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.

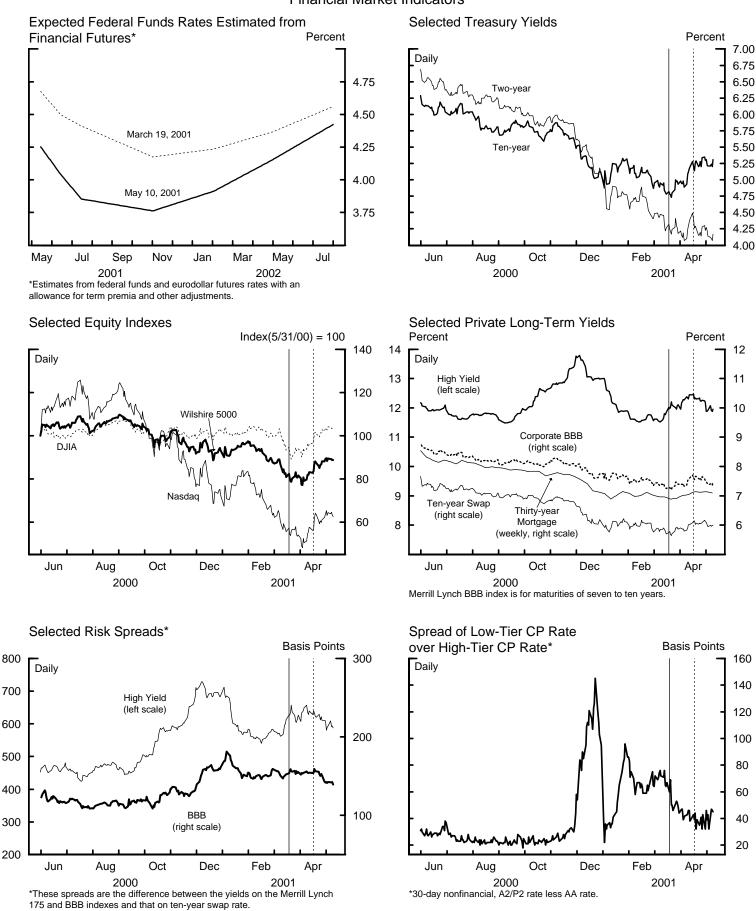
MONETARY POLICY ALTERNATIVES

Recent Developments

- (1) The 50-basis-point reduction in the target federal funds rate at the March 20 meeting was less than some investors had expected, but the accompanying statement contributed to expectations that an intermeeting ease would follow.¹ Those expectations gradually diminished over subsequent weeks as incoming data and statements by several Federal Reserve officials evidently were read by investors as suggesting less weakness in the economy going forward. Thus, the 50-basis-point reduction in the federal funds rate on April 18 caught investors by surprise. Short-term interest rates declined in response, as market participants marked down the expected path of the federal funds rate over the next year or so. More recently, surprisingly weak employment data added to the amount of near-term easing built into asset prices. Futures rates currently indicate that market participants expect the federal funds rate to be cut another 50 basis points at the May meeting to 4 percent and to decline to about 3³/₄ percent by fall—about ½ percentage point lower than was anticipated before the March meeting (chart 1). On balance over the intermeeting period, short-term interest rates fell ½ to 1 percentage point.
- (2) Despite the sharp decline in short-term interest rates, longer-term yields rose on balance over the intermeeting period. Most of the increase occurred before

^{1.} Over the intermeeting period, federal funds have traded at rates near the target levels. The Desk redeemed \$11.8 billion of Treasury securities, including \$7.5 billion of bills and \$4.4 billion of coupon securities, to continue bringing SOMA holdings into conformance with the guidelines on per-issue limits. To offset the resulting reserve drain and meet longer-term reserve needs, the Desk purchased outright \$13.6 billion of Treasury coupon securities in the market and \$486 million of Treasury bills from foreign customers. The volume of outstanding long-term RPs was kept unchanged at \$12.0 billion.

