Monetary Policy and the Economy in 2000

Bolstered by the exceptional strength of domestic demand, the U.S. economy continued to expand at a rapid pace in the first half of 2000. The economy slowed appreciably thereafter, however, and growth eventually became quite sluggish as the year wound down. Overall rates of inflation were higher than in 1999, largely as a result of steep increases in energy prices.

The Federal Reserve adjusted its policy settings and its perceptions of risk as economic conditions changed. When the FOMC convened for its first two meetings of 2000, in February and March, economic indicators were pointing toward an increasingly taut labor market as a consequence of a persistent imbalance between the growth rates of aggregate demand and potential aggregate supply. Reflecting the underlying strength in spending and expectations of tighter monetary policy, market interest rates were rising, especially after the century date change passed without incident. But, at the same time, equity prices were still posting appreciable gains on net. Knowing that the two safety valves that had been keeping underlying inflation from picking up until then—the economy's ability to draw on the pool of available workers and to expand its trade deficit on reasonable terms—could not be counted on indefinitely, the FOMC voted for a further tightening in monetary policy at both its February and March meetings, raising the target for the overnight federal funds rate ¼ percentage point on each occasion. In related actions, the Board of Governors also approved quarter-point increases in the discount rate in both February and March.

Between the March and May meetings of the FOMC some readings on labor costs and prices suggested a possible increase of inflation pressures. Moreover, aggregate demand had continued to grow at a fast clip, and markets for labor and other resources were showing signs of further tightening. Financial market conditions had firmed in response to these developments; the substantial rise in private borrowing rates between March and May had been influenced by the buildup in expectations of more policy tightening. Given all these circumstances, the FOMC decided in May to raise the target for the overnight federal funds rate ½ percentage point, to 6½ percent, and the Board of Governors approved an increase of the same size in the discount rate.

By the June FOMC meeting, the incoming data were suggesting that the expansion of aggregate demand might be starting to moderate toward a more sustainable pace: Consumers had increased their outlays for goods modestly during the spring; home purchases and starts appeared to have softened; and readings on the labor market suggested that the pace of hiring might be cooling off. Moreover, much of the effects on demand of previous policy firmings, including the ½ percentage point tightening in May, had not yet been fully realized. Financial market participants interpreted signs of economic slowing as suggesting that the

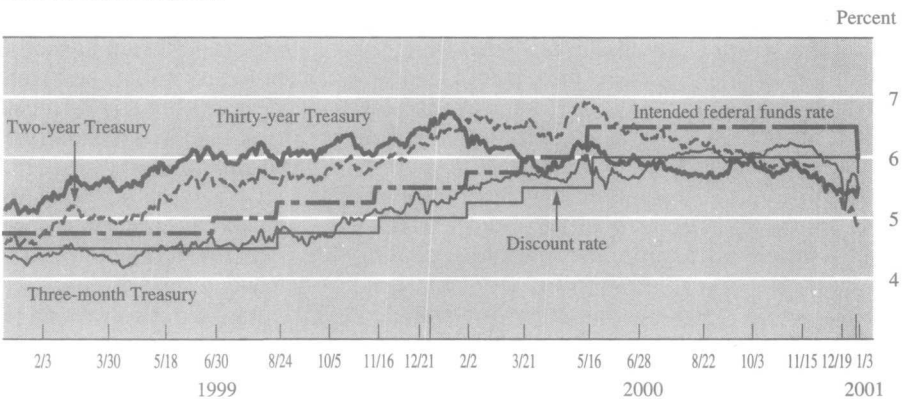
NOTE. The discussions here and in the next section ("Economic and Financial Developments in 2000") are adapted mainly from *Monetary Policy Report to the Congress* (Board of Governors, February 2001). The data cited are those available as of mid-February 2001.

Federal Reserve probably would be able to hold inflation in check without much, if any, additional policy firming. However, whether aggregate demand had moved decisively onto a more moderate expansion track was not yet clear, and labor resource utilization remained unusually elevated. The FOMC decided to take no policy action in June, but it indicated that the balance of risks was still on the side of rising inflation in the foreseeable future.

Further evidence accumulated over the summer and into the fall to indicate that demand growth was moderating to a pace around that of potential supply. Although consumer spending had picked up again during the summer, it did not regain the vigor it had displayed earlier in the year, and capital spending, while still growing briskly, had decelerated from its first-half pace. With increases in demand moderating, private employment gains slowed from the rates seen earlier in the year. However, labor markets remained exceptionally tight, and the hourly compensation of workers had accelerated to a point at which unit labor costs were edging up despite strong gains in productivity. In addition, sizable increases in energy prices were pushing broad inflation measures above the levels of recent years. Although core inflation measures were at most only creeping up, the Committee felt that there was some risk that the increase in energy prices, which was lasting longer than had seemed likely earlier in the year, would start to leave an imprint on business costs and longer-run inflation expectations, posing the risk that core inflation rates could rise more substantially. Weighing these considerations, the FOMC decided to hold the federal funds rate unchanged at both its August and October meetings, and it indicated that the balance of risks still was weighted toward heightened inflation pressures.

By the time of the November FOMC meeting, conditions in the financial markets were becoming less accommodative in some ways, even as the Federal Reserve held the federal funds rate steady. Equity prices had declined considerably over the previous several months, resulting in an erosion of household wealth that seemed likely to restrain consumer spending going forward. Those price declines, along with

Selected Interest Rates



NOTE. The data are daily. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions.

the elevated volatility of equity prices, also hampered the ability of firms to raise funds in equity markets and were likely discouraging business investment. Some firms faced more restrictive conditions in credit markets as well, as risk spreads in the corporate bond market widened significantly for firms with lower credit ratings and as banks tightened the standards and terms on their business loans. Meanwhile, incoming data indicated that the pace of economic activity had softened a bit further. Still, the growth of aggregate demand apparently had moved only modestly below that of potential supply. Moreover, while crude oil prices appeared to be topping out, additional inflationary pressures were arising in the energy sector in the form of surging prices for natural gas, and there had been no easing of the tightness in the labor market. In assessing the evidence, the members of the Committee felt that the risks to the outlook were coming into closer balance but had not yet shifted decisively. At the close of the meeting, the FOMC left the funds rate unchanged once again, and it stated that the balance of risks continued to point toward increased inflation. However, in the statement released after the meeting, the FOMC noted the possibility of subpar growth in the economy in the period ahead.

