Monetary Policy Reports to the Congress

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Report on February 24, 1998

Monetary Policy and the Economic Outlook

The U.S. economy turned in another excellent performance in 1997. Growth was strong, the unemployment rate declined to its lowest level in nearly a quarter-century, and inflation slowed further. Impressive gains were also made in other important respects: The federal budget moved toward balance much more quickly than almost anyone had anticipated; capital investment, a critical ingredient for long-run growth, rose sharply further; and labor productivity, the ultimate key to rising living standards, displayed notable vigor.

Among the influences that have brought about this favorable performance are the sound fiscal and monetary policies that have been pursued in recent years. Budgetary restraint at the federal level has raised national saving, easing the competition for funds in our capital markets and thereby encouraging greater private investment. Monetary policy, for its part, has sought to foster an environment of subdued inflation and sustainable growth. The experience of recent years has provided additional evidence that the less households and businesses need to cope with a rising price level, or worry about the sharp fluctuations in employment and production that usually accompany inflationary instability, the more long-term investment, innovation, and enterprise are enhanced.

The circumstances that prevailed through most of 1997 required that the Federal Reserve remain especially attentive to the risk of a pickup in inflation. Labor markets were already tight when the year began, and nominal wages had started to rise faster than previously. Persistent strength in demand over the year led to economic growth in excess of the expansion of the economy's potential, intensifying the pressures on labor supplies. In earlier business expansions, such developments had usually produced an adverse turn in the inflation trend that, more often than not, was accompanied by a worsening of economic performance on a variety of fronts, culminating in recession.

Robust growth of spending early in the year heightened concerns among members of the Federal Open Market Committee (FOMC) that growing strains on productive resources might touch off a faster rate of cost and price rise that could eventually undermine the expansion. Financial market participants seemed to share these concerns: Intermediate- and long-term interest rates began moving up in December 1996, effectively anticipating Federal Reserve action. When the FOMC firmed policy slightly at its March meeting by raising the intended federal funds rate from 5¼ percent to 5½ percent, the market response was small.

The economy slowed a bit during the second and third quarters, and inflation moderated further. In addition, the progress being made by the federal government in reducing the size of the deficit was becoming more apparent. As a consequence, by the end of September, longer-term interest rates fell ¾ percentage point from their peaks in mid-April, leaving them about ¼ percentage point below their levels at the end of 1996. The decline in interest rates, along with continued reports of brisk growth in corporate profits, sparked increases in broad indexes of equity prices of 20 percent to 35 percent between April and September.

Even with a more moderate pace of growth, labor markets continued to tighten, generating concern among the FOMC members over this period that rising costs might trigger a rise in inflation. Consequently, at its meetings from May through November, the Committee adopted directives for the conduct of policy that assigned greater likelihood to the possibility of a tightening of policy than to the possibility of an easing of policy. Even though the Committee kept the nominal federal funds rate unchanged, it saw the rise in the real funds rate resulting from declining inflation expectations, together with the increase in the exchange value of the dollar, as providing some measure of additional restraint against the possible emergence of greater inflation pressures.

In the latter part of the year, developments in other parts of the world began to alter the perceived risks attending the U.S. economic outlook. Foreign economies generally had seemed to be on a strengthening growth path when the Federal Reserve presented its midyear monetary policy report to the Congress last July. But over the remainder of the summer and during the autumn, severe financial strains surfaced in a number of advanced developing countries in Asia, weakening somewhat the outlook for growth abroad and thus the prospects for U.S. exports. Although the circumstances in individual countries varied, the problems they encountered generally resulted in severe downward pressures on the foreign exchange values of their currencies; in many cases, steep depreciations occurred despite substantial upward movement of interest rates. Asset values in Asia, notably equity and real estate prices, also declined appreciably in some instances, leading to losses by financial institutions that had either invested in those assets or lent against them; nonfinancial firms began to encounter problems servicing their obligations. In many instances the debts of nonfinancial and financial firms were denominated in dollars and unhedged. Concerted international efforts to bring economic and financial stability to the region are under way, and some progress has been made, but it is evident that in several of the affected economies the process of adjustment will be painful. Meanwhile, economic activity in Japan stagnated, in part because of the developments elsewhere in East Asia, and the weaknesses in the Japanese financial system became more apparent.

The steep depreciations of many Asian currencies contributed to a substantial further appreciation of the U.S. dollar. Measured against a broad set of currencies that includes those of the advanced developing countries of Asia, the exchange value of the dollar, adjusted for relative consumer prices, has moved up about 8 percent since October and has increased about 16 percent from its level at the end of 1996. The dollar has also appreciated, on balance, against an index of currencies of the G-10 (Group of Ten) industrial countries; this G-10 trade-weighted index of dollar exchange rates is up about 13 percent in nominal terms since the end of 1996.

The difficulties in Asia contributed to additional declines of ¼ to ½ percentage point in the yields on intermediate-and long-term Treasury securities in the United States between mid-autumn and the end of the year. These decreases were due in part to an international flight to the safe haven of dollar assets, but they also reflected expectations that these difficulties would exert a moderating influence on the growth of aggregate demand and inflation in the United States. Equity prices were quite volatile but showed little trend in the fourth quarter. In light of the ongoing difficulties in Asia and the possible effects on the United States, the FOMC not only left interest rates unchanged in December, but shifted its instructions to the Manager of the System Open Market Account to symmetry between ease and tightening in the near term.

Some spillover from the problems in Asia has recently begun to appear in reports on business activity in the United States. Customers in the advanced developing countries reportedly have canceled some of the orders they had previously placed with U.S. firms, and companies more generally are expressing concerns about the possibilities of both reduced sales to Asia and more intense price competition here as the result of the sharp changes in exchange rates. Nonetheless, the available statistics suggest on balance that overall growth of output and employment has remained brisk in the early part of 1998.

Confronted with the marked crosscurrents described above—involving both upside and downside risks to the growth of output and prospects for inflation—the FOMC earlier this month once again chose to hold its federal funds rate objective unchanged. In credit markets, interest rates have fallen further this year as the effects of the Asian turmoil seemed even more likely to restrain any tendencies toward unsustainable growth and greater inflation in the United States. With interest rates lower and the negative effects of the Asian problems seen by market participants as mostly limited to particular sectors, broad indexes of equity prices have risen appreciably, many to new highs.

Economic Projections for 1998

The outlook for 1998 is clouded with a greater-than-usual degree of uncertainty. Part of that uncertainty is a reflection of the financial and economic stresses that have developed in Asia, the full consequences of which are difficult to judge. But there are some other significant question marks as well, many of them growing out of the surprising performance of the U.S. economy in 1997: Growth was considerably stronger and inflation considerably lower than Federal Reserve officials and most private analysts had anticipated.

Some of the key forces that gave rise to this favorable performance can be readily identified. An ongoing capital spending boom, encouraged in part by declining prices of high-technology equipment, provided stimulus to aggregate demand and at the same time created the additional capacity to help meet that demand. A further jump in labor productivity that was fueled partly by the buildup of capital helped firms overcome the production and pricing challenges posed by tight labor markets. A surprisingly robust stock market bolstered the finances of households and enabled them to spend more freely. Falling world oil prices reduced the prices of petroleum products and helped hold down the prices of other energy-intensive goods. Finally, a rising dollar imposed additional restraint on inflation, as prices of imported goods fell appreciably. Circumstances as favorable as those of 1997 are not likely to persist, although several elements in the recent mix could help maintain, for some time, a more favorable economic performance than historical relationships would suggest.

In assessing the situation, the members of the Board of Governors and the Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, think that the most likely outcome for 1998 will be one of moderate growth, low unemployment, and low inflation. Most of them have placed their point estimates of the rise in real gross domestic product from the fourth quarter of 1997 to the fourth quarter of 1998 in the range of 2 percent to 2¾ percent. The civilian unemployment rate in the fourth quarter of 1998 is expected to be at about its recent level. For the most part, the forecasts have the total consumer price index for all urban consumers rising between 1¾ percent and 2¼ percent this year. These predictions do not differ appreciably from those recently put forth by the Administration.

Although developments in Asia over the past few months have not yet affected aggregate U.S. economic performance in a measurable way, these influences will likely become more visible in coming months. Growth of U.S. exports is expected to be restrained by weaknesses in Asian economies and by the lagged effects of the appreciation of the dollar since 1995. Moreover, with the rise in the dollar's value making imports less expensive, some U.S. businesses and consumers will likely switch from domestic to foreign sources for some of their purchases. But the timing and magnitude of these developments are hard to predict.

In contrast to the slower growth that seems to be in prospect for exports, domestic spending seems likely to maintain considerable strength in coming quarters. Households as a group are quite upbeat in their assessments of their personal finances—as might be expected in conjunction with expanding job opportunities, rising incomes, and huge gains in wealth. Recently, many households have taken advantage of lower long-term interest rates by refinancing their home mortgages, and this will provide a little additional wherewithal for spending. Moreover, the decline in mortgage rates is also bolstering housing construction.

Business outlays for fixed investment seem likely to advance at a relatively brisk pace in the coming year, although gains as large as those of the past couple

Economic Projections for 1998

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents		Administration
	Range	Central tendency	
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	3½–5	3¾–4½	4.0
Real GDP[2]	1¾–3	2–2¾	2.0
Consumer price index[3]	1½–2½	1¾–2¼	2.2
Average level, fourth quarter			
Civilian unemployment rate	4½–5	about 4¾	5.0

1. Change from average for fourth quarter of 1997 to average for fourth quarter of 1998.

2. Chain-weighted.

3. All urban consumers.

of years may be difficult to match. Outlays for computers, which have dominated the investment surge of the past few years, should climb substantially further as businesses press ahead with new investment in the latest technologies, encouraged in part by ongoing price declines. With labor markets tight, firms continue to see capital investment as the key in efforts to increase efficiency and maintain competitiveness. Internally generated funds remain adequate to cover the bulk of businesses' investment outlays, and those firms turning to the debt and equity markets are most often finding financing generously available on good terms. Inventory growth will likely put less pressure on business cash flow this year; after adding to stocks at a substantial clip in 1997, businesses seem likely to scale back such investment somewhat, especially as they perceive a moderation in sales increases.

The Federal Reserve policymakers' forecasts of the average unemployment rate in the fourth quarter of 1998 are mostly around 4¾ percent. The persistence for another year of this degree of tightness in the labor market means that firms will likely continue to face difficulties in finding workers and that hiring and retaining workers could become more costly. Indeed, there are indications that wage inflation picked up further at the end of last year. Improvements in labor productivity have become more sizable in the past couple of years, and if such gains can be extended, wage increases of the magnitude of those of 1997 need not translate into greater price inflation. The more rapid growth in productivity is consistent with the high level of capital investment in recent years, but the extent to which the trend in productivity has picked up is still uncertain. Furthermore, if momentum in nominal wages continues to build, the pay increases will eventually squeeze profit margins and place upward pressures on prices, even with exceptional productivity gains. The strains in labor markets therefore constitute an ongoing inflationary risk that will have to be monitored closely.

In the near term, however, there are several factors that should lessen the risk of a step-up in inflation. Manufacturing capacity remains ample, and bottlenecks are not hampering production. The recent appreciation of the dollar should damp inflation both because of falling import prices and because the added competition from imports may induce domestic producers to hold down prices. Oil prices have weakened considerably since the latter part of 1997 in response to abundant supplies, the softening of demand in Asia, and a mild winter. Ample supplies and the prospect of softer global demand have been depressing the prices of many other commodities, both in agriculture and in industry. Perhaps most important, as the low level of inflation that has prevailed in recent years gets built into wage agreements, other contracts, and individuals' inflation expectations, it will provide an inertial force helping sustain the favorable price performance for a time.

Although many of the factors currently placing restraint on inflation are not necessarily long lasting, the Committee judged that their effect in 1998 would about offset the pressures from tight labor markets. Consequently, the Board members and Reserve Bank presidents anticipate that the rate of price inflation will change little this year. Again in 1998, the FOMC will be monitoring a variety of price measures in addition to the CPI for indications of changes in inflation and will be assessing movements in the CPI in the context of ongoing technical improvements by the Bureau of Labor Statistics that are likely to damp the reported 1998 rise in that index.

