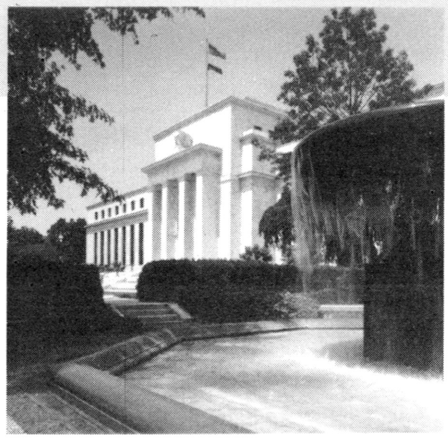
1999

MONETARY POLICY OBJECTIVES

A Summary Report of the Federal Reserve Board

February 23, 1999



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This Executive Summary provides highlights of the Board's Report to Congress on the Full Employment and Balanced Growth Act of 1978

Contents

Testimony of Alan Greenspan Chairman, Federal Reserve Board

Mr. Chairman and members of the Committee, I appreciate the opportunity to present the Federal Reserve's semiannual report on monetary policy.

The U.S. economy over the past year again performed admirably. Despite the challenges presented by severe economic downturns in a number of foreign countries and episodic financial turmoil abroad and at home, our real GDP grew about 4 percent for a third straight year. In 1998, 2¾ million jobs were created on net, bringing the total increase in payrolls to more than 18 million during the current economic expansion, which late last year became the longest in U.S. peacetime history. Unemployment edged down further to a 4¼ percent rate, the lowest since 1970.

And despite taut labor markets, inflation also fell to its lowest rate in many decades by some broad measures, although a portion of this decline owed to decreases in oil, commodity, and other import prices that are unlikely to be repeated. Hourly labor compensation adjusted for inflation posted further impressive gains. Real compensation gains have been supported by robust advances in labor productivity, which in turn have partly reflected heavy investment in plant and equipment, often embodying innovative technologies.

Can this favorable performance be sustained? In many respects the fundamental underpinnings of the recent U.S. economic performance are strong. Flexible markets and the shift to surplus on the books of the federal government are facilitating the build-up in cutting-edge capital stock. That build-up in turn is spawning rapid advances in productivity that are helping to keep inflation well behaved. The new technologies and the optimism of consumers and investors are supporting asset prices and sustaining spending.

But, after eight years of economic expansion, the economy appears stretched in a number of dimensions, implying considerable upside and downside risks to the economic outlook. The robust increase of production has been using up our nation's spare labor resources, suggesting that recent strong growth in spending cannot continue without a pickup in inflation unless labor productivity growth increases significantly further. Equity prices are high enough to raise questions about whether shares are overvalued. The debt of the household and business sectors has mounted, as has the external debt of the country as a whole, reflecting the deepening current account deficit. We remain vulnerable to rapidly changing conditions overseas, which, as we saw last summer, can be transmitted to U.S. markets quickly and traumatically. I will be commenting on many of these issues as I review the developments of the past year and the prospects going forward. In light of all these risks, monetary policy must be ready to move quickly in either direction should we perceive imbalances and distortions developing that could undermine the economic expansion.

Recent Developments

A hallmark of our economic performance over the past year was the continuing sharp expansion of business investment spending. Competitive global markets and persisting technological advances both spurred the business drive to become more efficient and induced the price declines for many types of new equipment that made capital spending more attractive.

Business success in enhancing productivity and the expectation of still further, perhaps accelerated, advances buoyed public optimism about profit prospects, which contributed to another sizable boost in equity prices. Rising household wealth along with strong growth in real income, related to better pay, slower inflation, and expanding job opportunities, boosted consumption at the fastest clip in a decade and a half. The gains in income and wealth last year, along with a further decrease in mortgage rates, also prompted considerable activity in the housing sector.

The impressive performance of the private sector was reflected in a continued improvement in the federal budget. Burgeoning receipts, along-with continuing restraint on federal spending, produced the first unified budget surplus in thirty years, allowing the Treasury to begin to pay down the federal debt held by the public. This shift in the federal government's fiscal position has fostered an increase in overall national saving as a share of GDP to 17¼ percent from the 14½ percent low reached in 1993. This rise in national saving has helped to hold down real interest rates and to facilitate the financing of the boom in private investment spending.

Foreign savers have provided an additional source of funds for vigorous domestic investment. The counterpart of our high and rising current account deficit has been ever-faster increases in the net indebtedness of U.S. residents to foreigners. The rapid widening of the current account deficit has some disquieting aspects, especially when viewed in a longer-term context. Foreigners presumably will not want to raise indefinitely the share of their portfolios in claims on the United States. Should the sustainability of the buildup of our foreign indebtedness come into question, the exchange value of the dollar may well decline, imparting pressures on prices in the United States.

In the recent economic environment, however, the widening of the trade and current account deficits had some beneficial aspects. It provided a safety valve for strong U.S. domestic demand, thereby helping to restrain pressures on U.S. resources. It also cushioned, to some extent, economic weakness in our trading partners.

Moreover, decreasing import prices, which partly came from the appreciation of the dollar through midsummer, contributed to low overall U.S. inflation, as did ample manufacturing capacity in the United States and lower prices for oil and other commodities stemming from the weak activity abroad. The marked drop in energy prices significantly contributed to the subdued, less than 1 percent, increase in the price index for total personal consumption expenditures during 1998. In addition, supported by rapid accumulation of more efficient capital, the growth of labor productivity picked up last year, allowing nominal labor compensation to post another sizable gain without putting added upward pressure on costs and prices. I shall return to an analysis of the extraordinary performance of inflation later in my remarks.

The Federal Open Market Committee conducted monetary policy last year with the aim of sustaining the remarkable combination of economic expansion and low inflation. At its meetings from March to July, the inflation risks accompanying the continued strength of domestic demand and the tightening of labor markets necessitated that the FOMC place itself on heightened inflation alert. Although the FOMC kept the nominal federal funds rate unchanged, it allowed the real funds rate to rise with continuing declines in inflation and, presumably, inflation expectations. In August, the FOMC returned to an unbiased policy predilection in response to the adverse implications for the U.S. outlook of worsening conditions in foreign economies and in global financial markets, including our own.

Shortly thereafter, a further deterioration in financial market conditions began to pose a more serious threat to economic stability. In the wake of the Russian crisis and subsequent difficulties in other emerging-market economies, investors perceived that the uncertainties in financial markets had broadened appreciably and as a consequence they became decidedly more risk averse. Safe-haven demands for U.S. Treasury securities intensified at the expense of private debt securities. As a result, quality spreads escalated dramatically, especially for lower-rated issuers. Many financial markets turned illiquid, with wider bid-asked spreads and heightened price volatility, and issuance was disrupted in some private securities markets. Even the liquidity in the market for seasoned issues of U.S. Treasury securities dried up, as investors shifted toward the more actively traded, recently issued securities and dealers pared inventories, fearing that heightened price volatility posed an unacceptable risk to their capital.

Responding to losses in foreign financial markets and to pressures from counterparties, highly leveraged investors began to unwind their positions, which further weighed on market conditions. As credit became less available to business borrowers in capital markets, their demands were redirected to commercial banks, which reacted to the enlarged borrowing, and more uncertain business prospects, by tightening their standards and terms on such lending.