Toward the end of the year, the moderation of economic growth gave way, fairly abruptly, to more sluggish conditions. By the time of the December FOMC meeting, manufacturing activity had softened considerably, especially in motor vehicles and related industries, and a number of industries had accumulated excessive stocks of inventories. Across a broader set of firms, forecasts for corporate sales and profits in the fourth quarter and in 2001 were being slashed, contributing to a continued decline in equity prices and a further widening of risk spreads on lower-rated corporate bonds. In this environment, growth in business fixed investment appeared to be slowing appreciably. Consumer spending showed signs of decelerating further, as falling stock prices eroded household wealth and consumer confidence weakened. Moreover, growth in foreign economies seemed to be slowing, on balance, and U.S. export performance began to deteriorate. Market interest rates had declined sharply in response to these developments. Against this backdrop, the FOMC at its December meeting decided that the risks to the outlook had swung considerably and now were weighted toward economic weakness, although it decided to wait for additional evidence on the extent and persistence of the slowdown before moving to an easier policy stance. Recognizing that the current position of the economy was difficult to discern because of lags in the data and that prospects for the near term were particularly uncertain, the Committee agreed at the meeting that it would be especially attentive over coming weeks to signs that an intermeeting policy action was called for.

Additional evidence that economic activity was slowing significantly emerged not long after the December meeting. New data indicated a marked weakening in business investment, and retail sales over the holiday season were appreciably lower than businesses had expected. To contain the resulting buildup in inventories, activity in the manufacturing sector continued to drop. In addition, forecasts of near-term corporate profits were being marked down further, resulting in additional declines in equity prices and in business confidence. Market interest rates continued to fall, as investors became more pessimistic about the economic outlook. On the basis of these developments, the Com-

mittee held a telephone conference call on January 3, 2001, and decided to cut the intended federal funds rate ½ percentage point. By the following day, the Board of Governors had approved decreases in the discount rate totaling ½ percentage point. Equity prices surged on the announcement of the federal funds rate cut, and the Treasury yield curve steepened considerably, apparently because market participants became more confident that a prolonged downturn in economic growth would likely be forestalled. ■

Monetary Policy and the Economic Outlook

Last year was a difficult one for the economy of the United States. The slowdown in the growth of economic activity that had become apparent in late 2000 intensified in the first half of the year. Businesses slashed investment spending—making especially deep cuts in outlays for high-technology equipment—in response to weakening final demand, an oversupply of some types of capital, and declining profits. As actual and prospective sales deteriorated, many firms in the factory sector struggled with uncomfortably high levels of inventories, and the accompanying declines in manufacturing output steepened. At the same time, foreign economies also slowed, further reducing the demand for U.S. production. The aggressive actions by the Federal Reserve to ease the stance of monetary policy in the first half of the year provided support to consumer spending and the housing sector. Nevertheless, the weakening in activity became more widespread through the summer, job losses mounted further, and the unemployment rate moved higher. With few indications that economic conditions were about to improve, with underlying inflation moderate and edging lower, and with inflation expectations well contained, the Federal Reserve continued its efforts to counter the ongoing weakness by cutting the federal funds rate, bringing the cumulative reduction in that rate to 3 percentage points by August.

The devastating events of September 11 further set back an already fragile economy. Heightened uncertainty and badly shaken confidence caused a widespread pullback from economic activity and from risk-taking in financial markets, where equity prices fell sharply for several weeks and credit risk spreads widened appreciably. The most pressing concern of the Federal Reserve in the first few days following the attacks was to help shore up the infrastructure of financial markets and to provide massive quantities of liquidity to limit potential disruptions to the functioning of those markets. The economic fallout of the events of September 11 led the Federal Open Market Committee (FOMC) to cut the target federal funds rate after a conference call early the following week and again at each meeting through the end of the year (see box "Monetary Policy after the Terrorist Attacks").

Displaying the same swift response to economic developments that appears to have characterized much business behavior in the current cyclical episode, firms moved quickly to reduce payrolls and cut production after mid-September. Although these adjustments occurred across a broad swath of the economy, manufacturing and industries related to travel, hospitality, and entertainment bore the brunt of the downturn. Measures of consumer confidence fell sharply in the first few weeks after the attacks, but the deterioration was not especially large by cyclical standards, and improvement in some of these indexes was evident in October. Similarly, equity prices started to rebound in

NOTE. The discussions here and in the next section ("Economic and Financial Developments in 2001 and Early 2002") consist of the text, tables, and selected charts from *Monetary Policy Report to the Congress* (Board of Governors, February 2002).

Monetary Policy after the Terrorist Attacks

The terrorist attacks on September 11 destroyed a portion of the infrastructure of U.S. financial markets, disrupted communication networks, and forced some market participants to retreat to contingency sites in varying states of readiness. These developments, along with the tragic loss of life among the employees of a few major financial firms, greatly complicated trading, clearing, and settlement of many different classes of financial instruments. Direct dislocations elevated uncertainties about payment flows, making it difficult for the reserve market to channel funds where they were needed most. Depositories that held more reserve balances than they preferred had considerable difficulty unloading the excess in the market; by contrast, depositories awaiting funds had to scramble to cover overdraft positions. As a result, the effective demand for reserves ballooned.

