

Prefatory Note

The attached document represents the most complete and accurate version available based on original copies culled from the files of the FOMC Secretariat at the Board of Governors of the Federal Reserve System. This electronic document was created through a comprehensive digitization process which included identifying the best-preserved paper copies, scanning those copies,¹ and then making the scanned versions text-searchable.² Though a stringent quality assurance process was employed, some imperfections may remain.

Please note that this document may contain occasional gaps in the text. These gaps are the result of a redaction process that removed information obtained on a confidential basis. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

¹ In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

² A two-step process was used. An advanced optimal character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

MONETARY POLICY ALTERNATIVES

PREPARED FOR THE FEDERAL OPEN MARKET COMMITTEE
BY THE STAFF OF THE BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

MONETARY POLICY ALTERNATIVES

Recent Developments

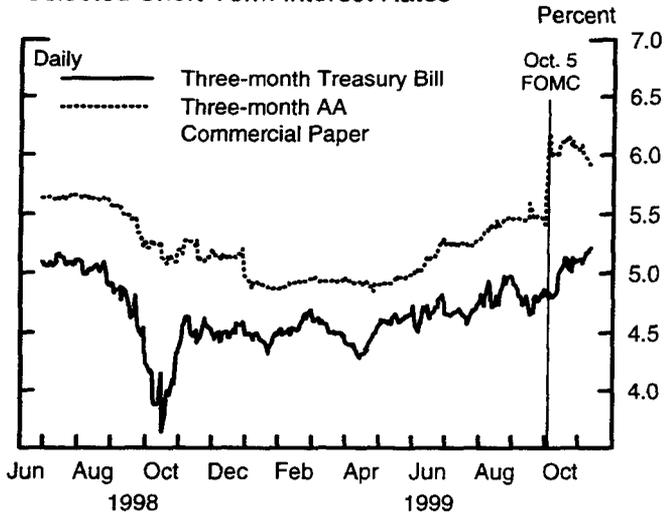
(1) Financial market conditions have become a little more accommodative on balance since the October FOMC meeting, with stock prices rising appreciably and interest and dollar exchange rates showing small mixed changes. While the Committee's decision at that meeting to leave the federal funds rate unchanged was widely anticipated by market participants, the adoption of a bias toward tightening came as something of a surprise, and market interest rates rose in response to the announcement. Yields continued to climb over the first half of the intermeeting period as data releases, especially the September PPI and retail sales reports, elevated concerns about unsustainable growth and inflation and heightened expectations of further monetary policy tightening (chart 1). Yields have since retreated, however, largely in response to data pointing to low wage and price inflation. On net, yields on Treasury coupon securities are from 7 basis points lower to 8 basis points higher.¹

(2) Conditions in private credit markets appear to have eased slightly over the intermeeting period. Yields on long-term private securities have edged lower, swap spreads have narrowed, and rates on most short-term private securities have fallen. More favorable

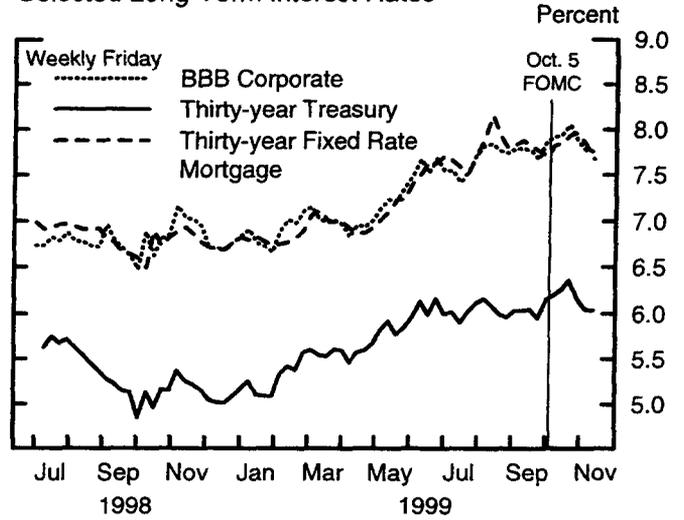
1. In contrast, Treasury bill rates have risen about 20 to 40 basis points. Investors anticipate a large increase in bill supplies in November and December as the Treasury builds its cash balance to larger-than-usual levels ahead of the century date change. In addition, demand for bills likely has decreased somewhat as Y2K-related market concerns have lessened.