To cushion the domestic economy from the impact of the increasing weakness in foreign economies and the less accommodative conditions in U.S. financial markets, the FOMC, beginning in late September, undertook three policy easings. By mid-November, the FOMC had reduced the federal funds rate from 5½ percent to 4¾ percent. These actions were taken to rebalance the risks to the outlook, and, in the event, the markets have recovered appreciably. Our economy has weathered the disturbances with remarkable resilience, though some yield and bid-asked spreads still reflect a hesitancy on the part of market participants to take on risk. The Federal Reserve must continue to evaluate, among other issues, whether the full extent of the policy easings undertaken last fall to address the seizing-up of financial markets remains appropriate as those disturbances abate.

To date, domestic demand and hence employment and output have remained vigorous. Real GDP is estimated to have risen at an annual rate exceeding 5½ percent in the fourth quarter of last year. Although some slowing from this torrid pace is most likely in the first quarter, labor markets remain exceptionally tight and the economy evidently retains a great deal of underlying momentum despite the global economic problems and the still-visible remnants of the earlier financial turmoil in the United States. At the same time, no evidence of any upturn in inflation has, as yet, surfaced.

Abroad, the situation is mixed. In some East Asian countries that, in recent years, experienced a loss of investor confidence, a severe currency depreciation, and a deep recession, early signs of stabilization and economic recovery have appeared. This is particularly the case for Korea and Thailand. Authorities in those countries, in the context of IMF stabilization programs, early on established appropriate macroeconomic policies and undertook significant structural reforms to buttress the banking system and repair the finances of the corporate sector. As investor confidence has returned, exchange rates have risen and interest rates have fallen. With persistence and follow-through on reforms, the future of those economies has promise.

The situations in some other emerging market economies are not as encouraging. The Russian government's decision in mid-August to suspend payments on its domestic debt and devalue the ruble took markets by surprise. Investor flight exacerbated the collapse of prices in Russian financial markets and led to a sharp depreciation of the ruble. The earlier decline in output gathered momentum, and by late in the year inflation had moved up to a triple-digit annual rate. Russia's stabilization program with the IMF has been on hold since the financial crisis hit, and the economic outlook there remains troubling.

The Russian financial crisis immediately spilled over to some other countries, hitting Latin America especially hard. Countering downward pressure on the exchange values of the affected currencies, interest rates moved sharply higher, especially in Brazil. As a consequence of the high interest rates and growing economic uncertainty, Brazil's economic activity took a turn for the worse. Higher interest rates also had negative consequences for the fiscal outlook, as much of Brazil's substantial domestic debt effectively carries floating interest rates. With budget reform legislation encountering various setbacks, market confidence waned further and capital outflows from Brazil continued, drawing down foreign currency reserves. Ultimately, the decision was taken to allow the *real* to float, and it subsequently depreciated sharply.

Brazilian authorities must walk a very narrow, difficult path of restoring confidence and keeping inflation contained with monetary policy while dealing with serious fiscal imbalances. Although the situation in Brazil remains uncertain, there has been limited contagion to other countries thus far. Apparently, the slow onset of the crisis has enabled many parties with Brazilian exposures to hedge those positions or allow them to run off. With the net exposure smaller, and increasingly held by those who both recognized the heightened risk and were willing to bear it, some of the elements that might have contributed to further contagion may have been significantly reduced.

The Economic Outlook

These recent domestic and international developments provide the backdrop for U.S. economic prospects. Our economy's performance should remain solid this year, though likely with a slower pace of economic expansion and a slightly higher rate of overall inflation than last year. The stocks of business equipment, housing, and household durable goods have been growing rapidly to quite high levels relative to business sales or household incomes during the past few years, and some slowing in the growth of spending on these items seems a reasonable prospect. Moreover, part of the rapid increase in spending, especially in the household sector, has resulted from the surge in wealth associated with a run-up in equity prices that is unlikely to be repeated. And the purchasing power of income and wealth has been enhanced by declines in oil and other import prices, which also are unlikely to recur this year. Assuming that aggregate demand decelerates, underlying inflation pressures, as captured by core price measures, in all likelihood will not intensify significantly in the year ahead, though the Federal Reserve will need to monitor developments carefully. We perceive stable prices as optimum for economic growth. Both inflation and deflation raise volatility and risks that thwart maximum economic growth.

Most Governors and Reserve Bank Presidents foresee that economic growth this year will slow to a 2½ to 3 percent rate. Such growth would keep the unemployment rate about unchanged. The central tendency of the Governors' and Presidents' predictions of CPI inflation is 2 to 2½ percent. This level represents a pickup from last year, when energy prices were falling, but it is in the vicinity of core CPI inflation over the last couple of years.

This outlook involves several risks. The continuing downside risk posed by possible economic and financial instability around the world was highlighted earlier this year by the events in Brazil. Although financial contagion elsewhere has been limited to date, more significant knock-on effects in financial markets and in the economies of Brazil's important trading partners, including the United States, are still possible. Moreover, the economies of several of our key industrial trading partners have shown evidence of weakness, which if it deepens could further depress demands for our exports.

Another downside risk is that growth in capital spending, especially among manufacturers, could weaken appreciably if pressures on domestic profit margins mount and capacity utilization drops further. And it remains to be seen whether corporate earnings will disappoint investors, even if the slowing of economic growth is only moderate. Investors appear to have incorporated into current equity price levels both robust profit expectations and low compensation for risk. As the economy slows to a more sustainable pace as expected, profit forecasts could be pared back, which together with a greater sense of vulnerability in business prospects could damp appetites for equities. A downward correction to stock prices, and an associated increase in the cost of equity capital, could compound a slowdown in the growth of capital spending. In addition, a stock market decline would tend to restrain consumption spending through its effect on household net worth.

But on the upside, our economy has proved surprisingly robust in recent years. More rapid increases in capital spending, productivity, real wages, and asset prices have combined to boost economic growth far more and far longer than many of us would have anticipated.

This "virtuous cycle" has been able to persist because the behavior of inflation also has been surprisingly favorable, remaining well contained at levels of utilization of labor that in the past would have produced accelerating prices. That it has not done so in recent years has been the result of a combination of special one-time factors holding down prices and more lasting changes in the processes determining inflation.

Among the temporary factors, the sizable declines in the prices of oil, other internationally traded commodities, and other imports contributed directly to holding down inflation last year, and also indirectly by reducing inflation expectations. But these prices are not likely to fall further, and they could begin to rise as some Asian economies revive and the effects of the net depreciation of the dollar since midsummer are felt more strongly.

At the same time, however, recent experience does seem to suggest that the economy has become less inflation prone than in the past, so that the chances of an inflationary breakout arguably are, at least for now, less than they would have been under similar conditions in earlier cycles.

Several years ago I suggested that worker insecurity might be an important reason for unusually damped inflation. From the early 1990s through 1996, survey results indicated that workers were becoming much more concerned about being laid off. Workers' underlying fear of technology-driven job obsolescence, and hence willingness to stress job security over wage increases, appeared to have suppressed labor cost pressures despite a reduced unemployment rate. More recently, that effect seems to have diminished in part. So while job loss fears probably contributed to wage and price suppression through 1996, it does not appear that a further heightening of worker insecurity about employment prospects can explain the more recent improved behavior of inflation.