The Federal Reserve accommodated the increase in the demand for reserves through a variety of means, the relative importance of which shifted through the week. On Tuesday morning, shortly after the attacks, the Federal Reserve issued a press release reassuring financial markets that the Federal Reserve System was functioning normally and stating that "the discount window is available to meet liquidity needs." Depository institutions took up the offer, and borrowing surged to a record $45½ billion by Wednesday. Discount loans outstanding dropped off sharply on Thursday and returned to very low levels by Friday. Separately, overnight overdrafts on Tuesday and Wednesday rose to several billion dollars, as a handful of depository and other institutions with accounts at the Federal Reserve were forced into overdraft on their reserve accounts. Overnight overdrafts returned to negligible levels by the end of the week.

Like their U.S. counterparts, foreign financial institutions operating in the United States faced elevated dollar liquidity needs. In some cases, however, these institutions encountered difficulties positioning the collateral at their U.S. branches to secure Federal Reserve discount window credit. To be in a position to help meet those needs, three foreign central banks established new or expanded arrangements with the Federal Reserve to receive dollars in exchange for their respective currencies. These swap lines, which lasted for thirty days, consisted of $50 billion for the European Central Bank, $30 billion for the Bank of England, and an increase of $8 billion (from $2 billion to $10 billion) for the Bank of Canada. The European Central

late September, and risk spreads began to narrow somewhat by early November, when it became apparent that the economic effects of the attacks were proving less severe than many had feared.

Consumer spending remained surprisingly solid over the final three months of the year in the face of enormous economic uncertainty, widespread job losses, and further deterioration of household balance sheets from the sharp drop in equity prices immediately following September 11. Several factors were at work in support of household spending during this period. Low and declining interest rates provided a lift to outlays for durable goods and to activity in housing markets. Nowhere was the boost from low interest rates more apparent than in the sales of new motor vehicles, which soared in response to the financing incentives offered by manufacturers. Low mortgage interest rates not only sustained high levels of new home construction

Bank drew on its line that week to channel the funds to institutions with a need for dollars.

By Thursday and Friday, the disruption in air traffic caused the Federal Reserve to extend record levels of credit to depository institutions in the form of check float. Float increased dramatically because the Federal Reserve continued to credit the accounts of banks for deposited checks even though the grounding of airplanes meant that checks normally shipped by air could not be presented to the checkwriters' banks on the usual schedule. Float declined to normal levels the following week once air traffic was permitted to recommence. Lastly, over the course of the week that included September 11, as the market for reserves began to function more normally, the Federal Reserve resumed the use of open market operations to provide the bulk of reserves. The open market Desk accommodated all propositions down to the target federal funds rate, operating exclusively through overnight transactions for several days. The injection of reserves through open market operations peaked at $81 billion on Friday. The combined infusion of liquidity from the various sources pushed the level of reserve balances at Federal Reserve Banks to more than $100 billion on Wednesday, September 12, about ten times the normal level. As anticipated by the FOMC, federal funds traded somewhat below their new target level for the rest of the week. By the end of the month, bid–asked spreads and trading volumes in the interbank and other markets receded to more normal levels, and federal funds consistently began to trade around the intended rate.

The Federal Reserve took several steps to facilitate market functioning in September in addition to accommodating the heightened demand for reserves. The hours of funds and securities transfer systems operated by the Federal Reserve were extended significantly for a week after the attacks. The Federal Reserve Bank of New York liberalized the terms under which it would lend the securities in the System portfolio, and the amount of securities lent rose to record levels in the second half of September. For the ten days following the attacks, the Federal Reserve reduced or eliminated the penalty charged on overnight overdrafts, largely because those overdrafts were almost entirely the result of extraordinary developments beyond the control of the account holders. In addition, the Federal Reserve helped restore communication between market participants and in some cases processed bilateral loans of reserves between account holders in lieu of market intermediation.

but also allowed households to refinance mortgages and extract equity from homes to pay down other debts or to increase spending. Fiscal policy provided additional support to consumer spending. The cuts in taxes enacted last year, including the rebates paid out over the summer, cushioned the loss of income from the deterioration in labor markets. And the purchasing power of household income was further enhanced by the sharp drop in energy prices during the autumn. With businesses having positioned themselves to absorb a falloff of demand, the surprising strength in household spending late in the year resulted in a dramatic liquidation of inventories. In the end, real gross domestic product posted a much better performance than had been anticipated in the immediate aftermath of the attacks.

More recently, there have been encouraging signs that economic activity is beginning to firm. Job losses diminished considerably in December and January, and initial claims for unemployment insurance and the level of

insured unemployment have reversed their earlier sharp increases. Although motor vehicle purchases have declined appreciably from their blistering fourth-quarter pace, early readings suggest that consumer spending overall has remained very strong early this year. In the business sector, new orders for capital equipment have provided some tentative indications that the deep retrenchment in investment spending could be abating. Meanwhile, purchasing managers in the manufacturing sector report that orders have strengthened and that they view the level of their customers' inventories as being in better balance. Indeed, the increasingly rapid pace of inventory runoff over the course of the last year has left the level of production well below that of sales, suggesting scope for a recovery in output given the current sales pace. Against this backdrop, the FOMC left its target for the federal funds rate unchanged in January. However, reflecting a concern that growth could be weaker than the economy's potential for a time, the FOMC retained its assessment that the risks were tilted unacceptably toward economic weakness.

The extent and persistence of any recovery in production will, of course, depend critically on the trajectory of final demand in the period ahead. Several factors are providing impetus to such a recovery in the coming year. With the real federal funds rate hovering around zero, monetary policy should be positioned to support growth in spending. Money and credit expanded fairly rapidly through the end of the year, and many households and businesses have strengthened their finances by locking in relatively low-cost long-term credit. The second installment of personal income tax cuts and scheduled increases in government spending on homeland security and national defense also will provide some stimulus to activity this year. Perhaps the most significant potential support to the economy could come from further gains in private-sector productivity. Despite the pronounced slowdown in real GDP growth last year, output per hour in the nonfarm business sector increased impressively. Continued robust gains in productivity, stemming from likely advances in technology, should provide a considerable boost to household and business incomes and spending and contribute to a sustained, noninflationary recovery.