Chart 1
Financial Market Indicators



Note: Solid vertical line indicates last FOMC meeting; dotted vertical line indicates intermeeting policy easing.

the intermeeting policy move, as investors became more confident that output growth will pick up; the growing likelihood of substantial federal tax cuts also may have added pressure on long-term yields. Although yields on longer-term nominal Treasury securities increased nearly ½ percentage point, those on comparable inflation-indexed securities drifted lower.² The implied run-up in inflation compensation left that measure above the levels observed before its sharp decline in late 2000 associated with emerging weakness in the economy. The improved sentiment about the economic outlook and the surprise intermeeting policy easing may have contributed to a narrowing of risk premiums, especially on lower-grade corporate debt securities, and to a rise in stock prices. Equity markets were also bolstered by first-quarter earnings reports, which generally came in above sharply reduced expectations, although analysts continued to lower forecasts for eamings in subsequent quarters. Over the intermeeting period, the Wilshire 5000 index gained more than 7½ percent, leaving it about 5 percent below its year-end level.

(3) Equity prices and long-term yields rose in other industrial countries as well, likely reflecting in part the importance of the United States for the global economy and the perceived improvement in prospects for globally important industries, including those in the high-technology area. The increase in equity prices was particularly large in Japan—about 15 percent—reflecting in part a favorable market reaction to the Bank of Japan's announcement of policy changes the day before the March FOMC meeting, which included a return to a zero interest rate target, and the formation of the new Koizumi-led government in late April. Short-term yields abroad

^{2.} Some of the increase in the ten- and thirty-year nominal constant maturity Treasury yields reflected a decline in the on-the-run premium that is typical of the Treasury auction schedule. At the ten-year maturity, the narrowing of this premium is estimated to have added about 10 basis points to the increase in the constant maturity yield over the intermeeting period.

Bank ended its "wait and see" policy recently with a 25-basis-point cut in its policy rates. The reduction came amid increasing indications of economic weakness in the euro area and despite some signs of increased inflationary pressure. Policy rates also were cut by 25 basis points in Canada and Switzerland and by 50 basis points in two steps in the United Kingdom since the March FOMC meeting. The dollar appreciated against a basket of major currencies early in the intermeeting period, but it later retraced that movement, particularly after the FOMC's surprise interest rate cut in mid-April, and finished the intermeeting period about unchanged (chart 2).

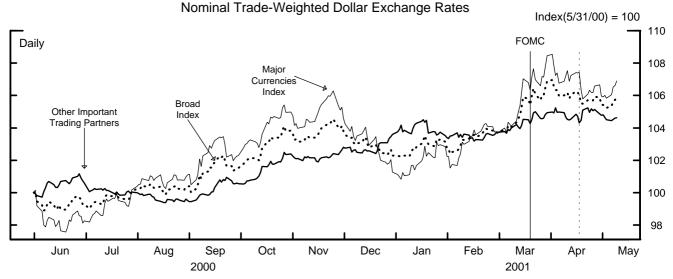
over the

intermeeting period U.S. authorities did not intervene.

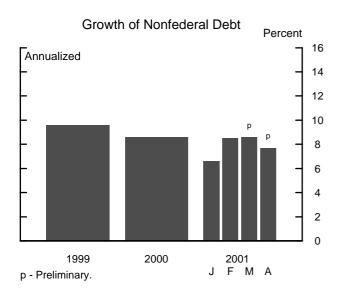
The dollar was also essentially unchanged on balance against a basket of (4)currencies of our other important trading partners. Argentine financial markets were roiled by growing uncertainties about the country's financial situation and speculation that its exchange rate peg might be modified, as well as by an open dispute between the Argentine government and central bank over the use of reserve requirements. Market pressures spilled over to Brazil, where the real fell almost 5 percent against the dollar. Risk spreads on dollar-denominated Argentine and Brazilian debt moved up sharply. In contrast, the Mexican peso appreciated about 4 percent against the dollar, as monetary authorities held to their tight policy stance, and spreads on Mexican debt narrowed. The Turkish lira regained some of its previously lost ground, and Turkish financial markets calmed, as the country's financial problems appeared to have been brought under better control partly in response to the prospect of additional funding from the IMF and World Bank. The Indonesian rupiah and the Philippine peso both declined sharply against the dollar in reaction to financial problems and domestic political turmoil.