Money and Debt Ranges for 1998

In establishing the ranges for growth of broad measures of money over 1998, the Committee recognized the considerable uncertainty that still exists about the behavior of the velocities of these aggregates. The velocity of M3 (the ratio of nominal GDP to the monetary aggregate) in particular has proved difficult to predict. Last year, the growth of this aggregate relative to spending was affected by the rapid increase in depository credit and by the way in which that increase was funded, as well as by the changing cash management practices of corporations, which have been using the services of institution-only money funds in M3. These factors boosted M3 growth last year to 8¾ percent, 3 percentage points faster than nominal GDP—an unusually large decline in M3 velocity. Going forward, it seems likely that M3 growth will continue to be buoyed by robust credit growth at depositories and continuing shifts in cash management. Thus, its velocity is likely to decline further, though the amount of decline is difficult to predict.

The relationship of M2 to spending in recent years has come back more into line with historical patterns in which the velocity of M2 tended to be fairly constant, except for the effects of the changing opportunity cost of M2—the spread between yields that savers could earn holding short-term market instruments and those that they could earn holding M2. In the early 1990s, M2 velocity departed from this pattern, rising substantially and atypically. Even after the unusual shift of the early 1990s died out, M2 velocity continued to drift somewhat higher from 1994 into 1997. That drift probably reflected some continued, albeit more moderate, redirection of savings into bond and equity markets, especially through the purchase of mutual funds. However, last year the drift abated. There was little change, on balance, in the opportunity cost of holding M2, and M2 velocity also was about unchanged, as M2 grew 5½ percent, nearly the same as nominal GDP. Nevertheless, the upward drift could resume in the years ahead as financial innovations or perceptions of attractive returns lead households to further shift their savings away from M2 balances. Or velocity might be pushed downward if volatility or setbacks in bond and stock markets were to lead investors to seek the safety of M2 assets, which have stable principal.

In light of the uncertainties about the behavior of velocities, the Committee followed its practice of recent years and established the ranges for 1998 not as expectations for actual money growth, but rather as benchmarks for M2 and M3 behavior that would be consistent with sustained price stability, assuming velocity change in line with pre-1990 historical experience. Thus, the ranges for fourth-quarter to fourth-quarter growth are unchanged from those in 1997: 1 percent to 5 percent for M2, and 2 percent to 6 percent for M3. Given the central tendency of the Committee's forecast for growth of nominal GDP of

Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1996	1997	1998
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.

3¾ percent to 4½ percent, M2 is likely to be in the range, perhaps in the upper half, if short-term interest rates do not change much and velocity continues recent patterns. For M3, however, a continuation of recent velocity behavior could imply growth around the upper end of, if not above, the price-stability range.

Debt of the nonfinancial sectors grew 4¾ percent in 1997, near the middle of the range of 3 percent to 7 percent established by the Committee last February. As with the monetary aggregates, the Committee has left the range for debt unchanged for 1998. The range it has chosen encompasses the likely growth of debt given Committee members' forecasts of nominal GDP. Except for the 1980s, the growth of debt has tended to be reasonably in line with the growth of nominal GDP.

Although the ranges for money and debt are not set as targets for monetary policy in 1998, the behavior of these variables, interpreted carefully, can at times provide useful information about the economy and the workings of the financial markets. The Committee will continue to monitor the movements of money and debt—along with a wide variety of other financial and economic indicators—to inform its policy deliberations.

Economic and Financial Developments in 1997 and Early 1998

The past year has been an exceptionally good one for the U.S. economy. Initial estimates indicate that real GDP increased nearly 4 percent over the four quarters of 1997. Household and business expenditures continued to rise rapidly, owing in part to supportive financial conditions, including a strong stock market, ample availability of credit, and, from April onward, declining intermediate- and long-term interest rates. In the aggregate, private domestic spending on consumption and investment rose nearly 5 percent on an inflation-adjusted basis. The strength of spending, along with a further sizable appreciation of the foreign exchange value of the U.S. dollar, brought a surge of imports, the largest in many years. Export growth, while lagging that of imports, also was substantial despite the appreciation of the dollar and the emergence after midyear of severe financial difficulties in several foreign economies, particularly among the advanced developing countries in Asia.

Meanwhile, inflation slowed from the already reduced rates of the previous few years. Although wages and total hourly compensation accelerated in a tight labor market, the inflationary impulse from that source was more than offset by other factors, including rising competition from imports, the price restraint from increased manufacturing capacity, and a sizable gain in labor productivity.

The Household Sector

Consumption Spending, Income, and Saving

Bolstered by increases in income and wealth, personal consumption expenditures rose substantially during 1997—about 3¾ percent, according to the initial estimate. Expenditures strengthened for a wide variety of durable goods. Real outlays on home computers continued to soar, rising even faster than they did over the previous few years. Strength also was reported in purchases of furniture and home appliances—products that tend to do well when home sales are strong. Consumer expenditures on motor vehicles rose moderately, on net, more than reversing the small declines of the previous two years. Real expenditures on services increased more than 4 percent in 1997, the largest gain of recent years. Personal service categories such as recreation, transportation, and education recorded large increases. Consumers also boosted their outlays for business services, including outlays related to financial transactions.

Real disposable personal income—after-tax income adjusted for inflation—is estimated to have increased about 3¾ percent during 1997, a gain that was exceeded on only one occasion in the previous decade. Income was boosted this past year by sizable gains in wages and salaries and by another year of large increases in dividends.

Measured in terms of annual averages, the personal saving rate fell further in 1997, according to current estimates. The 1997 average of 3.8 percent was about ½ percentage point below the 1996 average and roughly a full percentage point below the 1995 average. It also was the lowest annual reading in several decades. Various surveys of households show consumers to have become increasingly optimistic about prospects for the economy, and this rising degree of optimism may have led them to spend more freely from current income. Support for additional spending came from the further rise in the stock market, as the capital gains accruing to households increased the chances of their meeting longer-run net worth objectives even as they consumed a larger proportion of current income.

Residential Investment

Preliminary data indicate that real residential investment increased nearly 6 percent during 1997. Real outlays for the construction of new single-family structures rose moderately, and outlays for the construction of multifamily units continued to recover from the extreme lows that were reached earlier in the decade. Real outlays for home improvements and brokers' commissions, categories that have a combined weight of more than 35 percent in total residential investment, moved up substantially from the final quarter of 1996 to the final quarter of 1997. Spending on mobile homes, a small part of the total, also advanced.

The indicators of single-family housing activity were almost uniformly strong during the year. Sales of houses surged, driven by declines in mortgage interest rates and the increasingly favorable economic circumstances of households. Annual sales of new single-family houses were up about 5½ percent from the number sold in the preceding year, and sales of existing homes moved up about 3 percent. House prices moved up more quickly than prices in general. Responding to the strong demand, starts of new single-family units remained at a high level, only a touch below that of 1996; the annual totals for single-family units have now exceeded 1 million units for six consecutive years, putting the current expansion in single-family housing construction nearly on a par with that of the 1980s in terms of longevity and strength. In January of this year, starts of and permits for single-family units were both quite strong.

Starts of multifamily units increased in 1997 for the fourth year in a row and were about double the record low of 1993. The increased construction of these units was supported by a firming of rents, abundant supplies of credit, and a reduction in vacancy rates in some markets. The national vacancy rate came down only slightly, however, and it has reversed only a portion of the sharp run-up that took place in the 1980s. This

January, starts of multifamily units fell back to about the 1997 average after having surged to an exceptionally high level in the fourth quarter.

The home-ownership rate—the number of households that own their dwellings divided by the total number of households—moved up further in 1997, to about 65¾ percent, a historical high. The rate had fallen in the 1980s but has risen almost 2 percentage points in this decade.

Household Finance

Household net worth appears to have grown roughly $3½ trillion during 1997, ending at its highest multiple relative to disposable personal income on record. Most of this increase in net worth was the result of upward revaluations of household assets rather than additional saving. In particular, capital gains on corporate equities accounted for about three-fourths of the increase in net worth. Flows of household assets into mutual funds, pensions, and other vehicles for holding equities indirectly were exceeded by outflows from directly held equities.

Household borrowing not backed by real estate, including credit card balances, auto loans, and other consumer credit, increased 4¾ percent in 1997. These obligations grew at double-digit rates in 1994 and 1995, but their growth has slowed fairly steadily since then. Mortgage borrowing, by contrast, has experienced relatively muted swings in growth during the current expansion. Home mortgages are estimated to have grown 7 percent last year, only a bit slower than in 1996. Within this category of credit, however, home equity loans have advanced sharply, reflecting in part the use of these loans in refinancing and consolidating credit card and other consumer obligations.

An element in the slowing of consumer credit growth may have been assessments by some households that they were reaching the limits of their capacity for carrying debt and by some lenders that they needed to tighten selectively their standards for granting new loans. In the mid-1990s, the percentage of household income required to meet debt obligations rose to the upper end of its historical range, in large part because of a sharp rise in credit card debt. Between 1994 and 1996 personal bankruptcies grew at more than a 20 percent annual rate, to some extent because of households' rising debt burden; a change in the federal bankruptcy law and a secular trend toward associating less social stigma with bankruptcy also may have contributed. Over the same period, delinquency and charge-off rates on consumer loans increased significantly.

Last year, however, because the growth of household debt only slightly outpaced that of income while interest rates drifted lower, the household debt-service burden did not change. Reflecting in part the stability of the aggregate household debt burden, delinquency rates on many segments of consumer credit plateaued, although charge-off rates generally continued to rise somewhat. Personal bankruptcies advanced again last year but showed some signs of leveling off in the third quarter.

Some of the apparent leveling out of household debt-repayment problems may also have resulted from efforts by lenders to stem the growth of losses on consumer loans. For the past two years, a large percentage of the respondents to the Federal Reserve's quarterly Senior Loan Officer Opinion Survey on Bank Lending Practices have reported tightened standards on consumer loans. But the percentages reporting tightening have fallen a bit in the last few surveys, suggesting that many banks feel that they have now altered their standards sufficiently.

Although banks pulled back a bit from consumer lending, most households had little trouble obtaining credit in 1997. Bank restraint has most commonly taken the form of imposing lower credit limits or raising finance charges on outstanding balances; credit card solicitations continued at a record pace. Furthermore, many respondents to the Federal Reserve's January 1998 survey of loan officers said their banks had eased terms and standards on home equity loans, providing consumers easier access to an alternative source of finance.

Mortgage rates fell last month to levels that led many households to apply for loan refinancing. When households refinance, they may choose among options that have differing implications for cash flow, household balance sheets, and spending. Some households may decide to reduce their monthly payments, keeping the size of their mortgages unchanged. Others may keep their monthly payments unchanged, either speeding up their repayments or increasing their mortgages and taking out cash in the process, perhaps to augment current expenditures. In any case, the wave of refinancings is likely having only a small effect on the overall economy because the current difference between the average rate on outstanding mortgages and the rate on new ones is not very large.

The Business Sector

Investment Expenditures

Adjusted for inflation, businesses' outlays for fixed investment rose about 8 percent during 1997 after gaining about 12 percent during 1996. Spending continued to be spurred by rapid growth of the economy, favorable financial conditions, attractive purchase prices for new equipment, and optimism about the future. Business outlays for equipment, which account for more than three-fourths of total business fixed investment, moved up about 12 percent this past year, making it the fourth year of the last five in which the annual gains have exceeded 10 percent. As in previous years of the expansion, real investment rose fastest for computers, the power of which continued to advance rapidly at the same time their prices continued to decline. Spending also moved up briskly for many other types of equipment, including communications equipment, commercial aircraft, industrial machinery, and construction machinery.

Real outlays for nonresidential construction, the remaining portion of business fixed investment, declined somewhat in 1997 after moving up in each of the four previous years. Construction of office buildings continued to increase in 1997, but sluggishness was apparent in the expenditure data for many other types of structures. Nonetheless, a tone of underlying firmness was apparent in other indicators of market conditions. Vacancy rates declined, for example, and rents seemed to be picking up. In some areas of the country, more builders have been putting up new office buildings on "spec"—that is, undertaking new construction before occupants have been lined up. The new projects are apparently being spurred to some degree by the ready availability of financing.

Business inventory investment picked up considerably in 1997. According to the initial estimate, the level of inventories held by nonfarm businesses rose about 5 percent in real terms over the course of the year after increasing roughly 2 percent in 1996. Accumulation was especially rapid in the commercial aircraft industry, in which production has been ramped up in response to a huge backlog of orders for new jets. With the rate of inventory growth outpacing the growth of final sales last year, the stock-to-sales ratio in the nonfarm sector ticked up slightly, after a small decline in the preceding year. Although inventory accumulation does not seem likely to persist at the pace of 1997, businesses in general do not appear to be uncomfortable with the levels of stocks they have been carrying.