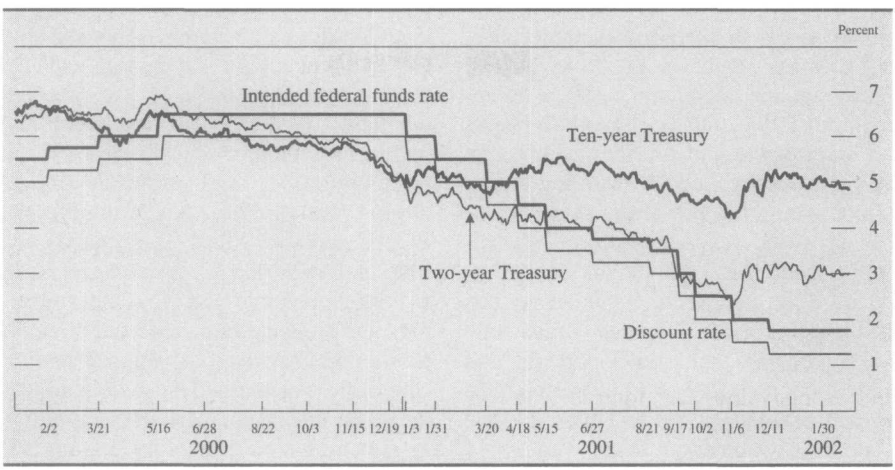
Still, the economy faces considerable risk of subpar economic performance in the period ahead. Because outlays for durable goods and for new homes have been relatively well maintained in this cycle, the scope for strong upward impetus from household spending seems more limited than has often been the case in past recoveries. Moreover, the net decline in household net worth relative to income over the past two years is likely to continue to restrain the growth of spending in coming quarters. To be sure, the contraction in business capital spending appears to be waning. But spending on some types of equipment, most notably communications equipment, continues to decline, and there are few signs yet of a broad-based upturn in capital outlays. Activity abroad remains subdued, and a rebound of foreign output is likely to follow, not lead, a rebound in the United States. Furthermore, lenders and equity investors remain quite cautious. Banks have continued to tighten terms and standards on loans, and risk spreads have increased a little this year. Stock prices have retreated from recent highs as earnings continue to fall amid concerns about the transparency of corporate financial reports and uncertainty about the pace at which profitability will improve.

Monetary Policy, Financial Markets, and the Economy over 2001 and Early 2002

As economic weakness spread and intensified over the first half of 2001, the FOMC aggressively lowered its target for the federal funds rate. Because firms reacted unusually swiftly to indicators that inventories were uncomfortably high and capital was becoming underutilized, the drop in production and business capital spending was especially steep. Moreover, sharp downward revisions in corporate profit expectations caused equity prices to plunge, which, along with a decline in consumer confidence, pointed to vulnerability in household spending. Meanwhile, a significant deceleration in energy prices, after a surge early in the year, began to hold down overall inflation; the restraining effect of energy prices, combined with the moderation of resource utilization, also promised to reduce core inflation. Responding to the rapid deterioration in economic conditions, the FOMC cut its target for the federal funds rate 2½ percentage points—in 5 half-point steps—by the middle of May. Moreover, the FOMC indicated throughout this period that it judged the balance of risks to the outlook as weighted toward economic weakness. The Board of Governors of the Federal Reserve System approved reductions in the discount rate that matched the Committee's cuts in the target federal funds rate. As a result, the discount rate declined from 6 percent to 3½ percent over the period.

At its June and August meetings, the FOMC noted information suggesting continued softening in the economy and a lack of convincing evidence that the end of the slide in activity was in sight. Although consumer spending on both housing and nonhousing items—buoyed by the tax cuts and rebates, low mortgage interest rates, declining energy prices, and realized capital gains from home sales—remained fairly resilient, economic conditions in manufacturing deteriorated further. Firms continued to reduce payrolls, work off excess inventories, and cut back capital equipment expenditures amid sluggish growth in

Selected Interest Rates



NOTE. The data are daily and extend through February 25, 2002. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions.

business sales, significantly lower corporate profits, and greater uncertainty about future sales and earnings. With energy prices in retreat, price inflation remained subdued. In reaching its policy decisions at its June and August meetings, the FOMC took into account the substantial monetary policy stimulus already implemented since the start of the year—but not yet fully absorbed by the economy—and the oncoming effects of stimulative fiscal policy measures recently enacted by the Congress. Consequently, the Committee opted for smaller interest rate cuts of ¼ percentage point at both the June and August meetings, which brought the target federal funds rate down to 3½ percent; as earlier in the year, the FOMC continued to indicate that it judged the balance of risks to the outlook as weighted toward economic weakness. After both meetings, the Board of Governors of the Federal Reserve System also approved similar reductions in the discount rate, which moved down to 3 percent.

After the terrorist attacks on September 11, the available Committee members held a telephone conference on September 13, during which they agreed that the financial markets were too disrupted to allow for an immediate alteration in the stance of monetary policy. However, the members were in agreement that the attacks' potential effects on asset prices and on the performance of the economy, and the resulting uncertainty, would likely warrant some policy easing in the very near future. Accordingly, the FOMC, at a telephone conference on September 17, voted to reduce its target for the federal funds rate ½ percentage point, to 3 percent, and stated that it continued to judge the risks to the outlook to be weighted toward economic weakness.