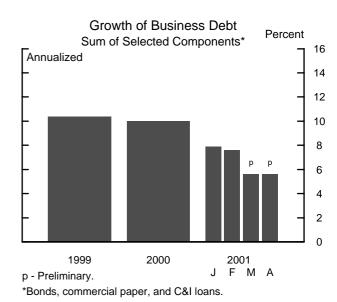
- (5)The debt of nonfederal sectors in the United States is estimated to have advanced at around an 8 percent rate on average over March and April, about equal to its robust pace of the second half of 2000 and early 2001 (see chart 2). However, growth of business debt fell back in recent months, likely reflecting a reduction in inventory and capital investment and in merger and acquisition activity. Firms continued to borrow heavily in the corporate bond market, but they reduced their reliance on short-term financing markets. Commercial paper outstanding ran off further in March and April, albeit at a much slower pace than earlier in the year, and business loans at commercial banks also declined very recently, possibly damped by the further tightening of credit conditions indicated in the most recent Senior Loan Officer Opinion survey. Household borrowing also has showed some signs of slowing in recent months. Growth in consumer credit declined moderately in March and is estimated to have slowed further in April, as outlays on durable goods appear to have fallen back from the surprisingly strong pace early in the year. Mortgage debt growth, by contrast, seems to have largely sustained its rapid pace, reflecting strength in the residential housing sector and substantial refinancing activity. State and local government borrowing picked up further in March and April, as lower interest rates fueled advance refunding of existing debt. The federal government, in contrast, paid down a considerable amount of debt in April, which pulled down the growth of total domestic nonfinancial debt that month.
- (6) Spurred by the drop in its opportunity cost, M2 expanded at an average pace of 12½ percent over March and April, with particular strength in liquid deposits and retail money funds. M2 growth was boosted by several special factors, including extensive mortgage refinancing activity and, in April, households' accumulation of liquid balances to make nonwithheld tax payments, which increased by more than allowed for by seasonal factors. In addition, portfolio flows into safe, liquid assets

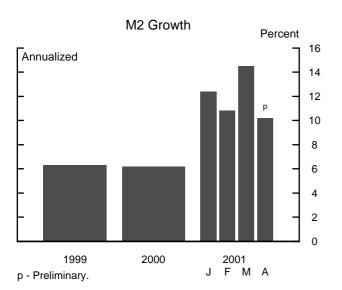
Chart 2
Exchange Rates and Financial Flows

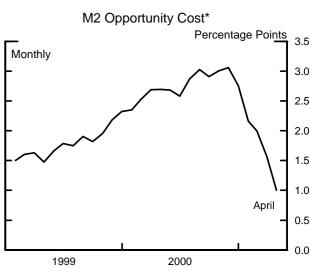


Solid vertical line indicates last FOMC meeting; dotted vertical line indicates intermeeting policy easing.









* Yield on three-month Treasury bill minus average return on M2 assets.

amid volatile movements in equity prices likely added to M2 growth in recent months. However, weekly data suggest that M2 growth has slowed some of late, perhaps reflecting an unwinding of tax-related balances and the resumption of more normal portfolio flows into equities. M3 also expanded at a rapid pace in recent months. Growth of institution-only money funds remained very brisk, in part because rates on those funds do not decline as quickly as short-term market rates. Managed liabilities included in M3 also increased in April, apparently to help finance a pickup in bank credit growth and a shift in bank funding from foreign to U.S. sources.

MONEY AND CREDIT AGGREGATES

(Seasonally adjusted annual percentage rates of growth)

| | 2000 | Jan 2001 | Feb 2001 | Mar 2001 | Apr 2001 (p) |
|-----------------------------|------|----------|----------|----------|--------------|
| Money and Credit Aggregates | | | | | |
| M2 | 6.2 | 12.4 | 10.8 | 14.5 | 10.2 |
| M3 | 9.2 | 16.0 | 9.8 | 10.4 | 17.4 |
| Domestic nonfinancial debt | 5.4 | 4.0 | 6.4 | 7.2 | 4.2 |
| Federal | -6.7 | -7.1 | -3.0 | 1.2 | -11.5 |
| Nonfederal | 8.6 | 6.6 | 8.5 | 8.6 | 7.7 |
| Bank credit | 10.0 | 11.5 | 3.1 | 1.9 | 5.2 |
| Adjusted ¹ | 9.4 | 12.0 | 3.1 | 0.4 | 5.1 |
| Memo: | | | | | |
| Monetary base ² | 1.4 | 11.2 | 3.3 | 2.4 | 7.0 |
| Adjusted for sweeps | 2.0 | 10.8 | 3.3 | 2.9 | 7.5 |
| | | | | | |

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

^{2.} Adjusted for discontinuities associated with changes in reserve requirements.