Corporate Profits and Business Finance

The economic profits of U.S. corporations (book profits after inventory valuation and capital consumption adjustments) increased at more than a 14 percent annual rate over the first three quarters of 1997, and the profits of nonfinancial corporations from their domestic operations grew at a 13½ percent annual rate. In the third quarter, nonfinancial corporate profits amounted to nearly 14 percent of that sector's nominal output, up from 7¼ percent in 1982 and the highest share since 1969. The elevated profit share reflects both the high level of cash flow before interest costs, which also stands at a multiyear peak relative to output, and the reductions in interest costs that have taken place in the 1990s. Fourth-quarter profit announcements indicate that year-over-year growth in earnings was fairly strong; few corporations reported that they had experienced much fallout yet from the events in Asia, but many warned that profits in the first half of 1998 will be significantly affected.

Despite the rapid growth in profits, the financing gap for nonfinancial corporations—capital expenditures less internal cash flow—widened, reflecting the strong expansion of spending on capital equipment and inventories. Furthermore, on net, firms continued to retire a large volume of equity, adding further to borrowing needs, as substantial gross issuance was swamped by stock repurchases and merger-related retirements. Given these financing requirements, the growth of nonfinancial corporate debt picked up to more than a 7 percent rate last year.

With the debt of nonfinancial corporations advancing briskly, the ratio of their interest payments to cash flow was about unchanged last year, after several years of decline that had left it at quite a low level. Consequently, measures of debt-repayment difficulties also were very favorable last year: The default rate on corporate bonds remained extremely low, and the number of upgrades of debt about equaled the number of downgrades. Similarly, only small percentages of business loans at banks were delinquent or charged off. The rate of business bankruptcies increased a bit but was still fairly low.

Businesses continued to find credit amply supplied at advantageous terms last year. The spread between yields on investment-grade bonds and yields on Treasury securities of similar maturities remained narrow, varying only a little during the year. The spreads on below-investment-grade bonds fell over the year, touching new lows before widening a bit in the fall and early this year; the widening occurred in large part because these securities benefited less from the flight to U.S. assets in response to events in Asia than did Treasury securities. Banks also appeared eager to lend to businesses. Large percentages of the respondents to the Federal Reserve's surveys, citing stiff competition as the reason, said they had eased terms—particularly spreads—on business loans last year. Much smaller percentages reported having eased standards on these loans. The high ratios of stock prices to earnings suggest that equity finance was also quite cheap last year. Nevertheless, the market for initial public offerings of equity was cooler than in 1996—new issues were priced below the expected range more often than above it, and first-day trading returns were smaller on average.

The pickup in business borrowing was widespread across funding sources. Outstanding commercial paper, which had declined a bit in 1996, posted strong growth in 1997, as did bank business loans. Gross issuance of bonds was extremely high, particularly bonds with ratings below investment grade. Such lower-rated bonds made up nearly half of all issuance, a new record. Although sales of new investment-grade bonds slowed a bit in the fall, corporations were apparently waiting out the market volatility at that time, and issuance picked back up in January. Banks, real estate investment trusts, and commercial-mortgage-backed securities were the most significant sources of funds for income properties—residential apartments and commercial buildings—the financing of which expanded further last year.

The Government Sector

Federal Expenditures, Receipts, and Finance

Nominal outlays in the unified budget increased about 2½ percent in fiscal year 1997 after moving up 3 percent in fiscal 1996. Fiscal 1997 was the sixth consecutive year that the growth of spending was less than the growth of nominal GDP. During that period, spending as a percentage of nominal GDP fell from about 22½ percent to just over 20 percent. The set of factors that have combined to bring about this result includes implementation of fiscal policies aimed at reducing the deficit, which has helped slow the growth of discretionary spending and spending on some social and health services programs, and the strength of the economy, which has reduced outlays for income support.

In nominal terms, small to moderate increases were recorded in most major expenditure categories in fiscal 1997. Net interest outlays, which have been accounting for about 15 percent of total unified outlays in recent years, rose only a small amount in 1997, as did nominal outlays for defense and those for income security. Expenditures on Medicaid rose moderately for a second year after having grown very rapidly for many years; spending in this category has been restrained of late by the strong economy, the low rate of inflation in the medical area, and policy changes in the Medicaid program. Policy shifts and the strong economy also cut into outlays for food stamps, which fell about 10 percent in fiscal 1997. By contrast, spending on Medicare continued to rise at about three times the rate of total federal outlays. Growth of outlays for social security also exceeded the rate of rise of total expenditures.

Real federal outlays for consumption and gross investment, the part of federal spending that is counted in GDP, were unchanged, on net, from the last quarter of 1996 to the final quarter of 1997. Real outlays for defense, which account for about two-thirds of the spending for consumption and investment, declined slightly, offsetting a small increase in nondefense outlays. Because of much larger declines in most other recent years, the level of real defense outlays at the end of 1997 was down about 22 percent from its level at the end of the 1980s; total real outlays for consumption and investment dropped about 14 percent over that period.

Federal receipts rose faster than nominal GDP for a fifth consecutive year in fiscal 1997; receipts were 19¾ percent of GDP last year, up from 17¾ percent in fiscal 1992. The ratio tends to rise during business expansions, mainly because of cyclical increases in the share of profits in nominal GDP. In the past couple of years, the ratio also has been boosted by the tax increases included in the Omnibus Reconciliation Act of 1993, by a rising income share of high-income taxpayers, and by receipts from surging capital gains realizations, which raise the numerator of the ratio but not the denominator because capital gains realizations are not part of GDP. In fiscal 1997, combined receipts from individual income taxes and social insurance taxes, which account for about 80 percent of total receipts, moved up about 9½ percent, even more than in fiscal 1996. Receipts from the taxes on corporate profits were up about 6 percent in fiscal 1997 after increasing about 9½ percent in the preceding fiscal year. The total rise in receipts in fiscal 1997, coupled with the subdued rate of increase in nominal outlays, resulted in a budget deficit of $22 billion, down from $107 billion in the preceding fiscal year.

With the budget moving close to balance, federal borrowing slowed sharply last year. The Treasury responded to the smaller-than-expected borrowing need by reducing sales of bills in order to keep its auctions of coupon securities predictable and of sufficient volume to maintain the liquidity of the secondary markets. The result was an unusually large net redemption of bills, which at times pushed yields on short-term bills down relative to yields on other Treasury securities and short-term private obligations.

Last year saw the first issuance by the Treasury of inflation-indexed securities. The Treasury sold indexed ten-year notes in January and April of last year and again this January, and sold five-year notes in July and October; it also announced that it would sell indexed thirty-year bonds this April. Investor interest in the securities at those auctions was substantial, with the ratios of received bids to accepted bids resembling those for nominal securities. As expected, most of the securities were quickly acquired by final investors, and the trading volume as a share of the outstanding amount has been much smaller than for nominal securities.

An important macroeconomic implication of the reduced federal deficit is that the federal government has ceased to be a negative influence on the level of national saving. The improvement in the federal government's saving position in recent years has more than accounted for a rise in the total gross saving of households, businesses, and governments, from about 14½ percent of gross national product earlier in the decade, when federal government saving was at a cyclical low and highly negative, to more than 17 percent in the first three quarters of 1997. This rise in domestic saving, along with increased borrowing from abroad, has financed the rise in domestic investment in this expansion. Still higher rates of saving and investment were the norm a couple of decades ago, when the personal saving rate was a good bit above its level in recent years.

State and Local Governments

The real outlays of state and local governments for consumption and investment moved up about 2 percent over the four quarters of 1997, similar to the average since the start of the 1990s.

Investment expenditures, which have grown about 2½ percent per annum this decade, rose at only half that pace in 1997, according to the initial estimate. However, real consumption expenditures increased 2¼ percent last year, a touch above the average for the decade. Compensation of government employees, which accounts for about three-fifths of real consumption and investment expenditures, rose about 1¾ percent in 1997 and has increased at an annual rate of only about 1¼ percent since the end of the 1980s.

The efforts of state and local governments to hold down their labor expenses are also reflected in the recent data on nominal wages and hourly compensation. According to the employment cost indexes, hourly compensation of the workers employed by state and local governments increased 2¼ percent in 1997, a little less than in 1996 and the smallest annual increase in the seventeen-year history of the series. The increase in the average hourly wage of state and local employees amounted to about 2¾ percent in 1997, roughly the same as the gain in 1996. The average hourly cost of the benefit packages provided to state and local employees rose only 1¼ percent, a percentage point less than the increase in 1996.

With costs contained and receipts continuing to rise with the growth of the economy, financial pressures that were evident among state and local governments earlier in the expansion have diminished. The increased breathing room in the budgets of recent years is apparent in the consolidated current account of these governments: Surpluses in that account, excluding those that are earmarked for social insurance funds, had dipped to a low of about 1½ percent of nominal receipts in 1991, but they have been larger than 3 percent of receipts in each of the past three years.

State and local debt expanded about 5¾ percent last year after changing little in 1996 and declining in the two preceding years. In those earlier years, municipal debt outstanding had been held down by the retirement of bonds that were "advance refunded" in the early 1990s. In such operations, funds that had earlier been raised and set aside were used to refund debt as it became callable. By the end of 1996, however, the stock of such debt had apparently been largely worked down.

External Sector

Trade and the Current Account

The nominal trade deficit for goods and services was $114 billion in 1997, little changed from the $111 billion deficit in 1996. For the first three quarters of the year, the current account deficit reached $160 billion at an annual rate, somewhat wider than the 1996 deficit of $148 billion. This deterioration of the current account largely reflects continued declines in net investment income, which for the first time recorded deficits in each of the first three quarters of the year.

The quantity of imports of goods and services expanded strongly during 1997—about 13 percent according to preliminary estimates—as the very rapid growth experienced during the first half of the year moderated slightly during the second half. The expansion was fueled by continued vigorous growth of U.S. GDP. Additional declines in non-oil import prices—related in large part to the appreciation of the dollar—contributed as well. Of the major trade categories, increases in imports were sharpest for capital goods and consumer goods.

Export growth was also strong in 1997, particularly during the first half of the year. The quantity of exports of goods and services rose nearly 11 percent, after a rise of 9¼ percent the preceding year. Despite further appreciation of the dollar, exports accelerated in response to the strength of economic activity abroad. Output growth in most of our industrial-country trading partners firmed in 1997 from the moderate rates observed in 1996. Among our developing-country trading partners, robust growth continued through much of the year, but the onset of crises in several Asian economies late in 1997 led to abrupt slowdowns in economic activity. Growth of exports to Latin American countries and to Canada was particularly strong. Exports to Western Europe also increased at a healthy pace.

Capital Flows

In the first three quarters of 1997, large increases were reported in both foreign ownership of assets in the United States and U.S. ownership of assets abroad, reflecting the continued trend toward the globalization of both financial markets and the markets for goods. Little evidence of the gathering financial storm in Asia was apparent in the data on U.S. capital flows through the end of September. Foreign official assets in the United States rose $46 billion in the first three quarters of 1997. The increases were concentrated in the holdings of certain industrial countries and members of OPEC. Although substantial, these increases were below the pace for the first three quarters of 1996.

In contrast, increases in assets held by other foreigners in the first three quarters of 1997 surpassed those recorded in 1996. In particular, net purchases of U.S. Treasury securities by private foreigners rose to $130 billion, net purchases of U.S. corporate and other bonds reached $96 billion, and net purchases of U.S. stocks were a record $55 billion. In addition, foreign direct investment in the United States also posted a new high of $78 billion, as the strong pace of acquisitions of U.S. companies by foreigners continued.

U.S. direct investment abroad in the first three quarters of 1997 also exceeded the 1996 pace, with a record net outflow of $88 billion. U.S. net purchases of foreign securities in the first three quarters of 1997 were $74 billion, a little below the pace for 1996. However, net purchases of stocks in Japan and bonds in Latin America were up substantially. Banks in the United States reported a large increase in net claims on foreigners in the first quarter but only a modest increase in the next two quarters combined.