Over subsequent weeks, heightened aversion to risk, which caused investors to flock from private to Treasury and federal agency debt, boosted risk spreads sharply, especially on lower-rated corporate debt. Increased demand for safe and liquid assets contributed to selling pressure in the stock market. At its October 2 meeting, the FOMC had little hard information available on economic developments since the attacks. However, evidence gleaned from surveys, anecdotes, and market contacts indicated that the events of September 11 had considerable adverse repercussions on an already weak economy: Survey indicators of consumer confidence had fallen, and consumer spending had apparently declined. At the same time, anecdotal information pointed to additional deep cutbacks in capital spending by many firms after an already-significant contraction in business fixed investment over the summer months.

When the FOMC met on November 6, scattered early data tended to confirm the information that the decline in production, employment, and final demand had steepened after the terrorist attacks. Although an economic turnaround beginning in the first half of 2002 was a reasonable expectation according to the Committee, concrete evidence that the economy was stabilizing had yet to emerge. Meanwhile, the marked decrease in energy prices since the spring had induced a decline in overall price inflation, and inflation expectations had fallen. Accordingly, the FOMC voted to lower its target for the federal funds rate ½ percentage point at both its October and November meetings and reiterated its view that the risks to the outlook were weighted toward economic weakness. The sizable adjustments in the stance of monetary policy in part reflected concerns that insufficient policy stimulus posed an unacceptably high risk of a more extended cycli-

cal retrenchment that could prove progressively more difficult to counter, given that the federal funds rate—at 2 percent—was already at such a low level.

By the time of the December FOMC meeting, the most recent data were suggesting that the rate of economic decline might be moderating. After plunging earlier in the year, orders and shipments of nondefense capital goods had turned up early in the fourth quarter, and the most recent survey evidence for manufacturing also suggested that some expansion in that sector's activity might be in the offing. In the household sector, personal consumption expenditures appeared to have been quite well maintained, an outcome that reflected the continuation of zero-rate financing packages offered by the automakers, widespread price discounting, and low interest rates. In an environment of very low mortgage interest rates, household demand for housing remained at a relatively high level, and financial resources freed up by a rapid pace of mortgage refinancing activity also supported consumer spending.

Nonetheless, the evidence of emerging stabilization in the economy was quite tentative and limited, and the Committee saw subpar economic performance as likely to persist over the near term. Moreover, in the probable absence of significant inflationary pressures for some time, a modest easing action could be reversed in a timely manner if it turned out not to be needed. In view of these considerations, the FOMC lowered its target for the federal funds rate ¼ percentage point, to 1¾ percent, on December 11, 2001, and stated that it continued to judge the risks to the outlook to be weighted mainly toward economic weakness. As had been the case throughout the year, the Board of Governors approved reductions in the discount rate that matched the FOMC's cuts in the target federal funds rate, bringing the discount rate to 1¼ percent, its lowest level since 1948.

Subsequent news on economic activity bolstered the view that the economy was beginning to stabilize. The information reviewed at the January 29–30, 2002, FOMC meeting indicated that consumer spending had held up remarkably well, investment orders had firmed further, and the rate of decline in manufacturing production had lessened toward the end of 2001. With weakness in business activity abating, and monetary policy already having been eased substantially, the FOMC left the federal funds rate unchanged at the close of its meeting, but it continued to see the risks to the outlook as weighted mainly toward economic weakness.

Economic Projections for 2002

Federal Reserve policymakers are expecting the economy to begin to recover this year from the mild downturn experienced in 2001, but the pace of expansion is not projected to be sufficient to cut into the margin of underutilized resources. The central tendency of the real GDP growth forecasts made by the members of the Board of Governors and the Federal Reserve Bank presidents is 2½ percent to 3 percent, measured as the change between the final quarter of 2001 and the final quarter of this year. The pace of expansion is likely to increase only gradually over the course of the year, and the unemployment rate is expected to move higher for a time. The FOMC members project the civilian unemployment rate to stand at about 6 percent to 6¼ percent at the end of 2002.

A diminution of the rate of inventory liquidation is likely to be an important factor helping to buoy production this

Economic Projections for 2002

Percent

Indicator	MEMO: 2001 actual	Federal Reserve Governors and Reserve Bank presidents	
		Range	Central tendency
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	1.9	3½–5½	4–4½
Real GDP	.1	2–3½	2½–3
PCE chain-type price index	1.3	1–2	About 1½
Average level, fourth quarter			
Civilian unemployment rate	5.6	5¾–6½	6–6¼

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

year. In 2001, businesses cut inventories sharply so as to avoid carrying excessive stocks relative to the weaker pace of sales, and although this process of liquidation probably is not yet complete in many industries, the overall pace of reduction is likely to slow. Then, as final demand strengthens, liquidation should give way to some restocking later in the year.

As noted above, the forces affecting demand this year are mixed. On the positive side are the stimulative effects of both fiscal policy and the earlier monetary policy actions. A gradual turnaround in employment and a strengthening of the economies of our major trading partners should provide some lift to final demand, and spending by both households and businesses ought to be supported by robust productivity growth. On the other hand, the problems facing the high-tech sector have not yet completely receded, and indications are that spending on other types of capital equipment remains lackluster. The surprising strength of household spending through this period of economic weakness suggests a lack of pent-up consumer demand going forward. In addition, consumers likely will not benefit from declining energy prices to the extent they did last year, and the net decline in equity values since mid-2000 will probably continue to weigh on consumption spending in the period ahead.