Chart 1

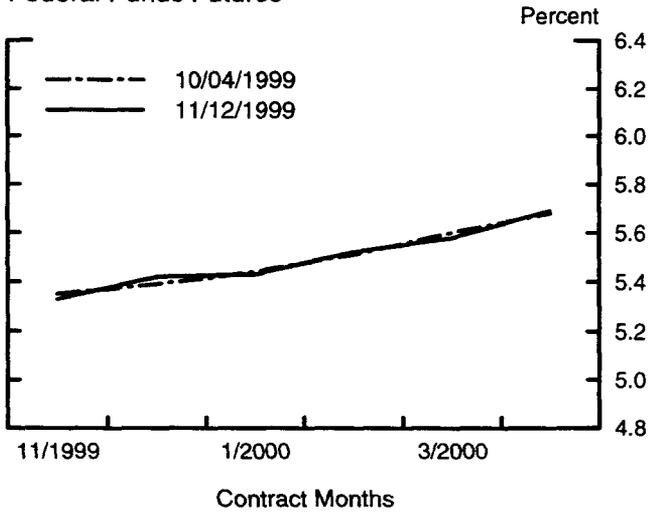
Selected Short-Term Interest Rates



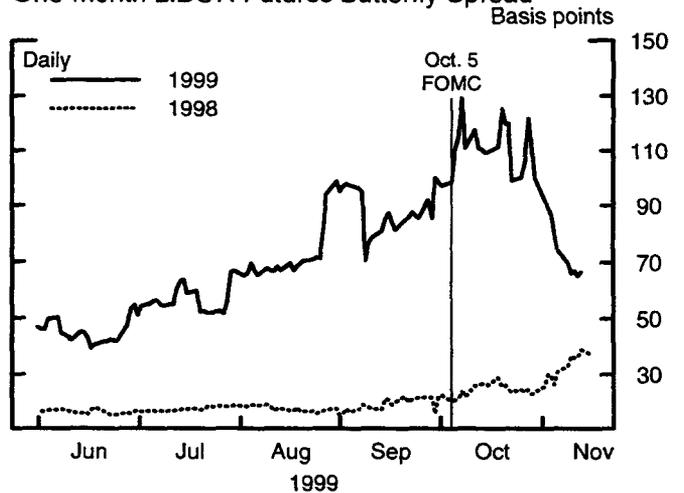
Selected Long-Term Interest Rates



Federal Funds Futures

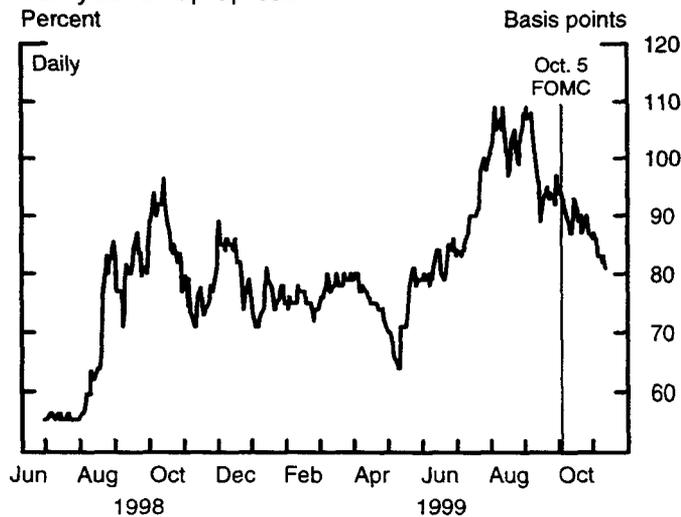


One-month LIBOR Futures Butterfly Spread

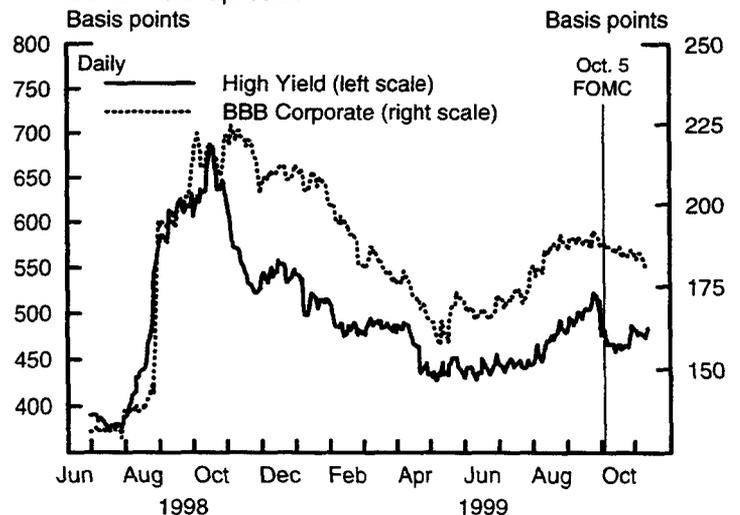


Note. December futures rate less average of November and January futures rates (based on mid-month to mid-month deposit rates).

Ten-year Swap Spread



Bond Yield Spreads*



*High yield spread is relative to the seven-year Treasury yield. BBB corporate spread is relative to the ten-year Treasury yield.

economic performance at home and abroad appears to have fostered investor confidence and perhaps a greater willingness to bear risk. An important part of this more relaxed attitude probably reflects reduced concerns about funding and liquidity pressures over the century date change. The Desk's implementation of a number of measures to enhance its ability to supply reserves and to act as a backstop source of funding to major participants in the financing markets over the century date change no doubt played an important role. The Desk put into place arrangements to execute repurchase agreements on a triparty basis, and, using those arrangements, it began accepting agency mortgage-backed securities as collateral; it also started to conduct repurchase agreements with maturities of up to 90 days that extended into the new year; and it auctioned options on repurchase agreements for the weeks around year-end.² In addition, the relatively high volume of commercial paper issued with

2. The options permit the buyer to engage in overnight repurchase agreements with the Desk on any or all days during a specified week; options have been offered for the weeks beginning on December 23, December 30, and January 6. The demand for the options has been considerable, with the Desk increasing the total volume of options offered in each of the first four auctions and extending the number of auctions from five to seven. The volume of options outstanding is \$74 billion for the week of December 23, \$143 billion for the week of December 30, and \$89 billion for the week of January 6. In the most recent auction, though, propositions fell off considerably, and the Desk responded by substantially reducing the volume of options to be auctioned next week.

The Federal Reserve's other initiative for providing liquidity, the Special Liquidity Facility (SLF), has seen limited usage to date--probably because the federal funds rate was close to its target over most of the intermeeting period. SLF borrowing averaged \$9 million over the intermeeting period, although one depository institution borrowed \$210 million on November 3, when the funds rate reached a high of 10 percent, reportedly to sell the proceeds in the funds market. Most other drawdowns were for testing purposes, although two credit unions borrowed to meet funding needs. The Federal Reserve also expanded the range of collateral eligible to be pledged for discount window loans to include bank obligations, collateralized loan obligations, collateralized bond obligations, commercial mortgage-backed securities, mutual fund shares, and, shortly, sovereign debt denominated in foreign currencies. In recent months, banks have greatly increased the volume of collateral

maturities after the middle of January indicates that borrowers have gotten a good start on meeting their funding needs (chart 2). Direct measures of Y2K effects in financing markets, such as butterfly interest-rate spreads on one-month bank deposits spanning the year-end, have narrowed in recent weeks. Nonetheless, those spreads remain unusually elevated. Moreover, spreads in bond and swap markets have not rolled back all their runup since last spring, and financial markets in general are still somewhat less liquid than the norm prior to the Russian default in August 1998.

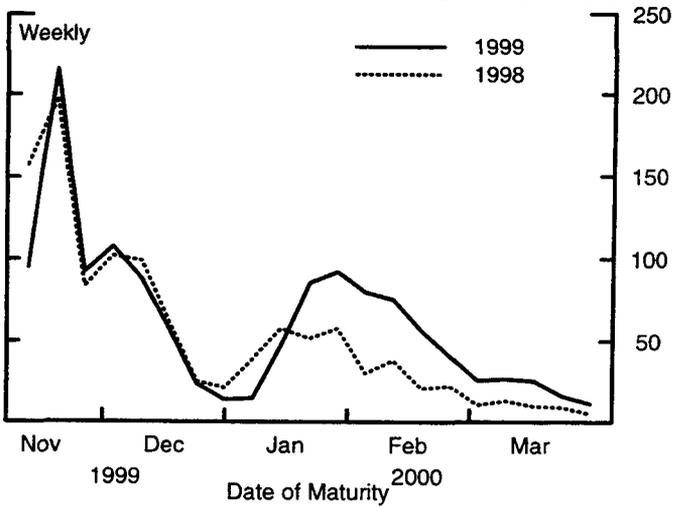
(3) Equity prices have been lifted by stronger-than-expected earnings reports and perceptions of improved prospects for continued strong output growth with subdued inflation. Nonetheless, most broad equity indexes are still a bit below the peaks that were posted in spring and midsummer. An exception, however, is the Nasdaq, which reached a record high over the intermeeting period. Prices of financial stocks have received a further boost from the passage of financial reform legislation. On balance, major equity price indexes have risen 3 to 15 percent since the October FOMC meeting.

(4) In foreign exchange markets, the exchange value of the dollar against a broad index of foreign currencies was little changed on net over the intermeeting period, as a 1 percent appreciation relative to major currencies just offset a like-sized depreciation against the currencies of other important trading partners. For industrial countries, the net change in bilateral exchange rates mirrored variations in long-term interest rate differentials,

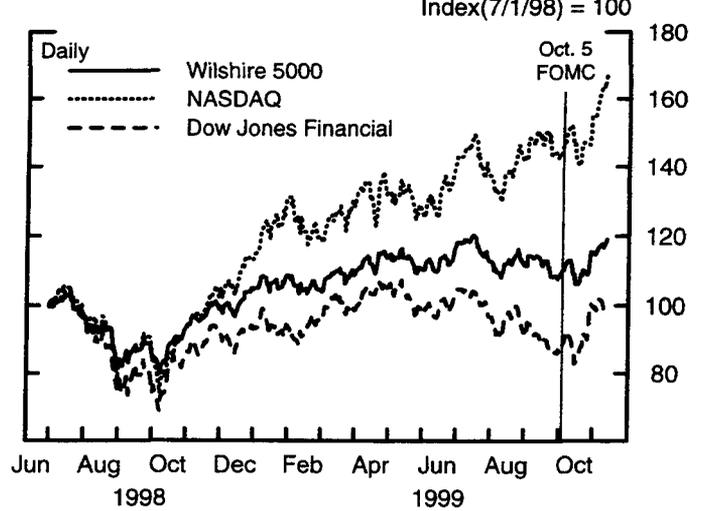
pre-positioned with Reserve Banks to support discount window borrowing, and the ready availability of this credit is likely also helping to calm year-end concerns.