The Labor Market

Employment, Productivity, and Labor Supply

More than 3 million jobs were added to nonfarm payrolls in 1997—a gain of nearly 2¾ percent, measured from December to December. Patterns of hiring mirrored the broadly based gains in output and spending. Manufacturing, construction, trade, transportation, finance, and services all exhibited appreciable strength. In manufacturing, the 1997 rise in the job count followed two years of little change. Elsewhere, the gains in 1997 came on top of substantial increases in other recent years. Especially rapid increases were posted this past year in some of the services industries, including computer services, management services, education, and recreation. Employment at suppliers of personnel, a category that includes the agencies that supply help on a temporary basis, also increased appreciably in 1997, but the gains in this category fell considerably short of those seen in previous years of the expansion. Help-supply firms reported that shortages of workers were limiting the pace of their expansion.

Labor productivity has risen rapidly over the past two years. Revised data show the 1996 gain in output per hour in the nonfarm business sector to have been about 1¾ percent, and the increase in 1997 was larger still—about 2¼ percent, according to the first round of estimates. Although the average rate of productivity increase since the end of the 1980s still is only a little above 1 percent per year, the data for the past two years provide hopeful indications that sustained high levels of investment in new technologies may finally be translating into a stronger trend.

The civilian unemployment rate fell more than ½ percentage point from the fourth quarter of 1996 to the fourth quarter of 1997, to an average of just under 4¾ percent. The rate held steady at this level in January of this year. For most of the past year, the rate has been running somewhat below the minimum that was reached in the expansion of the 1980s. A variety of survey data indicate that firms have had increased difficulty filling jobs.

After moving up a step in 1996, the labor force participation rate continued to edge higher in 1997. Without the increment to labor supply from increased participation over these two years, the unemployment rate would have fallen to an even lower level. Changes in the welfare system perhaps contributed to some extent to the small rise in participation in 1997, although this effect is difficult to disentangle from the normal tendency of participation to rise when the labor market is tight. Even though one-third of the adult population remained outside the labor force in 1997, the vast majority of those individuals likely were in pursuits that tended to preclude their workforce participation, such as retirement, schooling, or housework. The percentage of the working age population interested in work but not actively seeking it moved down further in 1997, to 2¼ percent in the fourth quarter, a record low in the history of the series, which began in 1970.

Wages and Hourly Compensation

According to the employment cost indexes, hourly compensation in private industry increased 3.4 percent from December of 1996 to December of 1997. This rise exceeded that of the previous year by 0.3 percentage point and was 0.8 percentage point greater than the increase of 1995. Although the patterns of change in hourly pay have varied quite a bit by industry and occupation over the past two years, the overall step-up seems to have been prompted, in large part, by the tightening of labor markets. The implementation of a higher minimum wage also seems to have been a factor in some industries and occupations, although its impact is difficult to assess precisely.

The wage and salary component of hourly compensation rose faster in 1997 than in any previous year of the expansion. Annual increases in the employment cost index for wages and salaries in private industry amounted to 2.8 percent in both 1994 and 1995, but the increases of 1996 and 1997 were 3.4 percent and 3.9 percent respectively. Wages and salaries in the service-producing industries accelerated nearly a full percentage point in 1997, pushed up, especially, by sharp pay increases in the finance, insurance, and real estate sector, in which commissions and bonuses have recently been boosted by high levels of mortgage refinancing and trading activity. By contrast, hourly wages in the goods-producing industries slowed a couple of tenths of a percentage point in 1997; the annual gains in these industries have been around 3 percent, on average, in each of the past six years.

Although the costs of the fringe benefits that companies provide to their employees also picked up in 1997, the yearly increase of 2.3 percent was not large by historical standards. As in other recent years, benefit costs in 1997 were restrained by a variety of influences. Most notably, the price of health care continued to rise at a subdued pace, and the ongoing strength of the economy limited the need for payments by firms to state unemployment trust funds. Even though some firms reported seeing renewed sharp increases in health care costs during the year, the employment cost data suggest that most firms still were keeping those costs under fairly tight control.

With nominal hourly compensation in almost all industries moving ahead at a faster pace than inflation, workers' pay generally increased in real terms, and the real gains were substantial in many occupations. Indeed, the employment cost index does not capture some of the forms of compensation that employers have been using to attract and retain workers—stock options and signing bonuses, for example.

Prices

Indications of a slowing of inflation in 1997 were widespread in the various measures of aggregate price change. The consumer price index, which had picked up to more than a 3 percent rate of rise over the four quarters of 1996, increased slightly less than 2 percent over the four quarters of 1997 as energy prices turned down and increases in food prices slowed. The CPI excluding food and energy—a widely used gauge of the underlying trend of inflation—rose only 2¼ percent in 1997 after increases of 3 percent in 1995 and 2½ percent in 1996. The CPI for commodities other than food and energy rose about ½ percent over the four quarters of 1997 after moving up slightly more than 1 percent in 1996. Price increases for non-energy services, which have a much larger weight than commodities in the core CPI, also slowed a little in 1997; a 3 percent rise during the year was about ¼ percentage point less than the increase during 1996. Only small portions of the slowdowns between 1996 and 1997 in the total CPI and in the CPI excluding food and energy were the result of technical changes implemented by the Bureau of Labor Statistics.[1]

Other measures of aggregate price change also decelerated in 1997. The chain-type price index for gross domestic purchases—the broadest measure of prices paid by U.S. households, businesses, and governments—increased about 1½ percent during 1997 after moving up 2¼ percent in 1996. The chain-type price index for gross domestic product, a measure of price change for the goods and services produced in this country (rather than the goods and services purchased), increased 1¾ per-

1. Over the past three years, the Bureau of Labor Statistics has introduced a number of technical changes in its procedures for compiling the CPI, with the aim of obtaining a more accurate measure of price change. Typically, the changes have only a small effect on the results for any particular year, but their cumulative effects are somewhat larger and are tending to hold down the reported increases of recent years relative to what would have been reported with no changes in procedures. Apart from the procedural changes, the reported rate of rise from 1998 forward will also be affected by an updating of the CPI market basket, an action that the BLS undertakes approximately every ten years.

Alternative Measures of Price Change

Percent

Price measure	1996	1997
Fixed-weight		
Consumer price index	3.2	1.9
Excluding food and energy	2.6	2.2
Chain-type		
Personal consumption expenditures	2.7	1.5
Excluding food and energy	2.3	1.6
Gross domestic purchases	2.3	1.4
Gross domestic product	2.3	1.8

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the preceding year.

cent in the latest year after rising 2¼ percent in 1996. The steeper slowing of the price index for aggregate purchases relative to that for aggregate production was largely a reflection of the prices of imports, which fell faster in 1997 than in 1996. Falling computer prices were an important influence on many of these measures of aggregate price change—more so than on the CPI, which gave small weight to computers through 1997 but has started weighting them more heavily this year.

In real terms, imports of goods and services account for approximately 15 percent of the total purchases of households, businesses, and governments located in the United States. But that figure probably understates the degree of restraint that falling import prices have imposed on domestic inflation, because the lower prices for imports also make domestic producers of competing products less likely to raise prices. Prices have also been restrained by large additions to manufacturing capacity in this country, amounting to more than 5 percent in each of the past three years; this capacity growth helped to stave off the bottlenecks that so often have developed in the more advanced stages of other postwar business expansions. A gain in manufacturing production of more than 6 percent this past year was accompanied by only a moderate increase in the factory operating rate, which, at year-end, remained well below the highs reached in other recent expansions and the peak for this expansion, which was recorded about three years ago.

Reflecting the ample domestic supply and the effects of competition from goods produced abroad, the producer price index for finished goods declined about ¾ percent from the fourth quarter of 1996 to the fourth quarter of 1997; excluding food and energy, it rose only fractionally. Prices of domestically produced materials (other than food and energy) also rose only slightly, on net. The prices of raw industrial commodities, many of which are traded in international markets, declined over the year; the weakness of prices in these markets was especially pronounced in late 1997, when the crises in Asia were worsening. Industrial commodity prices fell further in the first couple of weeks of 1998, but they since have changed little, on balance. The producer price index fell sharply in January of this year; the index excluding food and energy declined slightly.

After moving up more than 4 percent in 1996, the consumer price index for food increased only 1¾ percent in 1997. Impetus for the large increase of 1996 had come from a surge in the price of grain, which peaked around the middle of that year; since then, grain prices have dropped back considerably. An echo of the up-and-down price pattern for grains appeared at retail in the form of sharp price increases for meats, poultry, and dairy products in 1996 followed by small to moderate declines for most of those products in 1997. Moderate price increases were posted at retail for most other food categories last year.

The CPI for energy has traced out an even bigger swing than the price of food over the past two years—a jump of 7½ percent over the four quarters of 1996 was followed by a decline of about 1 percent over the four quarters of 1997. As is usually the case in this sector, the key to these developments was the price of crude oil, which in 1997 more than reversed the run-up of the preceding year. Prices of oil have been held down in recent months by ample world supplies, the economic problems in Asia, and a mild winter.

Survey data on inflation expectations mostly showed moderate reductions during 1997 in respondents' views of the future rate of price increase, and some of the survey data for early 1998 have shown a more noticeable downward shift in inflation expectations. A lowering of inflation expectations has long been viewed as an essential ingredient in the pursuit of price stability, and the recent data are a sign that progress is still being made in that regard.

Credit, Money, Interest Rates, and Equity Prices

Credit and Depository Intermediation

The debt of the domestic nonfinancial sectors grew at a 4¾ percent rate last year, somewhat below the midpoint of the range established by the FOMC and less than in 1996, when it grew 5¼ percent. The deceleration was accounted for entirely by the federal component, which, because of the reduced budget deficit, rose less than 1 percent last year after having risen 3¾ percent in 1996. Nonfederal debt grew 6 percent, a bit more than in 1996, as the pickup in business borrowing more than offset the deceleration of household debt.

Depository institutions increased their share of credit flows in 1997, with credit on their books expanding 5¾ percent, up appreciably from growth in 1996. The growth of bank credit, adjusted to remove the effects of mark-to-market accounting rules, accelerated to an 8¼ percent pace, the largest rise in ten years; and banks' share of domestic nonfinancial debt outstanding climbed to its highest level since 1988. Bank credit accelerated in part because banks' holdings of securities—which had run off in 1995 and had been flat in 1996—expanded at a brisk pace last year; securities account for one-fourth of total bank credit. Loans, which make up the remainder of bank credit, also advanced a bit more quickly last year than in 1996, though more slowly than in 1995.

The increase in bank loans occurred despite a net decline in consumer loans on banks' books resulting both from sharply slower growth in loans originated by banks and from continued securitization of those loans. Real estate loans at banks, by contrast, posted solid growth last year. This category of credit benefited from a pickup in home mortgages, the rapid growth in home equity loans, which were substituting in part for consumer loans, an acceleration in commercial real estate lending, and the acquisition of thrift institutions by banks. Commercial and industrial loans expanded considerably last year, reflecting both the general rise in the demand by businesses for funds and an increase in banks' share of the nonmortgage business credit market as they competed vigorously for business loans by easing terms.

The rapid growth of banks' assets was facilitated by their continued high profitability and abundance of capital; at the end of the third quarter, nearly 99 percent of bank assets were at well-capitalized institutions. Problems with the repayment performance of consumer loans—which, while not deteriorating further, remained elevated by historical standards—hurt some banks; however, overall loan delinquency and charge-off rates stayed quite low, and measures of banks' profitability persisted at the elevated levels they have occupied for several years. Profits at a few large bank holding companies were reduced in the fourth quarter by trading losses resulting from the events in Asia. Nonetheless, the profits of the industry as a whole remained robust.

The profits and capital levels of thrift institutions, like those of banks, were high last year, and the thrifts also were aggressive lenders. The outstanding amount of credit extended by thrifts grew at about a 1½ percent pace last year, but this sluggishness reflected entirely the acquisitions of thrifts by commercial banks; among thrifts not acquired during the year, asset growth was similar to that of banks.

The Monetary Aggregates

Boosted in part by the need to fund substantial growth in depository credit, M3 shot up last year, expanding 8¾ percent; this growth was well above the 2 percent to 6 percent annual range, which was intended to suggest the rate of growth over the long run consistent with price stability. M3 was augmented by a shift in sources of funding—mostly at U.S. branches and agencies of foreign banks—from borrowings from related offices abroad, which are not included in M3, to large time deposits issued in the United States, which are. Also contributing to the strength in M3 was rapid growth in institution-only money funds, which reflected gains by these funds in the provision of corporate cash management services. Corporations that manage their own cash often keep their funds in short-term assets that are not included in M3.

