243,000
8.500	02/15/20	465,879	45,000

* Delivery basis.

Note: Declines in holdings are shown in parentheses.

U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN SYSTEM OPEN MARKET ACCOUNT

(In thousands of dollars)

Treasury Bonds (Cont'd)		Holdings* 12/31/94	Net change since 12/31/93
8.750 %	05/15/20	380,000	25,000
8.750	08/15/20	510,000	65,000
7.875	02/15/21	235,000	25,000
8.125	05/15/21	380,000	20,000
8.125	08/15/21	320,000	10,000
8.000	11/15/21	755,000	65,000
7.250	08/15/22	400,000	30,000
7.625	11/15/22	470,000	70,000
7.125	02/15/23	982,000	177,000
6.250	08/15/23	880,000	355,000
7.500	11/15/24	450,000	450,000
Total Treasury Bonds		42,997,536	3,425,964
Total Treasury Security Holdings		364,519,239	32,503,946

* Delivery basis.

Note: Declines in holdings are shown in parentheses.

U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN SYSTEM OPEN MARKET ACCOUNT

(In thousands of dollars)

U.S. Government-Sponsored Agency Issues

		Holdings* 12/31/94	Net change since 12/31/93
FHLB			
Matured in 1994			(453,600)
Issues outstanding			
5.450 %	01/25/95	35,000	-
8.400	01/25/95	7,000	-
5.940	02/27/95	50,000	-
8.600	02/27/95	5,000	-
6.450	03/27/95	48,000	-
7.875	03/27/95	15,000	-
9.000	03/27/95	20,000	-
6.040	04/25/95	20,000	-
8.875	06/26/95	8,000	-
10.300	07/25/95	18,000	-
4.600	08/25/95	87,000	-
4.500	09/25/95	46,000	-
5.000	10/25/95	83,000	-
5.375	11/27/95	120,000	-
9.500	12/26/95	3,000	-
8.100	03/25/96	10,000	-
9.800	03/25/96	3,000	-
4.360	04/25/96	14,000	-
7.750	04/25/96	33,000	-
8.250	05/27/96	16,000	-
8.000	07/25/96	15,000	-
8.250	09/25/96	2,000	-
7.100	10/25/96	13,000	-
8.250	11/25/96	10,000	-
6.850	02/25/97	26,700	-
7.650	03/25/97	12,000	-
9.150	03/25/97	5,000	-
6.990	04/25/97	14,000	-
5.260	04/27/98	14,000	-
9.250	11/25/98	5,000	-
9.300	01/25/99	2,000	-
8.600	06/25/99	3,900	-
8.450	07/26/99	5,000	-
8.600	08/25/99	11,000	-
8.375	10/25/99	10,000	-
8.600	01/25/00	6,000	-
Total		795,600	(453,600)
FNMA			
Matured in 1994			(214,650)
Issues outstanding			
9.000 %	01/10/95	15,000	-
11.950	01/10/95	12,000	-
10.500	09/11/95	20,000	-
8.800	11/10/95	100,000	-
7.700	02/12/96	-	(40,000)
8.000	04/10/96	-	(45,000)
8.050	06/10/96	-	(25,650)
8.500	06/10/96	10,000	-

		Holdings* 12/31/94	Net change since 12/31/93
FNMA (Cont'd)			
8.750 %	06/10/96	10,000	-
8.000	07/10/96	31,500	-
8.200	08/12/96	-	(5,000)
7.700	09/10/96	25,000	-
7.050	10/10/96	100,000	-
6.900	11/12/96	58,000	-
7.700	12/10/96	12,000	-
6.200	01/10/97	15,000	-
7.600	01/10/97	160,000	-
7.050	03/10/97	70,000	-
7.000	04/10/97	10,000	-
9.250	04/10/97	-	(15,000)
9.200	06/10/97	27,000	-
8.950	07/10/97	10,000	-
9.150	09/10/97	-	(20,000)
9.550	09/10/97	35,000	-
5.700	09/11/97	45,000	-
5.350	10/10/97	4,700	-
6.300	12/11/97	55,000	-
8.650	02/10/98	10,000	-
5.300	03/11/98	50,000	-
9.150	04/10/98	30,000	-
8.200	08/10/98	35,000	-
9.400	08/10/98	50,000	-
7.850	09/10/98	48,000	-
5.300	12/10/98	15,000	-
7.050	12/10/98	30,000	-
7.500	03/10/99	50,000	-
9.550	03/10/99	25,000	-
8.700	06/10/99	23,000	-
8.450	07/12/99	5,000	-
7.000	08/11/99	15,000	15,000
9.000	10/11/99	-	(44,000)
8.350	11/10/99	7,000	-
8.650	12/10/99	-	(30,000)
6.100	02/10/00	25,000	-
9.050	04/10/00	10,000	-
9.800	05/10/00	30,000	-
9.200	09/11/00	10,000	-
8.500	02/12/01	-	(15,000)
8.625	04/10/01	35,000	-
8.700	06/11/01	20,000	-
8.875	07/10/01	5,000	-
7.200	01/10/02	10,000	-
7.900	04/10/02	10,000	-
7.800	06/10/02	40,100	-
7.300	07/10/02	12,000	-
6.950	09/10/02	35,000	-
6.625	04/10/03	30,000	-
6.450	06/10/03	25,000	-
6.200	07/10/03	15,000	-
5.800	12/10/03	10,000	-
7.600	04/14/04	100,000	100,000
7.550	06/10/04	24,650	24,650
8.050	07/14/04	5,000	5,000
8.250	10/12/04	30,000	30,000
10.350	12/10/15	10,000	-
8.200	03/10/16	15,000	-
Total		1,724,950	(279,650)