Chart 2

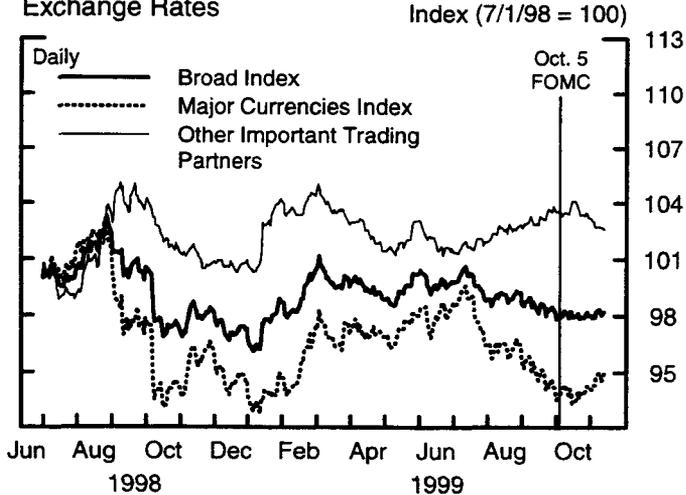
Maturities of Outstanding Commercial Paper, As of November 12



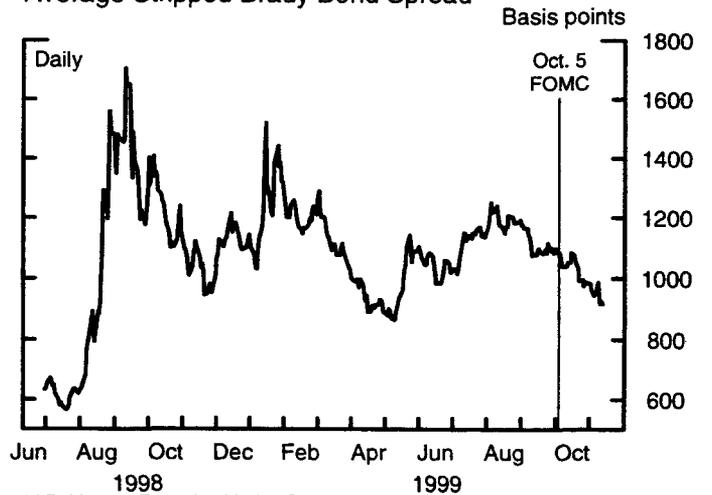
Selected Stock Indexes



Nominal Trade-Weighted Dollar Exchange Rates

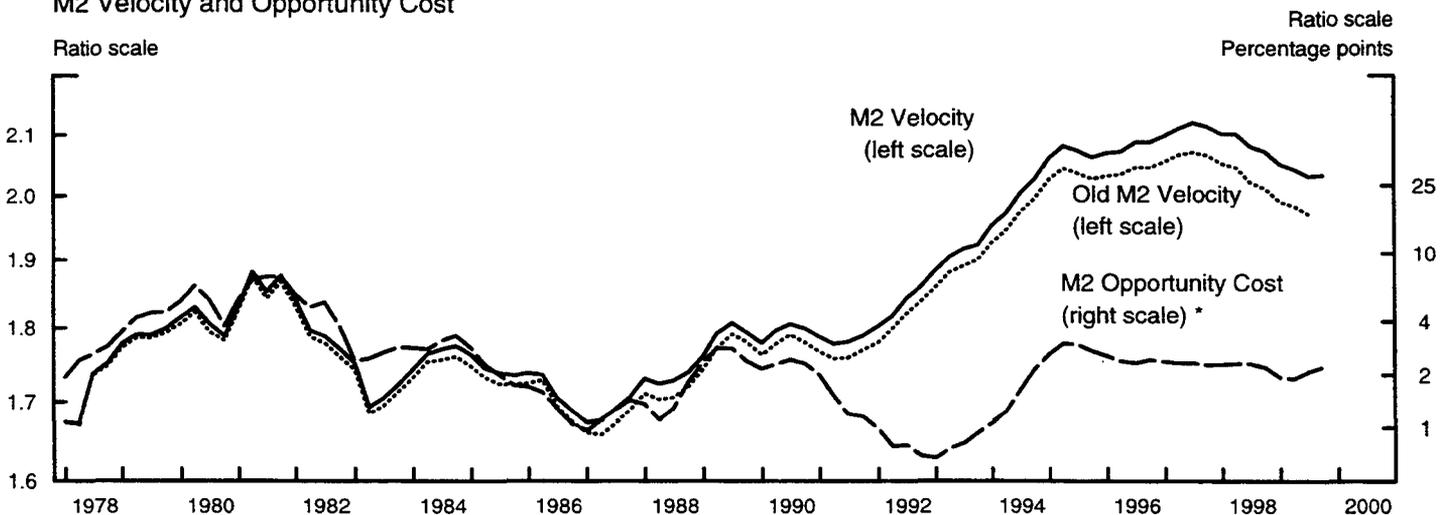


Average Stripped Brady Bond Spread*



*J.P. Morgan Emerging Market Bond Index, an average of stripped Brady bond yield spreads over Treasuries for ten emerging market countries.

M2 Velocity and Opportunity Cost



* Two quarter moving average

but movements on some days were sharp and difficult to relate to fundamentals. Both the European Central Bank and the Bank of England firmed policy late in the intermeeting period, raising official rates 50 and 25 basis points, respectively. Market participants apparently interpreted these actions—which had been largely anticipated—and, in the case of the ECB, the accompanying statement, as lowering the cumulative tightening that might be necessary and as reducing uncertainty by rendering it less likely that additional policy action would be forthcoming for a while. Against this backdrop, ten-year nominal yields fell 30 basis points in Germany and 70 basis points in the United Kingdom over the intermeeting period. These interest rate declines supported equity values but tended to weaken the euro and pound relative to the dollar. In Japan, evidence of sustained economic growth and expectations of substantial fiscal stimulus pushed up bond yields about 15 basis points, share prices 5 percent, and the exchange value of the yen against the dollar over 1 percent. Although rumors surfaced of impending action from time to time, Japanese authorities did not intervene in the foreign exchange market.

. The Desk did not
intervene.

(5) The depreciation of the dollar against the currencies of other important trading partners over the intermeeting period owed in part to greater assurance of economic expansion in many of those emerging economies and, perhaps, to an increased willingness of global investors to bear risk. In addition, relatively orderly elections in Indonesia and Argentina and a primary in Mexico underscored a sense of renewed stability in many of

these countries. Interest rate spreads on emerging market bonds narrowed considerably, and numerous reports indicate that credit markets have been receptive to new issues and debt exchanges by emerging market economies. Investor receptivity was evident in equity markets too: Excluding earthquake-stricken Taiwan, share prices rose 5 to 20 percent.

(6) In October, M2 growth advanced at a 5 percent pace, the same rate as in the third quarter but a bit slower than anticipated in the last bluebook. The public's holdings of currency continued to expand about in line with the rapid rates of earlier this year, but the data do not suggest any pronounced hoarding in advance of the century date change.³ M2 velocity in the third quarter rose at an annualized pace of 1 percent, the first increase in two years (chart 2). The advance likely reflected, at least in part, the rise in the opportunity cost of holding M2 that occurred in the spring and summer as market interest rates rose.⁴ M3 growth in October, at a 10-1/4 percent annual rate, was quite robust, owing to strength in large time deposits and institutional money funds. Bank credit grew only moderately, but banks shifted funding toward sources inside M3.

(7) Debt of domestic nonfinancial sectors expanded at a pace roughly in line with the approximately 6 percent growth of nominal GDP since midyear, leaving this aggregate in

3. Depository institutions have prepared for a surge in currency demand. Vault cash holdings have increased \$10-1/4 billion since the end of May, compared with virtually no change over the same period last year.

4. Revisions to the GDP data have left the pattern of velocity movements unchanged. Since 1994, velocity has moved more closely in line with predictions based on the previous historical relationship between M2 velocity and opportunity cost. However, that span still includes an uptrend in velocity from late 1995 through mid-1997 and a subsequent downtrend, both of which remain difficult to explain.

the upper part of its annual range. In October, net borrowing by businesses showed signs of slowing. Although risk spreads in securities markets have narrowed this fall, the November survey of senior loan officers suggests additional tightening in terms and standards on business loans. The survey also indicated that households have curbed their appetite for debt, perhaps reflecting the backup in interest rates over recent months. Meanwhile, the federal government's favorable budget position has led to a continued paydown of federal debt.