Instead, a variety of evidence, anecdotal and otherwise, suggests that the source of recent restrained inflation may be emanating more from employers than from employees. In the current economic setting, businesses sense that they have lost pricing power and generally have been unwilling to raise wages any faster than they can support at current price levels. Firms have evidently concluded that if they try to increase their prices, their competitors will not follow, and they will lose market share and profits.

Given the loss of pricing power, it is not surprising that individual employers resist pay increases. But why has pricing power of late been so delimited? Monetary policy certainly has played a role in constraining the rise in the general level of prices and damping inflation expectations over the 1980s and 1990s. But our current discretionary monetary policy has difficulty anchoring the price level over time in the same way that the gold standard did in the last century.

Enhanced opportunities for productive capital investment to hold down costs also may have helped to damp inflation. Through the 1970s and 1980s, firms apparently found it easier and more profitable to seek relief from rising nominal labor costs through price increases than through cost-reducing capital investments. Price relief evidently has not been available in recent years. But relief from cost pressures has. The newer technologies have made capital investment distinctly more profitable, enabling firms to substitute capital for labor far more productively than they would have a decade or two ago.

Starting in 1993, capital investment, especially in high-tech equipment, rose sharply beyond normal cyclical experience, apparently the result of expected increases in rates of return on the new investment. Had the profit expectations not been realized, one would have anticipated outlays to fall back. Instead, their growth accelerated through the remainder of the decade.

More direct evidence confirms improved underlying profitability. According to rough estimates, labor and capital productivity has risen significantly during the past five years. It seems likely that the synergies of advances in laser, fiber optic, satellite, and computer technologies with older technologies have enlarged the pool of opportunities to achieve a rate of return above the cost of capital. Moreover, the newer technologies have facilitated a dramatic foreshortening of the lead times on the delivery of capital equipment over the past decade, presumably allowing businesses to react more expeditiously to an actual or expected rise in nominal compensation costs than, say, they could have in the 1980s. In addition, the surge in investment not only has restrained costs, it has also increased industrial capacity faster than factory output has risen. The resulting slack in product markets has put greater competitive pressure on businesses to hold down prices, despite taut labor markets.

The role of technology in damping inflation is manifest not only in its effects on U.S. productivity and costs, but also through international trade, where technological developments have progressively broken down barriers to cross-border trade. The enhanced competition in tradable goods has enabled excess capacity previously bottled up in one country to augment worldwide supply and exert restraint on prices in all countries' markets. The resulting price discipline also has constrained nominal wage gains in internationally tradable goods industries. As workers have attempted to shift to other sectors, gains in nominal wages and increases in prices in nontradeable goods industries have been held down as well.

The process of price containment has potentially become, to some extent, self-reinforcing. Lower inflation in recent years has altered expectations. Workers no longer believe that escalating gains in nominal wages are needed to reap respectable increases in real wages, and their remaining sense of job insecurity is reinforcing this. Since neither firms nor their competitors can count any longer on a general inflationary tendency to validate decisions to raise their own prices, each company feels compelled to concentrate on efforts to hold down costs. The availability of new technology to each company and its rivals affords both the opportunity and the competitive necessity of taking steps to boost productivity.

It is difficult to judge whether these significant shifts in the market environment in which firms function are sufficient to account for our benign overall price behavior during the past half decade. Undoubtedly, other factors have been at work as well, including those temporary factors I mentioned earlier and some more lasting I have not discussed, such as worldwide deregulation and privatization, and the freeing-up of resources previously employed to produce military products that was brought about by the end of the cold war. There also may be other contributory forces lurking unseen in the wings that will only become clear in time. Over the longer run, of course, the actions of the central bank determine the degree of overall liquidity and hence rate of inflation. It is up to us to validate the favorable inflation developments of recent years.

Although the pace of productivity increase has picked up in recent years, the extraordinary strength of demand has meant that the substitution of capital for labor has not prevented us from rapidly depleting the pool of available workers. This worker depletion constitutes a critical upside risk to the inflation outlook because it presumably cannot continue for very much longer without putting increasing pressure on labor markets and on costs.

The number of people willing to work can be usefully defined as the unemployed component of the labor force plus those not actively seeking work, and thus not counted in the labor force, but who nonetheless say they would like a job if they could get one. This pool of potential workers aged 16 to 64 currently numbers about 10 million, or just 5¾ percent of that group's population—the lowest such percentage on record, which begins in 1970, and 2½ percentage points below its average over that period. The rapid increase in aggregate demand has generated growth of employment in excess of growth in population, causing the number of potential workers to fall since the mid-1990s at a rate of a bit under 1 million annually. We cannot judge with precision how much further this level can decline without sparking ever greater upward pressures on wages and prices. But, should labor market conditions continue to tighten, there has to be some point at which the rise in nominal wages will start increasingly outpacing the gains in labor productivity, and prices inevitably will begin to accelerate.

Ranges for Money and Credit

At its February meeting, the Committee elected to ratify the provisional ranges for all three aggregates that it had established last July. Specifically, the Committee again has set growth rate ranges over the four quarters of 1999 of 1 to 5 percent for M2, 2 to 6 percent for M3, and 3 to 7 percent for domestic nonfinancial debt. As in previous years, the Committee interpreted the ranges for the broader monetary aggregates as benchmarks for what money growth would be under conditions of price stability and sustainable economic growth, assuming historically typical velocity behavior.

Last year, these monetary aggregates far overshot the upper bounds of their annual ranges. While nominal GDP growth did exceed the rate likely consistent with sustained price stability, the rapid growth of M2 and M3 also reflected outsized declines in their velocities, that is, the ratio of nominal GDP to money. M2 velocity dropped by about 3 percent, while M3 velocity plunged by 5¼ percent.

Part of these velocity declines reflected some reduction in the opportunity cost of holding money; interest rates on Treasury securities, which represent an alternative return on non-monetary assets, dropped more than did the average of interest rates on deposits and money market mutual funds in M2, drawing funds into the aggregate. Even so, much of last year's aberrant behavior of broad money velocity cannot readily be explained by conventional determinants. Although growth of the broad aggregates was strong earlier in the year, it accelerated in the fourth quarter after credit markets became turbulent. Perhaps robust money growth late in the year partly reflected a reaction to this turmoil by the public, who began scrambling for safer and more liquid financial assets. Monetary expansion has moderated so far this year, evidently in lagged response to the calming of financial markets in the autumn. Layered on top of these influences, though, the public also may have been reapportioning their savings flows into money balances because the huge run-up in stock prices in recent years has resulted in an uncomfortable portion of their net worth in equity.

For the coming year, the broad monetary aggregates could again run high relative to these ranges. To be sure, the decline in the velocities of the broader aggregates this year should abate to some extent, as money demand behavior returns more to normal, and growth in nominal GDP should slow as well, as suggested by the Governors' and Presidents' central tendency. Both factors would restrain broad money expansion relative to last year. Still, the growth of M2 and M3 could well remain outside their price-stability ranges this year. Obviously, considerable uncertainty continues to surround the prospective behavior of monetary velocities and growth rates.