Although growth of M2 did not match that of M3, it increased at a brisk 5½ percent rate last year. As the Committee had anticipated, the aggregate was somewhat above the upper bound of its 1 percent to 5 percent annual range, which also had been chosen to be consistent with expected M2 growth under conditions of price stability. Because short-term interest rates responded only slightly to System tightening in March, the opportunity cost of holding M2—the interest earnings forgone by owning M2 assets rather than money

Growth of Money and Debt

Percent

Period	M1	M2	M3	Domestic non-financial debt
Annual[1]				
1987	6.3	4.2	5.8	9.9
1988	4.3	5.7	6.3	8.9
1989	.5	5.2	4.0	7.8
1990	4.2	4.1	1.8	6.8
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.7
1993	10.6	1.3	1.1	5.1
1994	2.5	.6	1.7	5.1
1995	−1.6	3.9	6.1	5.4
1996	−4.5	4.6	6.9	5.2
1997	−1.2	5.6	8.7	4.7
Quarterly (annual rate)[2]				
1997:Q1	−1.4	5.1	8.0	4.3
Q2	−4.5	4.4	7.7	4.7
Q3	.3	5.4	8.1	4.1
Q4	.8	6.8	9.8	5.2

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.

market instruments such as Treasury bills—was about unchanged over the year. As M2 grew at about the same rate as nominal GDP, velocity was also essentially unchanged. The ups and downs of M2 growth last year mirrored those of the growth in nominal output. M2 expanded much more slowly in the second quarter than in the first, consistent with the cooling of nominal GDP growth and almost unchanged opportunity costs. In the second half of the year, M2 growth picked up, again pacing the growth of nominal GDP. In the fall, M2 may also have been boosted a little by the volatility in equity markets, which may have led some households to seek the relative safety of M2 assets.

For several decades before 1990, M2 velocity responded positively to changes in its opportunity costs and otherwise showed little net movement over time. This pattern was disturbed in the early 1990s in part by households' apparent decision to shift funds out of lower-yielding M2 deposits into higher-yielding stock and bond mutual funds, which raised M2 velocity even as opportunity costs were declining. The movements in the velocity of M2 from 1994 into 1997 appear to have again been explained by changes in opportunity costs, along with some residual upward drift. This drift suggests that some households may still have been in the process of shifting their portfolios toward non-M2 assets. There was no uptrend in velocity over the second half of last year, perhaps because of the declining yields on intermediate- and long-term debt and the greater volatility and lower average returns posted by stock mutual funds. However, given the aberrant behavior of velocity during the 1990s in general, considerable uncertainty remains about the relationship between the velocity and opportunity cost of M2 in the future.

M1 fell 1¼ percent last year. As has been true for the past four years, the growth of this aggregate was depressed by the adoption by banks of retail sweep programs, whereby balances in transactions accounts, which are subject to reserve requirements, are "swept" into savings accounts, which are not. Sweep programs benefit depositories by reducing their required reserves, which earn no interest. At the same time, they do not restrict depositors' access to their funds for transactions purposes, because the funds are swept back into transactions accounts when needed. The initiation of programs that sweep funds out of NOW accounts—until last year the most common form of retail sweep programs—appears to be slowing, but sweeps of household demand deposits have picked up, leaving the estimated total amount by which sweep account balances increased last year similar to that in 1996. Adjusted for the initial reduction in transactions accounts resulting from the introduction of new sweep programs, M1 expanded 6¼ percent, a little above its sweep-adjusted growth in 1996.

The drop in transactions accounts caused required reserves to fall 7¼ percent last year. Despite this decline, the monetary base grew 6 percent, boosted by a hefty advance in currency. Currency again benefited from foreign demand, as overseas shipments continued at the elevated levels seen in recent years. Moreover, domestic demand for currency expanded sharply in response to the strong domestic spending.

The Federal Reserve has been concerned that as the steady decline in required reserves of recent years is extended, the federal funds rate may become significantly more volatile. Required reserves are fairly predictable and must be maintained on only a two-week average basis. As a result, the unavoidable daily mismatches between reserves made available through open market operations and desired reserves typically have been fairly small, and their effect on the federal funds rate has been muted. However, banks also hold reserve balances at the Federal Reserve to avoid overdrafts after making payments for themselves and their customers. This component of the demand for reserves is difficult to predict, varies considerably from day to day, and must be fully satisfied each day. As required reserves have declined, the demand for balances at the Federal Reserve has become increasingly dominated by these more changeable daily payment-related needs. Nonetheless, federal funds volatility did not increase noticeably last year. In part this was because the Federal Reserve intervened more frequently than in the past with open market operations of overnight maturity in order to better match the supply of and demand for reserves each day. In addition, banks made greater use of the discount window, increasing the supply of reserves when the market was excessively tight. Significant further declines in reserve balances, however, do risk increased federal funds rate volatility, potentially complicating the money market operations of the Federal Reserve and of the private sector. One possible solution to this problem is to pay banks interest on their required reserve balances, reducing their incentive to avoid holding such balances.

Interest Rates and Equity Prices

Interest rates on intermediate- and long-term Treasury securities moved lower, on balance, last year. Yields rose early in the year as market participants became concerned that strength in demand would further tighten resource utilization margins and increase inflation unless the Federal Reserve took countervailing action. Over the late spring and summer, however, as growth moderated some and inflation remained subdued, these concerns abated significantly, and longer-term interest rates declined. Further reductions came in the latter part of the year as economic problems mounted in Asia. On balance, between the end of 1996 and the end of 1997, the yields on ten-year and thirty-year Treasury bonds fell about 70 basis points. Early this year, with the economic troubles in Asia continuing, the desire of investors for less risky assets, along with further reductions in the perceived risk of strong growth and higher inflation, pushed yields on intermediate- and long-term Treasury securities down an additional 25 to 50 basis points, matching their levels of the late 1960s and the early 1970s, when the buildup of inflation expectations was in its early stages.

Survey measures of expectations for longer-horizon inflation generally did move lower last year, but by less than the drop in nominal yields. As a result, estimates of the real longer-term interest rate calculated by subtracting these measures of expected inflation from nominal yields indicate a slight decline in real rates over the year. In contrast, yields on the inflation-indexed ten-year Treasury note rose about a quarter percentage point between mid-March (when market participants seem to have become more comfortable with the new security) and the end of the year. The market for the indexed securities is sufficiently small that their yields can fluctuate temporarily as a result of moderate shifts in supply or demand. Indeed, much of the rise in the indexed yield came late in the year, when, in an uncertain global economic environment, investors' heightened desire for liquidity may have made nominal securities relatively more attractive.

With real interest rates remaining low and corporate profits growing strongly, equities had another good year in 1997, and major stock indexes rose 20 percent to 30 percent. Although stocks began the year well, they fell with the upturn in interest rates in February. As interest rates subsequently declined and earnings reports remained quite upbeat, the markets again advanced, with most broad indexes of stock prices reaching new highs in the spring. Advances were much more modest, on balance, over the second half of the year. Valuations seemed already to have incorporated very robust earnings growth, and in October, deepening difficulties in Asia evidently led investors to lower their expectations for the earnings of some U.S. firms, particularly high-technology firms and money center banks. More rapid price advances have resumed of late, as interest rates fell further and investors apparently came to see the earnings consequences of Asian difficulties as limited.

Despite the strong performance of earnings and the slower rise of stock prices since last summer, valuations seem to reflect a combination of expectations of quite rapid future earnings growth and a historically small risk premium on equities. The gap between the market's forward-looking earnings–price ratio and the real interest rate, measured by the ten-year Treasury rate less a survey measure of inflation expectations, was at the smallest sustained level last year in the eighteen-year period for which these data are available. Declines in this gap generally imply either that expected real earnings growth has increased or that the risk premium over the real rate investors use when valuing those earnings has fallen, or both. Survey estimates of stock analysts' expectations of long-term nominal earnings growth are, in fact, the highest observed in the fifteen years for which these data are available. Because inflation has trended down over the past fifteen years, the implicit forecast of the growth in real earnings departs even further from past forecasts. However, even with this forecast of real earnings growth, the current level of equity valuation suggests that investors are also requiring a lower risk premium on equities than has generally been the case in the past, a hypothesis supported by the low risk premiums evident in corporate bond yields last year.

International Developments

The foreign exchange value of the dollar rose during 1997 in terms of the currencies of most of the United States' trading partners. From the end of December 1996 through the end of December 1997, the dollar on average gained 13 percent in nominal terms against the currencies of the other G-10 countries when those currencies are weighted by multilateral trade shares. In terms of a broader index of currencies that includes those of most industrial countries and several developing countries, the dollar on balance rose nearly 14 percent in real terms during 1997.[2] The trading desk of the New York Federal Reserve Bank did not intervene in foreign exchange markets during 1997.

During the first half of 1997, the dollar appreciated in terms of the currencies of the other industrial countries, as the continuing strength of U.S. economic activity raised expectations of further tightening of U.S. monetary conditions. Concerns about the implications of the transition to European Monetary Union

2. This index weights currencies in terms of the importance of each country in determining the global competitiveness of U.S. exports and adjusts nominal exchange rates for changes in relative consumer prices.

and perceptions that monetary policy was not likely to tighten significantly in prospective member countries also contributed to the tendency for the dollar to rise in terms of the mark and other continental European currencies. In response to varying indicators of the strength of the Japanese expansion, the dollar rose against the yen early in the year but then moved back down through midyear.

The crises in Asian financial markets dominated developments during the second half of the year and resulted in substantial appreciation of the dollar in terms of the currencies of Korea and several countries in Southeast Asia. The dollar also appreciated against the yen in response to evidence of financial sector fragility in Japan and faltering Japanese economic activity, which were likely to be exacerbated by the negative impact of the Asian situation on Japan. During the first weeks of 1998, the dollar has changed little, on average, in terms of the currencies of most other industrial countries, but it has moved down in terms of the yen.

Pronounced asset–price fluctuations in Southeast Asia began in early July when the Thai baht dropped sharply immediately following the decision by authorities to no longer defend the baht's peg. Downward pressure soon emerged on the currencies and equity prices of other southeast Asian countries, in particular Indonesia and Malaysia. Weakening balance sheet positions of nonfinancial firms and financial institutions, rising debt-service burdens, and financial market stresses that resulted in part from policies of pegging local currencies to the appreciating dollar prompted closer scrutiny of Asian economies. As foreign creditors came to realize the extent to which these Asian financial systems were undercapitalized and inadequately supervised, they became less willing to continue to lend, making it even more difficult for the Asian borrowers to meet their foreign currency obligations. Turbulence spread to Hong Kong in October. The depreciation of currencies elsewhere in Asia, in particular the decision by Taiwanese authorities to allow some downward adjustment of the Taiwan dollar, led market participants to question the commitment of Hong Kong authorities to the peg of the Hong Kong dollar to the U.S. dollar. In response, the Hong Kong Monetary Authority raised domestic interest rates substantially to defend the peg, driving down equity prices as a consequence. Near the end of the year, the crisis spread to Korea, whose economy and financial system were already vulnerable as a result of numerous bankruptcies of corporate conglomerates starting in January 1997; these bankruptcies of major nonfinancial firms further undermined Korean financial institutions and, combined with the depreciations in competitor countries, contributed to a loss of investor confidence. On balance, during 1997 the dollar appreciated significantly in terms of the Indonesian rupiah (139 percent), the Korean won (100 percent), and the Thai baht (82 percent), while it moved up somewhat less in terms of the Taiwan dollar (19 percent) and was unchanged in terms of the Hong Kong dollar, which remains pegged to the U.S. dollar. Since year-end, the dollar has appreciated significantly further, on balance, in terms of the Indonesian rupiah and is little changed in terms of the Korean won.

The emergence of the financial crisis is causing a marked slowdown in economic activity in these Asian economies. During the first half of last year, real output continued to expand in most of these countries at about the robust rates enjoyed in 1996. Since the onset of the crisis, domestic demand in these countries has been greatly weakened by disruption in financial markets, substantially higher domestic interest rates, sharply reduced credit availability, and heightened uncertainty. In addition, macroeconomic policy has been tightened somewhat in Thailand, the Philippines, Indonesia, and Korea in connection with international support packages from the International Monetary Fund (IMF) and other international financial institutions, and in connection with bilateral aid from individual countries. Announcement of agreement with the IMF on the support packages temporarily buoyed asset markets in each country, but concerns about the willingness or ability of governments to undertake difficult reforms and to achieve the stated macroeconomic goals remained. Additional measures to tighten the Korean program were announced in mid-December and included improved reserve management by the Bank of Korea, removal of certain interest rate ceilings, and acceleration of capital account liberalization and financial sector restructuring. With the encouragement of the authorities of the G-7 and other countries, banks in industrial countries have generally rolled over the majority of their foreign-currency-denominated claims on Korean banks during early 1998, as a plan for financing the external obligations of Korean financial institutions was being formulated. After the announcement on January 28 of an agreement in principle for the exchange of existing claims on Korean banks for restructured loans carrying a guarantee from the Korean government, the won stabilized. In the case of Indonesia, the support package was renegotiated and reaffirmed with the IMF in mid-January, though important elements of the approach of the Indonesian authorities remain in question as this report is submitted.