p -- preliminary

Policy Alternatives

- The staff forecast for this meeting embodies a weaker outlook for aggregate demand than in the March Greenbook, reflecting in part incoming information suggesting lower-than-expected trajectories for investment and consumption spending. With projected spending on capital equipment softer than in the last forecast and estimates of multifactor productivity growth over recent years revised down, the staff has trimmed its estimate of the growth of structural productivity somewhat, which further damps prospective aggregate demand. The staff has assumed that the Federal Reserve will respond to this more negative outlook by easing policy 50 basis points at this meeting. Thereafter, the federal funds rate is held unchanged at a level one percentage point below that of the last Greenbook. Earnings disappointments are expected to trigger some near-term declines in stock prices, but long-term interest rates and the dollar are expected to hold near current levels given this policy path. The impetus provided by the cumulative policy easings and the support to investment and real income from continuing efficiency gains engendered by new technologies contribute to a strengthening of the growth of spending over the forecast period. In addition, fiscal stimulus spurs consumption demand beginning later this year. By the end of the projection period, economic growth rises back to a rate close to that of its potential. With slack emerging in labor and product markets and energy prices declining, core PCE inflation slips back under 2 percent in 2002.
- (8) In considering the appropriate stance of policy, it may be useful to compare the real federal funds rate with estimates of the current level of the equilibrium real federal funds rate. The equilibrium rate is defined here to be the rate that, if maintained, eventually would return output to potential once the effects of any transitory disturbances have dissipated. Thus, the equilibrium real federal funds rate

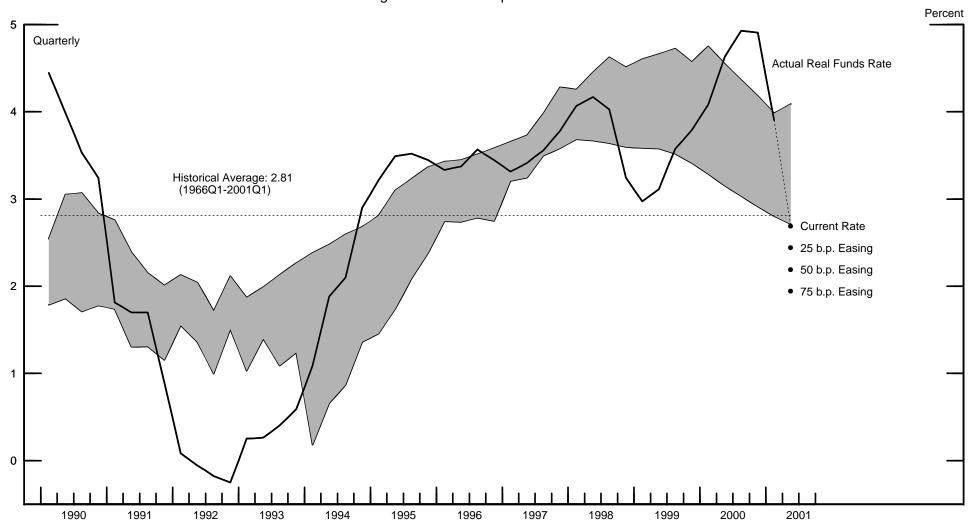
reflects the longer-term forces shaping the outlook for the real economy and so provides one benchmark for judging the implications of alternative policy stances. To be sure, the appropriate stance of policy relative to that equilibrium rate in a given instance will depend on policymakers' objectives, the current levels of output and inflation, and an assessment of the transitory factors that may influence the paths of inflation and output over the next few years.

The chart on the next page shows a range of estimates of the equilibrium real federal funds rate, as well as the actual real funds rate and its historical average.³ The range is constructed from several individual estimates of the equilibrium real rate. Two are derived from the FRB/US model; two others are calculated from the relationship between the real funds rate and the output gap using a statistical filter to separate permanent changes in that relationship from temporary deviations. In both of these approaches, one estimate is based on historical data while the other augments these data with the staff forecast through 2002. A fifth estimate, which begins in 1998, is inferred from actual indexed debt yields. As can be seen in the chart, the estimates imply some decline in the equilibrium rate over recent quarters, likely owing in part to the longer-term effects on demand of an increase in the equity premium, which reduces wealth, and of a slowing in the growth of potential output, which holds down the expansion of permanent real income and earnings. The FOMC's current target for the nominal funds rate implies a real federal funds rate of about 23/4 percent-around the lower end of the range. The chart also shows the real funds rates implied by the three policy alternatives discussed below.⁴

^{3.} All measures of the real federal funds rate are calculated using the core PCE inflation rate over the previous four quarters as a proxy for expected inflation.