Domestic nonfinancial debt seems more likely than the monetary aggregates to grow within its range for this year. Indeed, domestic nonfinancial debt also could grow more slowly this year than last year's 6¼ percent pace, which was in the upper part of its 3 to 7 percent annual range. With the federal budget surplus poised to widen further this year, federal debt should contract even more quickly than last year. And debt in each of the major nonfederal sectors in all likelihood will decelerate as well from last year's relatively elevated rates, along with the projected slowing of nominal GDP growth.

The FOMC's Disclosure Policy

The FOMC at recent meetings has discussed not only the stance of policy, but also when and how it communicates its views of the evolving economic situation to the public. The FOMC's objective is to release as much information about monetary policy decisionmaking, and as promptly, as is consistent with maintaining an effective deliberative process and avoiding roiling markets unnecessarily. Since early 1994, each change in the target nominal federal funds rate has been announced immediately with a brief rationale for the action. The FOMC resolved at its December meeting to take advantage of an available, but unused policy, originally stated in early 1995, of releasing, on an infrequent basis, a statement immediately after some FOMC meetings at which the stance of monetary policy has not been changed. The Federal Reserve will release such a statement when it wishes to communicate to the public a major shift in its views about the balance of risks or the likely direction of future policy. Such an announcement need not be made after every change in the tilt of the directive. Instead, this option would be reserved for situations in which the consensus of the Committee clearly had shifted significantly, though not by enough to change current policy, and in which the absence of an explanation risked misleading markets about the prospects for monetary policy.

Year 2000 Issues

Before closing, I'd like to address an issue that has been receiving increasing attention—the century date change. While no one can say that the rollover to the year 2000 will be trouble free, I am impressed by the efforts to date to address the problem in the banking and financial system. For our part, the Federal Reserve System has now completed remediation and testing of 101 of its 103 mission-critical applications, with the remaining two to be replaced by the end of March. We opened a test facility in June at which more than 6,000 depository institutions to date have conducted tests of their Y2K compliant systems, and we are well along in our risk mitigation and contingency planning activities. As a precautionary measure, the Federal Reserve has acted to increase the currency in inventory by about one-third to approximately $200 billion in late 1999 and has other contingency arrangements available if needed. While we do not expect currency demand to increase dramatically, the Federal Reserve believes it is important for the public to have confidence in the availability of cash in advance of the rollover. As a result of these kinds of activities, I can say with assurance that the Federal Reserve will be ready in both its operations and planning activities for the millennium rollover.

The banking industry is also working hard, and with evident success, to prepare for the event. By the end of the first quarter, every institution in the industry will have been subject to two rounds of on-site Y2K examinations. The Federal Reserve, like the other regulators, has found that only a small minority of institutions has fallen behind in their preparations, and those institutions have been targeted for additional follow-up and, as necessary, formal enforcement actions. The overwhelming majority of the industry has made impressive progress in their remediation, testing, and contingency planning efforts.

Concluding Comment

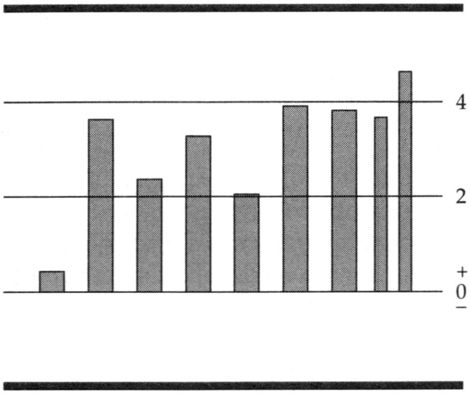
Americans can justifiably feel proud of their recent economic achievements. Competitive markets, with open trade both domestically and internationally, have kept our production efficient and on the expanding frontier of technological innovation. The determination of Americans to improve their skills and knowledge has allowed workers to be even more productive, elevating their real earnings. Macroeconomic policies have provided a favorable setting for the public to take greatest advantage of opportunities to improve its economic well being. The restrained fiscal policy of the Administration and the Congress has engendered the welcome advent of a unified budget surplus, freeing up funds for capital investment. A continuation of responsible fiscal and, we trust, monetary policies should afford Americans the opportunity to make considerable further economic progress over time.

Monetary Policy and the Economic Outlook

In 1998, the U.S. economy again performed impressively. Output expanded rapidly, the unemployment rate fell to the lowest level since 1970, and inflation remained subdued. Transitory factors, most recently falling prices for imports and commodities, especially oil, have helped to produce the favorable outcomes of recent years, but technological advances and increased efficiency, likely reflecting in part heightened global competition and changes in business practices, suggest that some of the improvement will be more lasting.

Change in Real GDP

Percent, annual rate

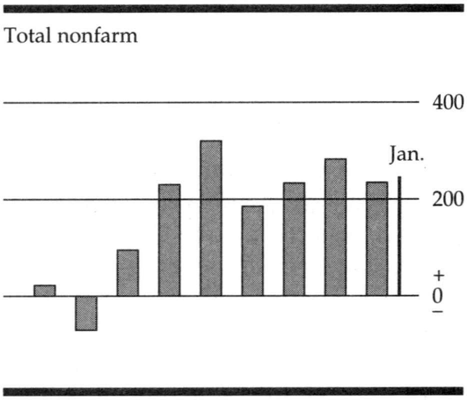


Note. In this chart and in subsequent charts that show the components of real GDP, changes are measured to the final quarter of the period indicated, from the final quarter of the previous period. Last data point is from the advance GDP report for 1998:Q4.

Sound fiscal and monetary policies have contributed importantly to the good economic results: Budgetary restraint at the federal level has bolstered national saving and permitted the Federal Reserve to maintain lower interest rates than would otherwise have been possible. This policy mix and sustained progress toward price stability have fostered clearer price signals, more efficient resource use, robust business investment, and sizable advances in the productivity of labor and in the real wages of workers. The more rapid expansion of productive potential has, in turn, helped to keep inflation low even as aggregate demand has been surging and as labor markets have tightened.

Change in Payroll Employment

Thousands of jobs, monthly average

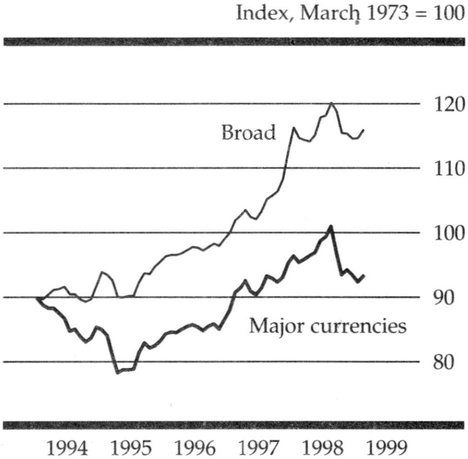


This past year, economic troubles abroad posed a significant threat to the performance of the economy. Foreign economic growth slowed markedly, on average, as conditions in many countries deteriorated. The recession in Japan deepened, and several emerging market economies in Asia, which had started to weaken in the wake of the financial crises of 1997, contracted sharply. A worsening economic situation in Russia last summer led to a devaluation of the ruble and a moratorium by that country on a substantial portion of its debt payments. As the year progressed, conditions in Latin America also weakened. Although some of the troubled foreign economies are showing signs of improvement, others either are not yet in recovery or are still contracting.