MONEY, CREDIT, AND RESERVE AGGREGATES
(Seasonally adjusted annual percentage rates of growth)

	Aug.	Sep.	Oct.	1998:Q4 to Oct. ²
<u>Money and Credit Aggregates</u>				
M1	3.2	-9.8	5.7	1.1
Adjusted for sweeps	7.1	-5.9	5.9	4.7
M2	5.7	4.9	5.0	6.0
M3	5.2	6.7	10.3	6.8
Domestic nonfinancial debt	6.2	6.5	n.a.	6.5
Federal	1.0	-4.2	n.a.	-1.9
Nonfederal	7.6	9.5	n.a.	9.0
Bank credit	9.3	8.2	2.0	2.5
Adjusted ¹	8.9	6.7	6.0	3.9
<u>Reserve Measures</u>				
Nonborrowed reserves	1.6	1.5	-31.9	-9.4
Total reserves	2.5	1.3	-33.3	-8.9
Adjusted for sweeps	10.3	3.3	-14.9	1.8
Monetary base	7.1	11.3	16.5	10.3
Adjusted for sweeps	7.9	11.0	15.9	10.7
Memo: (millions of dollars)				
Adjustment plus seasonal borrowing	344	338	281	--
Excess reserves	1129	1197	1156	--

NOTE: Monthly reserve measures, including excess reserves and borrowing, are calculated by prorating averages for two-week reserve maintenance periods that overlap months. Reserve data incorporate adjustments for discontinuities associated with changes in reserve requirements.

1. Adjusted to remove the effects of mark-to-market accounting rules (FIN 39 and FASB 115).

2. For nonfinancial debt and its components, 1998:Q4 to September.

Policy Alternatives

(8) The staff has again assumed 50 basis points of firming in the federal funds rate over the course of next year, which is anticipated to be accompanied by a gradual uptrend in bond rates and flat equity prices. These financial conditions, following the rise in interest rates and the leveling out of stock prices during 1999, are projected to contribute to a modest slowing in real GDP growth to a 3-1/2 percent rate over the next two years. This growth rate is a little below the staff's estimate of that of the economy's potential over this period, which has been revised up based on the new NIPA definitions and a reassessment of underlying productivity growth. Hence, the unemployment rate is seen as ticking up from its low October level, to the same 4-1/4 percent level in the fourth quarter of 2001 that was projected in the last Greenbook. Continued taut labor market conditions, along with the feed-through to inflation expectations of higher total consumer price inflation in 1999, are projected to induce a noticeable pickup in nominal labor costs. That pickup outpaces an expected further updrift in the growth of structural labor productivity. The resulting heightened upward pressures on prices are augmented in the projection by a faster rise in non-oil import prices associated with a forecasted depreciation in the exchange value of the dollar. Consequently, core CPI inflation is anticipated to step up 3/4 percentage point to about 2-3/4 percent by 2001, while total CPI inflation remains flat at just under 2-1/2 percent owing to a drop in energy prices.

(9) Even if the Committee, like the staff, sees forces at work tending to raise core inflation over time, it may be sufficiently uncertain about that outcome that it still would

wish to leave the intended funds rate unchanged at this meeting at 5-1/4 percent, as under **alternative B**, and to retain the tilt toward firming to convey a sense of the risks. Most incoming data on prices and labor costs, including GDP prices, the ECI, average hourly earnings, and unit labor costs, have once again proven to be surprisingly benign despite increasingly taut labor markets. This string of favorable readings underscores questions about the reliability of the traditional relationships that lie behind predictions that inflation will pick up should resource utilization remain around its current level. Indeed, the revised output data could be read as leaving open the possibility that productivity is continuing to accelerate, perhaps substantially. While the associated increase in the marginal return on capital projects would require higher real short-term interest rates at some point, the economy could be able to produce beyond its long-run potential for a while longer without an intensification of inflation so long as gains in real wages do not outstrip rising labor productivity. In this circumstance, further policy tightening would be unnecessary for some time. In light of the possibility that supply-side relationships continue to be unusually favorable, the Committee might see considerable benefit from waiting for more solid evidence that an inflationary upswing was in train. Even if productivity gains do not materialize, the possible cost of delaying a firming in policy until early next year may not be considered especially large since longer-term inflation expectations appear to be well anchored.

(10) Markets have priced in about even odds of a tightening at this meeting, and an announcement conveying a Committee decision to maintain both the current federal

funds rate target and an asymmetry toward tightening would prompt a modest rally.

Despite the asymmetry, market participants would likely assume that policy would be on hold until at least the February meeting, owing to the Committee's evident disinclination to act during intermeeting periods and the presumption that it would not want to risk disturbing financial markets around the turn of the year. Initially, bond yields would likely edge lower, and the exchange value of the dollar could fall. However, longer-term interest rates would likely edge higher later in the intermeeting period should economic activity unfold as robustly as in the staff forecast. The equity market would rally on the news of policy inaction, but the staff anticipates that stock prices would move sideways on net over the next few months. There is a wide range of uncertainty in predicting financial market conditions as the century date change approaches; market liquidity may continue to improve and spreads narrow some more, but most financial markets are likely to be unusually illiquid as participants pare back their activity until the new year.

(11) The Committee instead may favor a 25 basis point increase in its intended federal funds rate, as under **alternative C**. Although the staff has adopted the view that structural productivity is growing along a higher and steeper trajectory over the forecast period than previously thought, it still predicts an increase in core inflation over the next two years that the Committee may find both likely and unacceptable. The Committee may view the current tautness in labor markets as pointing so strongly toward a pickup in inflation that the need to firm policy would be unlikely to be called into question by new information arriving over the next few months. Even if the Committee questioned whether

current labor market conditions were so problematic, it may still see a substantial risk that resource utilization is in the process of tightening further, which in turn would induce rising inflation. The growth of aggregate demand has continued to outstrip that of aggregate supply, and only limited data are in hand to indicate that demand will be slowing enough to bring the two into balance. Indeed, one risk to that balancing is that policy inaction would provide additional fuel to investor optimism, pushing equity prices higher and providing a spur to spending. Another risk may emanate from the external sector: Recent news on foreign economies has been upbeat and has contributed to better conditions in their capital markets, which may provide more impetus to spending than projected by the staff. The inflationary impulse from the external sector would be intensified if improving foreign growth prospects and mounting U.S. net foreign indebtedness were to diminish the appetite of global investors for dollar assets, placing substantial downward pressure on the dollar, which would directly feed through to prices as well as demand for U.S. output. To offset these external forces, firmer financial conditions in the United States would be necessary to damp domestic demand so as to prevent an intensification of pressures on resources.

(12) The choice of the 1/4 percentage point rise in the funds rate under alternative C may incline the Committee to return to a symmetric directive. An unbiased directive could convey a sense that policy makers thought they might have put sufficient cumulative restraint in place to check inflation or, at least, to buy some time to assess whether additional firming was needed. Alternatively, the Committee may decide to retain an asymmetric directive in order to transmit its impression that, despite the higher 5-1/2

percent funds rate, the risks over a longer time period would still be tilted in the direction of heightened inflation pressures. If the Committee wanted to be sure that market uncertainties about near-term policy action did not unduly contribute to strains in the runup to year end, the announcement could convey a disinclination to act in December.

(13) While financial markets are somewhat illiquid, confidence about Y2K preparedness and procedures to contain systemic problems has been growing, suggesting that the 1/4 percentage point firming at this meeting under alternative C--although a bit of a surprise--would be unlikely to create undue strains. The response of key financial prices would depend importantly on the type of tilt and the wording of the announcement. An asymmetric directive and words emphasizing continuing inflation risks over a longer time period would impart to market participants the impression that further tightening moves could well be in store beginning fairly early next year. In that case, an appreciable backup in bond yields, sell-off of stocks, and strengthening of the exchange value of the dollar could be anticipated. In contrast, a symmetric directive and an announcement suggesting that the Committee could well stay its hand for some time could lead market participants to mark down their expectations for cumulative monetary policy tightening and reduce their uncertainty about near-term actions. In such a case, bond and stock prices could dip only slightly.