Federal Reserve policymakers believe that consumer prices will increase slightly more rapidly in 2002 than in 2001, as last year's sharp decline in energy prices is unlikely to be repeated. The central tendency of the FOMC members' projections for increases in the chain-type price index for personal consumption expenditures (PCE) is about 1½ percent; last year's actual increase was about 1¼ percent. Nevertheless, diminished levels of resource utilization, the indirect effects of previous declines in energy prices on firms' costs, and continued competitive pressures all ought to restrain the pace of price increases outside of the energy sector this year. ■

Monetary Policy and the Economic Outlook

The economy of the United States has suffered a series of blows in the past few years, including the fall in equity market values that began in 2000, cutbacks in capital spending in 2001, the horrific terrorist attacks of September 11, the emergence of disturbing evidence of corporate malfeasance, and an escalation of geopolitical risks. Despite these adversities, the nation's economy emerged from its downturn in 2001 to post moderate economic growth last year. The recovery was supported by accommodative monetary and fiscal policies and undergirded by unusually rapid productivity growth that boosted household incomes and held down business costs. The productivity performance was also associated with a rapid expansion of the economy's potential, and economic slack increased over the year despite the growth in aggregate demand.

After turning up in late 2001, activity began to strengthen more noticeably early last year. Sharp inventory cutbacks in 2001 had brought stocks into better alignment with gradually rising final sales, and firms began to increase production in the first quarter of 2002 to curtail further inventory runoffs. Moreover, businesses slowed their contraction of investment spending and began to increase outlays for some types of capital equipment. Household spending on both personal consumption items and housing remained solid and was supported by another installment of tax reductions, widespread price discounting, and low mortgage interest rates. By midyear, the cutbacks in employment came to an end, and private payrolls started to edge higher.

Although economic performance appeared to be gradually improving, the tentative nature of this improvement warranted the continuation of a highly accommodative stance of monetary policy. Accordingly, the Federal Open Market Committee (FOMC) held the federal funds rate at 1¾ percent through the first part of the year. In March, however, the FOMC shifted from an assessment that the risks over the foreseeable future to its goals of maximum sustainable growth and price stability were tilted toward economic weakness to an assessment that the risks were balanced.

Around midyear, the economy began to struggle again. Concerns about corporate governance came to weigh heavily on investors' confidence, and geopolitical tensions, especially the situation in Iraq, elevated uncertainties about the future economic climate. Equity prices fell during the summer, liquidity eroded in corporate debt markets, and risk spreads widened. Businesses once again became hesitant to spend and to hire, and both manufacturing output and private payrolls began to decline. State and local governments struggled to cope with deteriorating fiscal positions, and the economies of some of our major trading partners remained weak. Although the already accommodative stance of monetary policy and strong upward trend of productivity were providing important support

NOTE. The discussion here and in the next section ("Economic and Financial Developments in 2002 and Early 2003") consists of the text, tables, and selected charts from the Monetary Policy Report submitted to the Congress on February 11, 2003, pursuant to section 2B of the Federal Reserve Act.

to spending, the Committee perceived a risk that the near-term weakening could become entrenched. In August, the FOMC adjusted its weighting of risks toward economic weakness, and in November, it reduced the targeted federal funds rate 50 basis points, to 1¼ percent. The policy easing allowed the Committee to return to an assessment that the risks to its goals were balanced. With inflation expectations well contained, this additional monetary stimulus seemed to offer worthwhile insurance against the threat of persistent economic weakness and substantial declines in inflation from already low levels.

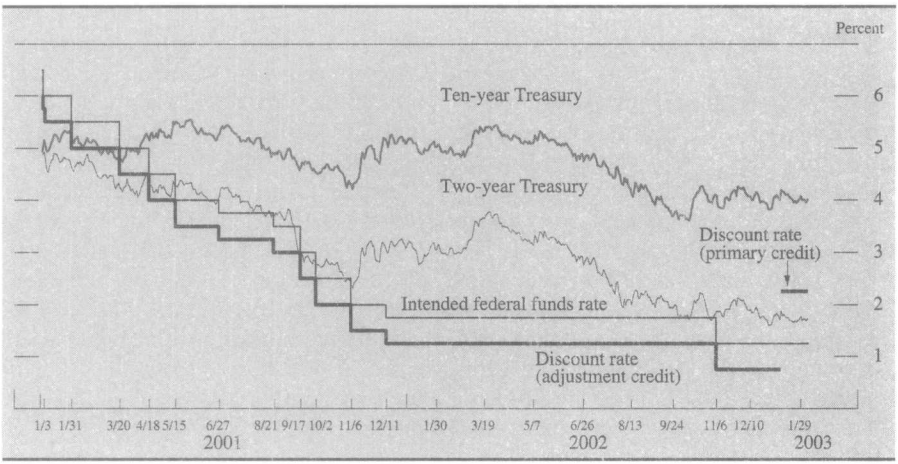
On net, the economy remained sluggish at the end of 2002 and early this year. The household sector continued to be a solid source of demand. Motor vehicle sales surged at year-end on the tide of another round of aggressive discounting by the manufacturers, other consumer outlays trended higher, and activity in housing markets remained exceptionally strong. Concerns about corporate governance appeared to recede somewhat late last year, in part because no new revelations of major wrongdoing had emerged. However, the ongoing situation in Iraq, civil strife in Venezuela that has curtailed oil production, and tensions on the Korean peninsula have sustained investors' uncertainty about economic prospects and have pushed prices higher on world oil markets. Faced with this uncertainty, businesses have been cautious in spending and changed payrolls little, on net, over December and January.

Mindful of the especially high degree of uncertainty attending the economic outlook in the current geopolitical environment, the members of the FOMC believe the most likely outcome to be that fundamentals will support a strengthening of economic growth. Business caution is anticipated to give way over the course of the year to clearer signs of improving sales. Inventories are lean relative to sales at present, and restocking is likely to provide an additional impetus to production in the period ahead. The rapid expansion of productivity, the waning effects of earlier declines in household wealth, and the highly accommodative stance of monetary policy should also continue to boost activity. Although state and local governments face budgetary problems, their restraint is likely to offset only a part of the stimulus from past and prospective fiscal policy actions at the federal level. In addition, the strengthening economies of our major trading partners along with the improving competitiveness of U.S. products ought to support demand for our exports. Taken together, these factors are expected to lead to a faster pace of economic expansion, while inflation pressures are anticipated to remain well contained.