^{4.} Note that since expected inflation is assumed to equal past actual inflation, a given change in the nominal federal funds rate target translates into an equal immediate change in the real federal funds rate.

Chart 3
Actual Real Federal Funds Rate and
Range of Estimated Equilibrium Real Rates



Note: The shaded range represents the maximum and the minimum values each quarter of the five estimates of the equilibrium real federal funds rate described in the text. Real federal funds rates are calculated using four-quarter lagged core PCE inflation. The values of the real federal funds rate in the second quarter of 2001 and under the three policy alternatives include the staff projection of core PCE inflation for that quarter.

- If the Committee, like the staff, anticipates a prolonged period of weak aggregate demand, it might choose the 50 basis point reduction in the target federal funds rate assumed in the staff forecast. While such a reduction would leave the real funds rate noticeably below the range of the estimates of its equilibrium value, an accommodative policy stance may be seen as needed for a time to counter temporary restraints on aggregate demand. In particular the Committee may be concerned about household spending in an environment of a weakening job market and about business investment outlays in view of the drags from the previous slowdown in final demand and the over-accumulation of capital in some sectors. In these circumstances, growth would remain sluggish for a time even after further policy easing, lessening pressures on resources and likely rolling back the recent upticks in inflation and inflation expectations. Indeed, the Committee may view the resource gap likely to open up under this scenario as sizable enough to imply a margin in which spending could snap back faster than expected without producing a deterioration in the inflation environment. Market participants already expect a substantial reversal of policy in 2002, suggesting that they would be prompter than usual in bringing forward in time and increasing the size of the anticipated tightening if evidence of such a snap-back emerged. As long as the Committee reinforced such sentiment with its words and actions, the resulting increase in real interest rates would work to stabilize the economy and constrain inflation.
- (11) Investors are expecting a 50 basis point move at this meeting, along with a statement indicating that the balance of risks remains weighted toward economic weakness, to be followed by an additional 25 basis point move by fall. Validating market expectations for this meeting would leave interest rates, equity prices, and the foreign exchange value of the dollar largely unchanged. The Committee may find this outcome especially attractive if it believes that the balance of risks is sufficiently tilted

toward weakness to make the added policy easing built into asset prices a reasonable possibility.

- The Committee might choose a more modest 25 basis point reduction in the federal funds rate at this meeting if it views aggregate demand going forward as likely to be noticeably less weak than in the staff forecast, perhaps because it sees the large cumulative easing of policy since the start of the year as providing more support for demand than in that forecast. Among financial indicators, the rapid growth of money and the steepness of the yield curve may suggest that considerable stimulus is already in place. In these circumstances, with the real funds rate at the low end of the range of estimates of its equilibrium level, and with equity markets having risen appreciably over the intermeeting period, the Committee may believe that a more forceful policy action at this meeting would create unacceptable odds of a policy overshoot, with potentially adverse consequences for inflation. Concerns in this regard might be accentuated by the recent firmer tone of the inflation data and the increases in survey and market measures of expected inflation. Thus, even if the Committee suspects that additional easing might well be appropriate at some point, it might choose a smaller policy step at this meeting to allow time for more evidence to accumulate on whether the economy will be soft enough to contain inflation pressures and warrant additional easing.
- if such a policy move is accompanied by a statement that the balance of risks remains weighted toward economic weakness, short-term interest rates would rise as investors marked up their expectations for the path of the federal funds rate over coming months. Higher interest rates, together with a sense that monetary policy is less focused on fostering a return to robust economic growth, would lead to a fall in stock prices. If the drop in equity prices is quite substantial, longer-term interest rates also

might decline, reflecting the weaker outlook for the economy. These effects in financial markets would be attenuated if, in light of the statement accompanying the policy announcement, the Federal Reserve is seen more as stretching out the timing of its policy moves than as reducing the total amount of easing that will be forthcoming.