(14) Under either alternative, the staff projects that domestic nonfinancial debt will grow about 6-1/4 percent over the four quarters of this year, outpacing the expected nominal GDP growth of 5-1/4 percent but staying within its 3 to 7 percent annual range.

Such an outcome would imply expansion of total debt at a 4-3/4 percent rate over the last three months of the year. This slowing is accounted for by a paydown of debt in the federal sector on a seasonally adjusted basis, and lower borrowing in the business and municipal sectors, where Y2K concerns are anticipated to reduce participation by both issuers and investors. After the turn of the year, debt growth should turn up slightly, owing primarily to a rebound in business borrowing. Even so, at an anticipated 5 percent pace over the first quarter, debt growth would still be on a slower track than the one laid down so far this year. Although financial conditions should ease a little early next year after the passage of the century date change, lenders and investors are expected to be a bit more cautious on balance in extending credit over the forecast period as economic expansion moderates and profit margins erode.

(15) Under alternative B, the staff expects that M2 will grow 6 percent this year and M3 7-1/4 percent, compared with the 5 and 6 percent upper bounds of their respective annual ranges. Built into these projections is a pickup in growth over the last two months of the year to a 8-1/4 percent pace for M2 and an 11-1/4 percent pace for M3. The staff estimates that approximately 2 and 3 percentage points of these respective growth rates will be attributable to the impact of Y2K concerns in temporarily boosting demands for monetary assets that are regarded as safe and liquid. These effects are reversed by the end of February. Smoothing through Y2K effects, the staff forecasts M2 and M3 to expand from October to March at rates of 6-1/2 and 7-1/4 percent, respectively.

Directive Language

(16) Presented below for the members' consideration is the operational paragraph for the intermeeting period

OPERATIONAL PARAGRAPH

To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining/INCREASING/DECREASING the federal funds rate AT/to an average of around ___ 5-1/4 percent. In view of the evidence currently available, the Committee believes that prospective developments are [EQUALLY LIKELY TO WARRANT AN INCREASE OR A DECREASE] more likely to warrant an increase/A DECREASE than a decrease/AN INCREASE in the federal funds rate operating objective during the intermeeting period.

Alternative Growth Rates for Key Monetary and Credit Aggregates

	M2		M3		Debt	
	Alt. B	Alt. C	Alt. B	Alt. C	All Alternatives	
Monthly Growth Rates						
1999 Sep	4.9	4.9	6.7	6.7	6.5	
Oct	5.0	5.0	10.3	10.3	5.7	
Nov	5.0	4.8	11.0	10.9	4.5	
Dec	11.3	10.7	11.6	11.3	4.4	
2000 Jan	4.8	4.0	5.2	4.8	4.2	
Feb	2.9	2.2	3.8	3.4	5.6	
Mar	6.0	5.4	5.8	5.6	5.4	
Quarterly Averages						
1999 Q1	7.2	7.2	7.6	7.6	6.6	
Q2	5.7	5.7	5.7	5.7	6.8	
Q3	5.1	5.1	5.7	5.7	5.7	
Q4	5.8	5.7	9.3	9.3	5.5	
2000 Q1	6.0	5.3	7.0	6.7	4.7	
Growth Rate						
From	To					
Oct-99	Dec-99	8.2	7.8	11.3	11.1	4.4
Dec-99	Mar-2000	4.6	3.9	5.0	4.6	5.1
Oct-99	Mar-2000	6.1	5.5	7.6	7.3	4.8
1998 Q4	Oct-99	6.0	6.0	6.8	6.8	6.4
1997 Q4	1998 Q4	8.5	8.5	10.9	10.9	6.7
1998 Q4	1999 Q4	6.1	6.1	7.3	7.3	6.3
1999 Q4	Mar-2000	5.8	5.1	6.6	6.3	4.9
1999 Annual Ranges:		1.0 to 5.0		2.0 to 6.0		3.0 to 7.0