Monetary Policy, Financial Markets, and the Economy over 2002 and Early 2003

As economic growth picked up during the early months of 2002, the FOMC maintained its target for the federal funds rate at 1¾ percent. A sharply reduced pace of inventory liquidation accounted for a significant portion of the step-up in real GDP growth, but other indicators also suggested that the economy was gaining momentum. Reductions in business outlays on equipment and software had moderated significantly after dropping precipitously in 2001, and consumer spending was well maintained by sizable gains in real disposable personal income. Residential construction activity was spurred by low home mortgage interest rates. The improvement in economic conditions

Selected Interest Rates



NOTE. The data are daily and extend through February 5, 2003. The dates on the horizontal axis are those of scheduled FOMC meetings and of any intermeeting policy actions. On January 9, 2003, the Federal Reserve changed the main credit program offered at the discount window by terminating the adjustment credit program and beginning the primary credit program.

sparked a rally in equity markets late in the first quarter and pushed up yields on longer-term Treasury instruments and investment-grade corporate bonds; yields on speculative-grade bonds declined in reaction to brighter economic prospects and the perceived reduction in credit risk. Meanwhile, surging energy prices exerted upward pressure on overall inflation, but still-appreciable slack in resource utilization and a strong upward trend in private-sector productivity were holding down core price inflation.

At both its March and May meetings, the FOMC noted that the apparent vigor of the economy was importantly attributable to a slowdown in the pace of inventory liquidation and that considerable uncertainty surrounded the outlook for final sales over the next several quarters. The Committee was especially concerned about prospects for a rebound in business fixed investment, which it viewed as key to ensuring sustainable economic expansion. Although the decline in investment spending during the first quarter of 2002 was the smallest in a year, gloomy business sentiment and large margins of excess capacity in numerous industries were likely to hamper capital expenditures. According to anecdotal reports, many firms were unwilling to expand capacity until they saw more conclusive evidence of growing sales and profits. At the same time, however, the FOMC noted that, with the federal funds rate unusually low on an inflation-adjusted basis and considerable fiscal stimulus in train, macroeconomic policies would provide strong support to further economic expansion. Against this backdrop, the Committee at the March 19 meeting judged the accommodative stance of monetary policy to be appropriate and announced that it considered the risks to achieving its long-run objectives as being balanced over the foreseeable future, judgments it retained at its meeting in early May.

The information reviewed at the June 25–26 FOMC meeting confirmed that the economy was expanding but at a slower pace than earlier in the year. As expected, the degree of impetus to economic activity from decelerating inventory liquidation had moderated. Residential investment and consumer spending also had slowed appreciably after surging earlier in the year. The most recent data on orders and shipments suggested a small upturn in business spending on equipment and software, but the improvement in capital spending appeared to be limited, unevenly distributed across industries, and not yet firmly indicative of sustained advance. Industrial production continued to increase, and the unemployment rate declined somewhat.

In financial markets, investors and lenders had apparently become more risk averse in reaction to the mixed tone of economic data releases, growing geopolitical tensions, further warnings about terrorist attacks, and additional revelations of dubious corporate accounting practices. In concert, these developments pushed down yields on longer-term Treasury securities, while interest rates on lower-quality corporate bonds rose notably, and equity prices dropped sharply. Although the economy continued to expand and the prospects for accelerating aggregate demand remained favorable, downbeat business sentiment and skittish financial markets rendered the timing and extent of the expected strengthening of the expansion subject to considerable uncertainty. In these circumstances, the FOMC left the federal funds rate unchanged to keep monetary policy very accommodative and once again assessed the risks to the outlook as being balanced.

By the time of the August 13 FOMC meeting, it had become apparent that economic activity had lost some of its earlier momentum. Turbulence in financial markets appeared to be holding back the pace of the economic expansion. Market participants focused their attention on the lack of convincing evidence that the recovery was gaining traction and the possibility that more news of corporate misdeeds would surface in the run-up to the Securities and Exchange Commission's August 14 deadline for the certification of financial statements by corporate executives. Although the cumulative losses in financial wealth since 2000 were restraining expenditures by households, very low mortgage interest rates were helping to sustain robust demand for housing. Moreover, the financial resources made available by a rapid pace of mortgage refinancing activity, in combination with attractive incentives offered by auto manufacturers, supported other consumer spending. The Committee continued to judge the prevailing degree of monetary accommodation as appropriate to foster a solid expansion that would bring the economy to fuller resource utilization. At the same time, the Committee recognized the considerable risks to that outlook and the potential adverse consequences for economic prospects from possible additional deterioration of financial conditions. The members noted, however, that a further easing of monetary policy, if it came to be viewed as appropriate, could be accomplished in a timely manner. In light of these considerations, the FOMC opted to retain a target rate of 1¾ percent for the federal funds rate, but it viewed the risks to the economy as having shifted from balanced to being tilted toward economic weakness.

When the FOMC met on September 24, data indicated that economic growth had picked up in the third quarter, on average, buoyed in part by a surge in motor vehicle production. The uneventful passing of the mid-August

deadline for recertification of corporate financial statements briefly alleviated investors' skittishness in debt and equity markets. However, the most timely information suggested that some softening in economic activity had occurred late in the summer. Those economic reports, along with a darker outlook for corporate profits and escalating fears of a possible war against Iraq, led market participants to revise down their expectations for the economy. Equity prices and yields on both longer-term Treasury and private securities moved sharply lower in early autumn. In the Committee's view, heightened geopolitical tensions constituted a significant additional source of uncertainty clouding the economic outlook. Still, fundamentals suggested reasonable prospects for continued expansion. Accordingly, the FOMC left the federal funds rate unchanged at the close of the September meeting but also reiterated its view that the risks to the outlook were weighted toward economic weakness.