- (14) If the Committee believes that the outlook for aggregate demand is probably weaker than in the staff forecast, or that the risks around that forecast are skewed substantially to the downside, it might choose a **75 basis point reduction** in the target federal funds rate. Such weakness could owe, for example, to a more protracted falloff in high-tech investment as businesses reconsider the profitability of these capital projects, which in turn would damp structural productivity growth and be reflected in a more pronounced decline in the equilibrium real funds rate. Even if the Committee agrees with the staff forecast of output and employment, it still may view their projected paths as unacceptably weak, justifying a larger cut in the federal funds rate than is assumed in that forecast. For example, the Committee may think that the unemployment rate does not need to rise as much or as quickly as in the staff forecast to keep inflation in check.
- (15) A 75 basis point easing accompanied by a statement that the risks remain weighted toward economic weakness would lower the expected near-term path of policy, reducing other shorter-term interest rates and easing financial conditions more generally. The larger-than-expected policy move would presumably bolster expectations of economic growth and corporate earnings, boosting stock prices. Effects on longer-term nominal interest rates are less clear. Such rates would tend to be pulled down by the change in near-term policy expectations and the associated decline in real interest rates, but that tendency could be more than offset by a rise in inflation premiums if market participants read the larger-than-expected policy move as increasing the odds of a significant pickup in inflation.

- Although market participants expect the Committee to retain its view that the balance of risks is weighted toward economic weakness, the Committee might believe that the level of rates selected at this meeting is sufficiently low to balance the risks of economic weakness with those of increased inflation pressures. If, for example, rates are cut by 50 or 75 basis points, the Committee might view the resulting real federal funds rate of 21/4 or 2 percent as low enough to make the reduced risks of economic weakness comparable to the increased risks of higher inflation. Most investors would probably read a shift by the Committee to a statement of balanced risks as indicating that the current cycle of policy easing had ended. As a result, a combination of a 50 basis point policy move and a shift to balanced risks would cause interest rates to back up and stock prices to decline, as investors take out the additional easing that had been expected in the near term. By contrast, a 75 basis point reduction in the target federal funds rate accompanied by a statement of balanced risks would tend to lower interest rates a little, since it would move up the timing of policy easing that is already expected, and boost stock prices slightly. However, market participants might view a move to balanced risks as suggesting that the Committee could be less likely to react quickly to future signs of economic weakness, in which case stock prices might slip, causing long-term rates to fall a bit further.
- (17) Under the staff forecast, a significant further tightening of credit conditions is not anticipated in coming quarters, although with the economy soft and profits not rebounding, lenders are likely to remain cautious. The expansion of domestic nonfinancial sector debt is projected to slow to about a 5 percent pace from April to December. Expected federal surpluses result in further substantial paydowns of Treasury debt in coming months before the need to finance the projected tax rebate requires the Treasury to temporarily become a net borrower. Nonfederal debt

growth is projected to moderate some, but it remains considerably faster than the expansion in nominal spending. Although mortgage growth is expected to remain brisk, household debt growth should slow as weaker consumption spending damps the expansion of consumer credit. Business borrowing also is anticipated to soften, as a widening of the gap between internally generated funds and capital expenditures in the second half of the year is more than offset by a reduction in equity retirements.

(18) Under the Greenbook forecast, M2 is projected to expand at a 5½ percent pace from April to December, well below its average rate in recent months. The deceleration owes in part to the projected slowdown in the growth of nominal spending and the waning effects of policy easings on opportunity costs. In addition, some of the special factors that have boosted M2 growth of late–including mortgage refinancing and tax-season effects, and perhaps some safe haven flows out of equity markets—are expected to unwind over coming months. M3 growth is projected to decline to a 7 percent pace over the April-to-December period, reflecting the moderation in M2 expansion and smaller increases in institutional money funds as their rates adjust to lower market interest rates.

Directive and Balance-of-Risks Language

(19) Presented below for the members' consideration is draft wording for (1) the directive and (2) the "balance-of-risks" sentence to be included in the press release issued after the meeting (not part of the directive).

(1) Directive Wording

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with MAINTAINING/INCREASING/reducing the federal funds rate AT/to an average of around ____4\frac{1}{2}\$ percent.

(2) "Balance-of-Risks" Sentence

Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the Committee believes that the risks [ARE BALANCED WITH RESPECT TO PROSPECTS FOR BOTH GOALS] [ARE WEIGHTED MAINLY TOWARD CONDITIONS THAT MAY GENERATE HEIGHTENED INFLATION PRESSURES] [are CONTINUE TO BE weighted mainly toward conditions that may generate economic weakness] in the foreseeable future.