Signs that adjustment is proceeding within these Asian economies are already evident. For example, Thailand and Korea have registered strong improvements in their trade balances in recent months. Equity prices have recovered in Thailand, Indonesia, and Korea as well. At the same time, signs of rising inflation are beginning to emerge. In particular, consumer prices have accelerated in recent months in these three countries.

Spillover of the financial crisis to the economies of China, Hong Kong, and Taiwan has been limited to date. Steps to maintain the peg in Hong Kong have resulted in elevated interest rates, sharply lower equity prices, and increased uncertainty. However, in Taiwan, equity prices on balance rose nearly 18 percent in 1997 and have risen somewhat further so far this year. Real output growth in these three economies remained robust early in 1997 but may have slowed somewhat in China and Hong Kong in recent months.

Financial markets in some Latin American countries also came under pressure in reaction to the intensification of the crises in Asia in late 1997. After remaining quite stable earlier in the year, the Mexican peso dropped about 8 percent in terms of the U.S. dollar in late October; since then, it has changed little, on balance. In Brazil, exchange market turbulence abroad lowered market confidence in the authorities' ability to maintain that country's managed exchange rate regime; in response, short-term interest rates were raised 20 percentage points. The Brazilian exchange rate regime and the peg of the Argentine peso to the dollar have held. Real output growth in Mexico and Argentina remained healthy during 1997. In Brazil, growth fluctuated sharply during the year, with the high domestic interest rates and tighter macroeconomic policy stance that were put in place late in the year weakening domestic demand. During 1997, consumer price inflation slowed significantly in Mexico and Brazil and remained very low in Argentina.

In Japan, the economic expansion faltered in the second quarter as the effects on domestic demand of the April increase in the consumption tax exceeded expectations; in addition, crises in many of Japan's Asian trading partners late in the year weakened external demand and heightened concerns about the fragility of Japan's financial sector. The dollar rose about 10 percent against the yen during the first four months of 1997 as economic activity in the United States strengthened relative to that in Japan and as interest rate developments, including the FOMC policy move in March, favored dollar assets. These gains were temporarily reversed in May and June as market attention focused on the growing Japanese external surplus and tentative indications of improving real activity. However, subsequent evidence of disappointing output growth, revelations of additional problems in the financial sector, and concerns about the implications of turmoil elsewhere in Asia for the Japanese economy contributed to a rise in the dollar in terms of the yen during the second half of the year. On net, the dollar appreciated nearly 13 percent against the yen during 1997; so far in 1998, it has moved back down slightly, on balance.

In Germany and France, output growth rose in 1997 from its modest 1996 pace, boosted in both countries by the strong performance of net exports. Nevertheless, the dollar rose in terms of the mark and other continental European currencies through midyear, responding not only to stronger U.S. economic activity but also to concerns about the timetable for launching European Monetary Union (EMU), the process of the transition to a single currency, and the policy resolve of the prospective members. Later in the year the dollar moved back down slightly and then fluctuated narrowly in terms of the mark, as investors concluded that the transition to EMU was likely to be smooth, with the euro introduced on time on January 1, 1999, and with a broad membership. On balance, the dollar rose about 17 percent against the mark during 1997 and has varied little since then.

In the United Kingdom and Canada, real output growth was vigorous in 1997. All the components of U.K. domestic demand continued to expand strongly. In Canada, more robust private consumption spending and less fiscal restraint boosted real GDP growth from its moderate 1996 pace. Central bank official lending rates were raised in both countries during the year to address the threat of rising inflation. The value of the pound eased slightly in terms of the dollar over the year, whereas the Canadian dollar fell more than 4 percent in terms of the U.S. dollar. Much of the movement in the Canadian dollar came during the fourth quarter, as the crisis in Asia contributed to a weakening of global commodity prices and thus a likely lessening of Canadian export earnings. The Canadian dollar depreciated further early in 1998, reaching historic lows against the U.S. dollar in January, but it has rebounded with the tightening by the Bank of Canada in late January.

Long-term interest rates have generally declined in the other G-10 countries since the end of 1996. Japanese long-term rates have dropped about 90 basis points, with most of the decrease coming in the second half of last year as evidence of sluggish economic activity became more apparent. German long-term rates have also fallen about 80 basis points as expectations of tightening by the Bundesbank diminished, especially toward the end of the year. The turbulence in Asian asset markets likely contributed to inflows into bond markets in several of the industrial countries, including the United States. Long-term rates in the United Kingdom have declined about 150 basis points. Legislation to increase the independence of the Bank of England and repeated tightening of monetary policy during the year reassured markets that some slowing of the very rapid pace of economic growth was likely and that the Bank would be aggressive in resisting inflation in the future. Three-month market interest rates generally have risen in the other G-10 countries, although there have been exceptions. Rates have moved up the most in Canada (more than 180 basis points) and the United Kingdom (120 basis points), in response to several increases in official lending rates. German rates have risen about 40 basis points. Short-term rates in the countries that are expected to adopt a single currency on January 1 of next year converged toward the relatively low levels of German and French rates, with Italian rates declining more than 100 basis points over the year.

Equity prices in the foreign G-10 countries other than Japan moved up significantly in 1997. Despite some volatility in these markets, particularly in the fourth quarter following severe equity price declines in many Asian markets, increases in equity price indexes over 1997 ranged from 17 percent in the United Kingdom to almost 60 percent in Italy. In contrast, equity prices fell 20 percent in Japan. To date this year, equity prices in the industrial countries generally have risen.

The price of gold declined more than 20 percent in 1997 and fell further in early 1998, reaching lows not seen since the late 1970s. Open discussion and, in some cases, confirmation of central bank sales of gold contributed to the price decline. Downward adjustment of expectations of inflation in the industrial countries in general may have added to the selling pressure on gold. More recently, the price of gold has moved up slightly, on net.

Report on July 21, 1998

Monetary Policy and the Economic Outlook

The U.S. economy posted significant further gains in the first half of 1998. The unemployment rate dropped to its lowest level in nearly thirty years, and inflation remained subdued. Real output rose appreciably, on balance, although much of the advance apparently occurred early in the year. Household spending and business fixed investment, supported by the ongoing rise in equity prices and the continued low level of long-term interest rates, appear to have maintained considerable momentum this year. The sizable advance in capital spending and the resulting additions to the capital stock should help bolster labor productivity—the key to rising living standards.

Yet the news this year has not been uniformly good. The turmoil that erupted in some Asian countries last year has generated major concerns about the outlook for those economies and the repercussions for other nations, including the United States. Several Asian countries have had sharp contractions in economic activity, and others have experienced distinctly subpar growth. Heightened uneasiness among international investors has induced portfolio shifts away from Asia and, to some extent, from other emerging market economies.

These difficulties have created considerable uncertainty and risk for the U.S. economy, but they have also helped to contain potential inflationary pressures in the near term by reducing import prices and restraining aggregate demand. In particular, the substantial rise in the foreign exchange value of the dollar has boosted our real imports and—together with the slower growth in Asia—depressed our real exports. At the same time, the run-up in the dollar and slack economic conditions in Asia have helped produce a sharp drop in the dollar prices of oil and other commodities and have pushed down other import prices. Shifts in preferences toward dollar-denominated assets in combination with downward revisions to forecasts of inflation and demand have helped to reduce our interest rates; the lower interest rates have boosted household and business spending, offsetting a portion of the damping of demand from the foreign sector.

The Asian crisis is likely to continue to restrain U.S. economic activity in coming quarters. The size of the effect will depend in large part on how quickly the authorities in the Asian nations can put their troubled financial systems on a sounder footing and carry out other essential economic reforms. Deteriorating conditions in many countries during the past few months created added pressures for reform, and they underscored the depth and scope of the problems that must be addressed.

Despite the pronounced weakening of our trade balance, the already tight U.S. labor market has come under further strain this year owing to robust growth of domestic demand. As a result, the outlook for inflation has taken on a greater degree of risk. Consumer prices actually rose a bit less rapidly in the first half of 1998 than they did in 1997, but transitory factors—the drop in oil prices, the run-up in the dollar, and weak economic activity in Asia—exerted considerable downward pressure on domestic prices. These factors will not persist indefinitely. Meanwhile, the pool of individuals interested in working but who are not already employed has continued to shrink. The extraordinary tightness in labor markets has generated a rising trend of increases in wages and related costs, although faster productivity growth has damped the effect on business costs so far.

In conducting monetary policy in the first half of 1998, the Federal Open Market Committee (FOMC) closely scrutinized incoming information for signs that the strength of the economy and the taut labor market were likely to boost inflation and threaten the durability of the expansion. However, despite slightly larger increases in the consumer price index (CPI) in some months, inflation remained moderate on the whole. Moreover, the FOMC expected that aggregate demand would slow appreciably because of a rising trade deficit and a considerable slackening in domestic spending. Although the Committee was acutely aware of the uncertainties in the economic outlook, it believed that the deceleration in demand—and the associated modest easing of pressures on resources—could well be sufficient to limit any deterioration in underlying price performance. On balance, the FOMC chose to keep the intended federal funds rate at 5½ percent.

Monetary Policy, Financial Markets, and the Economy over the First Half of 1998

Output grew rapidly in the first quarter, with real gross domestic product (GDP) estimated to have risen 5½ percent at an annual rate. Business fixed investment soared after a weak fourth quarter, and consumption and housing expenditures expanded at a strong clip. In addition, contrary to the expectations of many forecasters, inventory investment rose substantially from its already hefty fourth-quarter pace, with the rise contributing more than 1½ percentage points to overall GDP growth. At the same time, the cumulative effect of the appreciation of the dollar and the faster growth of demand here than abroad resulted in a sharp drop in real net exports, with both rapid import growth and the first quarterly drop in exports in four years. Employment continued to advance briskly, and the unemployment rate held steady at 4¾ percent. Hourly compensation accelerated somewhat when measured on a year-over-year basis, but impressive productivity growth once again helped to restrain the increase in unit labor costs. The CPI rose only ¼ percent at an annual rate over the first three months of the year, as a sharp drop in energy prices offset price increases elsewhere.

Falling long-term interest rates and rising equity prices over the previous year provided substantial impetus to household and business spending in the first quarter. Interest rates dropped sharply further in early January, and although they moved up a little over the remainder of the quarter, nominal yields on long-term Treasury securities were among the lowest in decades. Interest rates continued to benefit from the improvement in the federal budget and the prospect of reduced federal borrowing in the future; rates were also restrained to a significant extent by the effects of the Asian crisis. Equity prices increased sharply in the first quarter, extending their remarkable gains of the previous three years in spite of disappointing news on corporate profits. Households and firms borrowed at a vigorous pace in the first quarter, and growth in the debt of domestic nonfinancial sectors picked up from the fourth quarter of 1997, as did the growth of the monetary aggregates.

At their March meeting, the members of the FOMC confronted unusual crosscurrents in the economic outlook. On the price side, the FOMC noted that, although the incoming data were quite favorable, transitory factors were possibly masking underlying tendencies toward higher inflation. Moreover, the available data on household and business spending confirmed the impressive strength of domestic demand and highlighted the possibility that developments in the external sector might not provide sufficient offset in coming quarters to avoid a buildup of inflation pressures. At the same time, the FOMC noted the substantial uncertainty surrounding the prospects for the Asian economies. Balancing these considerations, the FOMC kept its policy stance unchanged but noted that recent information had altered the inflation risks enough to make tightening more likely than easing in the period ahead.

The second quarter brought both a marked further deterioration in the outlook for Asia and some indications that the U.S. economy might be cooling. In Asia, evidence of steep output declines in several countries was combined with mounting concern that economic and financial problems in Japan were not likely to be resolved as quickly as many observers had hoped or expected. One result was a further rise in the exchange value of the dollar and a decline in long-term U.S. interest rates. Increasing investor concern about emerging market economies raised risk spreads on external debts in Asia, Russia, and Latin America.