Chart 3

Actual and Projected M2

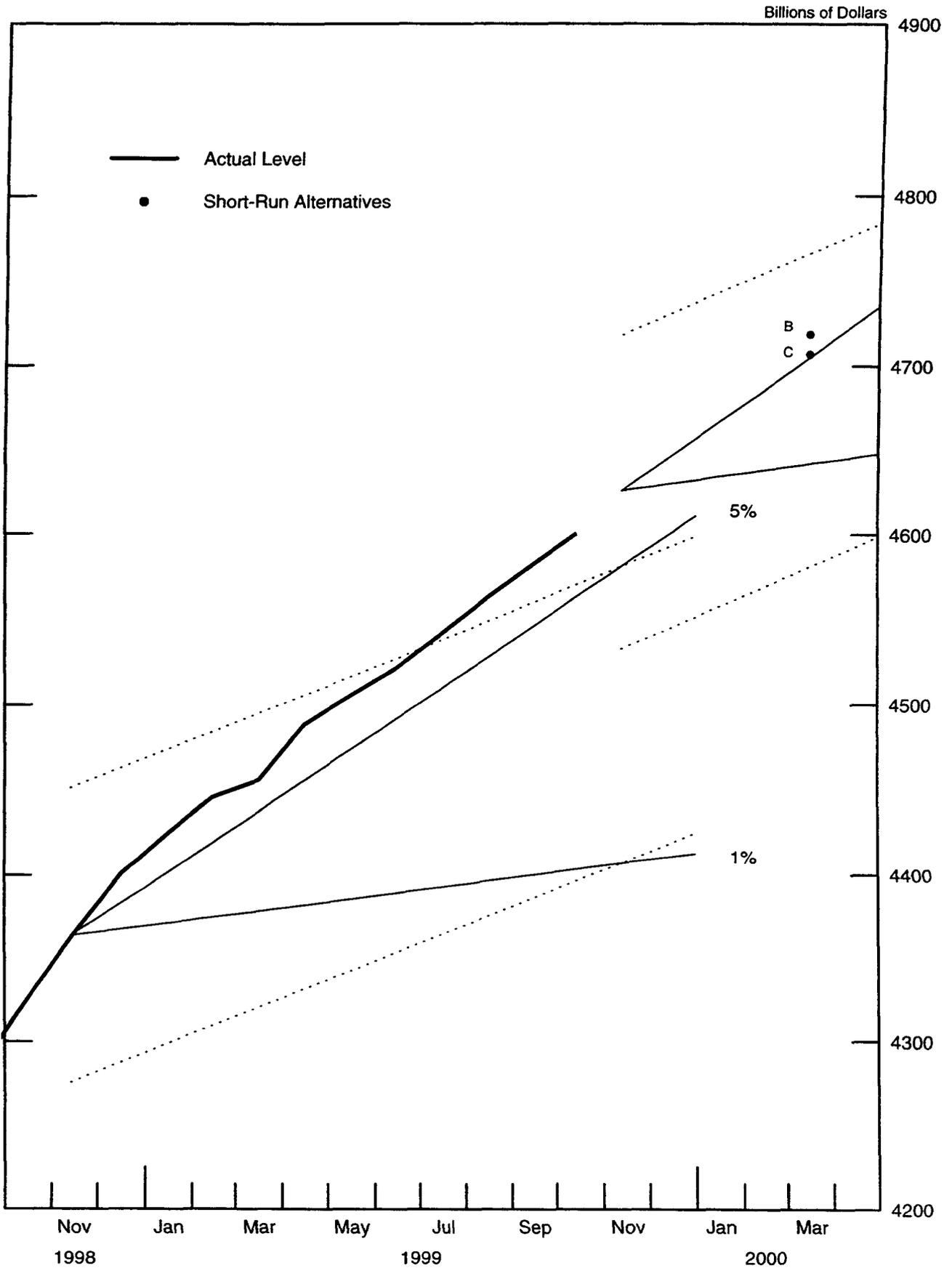


Chart 4

Actual and Projected M3

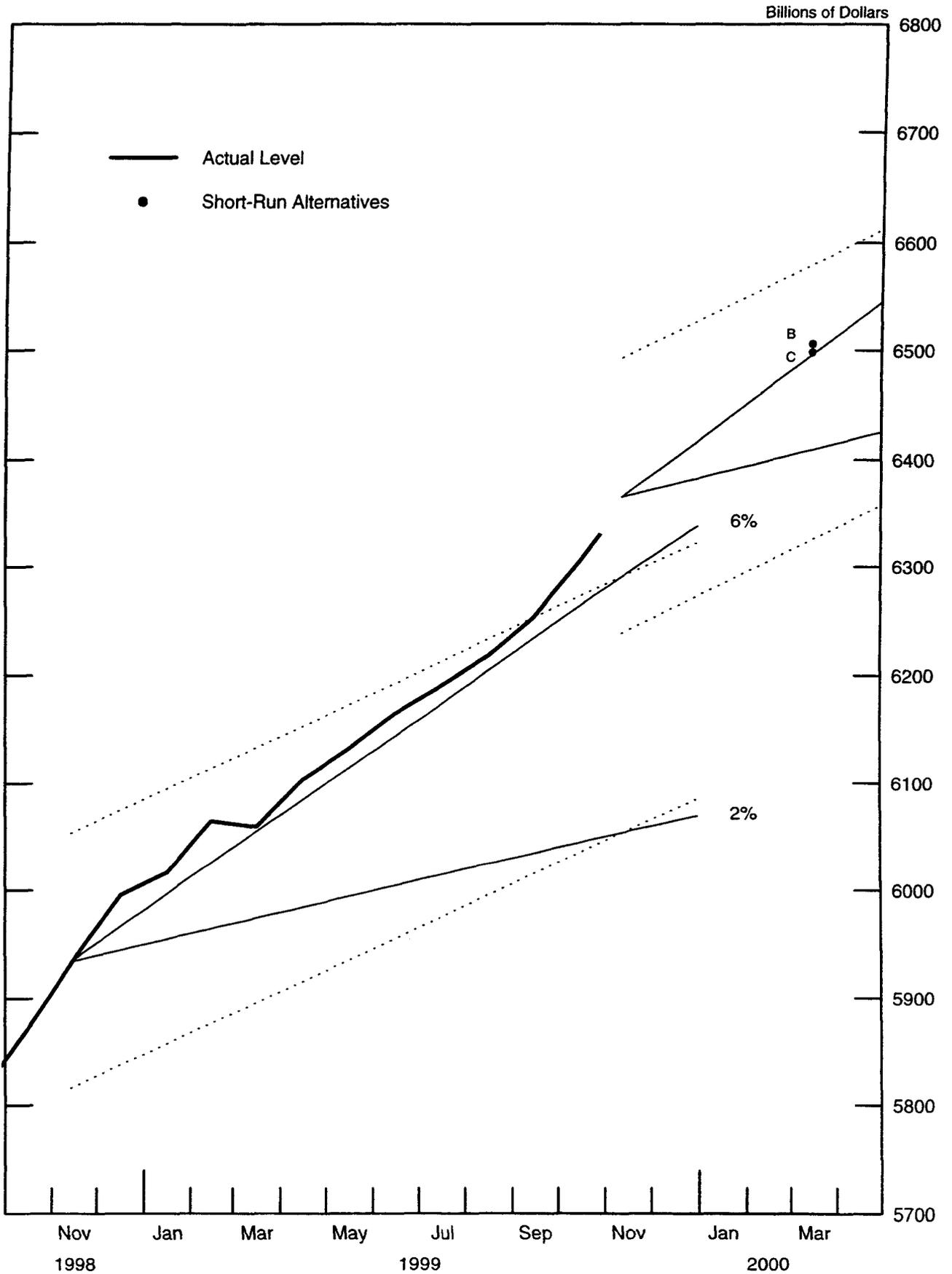
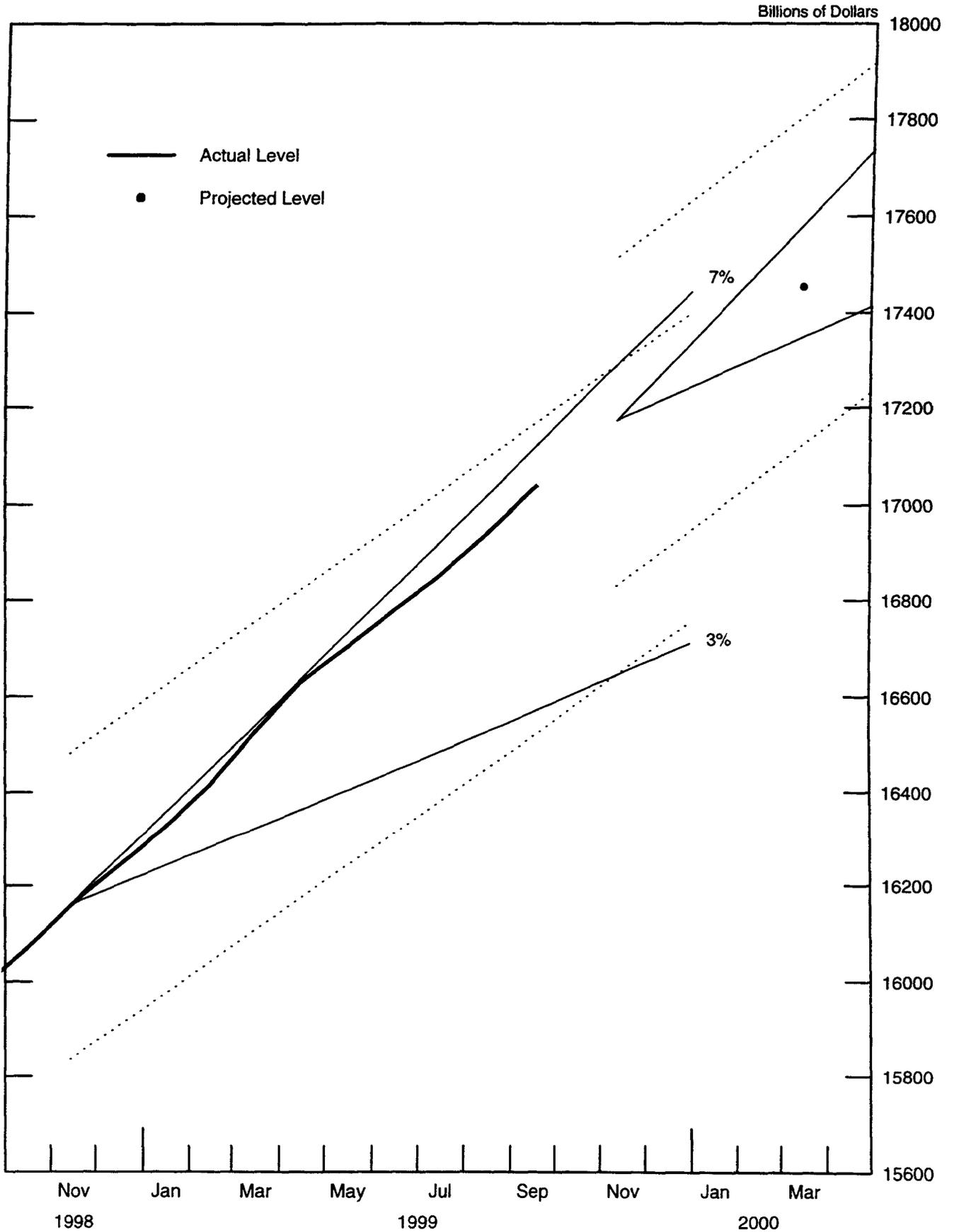