The Russian crisis in mid-August precipitated a period of unusual volatility in world financial markets. The losses incurred in Russia and in other emerging market economies heightened investors' and lenders' concerns about other potential problems and led them to become substantially more cautious about taking on risk. The resulting effects on U.S. financial markets included a substantial widening of risk spreads on debt instruments, a jump in measures of market uncertainty and volatility, a drop in equity prices, and a reduction in the liquidity of many markets. To cushion the U.S. economy from the effects of these financial strains, and potentially to help reduce the strains as well, the Federal Reserve eased monetary policy on three occasions in the fall. Global financial market stresses lessened somewhat after mid-autumn, reflecting, in part, these policy steps as well as interest rate cuts in other industrial countries and international efforts to provide support to troubled emerging market economies. Although some U.S. financial flows were disrupted for a time, most firms and households remained able to obtain sufficient credit, and the turbulence did not appear to constrain spending to a significant degree. More recently, some markets were unsettled by the devaluation and subsequent floating of the Brazilian *real* in mid-January, and the problems in Brazil continue to pose risks to global markets. Thus far, however, market reaction outside Brazil to that country's difficulties has been relatively muted.

The foreign exchange value of the dollar rose substantially against the currencies of the major foreign industrial countries over the first eight months of 1998, but subsequently it fell sharply, ending the year down a little on net. The appreciation of the dollar in the first half of the year carried it to an eight-year high against the Japanese yen. In June, this strength against the yen prompted the first U.S. foreign exchange intervention operation in nearly three years, an action that appeared to slow the dollar's rise against the yen over the following days and weeks. Later in the summer, concerns about the possible impact on the U.S. economy of increasing difficulties in Latin America began to weigh on the dollar's exchange value against major foreign currencies. After peaking in mid-August, it fell sharply over the course of several weeks,

Nominal Dollar Exchange Rate Indexes

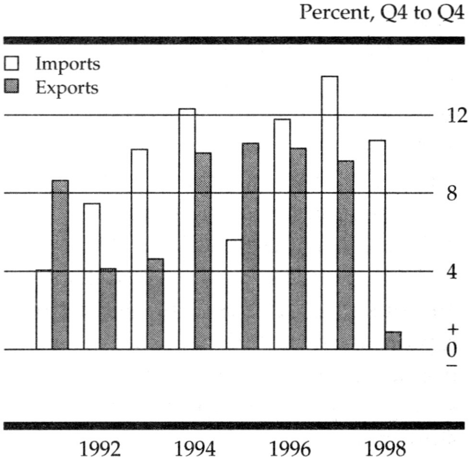


Note. The data are monthly. Indexes are trade-weighted averages of the exchange value of the dollar against major currencies and against the currencies of a broad group of important U.S. trading partners. Last observations are for the first three weeks of February 1999.

reversing by mid-October the appreciation that had occurred earlier in the year. The depreciation during this period was particularly sharp against the yen. The reasons for this decline against the yen are not clear, but repayment of yen-denominated loans by international investors and decisions by Japanese investors to repatriate their assets in light of increased volatility in global markets seem to have contributed. The exchange value of the dollar fluctuated moderately against the major currencies over the rest of the year, and after declining somewhat early in 1999, it has rebounded strongly in recent weeks, as incoming data have suggested continued strength of economic activity in the United States. Since the end of 1998, the dollar has appreciated about 7 percent against the yen, partly reflecting further monetary easing in Japan. At the turn of the year, the launch of the third stage of European Economic and Monetary Union fixed the eleven participating countries' conversion rates and created a new common currency, the euro. The dollar has appreciated more than 5 percent against the euro, in part because of signs that growth has slowed recently in some euro-area economies.

With the U.S. economy expanding rapidly, the economies of many U.S. trading partners struggling, and the foreign exchange value of the dollar having risen over 1997 and the first part of 1998, the U.S. trade deficit widened considerably last year. Some domestic industries were especially

Change in Real Imports and Exports of Goods and Services

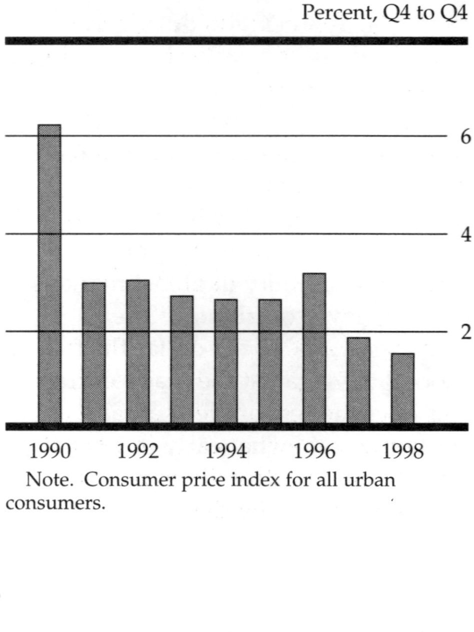


affected by reductions in foreign demand or by increased competition from imports. For example, a wide range of commodity producers, notably those in agriculture, oil, and metals, experienced sharp price declines. Parts of the manufacturing sector also suffered adverse consequences from the shocks from abroad. Overall, real net exports deteriorated sharply, as exports stagnated and imports continued to surge. The deterioration was particularly marked in the first half of the year; the second half brought a further, more modest, net widening of the external deficit.

Meanwhile, domestic spending continued to advance rapidly. Household expenditures were bolstered by gains in real income and a further rise in wealth, while a low cost of capital and optimism about future profitability spurred businesses to invest heavily in new capital equipment. Although securities markets were disrupted in late summer and early fall, credit generally remained available from alternative sources. Once the strains on securities markets had eased, businesses and households generally had ready access to credit and other sources of finance on relatively favorable terms, although spreads in some markets remained quite elevated, especially for lower-rated borrowers. All told, household and business outlays rose even more rapidly than in 1997, and that acceleration kept the growth of real GDP strong even as net exports were slumping.

Deteriorating economic conditions abroad, coupled with the strength of the dollar over the first eight months of the year, helped to hold down inflation in the United States by trimming the prices of oil and other imports. These declines reduced both the prices paid by consumers and the costs of production in many lines of business, and the competition from abroad kept businesses from raising prices as much as they might have otherwise. As the result of a reduced rate of price inflation, workers enjoyed a larger rise in real purchasing power even as increases in nominal hourly compensation picked up only slightly on average. Because of increased gains in productivity, corporations in the aggregate were able to absorb the larger real pay increases without suffering a serious diminution of profitability.