The higher value of the dollar and the depressed income in many Asian countries continued to take their toll on U.S. exports and to boost imports in the second quarter. In addition, a marked slackening in the pace of inventory accumulation, which was amplified by the effects of a strike in the motor vehicle industry, was reflected in a sharp slowing in domestic demand. Nonetheless, the utilization of labor resources remained very high: In the second quarter, the unemployment rate averaged a bit less than 4½ percent, its lowest quarterly reading in nearly thirty years. The twelve-month change in average hourly earnings indicated that wages were rising somewhat more rapidly than they had a year earlier. And the CPI rose faster in the second quarter than in the first, mainly reflecting a smaller drop in energy prices.

Financial conditions in the second quarter and into July remained supportive of domestic spending. Yields on private securities declined, although less than Treasury yields, as quality spreads widened a bit. Equity prices rose further in early April before falling back over the next two months in response to renewed earnings disappointments. Prices then rebounded substantially, with most major indexes hitting record highs in July. The growth of money and credit slowed a little on balance from the first-quarter pace but remained buoyant. Banks and other lenders continued to compete vigorously, extending credit on generally favorable terms as they responded in part to the sustained healthy financial condition of most businesses and households.

The FOMC left the intended federal funds rate unchanged at its May and June–July meetings. At the May meeting, the FOMC reiterated its earlier concern that the robust expansion of domestic final demand, supported by very positive financial conditions, had raised labor market pressures to a point that might precipitate an upturn in inflation over time. Yet the FOMC believed that the growth of economic activity would slow. It also judged that the risk of significant further deterioration in Asia, which could disrupt global financial markets and impair economic activity in the United States, was rising somewhat.

Economic Projections for 1998 and 1999

The members of the Board of Governors and the Federal Reserve Bank presidents, all of whom participate in the deliberations of the FOMC, expect economic activity to expand moderately, on average, over the next year and a half. For 1998 as a whole, the central tendency of their forecasts for real GDP growth spans a range of 3 percent to 3¼ percent. For 1999, these forecasts center on a range of 2 percent to 2½ percent. The civilian unemployment rate, which averaged a bit less than 4½ percent in the second quarter of 1998, is expected to stay near this level through the end of this year and to edge higher in 1999. With labor markets remaining tight and some of the special factors that helped restrain inflation in the first half of 1998 unlikely to be repeated, inflation is anticipated to run somewhat higher in the second half of 1998 and in 1999.

The economy is entering the second half of 1998 with considerable strength in household spending and business fixed investment. Consumers are enjoying expanding job opportunities, rising real incomes, and high levels of wealth, all of which are providing them with the confidence and wherewithal to spend. These factors, in conjunction with low mortgage interest rates, are also bolstering housing demand. Business fixed investment appears robust as well:

Financial conditions remain conducive to capital spending, and firms no doubt are continuing to seek out opportunities for productivity gains in an environment of rapid technological change, falling prices for high-tech equipment, and tight labor markets.

Nonetheless, a number of factors are expected to exert some restraint on the expansion of activity in the quarters ahead. The demand for U.S. exports will continue to be depressed for a while by weak activity abroad, on average, and by the strong dollar, which will also likely continue to boost imports. The effects of these external sector developments on employment and income growth have yet to materialize fully. In addition, although financial conditions are generally expected to be supportive, real outlays on housing and business equipment have reached such high levels that gains from here are expected to be more moderate.

With the plunge in energy prices in early 1998 unlikely to be repeated, most FOMC participants expect the CPI for all urban consumers to rise more rapidly in the second half of 1998 than it did in the first half, resulting in an increase in the CPI of 1¾ percent to 2 percent for 1998 as a whole. The pickup in the second half should be limited, however, by further decreases in non-oil import prices, ample domestic manufacturing capacity, and low expected inflation. Looking ahead to next year, the central tendency is for an increase in the CPI of 2 percent to 2½ percent. Absent a further rise in the dollar, the fall in non-oil import prices should have run its course. Moreover, even with the expected edg-

Economic Projections for 1998 and 1999

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents: Range	Federal Reserve governors and Reserve Bank presidents: Central tendency	Administration
	1998		
Change, fourth quarter to fourth quarter [1]			
Nominal GDP	4¼–5	4½–5	4.2
Real GDP	2¾–3¼	3–3¼	2.4
Consumer price index [2]	1¼–2¼	1¾–2	1.6
Average level in the fourth quarter			
Civilian unemployment rate	4¼–4½	4¼–4½	4.8
	1999		
Change, fourth quarter to fourth quarter [1]			
Nominal GDP	4–5½	4¼–5	4.1
Real GDP	2–3	2–2½	2.0
Consumer price index [2]	1½–3	2–2½	2.1
Average level in the fourth quarter			
Civilian unemployment rate	4¼–4¾	4½–4¾	5.0

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

2. All urban consumers.

ing higher of the unemployment rate next year, the labor market will remain tight, suggesting potential ongoing pressures on available resources that would tend to raise inflation a bit. The FOMC will remain alert to the possibility of underlying imbalances in the economy that could generate a persisting pickup in inflation, which would threaten the economic expansion.

As noted in past monetary policy reports, the Bureau of Labor Statistics is in the process of implementing a series of technical adjustments to make the CPI a more accurate measure of price change. These adjustments and the regular updating of the market basket are estimated to have trimmed CPI inflation somewhat over 1995–98, and a significant further adjustment is scheduled for 1999. All told, the published figures for CPI inflation in 1999 are expected to be more than ½ percentage point lower than they would have been had the Bureau retained the methods and formulas in place in 1994. In any event, the FOMC will continue to monitor a variety of price measures besides the CPI as it attempts to gauge progress toward the long-run goal of price stability.

Federal Reserve officials project somewhat faster growth in real GDP and slightly higher inflation in 1998 than does the Administration. The Administration's projections for the growth in real GDP and inflation in 1999 are around the lower end of the FOMC participants' central tendencies.

Money and Debt Ranges for 1998 and 1999

At its most recent meeting, the FOMC reaffirmed the ranges for 1998 growth of money and debt that it had established in February: 1 percent to 5 percent for M2, 2 percent to 6 percent for M3, and 3 percent to 7 percent for the debt of the domestic nonfinancial sectors. The FOMC set these same ranges for 1999 on a provisional basis.

Once again, the FOMC chose the growth ranges for the monetary aggregates as benchmarks for growth under conditions of price stability and historical velocity behavior. For several decades before 1990, the velocities of M2 and M3 (defined as the ratios of nominal GDP to the aggregates) behaved in a fairly consistent way over periods of a year or more. M2 velocity showed little trend but varied positively from year to year with changes in a traditional measure of M2 opportunity cost, defined as the interest forgone by holding M2 assets rather than short-term market instruments such as Treasury bills. M3 velocity moved down a bit over time, as depository credit and the associated elements in M3 tended to grow a shade faster than GDP. In the early 1990s, these patterns of M2 and M3 behavior were disrupted, and the velocities of both aggregates climbed well above the levels that were predicted by past relationships. However, since 1994 the velocities of M2 and M3 have again moved roughly in accord with their pre-1990 experience, although their levels remain elevated.

The recent return to historical patterns does not imply that velocity will be fully predictable or even that all

Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1997	1998	Provisional for 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.

movements in velocity can be completely explained in retrospect. Some shifts in velocity arise from household and business decisions to adjust their portfolios for reasons that are not captured by simple measures of opportunity cost. Some shifts in velocity arise from decisions of depository institutions to create more or less credit or to fund credit creation in different ways. All these decisions are shaped by the rapid pace of innovation in financial institutions and instruments. Between 1994 and early 1997, M2 velocity drifted somewhat higher, probably owing to some reallocation of household savings into bond and equity markets. But M2 velocity has declined over the past year despite little change in its traditionally defined opportunity cost. One explanation may be that the flatter yield curve has reduced the return on longer-term investments relative to the bank deposits and money market mutual funds in M2. Another part of the story may be the booming stock market, which has reduced the share of households' financial assets represented by monetary assets and may have encouraged households to rebalance their portfolios by increasing their M2 holdings. M3 velocity has dropped more sharply over the past year, with strong growth in large time deposits and in institutional money funds that are increasingly used by businesses for cash management.

If the velocities of M2 and M3 follow their average historical patterns over the remainder of 1998 and the growth of nominal GDP matches the expectations of Federal Reserve policymakers, these aggregates will finish this year above the upper ends of their respective ranges. Part of this relatively rapid money growth reflects nominal GDP growth in excess of that consistent with price stability and sustainable growth of real output; the rest represents a decline in velocity. Absent unusual changes in velocity in 1999, policymakers' expectations of nominal GDP growth imply that M2 and M3 will be in the upper ends of their price-stability growth ranges next year. The debt of the domestic nonfinancial sectors is expected to remain near the middle of its range this year and in 1999.

In light of the apparent return of velocity changes to their pre-1990 behavior, some FOMC members have been giving the aggregates greater weight in assessing overall financial conditions and the thrust of monetary policy. However, velocity remains somewhat unpredictable, and all FOMC members monitor a wide variety of other financial and economic indicators to inform their policy deliberations. The FOMC decided that the money and debt ranges are best used to emphasize its commitment to achieving price stability, so it again set the ranges as benchmarks for growth under price stability and historical velocity behavior.

Economic and Financial Developments in 1998

The U.S. economy continued to perform well in the first half of the year. The economic difficulties in Asia and the strong dollar reduced the demand for our exports and intensified the pressures on domestic producers from foreign competition. But these effects were outweighed by robust domestic final demand, owing in part to supportive financial conditions, including a higher stock market, ample availability of credit, and long-term interest rates that in nominal terms were among the lowest in many years. Sharp swings in inventory investment were mirrored in considerable unevenness in the growth of real GDP, which appears to have slowed markedly in the second quarter after having soared to nearly 5½ percent at an annual rate in the first quarter. Nonetheless, over the first half as a whole, the rise in real output was large enough to support sizable gains in employment and to push the unemployment rate down to the range of 4¼ percent to 4½ percent, the lowest in decades.

The further tightening of labor markets in recent quarters has been reflected in a more discernible uptilt to the trend in hourly compensation. But price inflation remained subdued in the first half of the year, held down in part by a sharp decline in energy prices and lower prices for non-oil imports. Intense competition in product markets, ample plant capacity, ongoing productivity gains, and damped inflation expectations also helped to restrain inflation pressures in the face of tight labor markets.

The Household Sector

Consumer Spending

The factors that fueled the sizable increase in household expenditures in 1997 continued to spur spending in the first half of 1998: Growth in employment and real disposable income remained very strong, and households in the aggregate enjoyed significant further gains in net worth. Reflecting these developments, sentiment indexes suggest that consumers continued to feel extraordinarily upbeat about the current and prospective condition of the economy and their own financial situations.

In total, real consumer outlays rose at an annual rate of 6 percent in the first quarter, and the available data point to another large increase in the second quarter. Increases in spending were broad-based, but outlays for durable goods were especially strong. Declining prices and ongoing product innovation continued to stimulate demand for personal computers and other home electronic equipment. In addition, purchases of motor vehicles were sustained by a combination of solid fundamentals and attractive pricing. Indeed, since 1994, sales of light vehicles have been running at a brisk pace of 15 million units (annual rate), and in the second quarter, a round of very attractive manufacturers' incentives helped lift sales to a pace of 16 million units.

Spending on services also remained robust in the first half of the year, with short-run variations reflecting in part the effects of weather on household energy use; outlays on personal business services, including those related to financial transactions, and on recreation services continued to exhibit remarkable strength. In addition, real outlays for nondurable goods, which rose only moderately last year, grew about 6½ percent at an annual rate in the first quarter, and they appear to have posted another sizable increase in the second quarter.

Real disposable income—that is, after-tax income adjusted for inflation—remained on a strong uptrend in early 1998: It rose about 4 percent at an annual rate between the fourth quarter of 1997 and May 1998. This increase in part reflected a sharp rise in aggregate wages and salaries, which were boosted by sizable gains in both employment and real wage rates; dividends and nonfarm proprietors' incomes also rose appreciably. However, growth in after-tax income (as measured in the national income and product accounts) was restrained by large increases in personal income tax payments—likely owing in part to taxes paid on realized capital gains; capital gains—whether realized or not—are not included in measured income. Reflecting the movements in spending and measured income, the personal saving rate fell from an already low level of about 4 percent in 1997 to 3½ percent during the first five months of 1998.