The information reviewed at the November 6 meeting indicated a more persistent spell of below-par economic performance than the FOMC had anticipated earlier. With home mortgage rates at very low levels, residential construction activity remained high. But consumer spending had decelerated noticeably since midsummer under the combined weight of stagnant employment and declining household wealth resulting from further decreases in equity prices. Worries about the potential for war against Iraq, as well as persistent concerns about the course of economic activity and corporate earnings, were apparently engendering a high degree of risk aversion among business executives that was constraining capital spending and hiring. Despite a weakening in the exchange value of the dollar, sluggish economic growth among major trading partners spelled difficulties for U.S. exports, and a rebound in foreign output seemed more likely to follow than to lead a rebound at home. Moreover, economic slack that was larger and more persistent than previously anticipated ran the risk of reducing core inflation appreciably further from already low levels. Given these considerations, the Committee lowered its target for the federal funds rate ½ percentage point, to 1¼ percent. The relatively aggressive adjustment in the stance of monetary policy was deemed to offset the potential for greater economic weakness, and the Committee accordingly announced that it judged risks to the outlook as balanced with respect to its long-run goals of price stability and sustainable economic growth.

When the FOMC met on December 10, overall conditions in financial markets had calmed considerably. Indicators of production and spending, however, remained mixed. The manufacturing sector registered large job losses in the autumn, and industrial production continued its slide, which had begun around midyear. A more vigorous rebound in business fixed investment was not evident, and indeed the recent data on orders and shipments and anecdotal reports from business contacts generally signaled continued softness in capital spending. Very low home mortgage interest rates were supporting residential construction activity, but consumption expenditures were sluggish. On balance, the Committee's view was that in the absence of major shocks to consumer and business confidence, a gradual strengthening of the economic expansion was likely over the coming quarters, especially given the very accommodative stance of monetary policy and probable further fiscal stimulus. The FOMC left the federal funds rate

unchanged and indicated that it continued to view the risks to the outlook as balanced over the foreseeable future.

By the time of the FOMC meeting on January 28–29, 2003, it had become apparent that the economy had grown only slowly in the fourth quarter of last year, but little evidence of cumulating weakness appeared in the most recent data, and final demand had held up reasonably well. The escalation of global tensions weighed heavily on business and investor sentiment. Firms apparently were remaining very cautious in their hiring and capital spending, and equity prices had declined on balance since the December meeting. But yield spreads on corporate debt—especially for riskier credits—narrowed further, and longer-term Treasury yields declined slightly. Although the fundamentals still pointed to favorable prospects for economic growth beyond the near term, geopolitical developments were making it especially difficult to gauge the underlying strength of the economy, and uncertainties about the economic outlook remained substantial. Against this background, the Committee decided to leave the federal funds rate unchanged and stated that it continued to judge the risks to the outlook as balanced.

Economic Projections for 2003

An unusual degree of uncertainty attends the economic outlook at present, in large measure, but not exclusively, because of potential geopolitical developments. But Federal Reserve policymakers believe the most probable outcome for this year to be a pickup in the pace of economic expansion. The central tendency of the real GDP forecasts made by the members of the Board of Governors and the Federal Reserve Bank presidents is 3¼ percent to 3½ percent, measured as the change between the final quarter of 2002 and the final quarter of this year. The full range of these forecasts is 3 percent to 3¾ percent. Of course, neither the central tendency nor the range is intended to convey the uncertainties surrounding the individual forecasts of the members. The civilian unemployment rate is expected to end the year in the 5¾ percent to 6 percent range.

Apart from the geopolitical and other uncertainties, the forces affecting demand this year appear, on balance, conducive to a strengthening of the economic expansion. Monetary policy remains highly accommodative, and federal fiscal policy is and likely will be stimulative. However, spending by many state and local governments will continue to be restrained by considerable budget difficulties. Activity abroad is expected to improve this year, even if at a less robust pace than in the United States; such growth together with the improving competitiveness of U.S. products should generate stronger demand for our exports. Furthermore, robust gains in productivity, though unlikely to be as large as in 2002, ought to continue to promote both household and business spending. Household purchasing power should be supported as well by a retreat in the price of imported energy products that is suggested by the oil futures market. And the adverse effects on household spending from past declines in equity wealth probably will begin to wane.

A reduction of businesses' hesitancy to expand investment and hiring is critical to the durability of the expansion, and such a reduction should occur gradually if geopolitical risks ease and profitability improves. Inventories are relatively lean, and some restocking ought to help boost production this year, albeit to a much smaller extent than did

Economic Projections for 2003

Percent

Indicator	MEMO: 2002 actual	Federal Reserve Governors and Reserve Bank presidents	
		Range	Central tendency
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	4.1	4½–5½	4¾–5
Real GDP	2.8	3–3¾	3¼–3½
PCE chain-type price index	1.9	1¼–1¾	1¼–1½
Average level, fourth quarter			
Civilian unemployment rate	5.9	5¾–6	5¾–6

1. Change from average for fourth quarter of previous year to average for fourth quarter of year indicated.

last year's cessation of sharp inventory liquidations. In addition, the continued growth of final sales, the tax law provision for partial expensing of equipment purchases, replacement demand, and a more hospitable financial environment should induce many firms to increase their capital spending. The growth of investment likely will be tempered, however, by the persistence of excess capital in some areas, notably the telecommunications sector, and reductions in business spending on many types of new structures may continue this year.

Federal Reserve policymakers believe that consumer prices will increase less this year than in 2002, especially if energy prices partly reverse last year's sharp rise. In addition, resource utilization likely will remain sufficiently slack to exert further downward pressure on underlying inflation. The central tendency of FOMC members' projections for increases in the chain-type price index for personal consumption expenditures (PCE) is 1¼ percent to 1½ percent this year, lower than the actual increase of about 2 percent in 2002. ■