* Delivery basis.

Note: Declines in holdings are shown in parentheses.

E-3 (Cont'd)

U.S. TREASURY AND FEDERAL AGENCY SECURITY HOLDINGS IN SYSTEM OPEN MARKET ACCOUNT

(In thousands of dollars)

U.S. Government-Sponsored Agency Issues (Cont'd)

		Holdings* 12/31/94	Net change since 12/31/93
FFCB			
Matured in 1994			(1,154,700)
Issues outstanding			
3.610 %	01/03/95	25,000	25,000
4.840	01/03/95	50,000	50,000
5.000	01/03/95	150,000	150,000
8.300	01/20/95	21,710	-
3.530	02/01/95	25,000	25,000
5.170	02/01/95	21,000	21,000
5.380	02/01/95	70,000	70,000
5.190	03/01/95	100,000	100,000
5.660	03/01/95	155,000	155,000
4.430	04/03/95	45,000	45,000
5.490	04/03/95	50,000	50,000
5.160	05/01/95	25,000	25,000
5.850	05/01/95	30,000	30,000
5.470	06/01/95	61,000	61,000
6.150	06/01/95	120,000	120,000
6.330	01/11/95	19,000	19,000
6.700	01/12/95	57,000	57,000
11.900	10/20/97	15,000	-
8.650	10/01/99	10,000	-
Total		1,049,710	(151,700)
FLB**			
Issues outstanding			
7.950 %	10/21/96	49,795	-
7.350	01/20/97	16,650	-
Total		66,445	-

		Holdings* 12/31/94	Net change since 12/31/93
Washington Metro Area Transit Auth.***			
Issues outstanding			
7.300 %	07/01/12	-	(44,950)
7.350	07/01/12	-	(35,410)
8.150	07/01/14	-	(36,410)
Total		-	(116,770)
Total Agency Issues		3,636,705	(1,001,720)
Total Treasury & Agency Issues		368,155,944	31,502,226

* Delivery basis.

** Federal Land Banks no longer sell debt separately. Their issuance is through Federal Farm Credit Bank consolidated issues.

*** The Federal Reserve is no longer authorized to buy debt of this Government entity because it is eligible to borrow from the Federal Financing Bank. Their debt was all called in 1994.

Note: Declines in holdings are shown in parentheses.

Holdings of Treasury Bills by the System Open Market Account
(In thousands of dollars)

December 31, 1994 Maturity	Holdings*	Percent of the Total Amount Outstanding
1995		
1/05	6,609,830	26.2 %
1/12#	2,645,166	25.6
1/19	6,571,760	25.4
1/26	6,281,500	23.9
2/02	6,972,715	26.3
2/09	11,387,110	26.4
2/16	6,728,985	24.8
2/23	6,441,064	24.6
3/02	6,747,980	25.7
3/09	10,787,155	25.3
3/16	6,358,380	24.6
3/23	6,359,310	25.5
3/30	6,196,335	24.8
4/06	7,752,700	26.2
4/13	3,527,200	26.6
4/20	3,440,200	26.2
4/27	3,512,900	25.7
5/04	7,632,400	24.9
5/11	3,650,900	26.6
5/18	3,350,000	24.1
5/25	3,300,000	24.0
6/01	7,947,200	25.7
6/08	3,400,000	24.0
6/15	3,350,000	23.3
6/22	3,300,000	25.0
6/29	7,475,500	24.7
7/27	4,382,100	25.8
8/24	4,285,000	25.4
9/21	4,445,000	26.5
10/19	4,190,000	24.3
11/16	4,150,000	23.7
12/14	4,200,000	24.6
Total #	177,378,390	25.3 %

* Delivery basis.