Change in Consumer Prices



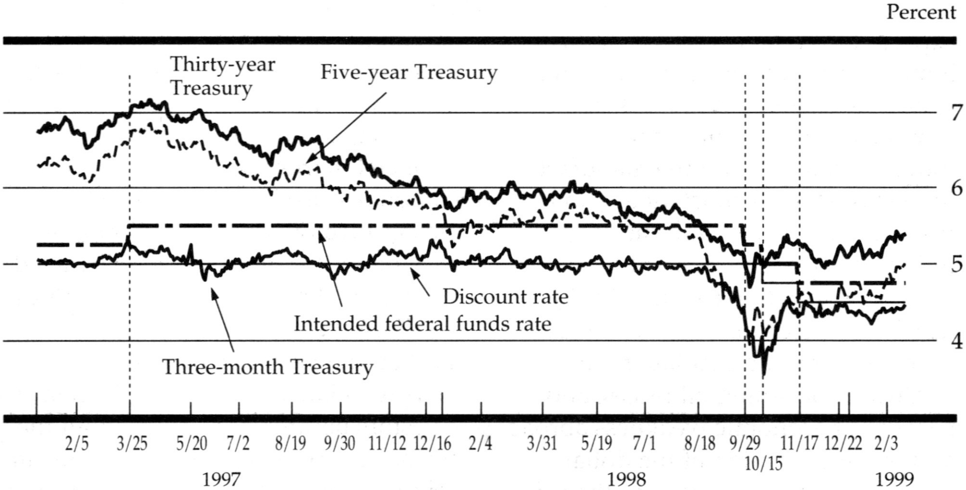
Note. Consumer price index for all urban consumers.

Monetary Policy, Financial Markets, and the Economy over 1998 and Early 1999

Monetary policy in 1998 needed to balance two major risks to the economic expansion. On the one hand, with the domestic economy displaying considerable momentum and labor markets tight, the Federal Open Market Committee (FOMC) was concerned about the possible emergence of imbalances that would lead to higher inflation and thereby, eventually, put the sustainability of the expansion at risk. On the other hand, troubles in many foreign economies and resulting financial turmoil both abroad and at home seemed, at times, to raise the risk of an excessive weakening of aggregate demand.

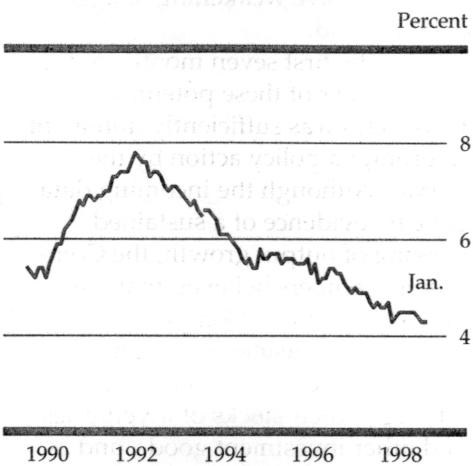
Over the first seven months of the year, neither of these potential tendencies was sufficiently dominant to prompt a policy action by the FOMC. Although the incoming data gave no evidence of a sustained slowing of output growth, the Committee members believed that the pace of expansion likely would moderate as businesses began to slow the rapid rates at which they had been adding to their stocks of inventories and other investment goods, and as households trimmed the large advances in their spending on consumer durables and homes. Relatively firm real interest rates, buoyed by a high real federal funds rate resulting

Selected Interest Rates



Note. The data are daily. Vertical lines indicate the days on which the Federal Reserve announced a monetary policy action. The dates on the horizontal axis are those on which either the FOMC held a scheduled meeting or a policy action was announced. Last observations are for February 19, 1999.

Civilian Unemployment Rate



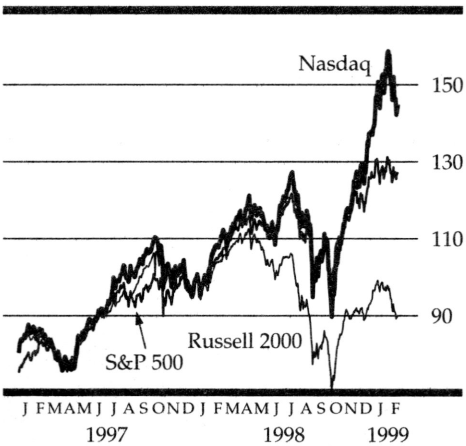
Note. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with those of earlier periods.

from the decline in the level of expected inflation, were thought likely to help restrain the growth of spending by businesses and households. Another check on growth was expected to come from the effects on imports and exports of the economic difficulties in emerging market economies in Asia and elsewhere. Indeed, production in the manufacturing sector slowed substantially in the first half of the year, and capacity utilization dropped noticeably. Moreover, inflation remained subdued, and a pickup was not expected in the near-to-intermediate term because of declining oil prices, and because of economic weakness abroad and the appreciation of the dollar, which were expected to trim the prices of imported goods and to increase price competition for many U.S. producers. Nonetheless, with labor markets already quite taut and aggregate demand growing rapidly—a combination that often has signaled the impending buildup of inflationary pressures—the Committee, at its meetings from March through July, judged conditions to be such that, if a policy action were to be taken in the period immediately ahead, it more likely would be a tightening than an easing; its directives to the Account Manager of the Domestic Trading Desk at the Federal Reserve Bank of New York noted that asymmetry.

By the time of the August FOMC meeting, however, the situation was changing. Although tight labor markets and rapid output growth continued to pose a risk of higher inflation, the damping influence of foreign economic developments on the U.S. economy seemed likely to increase. The contraction in the emerging market economies in Asia appeared to be deeper than had been anticipated, and the economic situation in Japan had deteriorated. Financial markets in some foreign economies also had experienced greater turmoil, and, the day before the Committee met, Russia was forced to devalue the ruble. These difficulties had been weighing on U.S. asset markets: Stock prices had fallen sharply in late July and into August as investors became concerned about the outlook for profits, and risk spreads in debt markets had widened, albeit from very low levels. Taking account of these circumstances, the Committee again left monetary policy unchanged at the August meeting, but it shifted to a symmetric directive, reflecting its perception that the risks to the economic outlook, at prevailing short-term rates, had become roughly balanced.

Major Stock Price Indexes

Index (January 2, 1998 = 100)



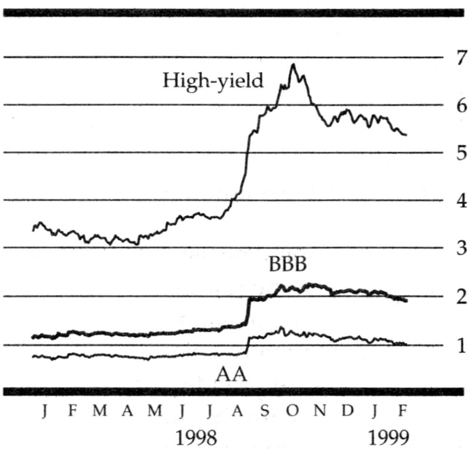
Note. The data are daily. Last observations are for February 19, 1999.

Over subsequent weeks, conditions in financial markets and the economic outlook in many foreign countries deteriorated further, increasing the dangers to the U.S. expansion. With investors around the world apparently reevaluating the risks associated with various credits and seemingly becoming less willing or able to bear such risks, asset demands shifted toward safer and more liquid instruments. These shifts caused a sharp fall in yields on Treasury securities. Spreads of yields on private debt securities over those on comparable Treasury instruments widened considerably further, and issuance slowed sharply. Measures of market volatility increased, and liquidity in many financial markets was curtailed. Equity prices continued to slide lower, with most broad indexes falling back by early September to near their levels at the start of the year. Reflecting the weaker and more uncertain economic outlook, some banks boosted interest rate spreads and fees on new loans to businesses and tightened their underwriting standards.