| | M2 | | | | М3 | | | М3 | Debt |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------|------|------|
| | Ease 75 bp | Ease 50 bp | Ease 25 bp | Ease 75 bp | Ease 50 bp | Ease 25 bp | Greenbook Forecast* | | |
| Monthly Growth Rates | | | | | | | | | |
| Jan-2001 | 12.4 | 12.4 | 12.4 | 16.0 | 16.0 | 16.0 | 12.4 | 16.0 | 4.0 |
| Feb-2001 | 10.8 | 10.8 | 10.8 | 9.8 | 9.8 | 9.8 | 10.8 | 9.8 | 6.4 |
| Mar-2001 | 14.5 | 14.5 | 14.5 | 10.4 | 10.4 | 10.4 | 14.5 | 10.4 | 7.2 |
| Apr-2001 | 10.2 | 10.2 | 10.2 | 17.4 | 17.4 | 17.4 | 10.2 | 17.4 | 4.2 |
| May-2001 | 2.9 | 2.7 | 2.5 | 6.9 | 6.8 | 6.7 | 2.7 | 6.8 | 3.8 |
| Jun-2001 | 6.6 | 6.0 | 5.4 | 7.5 | 7.2 | 6.9 | 6.0 | 7.2 | 5.7 |
| Jul-2001 | 6.3 | 5.5 | 4.7 | 7.3 | 6.9 | 6.5 | 5.5 | 6.9 | 4.7 |
| Aug-2001 | 6.6 | 5.8 | 5.1 | 7.4 | 7.0 | 6.7 | 5.8 | 7.0 | 6.1 |
| Sep-2001 | 6.6 | 6.0 | 5.4 | 7.3 | 7.1 | 6.8 | 6.0 | 7.1 | 6.5 |
| Oct-2001 | 6.2 | 5.8 | 5.3 | 7.1 | 6.9 | 6.7 | 5.8 | 6.9 | 4.0 |
| Nov-2001 | 6.4 | 6.0 | 5.6 | 7.2 | 7.0 | 6.8 | 6.0 | 7.0 | 3.8 |
| Dec-2001 | 5.9 | 5.5 | 5.2 | 6.8 | 6.6 | 6.4 | 5.5 | 6.6 | 4.4 |
| Quarterly Averages | | | | | | | | | |
| 2000 Q4 | 6.4 | 6.4 | 6.4 | 7.1 | 7.1 | 7.1 | 6.4 | 7.1 | 4.6 |
| 2001 Q1 | 10.8 | 10.8 | 10.8 | 12.4 | 12.4 | 12.4 | 10.8 | 12.4 | 5.5 |
| 2001 Q2 | 9.3 | 9.2 | 9.0 | 11.7 | 11.6 | 11.5 | 9.2 | 11.6 | 5.2 |
| 2001 Q3 | 6.1 | 5.4 | 4.8 | 7.4 | 7.0 | 6.7 | 5.4 | 7.1 | 5.3 |
| 2001 Q4 | 6.4 | 5.9 | 5.4 | 7.2 | 7.0 | 6.8 | 5.9 | 7.0 | 4.8 |
| Growth Rate | | | | | | | | | |
| From To | | | | | | | | | |
| Dec-2000 Dec-2001 | 8.2 | 7.9 | 7.5 | 9.7 | 9.5 | 9.3 | 7.9 | 9.5 | 5.2 |
| Dec-2000 Apr-2001 | 12.2 | 12.2 | 12.2 | 13.6 | 13.6 | 13.6 | 12.2 | 13.6 | 5.5 |
| Apr-2001 Dec-2001 | 6.0 | 5.5 | 5.0 | 7.3 | 7.1 | 6.8 | 5.5 | 7.1 | 4.9 |
| 2000 Q4 Apr-2001 | 11.4 | 11.4 | 11.4 | 13.2 | 13.2 | 13.2 | 11.4 | 13.2 | 5.6 |
| 2000 Q4 May-2001 | 10.0 | 9.9 | 9.9 | 12.2 | 12.2 | 12.2 | 9.9 | 12.2 | 5.3 |
| 2000 Q4 Dec-2001 | 8.3 | 7.9 | 7.6 | 9.8 | 9.7 | 9.5 | 7.9 | 9.7 | 5.3 |
| 1999 Q4 2000 Q4 | 6.2 | 6.2 | 6.2 | 9.2 | 9.2 | 9.2 | 6.2 | 9.2 | 5.4 |
| 2000 Q4 2001 Q4 | 8.4 | 8.1 | 7.7 | 10.0 | 9.9 | 9.7 | 8.1 | 9.9 | 5.3 |

^{*} This forecast is consistent with nominal GDP and interest rates in the Greenbook forecast.