\# Holdings were reduced by $8,041,354 thousand of January 12 maturities that were sold under matched sale-purchase agreements.
The percentages include the amounts that had been sold under matched transactions.

Participation in the System Open Market Account

The following table shows the net change in each Reserve Bank's participation during 1994 as a result of reallocations.

Reallocations of Participation in the System Open Market Account During 1994

	Reallocations	Participations December 31, 1994
Boston	($2,312,000,000)	$19,272,417,722.62
New York	8,394,000,000	136,037,203,468.45
Philadelphia	421,000,000	14,398,657,930.44
Cleveland	(1,436,000,000)	23,207,270,665.32
Richmond	671,000,000	29,428,346,952.00
Atlanta	1,394,000,000	16,455,609,748.84
Chicago	(575,000,000)	42,174,672,240.85
St. Louis	1,549,000,000	14,641,627,772.37
Minneapolis	(301,000,000)	8,107,828,584.79
Kansas City	1,725,000,000	15,792,604,567.30
Dallas	(1,738,000,000)	13,923,547,962.93
San Francisco	(7,792,000,000)	34,716,156,384.09
	$14,154,000,000	
	($14,154,000,000)	$368,155,944,000.00

Note: Declines are shown in parentheses.

Reallocation of participation in the System Open Market Account occurs each April and is based on net reserve flows between the districts. Gold certificates are reassigned among the districts according to the balance in each district's interdistrict settlement account. Those districts that are left with a below-average proportion of gold certificates to their Federal Reserve notes outstanding would receive additional gold certificates to return the proportion to the System average by paying for them with securities. A district which loses gold certificates is, in turn, compensated with additional securities. The Federal Reserve Bank of New York carries out the changes in portfolio shares on instruction from the Board of Governors. The resulting percentage of each Bank's participation in the System Account is used throughout the year to apportion the daily SOMA transactions.

System Account Earnings

Earnings from U.S. Government and Federal agency securities held in the System Open Market Account during the calendar year 1994 totaled $19,127,007,578, an increase of $2,350,032,993 from earnings in 1993.

The average earnings rate was 5.43 percent in 1994, compared with 5.29 percent in 1993. The earnings rate, which ended 1994 at 5.98 percent, was 5.04 percent on January 3, 1994. Average holdings increased to $350.5 billion in 1994 from $316.3 billion in 1993.

Note: Earnings reflect a 2 basis-point charge to foreign accounts for repurchase agreements.

The System Open Market Account earnings rate and the net accrual of earnings from the holdings on the last day of 1994 compared with the end of 1993 are shown in the following table:

(In thousands of dollars)

	12/31/94	12/31/93	Net Change
Total Portfolio*	$368,155,944	$336,653,718	$31,502,226
Earnings Rate**	5.98%	5.04%	94%
Net Daily Accrual of Earnings#	$60,332	$46,475	$13,857
Coupon Issues	$34,969	$32,255	$2,714
Treasury Bills	$25,363	$14,220	$11,143

* Delivery basis.

** The earnings rate on the last day of each year excludes interest earnings on holdings of most Federal agency issues because most agency securities accrue interest on a 30-day per month basis. (For accounting purposes, in 31-day months, no interest accrues on the last day and in February, interest earnings on the last day are adjusted to make the month's earnings equivalent to that of a 30-day month.)

\# Net after accrual of discount and amortization of premium balances.

Market Value of Portfolio

The net appreciation of System Open Market Account holdings of Treasury notes and bonds and Federal agency issues on December 31, 1994, as measured by the difference between book value (acquisition cost) and market bid quotations on notes and bonds, is shown below:

(In thousands of dollars)

	Par Value Holdings	Book Value	Market Value	Appreciation or (Depreciation)
Notes	141,713,648	142,555,306	138,052,380	(4,502,926)
Bonds	42,997,536	46,007,579	48,832,545	2,824,966
Agencies	3,636,705	3,635,784	3,597,996	(37,788)

Note: Declines are shown in parentheses.

Temporary Open Market Operations
(In thousands of dollars)

Federal Reserve Bank of New York
Repurchase Agreements Against U.S. Government and Federal Agency Securities

	1994	1993	1992
Purchases	361,972,000	510,509,900	392,939,000
Sales	364,594,000	505,391,900	400,743,000
Year-end Balance	10,590,000	13,212,000	8,094,000
Earnings on Repurchase Agreements	120,067	113,746	88,737

Matched Transactions*
System Open Market Account

	1994	1993	1992
Sales	1,701,309,417	1,475,085,001	1,482,466,745
Purchases	1,700,836,213	1,475,941,201	1,480,139,820
Outstanding transactions at year-end	8,041,354	7,568,150	8,424,350

Customer-Related RP Transactions

	1994	1993	1992
Sales	112,675,900	117,145,000	140,439,000
Purchases	112,675,900	117,145,000	140,439,000
Outstanding transactions at year-end	0	0	0

*Includes transactions in the market and with the System Account.