Against this backdrop, at its September meeting the FOMC looked

Spreads of Corporate Bond Yields Over Treasury Security Yields

Percentage points

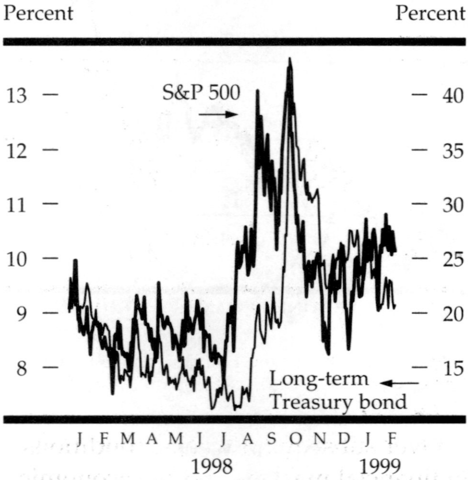


Note. The data are daily. The spread of high-yield bonds compares the yield on the Merrill Lynch Master II index with that on a seven-year Treasury; the other two spreads compare yields on the appropriate Merrill Lynch indexes with that on a ten-year Treasury. Last observations are for February 19, 1999.

beyond incoming data suggesting that the economy was continuing to expand at a robust pace, and it lowered the intended level of the federal funds rate ¼ percentage point. The Committee noted that the rate cut would cushion the effects on prospective U.S. economic growth of increasing weakness in foreign economies and of less accommodative conditions in domestic financial markets. The directive adopted at the meeting suggested a bias toward further easing over the intermeeting period. In the days following the policy move, disturbances in financial markets worsened. Movements in the prices of securities were exacerbated by a deterioration in market liquidity, as some securities dealers cut back on their market-making activities, and by the expected unwinding of positions by hedge funds and other leveraged investors. In early October, Treasury yields briefly tumbled to their lowest levels in many years, reflecting efforts by investors to exchange other instruments for riskless and liquid Treasury securities.

Although some measures of market turbulence had begun to ease a bit by mid-October, financial markets remained extremely volatile and risk spreads were very wide. On October 15, consistent with the directive from the September meeting, the intended federal funds rate was trimmed another ¼ percentage point, to 5 percent. This policy move, which occurred between FOMC meetings, came at the initiative of Chairman Greenspan and followed a conference call with Committee members. At the same time, the Board of Governors approved a ¼ percentage point reduction in the discount rate. These actions were taken to buffer the domestic economy from the impact of the less accommodative conditions in domestic financial markets, in part by contributing to some stabilization of the global financial situation.

Implied Volatilities



Note. The data are daily. Implied volatilities are calculated from options prices. Last observations are for February 19, 1999.

Following the October policy move, strains in domestic financial markets diminished considerably. As safe-haven demands for Treasury securities ebbed, Treasury yields generally trended higher, and measures of financial market volatility and illiquidity eased. Nonetheless, risk spreads remained very wide, and liquidity in many markets continued to be limited. Moreover, although pressures on some emerging market economies had receded a bit, partly reflecting concerted international efforts to provide assistance to Brazil, the foreign economic outlook remained uncertain. With downside risks still substantial, and in light of the cumulative effect since August of the tightening in many sectors of the credit markets and the weakening of economic activity abroad, the FOMC reduced the intended federal funds rate a further ¼ percentage point at its November meeting, bringing the total reduction during the autumn to ¾ percentage point. The Board of Governors also approved a second ¼ percentage point cut in the discount rate. The Committee believed that, with this policy action, financial conditions could reasonably be expected to be consistent with fostering sustained economic expansion while keeping inflationary pressures subdued. The action provided some insurance against an unexpectedly severe weakening of the expansion, and the Committee therefore established a symmetrical directive. By the time of the December meeting, the situation in financial markets had changed little, on balance, and the Committee decided that no further change in rates was desirable and that the directive should remain symmetrical.

Some measures of financial volatility eased further in the new year, although risk spreads on corporate bonds remained at quite high levels. Yields on Treasury securities were about flat, on balance, in January, as the effect of stronger-than-expected economic growth appeared to be about offset by data suggesting that inflation remained quiescent and perhaps also by the effects of some safe-haven flows prompted by the deteriorating situation in Brazil. Over the same period, stock prices surged higher, led by computer and other technology shares, and most stock price indexes posted new highs. By the time of the February 2–3 meeting, financial markets were easily accommodating robust demands for credit, and economic activity seemed to have more momentum than many had anticipated. However, the foreign sector continued to pose a threat to U.S. growth going forward, inflation showed no signs of picking up despite the rapid pace of growth and the very tight labor market, and some slowing of economic growth remained a likely prospect. In these circumstances, the FOMC concluded that it was prudent to wait for further information, and it left policy unchanged.

Economic Projections for 1999

By and large, the members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect the economy to expand moderately, on average, in 1999. The central tendency of the FOMC participants' forecasts of real GDP growth from the fourth quarter of 1998 to the fourth quarter of 1999 is 2½ percent to 3 percent. The anticipated expansion is expected to create enough new jobs to keep the civilian unemployment rate near its recent average, in a range of 4¼ percent to 4½ percent. With tightness of the labor market expected to persist and oil and import prices unlikely to be as weak in 1999 as they were in 1998, inflation is expected to move up somewhat from the rate of this past year but to remain low by the standards of the past three decades: The central tendency of the FOMC participants' CPI inflation forecasts for 1999 is 2 percent to 2½ percent. The Federal Reserve officials' inflation forecasts are closely aligned with that of the Administration, and their forecasts of real GDP and unemployment depict a somewhat stronger real economy than the Administration is projecting.

Present circumstances suggest that domestic demand could continue to rise briskly for a while longer. Consumer spending continues to be driven by strong gains in employment, increases in real incomes, and rising levels of wealth. Those same factors, together with low mortgage interest rates, are keeping housing activity robust. Businesses are still investing heavily in new capital, especially computers and other high-tech equipment. Households and businesses appear willing to take on more debt in support of spending; although spreads on corporate debt remain elevated, rate levels are perceived to be attractive for most borrowers, and restraint on access to finance is not much in evidence.

Economic Projections for 1999

Percent

Indicator		Federal Reserve governors and Reserve Bank presidents: Range	Federal Reserve governors and Reserve Bank presidents: Central tendency	Administration
Change, fourth quarter to fourth quarter:[1]	Nominal GDP	3¾–5	4–4½	4.0
	Real GDP[2]	2–3½	2½–3	2.0
	Consumer price index[3]	1½–2½	2–2½	2.3
Average level, fourth quarter:	Civilian unemployment rate	4¼–4¾	4¼–4½	4.9

1. Change from average for fourth quarter of 1998 to average for fourth quarter of 1999.

2. Chain-weighted.

3. All urban consumers.

As the year progresses, however, gains in domestic spending should begin to moderate. Spending increases for housing, consumer durables, and business equipment have been exceptionally large for a while now, substantially raising the rate of growth in the amounts of these goods owned by businesses and households; some moderation in outlays seems likely, lest these holdings become disproportionate to underlying trends in income and output. The outlook for spending continues to be obscured to some degree by uncertainties about the course of equity prices; a failure of these prices to match the outsized gains posted in recent years would contribute to some moderation in spending growth, especially by households. Government spending, which accounts for about one-sixth of domestic demand, seems likely to expand at a moderate pace overall. Along with the numerous other uncertainties that attend the outlook, an additional uncertainty is present this year because of the approach of the year 2000 and the associated Y2K problem.