Chart 5

Actual and Projected Debt



SELECTED INTEREST RATES
(percent)

November 15, 1999

	Short-term						Long-term									
	Federal funds	Treasury bills secondary market			CDs secondary market	Comm. paper	U.S. government constant maturity yields				Indexed yields		Moody's Baa	Municipal Bond Buyer	Conventional home mortgages primary market	
		3-month	6-month	1-year	3-month	1-month	3-year	5-year	10-year	30-year	5-year	10-year			Fixed-rate	ARM
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
98 -- High	5.87	5.24	5.24	5.23	5.74	5.71	5.70	5.72	5.75	6.05	3.93	3.82	7.42	5.52	7.22	5.71
98 -- Low	4.56	3.84	3.94	3.84	5.13	4.84	4.15	4.17	4.41	4.88	3.44	3.55	7.01	5.09	6.49	5.35
99 -- High	5.31	5.05	5.16	5.20	6.15	5.30	6.01	6.09	6.18	6.34	3.98	4.14	8.44	6.18	8.15	6.35
99 -- Low	4.42	4.20	4.30	4.29	4.86	4.76	4.58	4.56	4.67	5.12	3.61	3.76	7.24	5.17	6.74	5.56
Monthly																
Nov 98	4.83	4.41	4.42	4.33	5.24	5.00	4.57	4.54	4.83	5.25	3.75	3.77	7.34	5.27	6.87	5.53
Dec 98	4.68	4.39	4.40	4.32	5.14	5.24	4.48	4.45	4.65	5.06	3.75	3.80	7.23	5.23	6.72	5.55
Jan 99	4.63	4.34	4.33	4.31	4.89	4.80	4.61	4.60	4.72	5.16	3.73	3.81	7.29	5.23	6.79	5.60
Feb 99	4.76	4.44	4.44	4.48	4.90	4.80	4.90	4.91	5.00	5.37	3.70	3.79	7.39	5.27	6.81	5.65
Mar 99	4.81	4.44	4.47	4.53	4.91	4.82	5.11	5.14	5.23	5.58	3.84	3.90	7.53	5.31	7.04	5.77
Apr 99	4.74	4.29	4.37	4.45	4.88	4.79	5.03	5.08	5.18	5.55	3.72	3.90	7.48	5.29	6.92	5.60
May 99	4.74	4.50	4.56	4.60	4.92	4.79	5.33	5.44	5.54	5.81	3.65	3.85	7.72	5.37	7.15	5.72
Jun 99	4.76	4.57	4.82	4.82	5.13	4.95	5.70	5.81	5.90	6.04	3.78	3.94	8.02	5.53	7.55	5.91
Jul 99	4.99	4.55	4.58	4.75	5.24	5.06	5.62	5.68	5.79	5.98	3.94	4.01	7.95	5.61	7.63	5.99
Aug 99	5.07	4.72	4.87	4.91	5.41	5.18	5.77	5.84	5.94	6.07	3.96	4.03	8.15	5.81	7.94	6.18
Sep 99	5.22	4.68	4.88	4.96	5.50	5.28	5.75	5.80	5.92	6.07	3.89	4.05	8.20	5.92	7.82	6.20
Oct 99	5.20	4.86	4.98	5.12	6.13	5.28	5.94	6.03	6.11	6.26	3.85	4.12	8.38	6.12	7.85	6.27
Weekly																
Sep 10 99	5.17	4.67	4.93	4.99	5.45	5.28	5.78	5.82	5.94	6.07	3.90	4.04	8.20	5.90	7.88	6.21
Sep 17 99	5.23	4.61	4.89	4.97	5.45	5.28	5.76	5.80	5.92	6.08	3.87	4.04	8.18	5.92	7.82	6.22
Sep 24 99	5.18	4.65	4.85	4.95	5.45	5.29	5.71	5.77	5.88	6.06	3.89	4.06	8.19	5.93	7.76	6.19
Oct 1 99	5.31	4.71	4.79	4.94	5.79	5.29	5.73	5.81	5.92	6.09	3.87	4.07	8.24	5.96	7.70	6.12
Oct 8 99	5.21	4.69	4.88	5.03	6.10	5.30	5.87	5.95	6.02	6.17	3.87	4.10	8.28	6.02	7.82	6.27
Oct 15 99	5.19	4.84	4.94	5.11	6.13	5.28	5.92	6.03	6.11	6.28	3.88	4.14	8.40	6.11	7.85	6.31
Oct 22 99	5.15	4.97	5.03	5.16	6.15	5.27	5.99	6.09	6.18	6.34	3.83	4.13	8.44	6.17	7.93	6.30
Oct 29 99	5.22	4.96	5.10	5.20	6.14	5.27	6.01	6.09	6.16	6.30	3.83	4.12	8.42	6.18	7.96	6.35
Nov 5 99	5.25	4.98	5.10	5.15	6.07	5.27	5.87	5.95	6.00	6.12	3.83	4.10	8.27	6.09	7.84	6.34
Nov 12 99	5.24	5.05	5.16	5.19	5.96	5.25	5.83	5.88	5.96	6.06	3.84	4.08	--	6.08	7.67	6.30
Daily																
Oct 27 99	5.29	4.99	5.11	5.22	6.15	5.26	6.04	6.13	6.19	6.33	3.83	4.12	8.45	--	--	--
Oct 28 99	5.31	4.96	5.09	5.18	6.15	5.29	5.95	6.05	6.12	6.25	3.83	4.11	8.38	--	--	--
Oct 29 99	5.27	4.97	5.06	5.13	6.13	5.29	5.90	5.97	6.02	6.16	3.83	4.10	8.30	--	--	--
Nov 1 99	5.38	4.98	5.09	5.16	6.08	5.28	5.93	6.00	6.06	6.19	3.84	4.11	8.33	--	--	--
Nov 2 99	5.18	4.99	5.09	5.16	6.09	5.28	5.93	5.98	6.04	6.15	3.84	4.11	8.30	--	--	--
Nov 3 99	5.21	4.97	5.11	5.15	6.09	5.27	5.88	5.97	6.01	6.14	3.83	4.10	8.28	--	--	--
Nov 4 99	5.27	4.95	5.11	5.14	6.04	5.27	5.82	5.91	5.95	6.09	3.82	4.08	8.23	--	--	--
Nov 5 99	5.14	4.99	5.11	5.13	6.06	5.27	5.80	5.88	5.92	6.05	3.82	4.08	8.19	--	--	--
Nov 8 99	5.23	5.04	5.14	5.17	5.96	5.25	5.83	5.90	5.95	6.06	3.83	4.08	8.20	--	--	--
Nov 9 99	5.22	5.04	5.15	5.19	5.96	5.25	5.81	5.87	5.97	6.07	3.83	4.08	8.13	--	--	--
Nov 10 99	5.27	5.05	5.18	5.21	5.95	5.26	5.84	5.90	6.00	6.09	3.85	4.08	8.13	--	--	--
Nov 11 99	5.27	--	--	--	--	--	--	--	--	--	--	--	8.12	--	--	--
Nov 12 99	5.38 ^p	5.08	5.18	5.19	5.98	--	5.82	5.85	5.93	6.03	3.83	4.08	--	--	--	--

NOTE: Weekly data for columns 1 through 13 are week-ending averages. As of September 1997, data in column 6 are interpolated from data on certain commercial paper trades settled by the Depository Trust Company; prior to that, they reflect an average of offering rates placed by several leading dealers. Column 14 is the Bond Buyer revenue index, which is a 1-day quote for Thursday. Column 15 is the average contract rate on new commitments for fixed-rate mortgages (FRMs) with 80 percent loan-to-value ratios at major institutional lenders. Column 16 is the average initial contract rate on new commitments for 1-year, adjustable-rate mortgages (ARMs) at major institutional lenders offering both FRMs and ARMs with the same number of discount points.