APPENDIX F

SUMMARY OF POLICY GUIDES AND ACTIONS

I. **Authorization for Domestic Open Market Operations**

Open market operations during 1994 were conducted under the Authorization for Domestic Open Market Operations. Only one temporary change was made to the Authorization during 1994. The Committee raised the authorized limit on intermeeting-period changes in System Account holdings of U.S. Government and Federal agency securities at the March FOMC meeting to $11 billion. The action, taken on the recommendation of the Manager for Domestic Operations, was made to accommodate anticipated movements in various operating factors and required reserves that might necessitate outright operations in excess of the standard $8 billion intermeeting limit. It turned out that the temporary enlargement was not required as the maximum usage was $6.7 billion.

The Authorization for Domestic Open Market Operations in effect for 1994, except when amended as above, is reprinted below:

Authorization for Domestic Open Market Operations

1. The Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York, to the extent necessary to carry out the most recent domestic policy directive adopted at a meeting of the Committee:

    (a) To buy or sell U.S. Government securities, including securities of the Federal Financing Bank, and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States in the open market, from or to securities dealers and foreign and international accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the System Open Market Account at market prices, and, for such Account, to exchange maturing U.S. Government and Federal agency securities with the Treasury or the individual agencies or to allow them to mature without replacement; provided that the aggregate amount of U.S. Government and Federal agency securities held in such Account (including forward commitments) at the close of business on the day of a meeting of the Committee at which action is taken with respect to a domestic policy directive shall not be increased or decreased by more than $8.0 billion during the period commencing with the opening of business on the day following such meeting and ending with the close of business on the day of the next such meeting;

(b) When appropriate, to buy or sell in the open market, from or to acceptance dealers and foreign accounts maintained at the Federal Reserve Bank of New York, on a cash, regular, or deferred delivery basis, for the account of the Federal Reserve Bank of New York at market discount rates, prime bankers acceptances with maturities of up to nine months at the time of acceptance that (1) arise out of the current shipment of goods between countries or within the United States, or (2) arise out of the storage within the United States of goods under contract of sale or expected to move into the channels of trade within a reasonable time and that are secured throughout their life by a warehouse receipt or similar document conveying title to the underlying goods; provided that the aggregate amount of bankers acceptances held at any one time shall not exceed $100 million;

(c) To buy U.S. Government securities, obligations that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States, and prime bankers acceptances of the types authorized for purchase under 1(b) above, from dealers for the account of the Federal Reserve Bank of New York under agreements for repurchase of such securities, obligations, or acceptances in 15 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers; provided that in the event Government securities or agency issues covered by any such agreement are not repurchased by the dealer pursuant to the agreement or a renewal thereof, they shall be sold in the market or transferred to the System Open Market Account; and provided further that in the event bankers acceptances covered by any such agreement are not repurchased by the seller, they shall continue to be held by the Federal Reserve Bank or shall be sold in the open market.

2. In order to ensure the effective conduct of open market operations, the Federal Open Market Committee authorizes and directs the Federal Reserve Banks to lend U.S. Government securities held in the System Open Market Account to Government securities dealers and to banks participating in Government securities clearing arrangements conducted through a Federal Reserve Bank, under such instructions as the Committee may specify from time to time.

3. In order to ensure the effective conduct of open market operations, while assisting in the provision of short-term investments for foreign and international accounts maintained at the Federal Reserve Bank of New York, the Federal Open Market Committee authorizes and directs the Federal Reserve Bank of New York (a) for System Open Market Account, to sell U.S. Government securities to such foreign and international accounts on the bases set forth in paragraph 1(a) under agreements providing for the resale by such accounts of those securities within 15 calendar days on terms comparable to those available on such transactions in the market; and (b) for New York Bank account, when appropriate, to undertake with dealers, subject to the conditions imposed on purchases and sales of securities in paragraph 1(c), repurchase agreements in U.S. Government and agency securities, and to arrange corresponding sale and repurchase agreements between its own account and foreign and international accounts maintained at the Bank. Transactions undertaken with such accounts under the provisions of this paragraph may provide for a service fee when appropriate.

II. Policy Actions of the Board of Governors

The Board approved increases in the discount rate on three occasions as follows: on May 17, from 3 to 3 1/2 percent; on August 16, from 3 1/2 to 4 percent; and on November 15, from 4 to 4 3/4 percent.