Growth abroad is expected to remain sluggish, on balance, in 1999, limiting the prospects for exports. At the same time, growth of the U.S. economy probably will continue to generate fairly brisk increases in imports. In total, real net exports of goods and services seem likely to fall further in the coming year, although several factors—the decline in the dollar from its peak of last summer, the expected slowing of income growth in the United States, and the possibility of a slight pickup in economic growth abroad—provide a basis for thinking that this year's drop in net exports might not be as large as that of 1998.

The future course of inflation will depend in part on what happens to the prices of oil and other imports, and restraint from those sources seems unlikely to be as great as it was in 1998. The drop in the price of oil this past year left it toward the lower end of its range of the past couple of decades and has thereby reduced the incentives for exploration, drilling, and production. Futures markets have been showing a gradual rise in the price of oil going forward. Prices of nonoil imports changed little in the fourth quarter of last year after having fallen sharply in previous quarters. Indicators of the pressures on domestic resources provided mixed signals over the past year. In manufacturing, capacity utilization declined considerably, to a level below its long run average, reflecting slower production growth and sizable additions to the stock of capital. However, labor markets remained very taut, and with the economy apparently carrying substantial momentum into this year, data on costs and prices will need to be monitored carefully for signs that a rising inflation pattern might start to take hold. In that regard, the FOMC will continue to rely not only on the CPI but also on a variety of other price measures to gauge the economy's inflation performance in the period ahead.

Money and Debt Ranges for 1999

At its most recent meeting, the FOMC reaffirmed the 1999 monetary growth ranges that were chosen on a provisional basis last July: 1 percent to 5 percent for M2, and 2 percent to 6 percent for M3. As has been the case for some time, the FOMC intends these money growth ranges to be benchmarks for growth under conditions of price stability, sustainable real economic growth, and historical velocity relationships rather than ranges that encompass the expected growth of money over the coming year or that serve as guides to policy.

Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1997	1998	1999
M2	1–5	1–5	1–5
M3	2–6	2–6	2–6
Debt	3–7	3–7	3–7

Note. Change from average for fourth quarter of preceding year to average for fourth quarter of year indicated.

Given continued uncertainty about movements in the velocities of M2 and M3 (the ratios of nominal GDP to the aggregates), the Committee would have little confidence that money growth within any particular range selected for the year would be associated with the economic performance it expected or desired. Nonetheless, the Committee believes that, despite the apparent large shift in velocity behavior in the early 1990s, money growth has some value as an economic indicator. Indeed, some FOMC members have expressed the concern that the unusually rapid growth in the money and debt aggregates in 1998 might have reflected monetary conditions that were too accommodative and would ultimately lead to an increase in inflation pressures. The Committee will continue to monitor the monetary aggregates as well as a wide variety of other economic and financial data to inform its policy deliberations.

Last year, M2 increased 8½ percent, and with nominal GDP rising 5 percent, M2 velocity decreased 3 percent. This drop in velocity was considerably larger than would have been expected on the basis of historical relationships and the modest decline in the opportunity cost of M2 (measured as the difference between the interest rate on Treasury bills and the weighted average rate available on M2 assets). The fall in velocity in part reflected an increased demand for the safe and liquid assets in M2 as investors responded to the heightened volatility in financial markets in the second half of the year. Other factors that may have contributed include lower long-term interest rates and a very flat yield curve, which might have suggested to households that they would be giving up very little in earnings by parking savings in short-term assets in M2. In addition, M2 may have been boosted by a desire on the part of some investors to redirect savings flows away from equities after several years of outsized gains in stock market wealth. With equity wealth still elevated and the yield curve likely to remain flat, M2 velocity could continue to fall this year. However, the pace of decline should slow as some households respond to the easing of concerns about financial market volatility by reversing a portion of the shift toward M2 assets that occurred last fall. Indeed, this effect may already be visible, as M2 growth, while still robust, has slowed considerably early this year. If velocity does fall, given the Committee's expectations for nominal income growth, M2 could again exceed its price-stability benchmark range.

M3 expanded 11 percent last year, and its velocity fell 5¼ percent, the largest drop in many years. The rapid growth in this aggregate owed in large part to a substantial rise in institutional money funds. These funds have been expanding rapidly in recent years as nonfinancial firms increasingly employ them to provide cash management services. Investments in these funds provide businesses with greater liquidity than direct holdings of money market instruments, and by substituting for such direct holdings, they boost M3. M3 was also buoyed last year by a large advance in the managed liabilities banks used to fund rapid growth in bank credit. In part, the growth in bank credit reflected demand by borrowers shifting from the securities markets, and with these markets again receptive to new issues, bank credit growth this year is expected to slow to a pace more in line with broader debt aggregates. However, institutional money funds are likely to continue their robust gains, contributing to a further diminution in M3 velocity and, possibly, to growth of this aggregate above its price-stability range.

Domestic nonfinancial debt grew 6¼ percent in 1998, somewhat above the middle of the 3 percent to 7 percent growth range the Committee established last February. This robust growth reflected large rises in the debt of businesses and households owing to substantial advances in spending as well as debt-financed mergers and acquisitions. However, the increase in private-sector debt was partly offset by the first annual decline in federal debt in almost thirty years. As with the monetary aggregates, the Committee left the range for debt growth unchanged for 1999. After an aberrant period in the 1980s during which debt growth greatly exceeded growth of nominal GDP, debt growth over the past decade has returned to its historical pattern of about matching growth of nominal GDP, and the Committee members expect debt to fall within its range this year.

Growth of Money and Debt

Percent

Period		M1	M2	M3	Domestic nonfinancial debt
Annual[1]	1988	4.2	5.6	6.4	9.1
	1989	.6	5.2	4.1	7.5
	1990	4.2	4.2	1.9	6.7
	1991	8.0	3.1	1.2	4.5
	1992	14.3	1.8	.6	4.5
	1993	10.6	1.3	1.0	4.9
	1994	2.5	.6	1.7	4.9
	1995	–1.6	3.9	6.1	5.4
	1996	–4.5	4.6	6.8	5.3
	1997	–1.2	5.8	8.8	5.0
	1998	1.8	8.5	11.0	6.3
1998 Quarterly *(annual rate)*[2]	Q1	3.2	7.6	10.3	6.2
	Q2	1.0	7.5	10.1	6.1
	Q3	–2.0	6.9	8.6	6.0
	Q4	5.0	11.0	13.2	6.4

Note. M1 consists of currency, travelers checks, demand deposits, and other checkable deposits. M2 consists of M1 plus savings deposits (including money market deposit accounts), small-denomination time deposits, and balances in retail money market funds. M3 consists of M2 plus large-denomination time deposits, balances in institutional money market funds, RP liabilities (overnight and term), and Eurodollars (overnight and term). Debt consists of the outstanding credit market debt of the U.S. government, state and local governments, households and nonprofit organizations, nonfinancial businesses, and farms.

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.

2. From average for preceding quarter to average for quarter indicated.

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