p - preliminary data

Money and Debt Aggregates

Seasonally adjusted

November 15, 1999

Period	Money stock measures				Domestic nonfinancial debt			
	M1	M2	nontransactions components		M3	U. S. government ¹	other ¹	total ¹
			In M2	In M3 only				
	1	2	3	4	5	6	7	8
Annual growth rates(%):								
Annually (Q4 to Q4)								
1996	-4.5	4.6	8.6	15.3	6.8	3.8	6.0	5.4
1997	-1.2	5.7	8.5	19.3	8.8	0.8	6.7	5.2
1998	1.8	8.5	10.9	18.1	10.9	-1.1	9.3	6.7
Quarterly(average)								
1998-Q4	5.0	11.0	13.0	18.4	12.9	-2.8	9.2	6.3
1999-Q1	2.8	7.2	8.7	8.6	7.6	-3.1	9.5	6.6
Q2	3.5	5.7	6.4	5.9	5.7	-2.3	9.5	6.8
Q3	-2.3	5.2	7.6	7.1	5.7	-0.3	7.4	5.7
Monthly								
1998-Oct.	6.4	11.6	13.3	16.3	12.8	-3.8	9.5	6.3
Nov.	9.6	10.7	11.1	20.6	13.3	-2.6	9.9	6.9
Dec.	4.8	10.2	11.9	16.8	11.9	-2.6	8.5	5.9
1999-Jan.	-2.6	6.5	9.6	-2.1	4.2	-2.6	8.9	6.2
Feb.	1.8	5.6	6.8	20.5	9.5	-6.1	10.2	6.5
Mar.	10.3	2.7	0.2	-11.5	-1.1	0.1	10.6	8.2
Apr.	7.0	8.8	9.4	8.9	8.8	-1.7	10.0	7.4
May	-3.9	4.7	7.5	8.3	5.7	-5.1	8.2	5.2
June	-4.0	4.3	7.1	11.9	6.4	0.3	6.9	5.4
July	-1.7	5.5	7.9	4.1	5.1	1.4	6.4	5.3
Aug.	3.2	5.7	6.4	4.0	5.2	1.0	7.6	6.2
Sep.	-9.8	4.9	9.5	11.6	6.7	-4.2	9.5	6.5
Oct. p	5.7	5.0	4.8	24.8	10.3			
Levels (\$billions):								
Monthly								
1999-June	1101.1	4522.2	3421.1	1643.0	6165.2	3703.6	13073.6	16777.2
July	1099.5	4543.1	3443.6	1648.6	6191.6	3708.0	13143.1	16851.1
Aug.	1102.4	4564.5	3462.1	1654.1	6218.6	3711.0	13226.6	16937.6
Sep.	1093.4	4583.1	3489.6	1670.1	6253.1	3698.1	13330.9	17029.0
Oct. p	1098.6	4602.3	3503.7	1704.6	6306.9			
Weekly								
1999-Oct. 4	1101.6	4593.1	3491.5	1684.1	6277.2			
11	1096.2	4594.0	3497.8	1695.7	6289.7			
18	1096.5	4601.5	3504.9	1702.5	6304.0			
25p	1100.2	4605.6	3505.4	1708.6	6314.2			
Nov. 1p	1105.5	4619.7	3514.2	1724.3	6343.9			

1. Debt data are on a monthly average basis, derived by averaging end-of-month levels of adjacent months, and have been adjusted to remove discontinuities.

p preliminary

NET CHANGES IN SYSTEM HOLDINGS OF SECURITIES¹
Millions of dollars, not seasonally adjusted

November 12, 1999

Period	Treasury bills			Treasury coupons						Federal agencies redemptions (-)	Net change outright holdings total ⁴	Net RPs ⁵
	Net purchases ²	Redemptions (-)	Net change	Net purchases ³				Redemptions (-)	Net Change			
				within 1 year	1-5	5-10	over 10					
1996	9,901	---	9,901	524	3,898	1,116	1,655	2,015	5,179	409	14,670	-7,849
1997	9,147	---	9,147	5,549	20,080	3,449	5,897	1,996	32,979	1,540	40,586	-5,202
1998	3,550	2,000	1,550	6,297	12,901	2,294	4,884	2,676	23,699	322	24,902	-11,981
1998 ---Q1	---	2,000	-2,000	1,501	2,262	283	743	478	4,311	60	2,251	-12,184
---Q2	3,550	---	3,550	1,369	2,993	495	---	286	4,571	99	8,022	-13,549
---Q3	---	---	---	2,024	4,524	654	1,769	1,311	7,659	98	7,536	-10,034
---Q4	---	---	---	1,403	3,122	862	2,372	602	7,158	65	7,093	-9,477
1999 ---Q1	---	---	---	3,163	5,180	681	3,019	492	11,551	27	11,524	-8,004
---Q2	---	---	---	3,978	8,751	2,594	3,152	726	17,749	52	17,697	-10,271
---Q3	---	---	---	2,341	1,272	447	1,075	41	5,094	21	5,073	-8,257
1998 November	---	---	---	662	2,397	862	698	---	4,619	20	4,599	-11,659
December	---	---	---	---	---	---	---	---	---	30	-30	-6,096
1999 January	---	---	---	---	---	---	615	492	123	2	121	-7,799
February	---	---	---	2,103	2,752	335	---	---	5,190	---	5,190	-10,380
March	---	---	---	1,060	2,428	346	2,404	---	6,238	25	6,213	-7,243
April	---	---	---	1,677	3,362	945	262	726	5,520	---	5,520	-8,603
May	---	---	---	1,421	4,442	1,584	2,890	---	10,337	---	10,337	-10,368
June	---	---	---	880	948	65	---	---	1,893	52	1,841	-12,644
July	---	---	---	951	---	---	---	41	910	10	900	-11,355
August	---	---	---	429	1,272	447	1,075	---	3,223	11	3,212	-10,868
September	---	---	---	960	---	---	---	---	960	---	960	-4,894
October	---	---	---	---	---	---	---	170	-170	50	-220	-3
Weekly												
August 4	---	---	---	---	---	---	---	---	---	---	---	-11,437
11	---	---	---	---	---	---	---	---	---	---	---	-10,603
18	---	---	---	429	448	---	---	---	877	---	877	-9,846
25	---	---	---	---	824	447	1,075	---	2,346	11	2,335	-11,366
September 1	---	---	---	---	---	---	---	---	---	---	---	-10,163
8	---	---	---	---	---	---	---	---	---	---	---	-5,213
15	---	---	---	960	---	---	---	---	960	---	960	-7,266
22	---	---	---	---	---	---	---	---	---	---	---	-3,449
29	---	---	---	---	---	---	---	---	---	---	---	-4,985
October 6	---	---	---	---	---	---	---	---	---	10	-10	-3,080
13	---	---	---	---	---	---	---	---	---	30	-30	-1,854
20	---	---	---	---	---	---	---	170	-170	---	-170	1,610
27	---	---	---	---	---	---	---	---	---	10	-10	373
November 3	---	---	---	---	---	---	---	---	---	---	---	7,305
10	---	---	---	---	---	---	---	---	---	7	-7	8,552
Memo: LEVEL (bil. \$) ⁶												
November 10			215.7	56.1	120.2	50.2	65.2		291.7		507.6	12.5

1. Change from end-of-period to end-of-period.
2. Outright transactions in market and with foreign accounts.
3. Outright transactions in market and with foreign accounts, and short-term notes acquired in exchange for maturing bills. Excludes maturity shifts and rollovers of maturing issues.

4. Reflects net change in redemptions (-) of Treasury and agency securities.
5. Includes change in RPs (+), matched sale-purchase transactions (-), and matched purchase sale transactions (+).
6. The levels of agency issues were as follows:

within 1 year	1-5	5-10	over 10	total
0.1	0.0	0.1	0.0	0.2