Residential Investment

Housing activity continued to strengthen in the first half of 1998, especially in the single-family sector, where starts rose noticeably and sales of both new and existing homes soared. Indeed, the average level of single-family starts over the first five months of the year—1¼ million units at an annual rate—was 9 percent above the pace for 1997 as a whole. Moreover, surveys by the National Association of Homebuilders suggested that housing demand remained vigorous at midyear, and the Mortgage Bankers Association reported that loan applications for home purchases have been around all-time highs of late.

The strong demand for homes has contributed to some firming of house prices, which are now rising in the neighborhood of 3 percent to 5 percent per year, according to measures that control for shifts in the regional composition of sales and attempt to minimize the effects of changes in the mix of the structural features of houses sold. In nominal terms, these increases are well within the range of recent years; however, in real terms, they are among the largest since the mid-1980s—a development that should reinforce the investment motive for homeownership. Of course, rising house prices may make purchasing homes more difficult for some families. But, with income growth strong and mortgage rates around 7 percent (thirty-year conventional fixed-rate loans), homeownership is as affordable as it has been at any time in the past thirty years. Moreover, innovative programs that relax the standards for mortgage qualification are helping low-income families to finance home purchases. Also, stock market gains have probably boosted demand among higher-income groups, especially in the trade-up and second-home segments of the market.

After having surged in the fourth quarter of 1997, multifamily starts settled back to about 325,000 units (annual rate) over the first five months of 1998, a pace only slightly below that recorded over 1997 as a whole. Support for multifamily construction continued to come from the overall strength of the economy, which undoubtedly has stimulated more individuals to form households, as well as from low interest rates and an ample supply of financing. In addition, real rents picked up over the past year, and the apartment vacancy rate appears to be edging down.

Household Finance

Household net worth rose sharply in the first quarter, pushing the wealth-to-income ratio to another record high. Although the flow of new personal saving was quite small, the revaluation of existing assets added considerably to wealth, with much of these capital gains accumulated on equities held either directly or indirectly through mutual funds and retirement accounts. Of course, these gains have been distributed quite unevenly: The 1995 Survey of Consumer Finances reported that 41 percent of U.S. families own equities in some form, but that families with higher wealth own a much larger share of total equities.

In the first quarter of this year, the run-up in wealth, together with low interest rates and high levels of confidence about future economic conditions, supported robust household spending and borrowing. The expansion of household debt, at an annual rate of 7¾ percent, was above last year's pace and once again outstripped growth in disposable income. The consumer credit component of household debt grew 4½ percent at an annual rate in the first quarter, a pace roughly double that for the fourth quarter of last year but near the 1997 average. Preliminary data for April and May point to a somewhat smaller advance in the second quarter.

Mortgage debt increased 8¼ percent at an annual rate in the first quarter, the same as its fourth-quarter advance and a little above its 1997 growth rate. Fixed-rate mortgage interest rates were 15 basis points lower in the first quarter than three months earlier and 75 basis points lower than a year earlier, which encouraged both new home purchases and a surge of refinancing of existing mortgages. Within total gross mortgage borrowing, the flattening of the yield curve made adjustable-rate mortgages less attractive relative to fixed-rate mortgages, and their share of originations reached the lowest point in recent years. Net borrowing can be boosted by refinancings if households ''cash out'' some housing equity, but the magnitude of this effect is unclear. In any event, continued expansion of bank real estate lending and a high level of mortgage applications for home purchases suggest a further solid gain in mortgage debt in the second quarter. Home equity credit at banks increased only 2 percent at an annual rate from the fourth quarter of 1997 through June 1998 after having posted a 15½ percent gain last year; this slowdown may reflect a diminished substitution of mortgage debt for consumer debt or simply the increase in mortgage refinancings, which allowed households to pay down more expensive home equity debt or to convert housing equity into cash in a more advantageous manner.

Despite the further buildup of household indebtedness, financial stress among households appears to have stabilized after several years of deterioration. In the aggregate, estimated required payments of loan principal and interest have held about steady relative to disposable personal income—albeit at a high level—since 1996. Over this period, the effect on debt burdens of faster growth of debt than income has been roughly offset by declining interest rates and the associated refinancing of higher interest-rate debt, as well as by a shift toward mortgage debt (which has a longer repayment period). Various measures of delinquency rates on consumer loans leveled off or declined in 1997, and delinquency rates on mortgages have been at very low levels for several years. Personal bankruptcy filings reached a new record high in the first quarter of 1998, but this represented only 6 percent more filings than four quarters earlier, which is the smallest such change in three years.

These developments have apparently suggested to banks that they have sufficiently tightened terms and standards on consumer loans. In the Federal Reserve's May Senior Loan Officer Opinion Survey on Bank Lending Practices, relatively few banks, on net, reported tightening standards on credit card or other consumer loans. Little change was reported in the terms of consumer loans.

The Business Sector

Fixed Investment

Real business fixed investment appears to have posted another hefty gain over the first half of 1998 as spending continued to be boosted by positive sales expectations in many industries; favorable financial conditions; and a perceived opportunity, if not a necessity, for firms to install new technology in order to remain competitive. The exceptional growth of investment since the early 1990s has been facilitated in part by the increase in national saving associated with the elimination of the federal budget deficit. It has resulted in considerable modernization and expansion of the nation's capital stock, which have been important in the improved performance of labor productivity over the past few years and which should continue to lift productivity in the future. Moreover, rapid investment in the manufacturing sector in recent years has resulted in large additions to productive capacity, which have helped keep factory operating rates from rising much above average historical levels in the face of appreciable increases in output.

Real outlays for producers' durable equipment, which have been rising more than 10 percent per year, on average, since the early 1990s, moved sharply higher in the first half of 1998. All major categories of equipment spending recorded sizable gains in the first quarter; but, as has been true throughout the expansion, outlays for computers rose especially rapidly. Real computer outlays received particular impetus in early 1998 from extensive price-cutting. Purchases of communications equipment have also soared in recent quarters; the rise reflects intense pressures to add capacity to accommodate the growth of networking; the rapid pace of technological advance, especially in wireless communications; and regulatory changes. As for the second quarter, data on shipments, coupled with another steep decline in computer prices, point to a further substantial increase in real computer outlays. Spending on motor vehicles apparently continued to advance as well while demand for other types of capital equipment appears to have remained brisk.

In total, real outlays on nonresidential construction flattened out in 1997 after four years of gains, and they remained sluggish in early 1998. Construction of office buildings remained robust in the first half of this year, after having risen at double-digit rates in 1996 and 1997, and outlays for institutional buildings continued to trend up. However, expenditures for other types of structures were lackluster. Nonetheless, the economic fundamentals for the sector as a whole remain quite favorable: Vacancy rates for office and retail space have continued to fall; real estate prices, though still well below the levels of the mid-1980s in real terms, have risen appreciably in recent quarters; and funding for new projects remains abundant.

Inventory Investment

The pace of stockbuilding by nonfarm businesses picked up markedly in 1997 and is estimated to have approached $100 billion (annual rate) in the first quarter of 1998—equal to an annual rate increase of 8½ percent in the level of inventories and accounting for more than 1½ percentage points of that quarter's growth in real GDP. The first-quarter accumulation was heavy almost across the board. Among other things, it included a large increase in stocks of petroleum as the unusually warm weather reduced demand for refined products and low prices provided an incentive for refiners and distributors to accumulate stocks. However, overall sales were also very strong, and with only a few exceptions—notably, semiconductors, chemicals, and textiles—stocks did not seem out of line with sales. In any event, fragmentary data for the second quarter point to a considerable slowing in inventory investment that is especially evident in the motor vehicle sector, where stocks were depleted by the combination of strong sales and General Motors production shortfalls. In addition, petroleum stocks appear to have grown less rapidly than they did in the first quarter, and stock-building elsewhere slowed sharply in April and May.

Corporate Profits and Business Finance

Businesses have financed a good part of their investment this year through continued strong cash flow, but they have also increased their reliance on financial markets. Economic profits (book profits after inventory valuation and capital consumption adjustments) have run at 12 percent of national income over the past year, well above the 1980s peak of roughly 9 percent. However, the strength in profits has resulted partly from the low level of net interest payments, leaving total capital income at roughly the same share of national income as at the 1980s peak. Overall, a major portion of the increase in profits between the 1980s and the 1990s represents a realignment of returns from debt-holders to equity-holders.

Although their level remains high, the growth of profits has slowed: Economic profits rose 4¾ percent at an annual rate in the first quarter, compared with 9½ percent between the fourth quarter of 1996 and the fourth quarter of 1997. This slowdown may have resulted from various causes, including rising employee compensation and the Asian financial crisis. Quantifying the effect of the Asian turmoil is difficult: Although only a small share of the profits of U.S. companies is earned in the directly affected Asian countries, the crisis has reduced the prices of U.S. imports and thereby put downward pressure on domestic prices.

Nonfinancial businesses realized annualized economic profit growth of only 1¼ percent in the first quarter. Because capital expenditures (including inventory investment) grew much faster, the financing gap—the excess of capital expenditures over retained earnings—widened. As a result, these businesses used less of their cash flow to retire outstanding equity and continued to borrow at the rapid pace of the fourth quarter of 1997, with debt expanding at an annual rate of 9 percent in the first quarter of 1998. Outstanding amounts of both bonds and commercial paper rose especially sharply. The decline in long-term interest rates around year-end encouraged companies to lock in those yields, and gross bond issuance reached a record high in the first quarter of 1998. Borrowing by nonfinancial businesses increased at a slightly slower but still rapid clip in the second quarter, with little change in outstanding commercial paper but very strong net bond issuance and some rebound in bank loans.

Despite persistent high borrowing, external funding for businesses remained readily available on favorable terms. The spreads between yields on investment-grade bonds and yields on Treasury bonds widened a little from low levels, with investors favoring Treasury securities over corporate securities as a haven from Asian turmoil and, perhaps, with disappointing profits leading to some minor reassessment of the underlying risk of private obligations. The spreads on high-yield bonds also increased, in part because of heavy issuance of these bonds this spring, but they remain narrow by historical standards. In the Federal Reserve's May survey on bank lending practices, banks reported negligible change in business loan standards; moreover, yield spreads on bank loans remained low for both large and small firms. Surveys by the National Federation of Independent Business suggest that small firms have been facing little difficulty in obtaining credit.

The ready availability of credit has stemmed importantly from the healthy financial condition of many businesses, which have enjoyed an extended period of economic expansion and robust profits. The aggregate debt-service burden for nonfinancial corporations, measured as the ratio of net interest payments to cash flow, dropped substantially between 1990 and 1996 and remains modest, despite edging up in the first quarter of this year. In addition, most measures of financial distress have shown favorable readings. The delinquency rate on commercial and industrial bank loans has stayed very low since 1995, preserving the dramatic decline that occurred in the first half of the decade. After moving up a little in 1996 and 1997, business failures decreased in the first five months of 1998; the liabilities of failed businesses as a share of total liabilities was less than one-quarter the value reached in the early 1990s. At the same time, Moody's upgraded significantly more debt than it downgraded, and the rate of junk bond defaults stayed close to its low 1997 level.

Net equity issuance was less negative in the first quarter of this year than in the fourth quarter of last year, but nonfinancial corporations still retired, on net, about $100 billion of equity at an annual rate. The wave of merger announcements this spring will likely generate strong share retirements over the remainder of the year. Gross equity issuance in the first half of 1998 was close to its pace of the past several years, although investors seemed somewhat cautious about initial public offerings.

The Government Sector

Federal

The incoming news on the federal budget continues to be very positive. Over the twelve months ending in May 1998, the unified budget registered a surplus of $60 billion, compared with a deficit of $65 billion during the twelve months ending in May 1997. Soaring receipts continued to be the main force driving the improvement in the budget, but subdued growth in outlays also played a key role. If the latest projections from the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO) are realized, the unified budget for fiscal year 1998 as a whole will show a surplus of roughly $40 billion to $65 billion.

With the federal budget having shifted into surplus, the federal government is now augmenting, rather than drawing on, the pool of national saving. In fact, the improvement in the government's budget position over the past several years has been large enough to generate a considerable rise in gross domestic saving despite a decline in the private saving rate; all told, gross saving by households, businesses, and governments increased from about 14½ percent of gross national product in the early 1990s, when federal saving was at a cyclical low, to more than 17 percent of GNP in recent quarters. This increase in domestic saving, along with increased borrowing from abroad, has financed the surge in domestic investment in this expansion. Moreover, this year's budgetary surplus will continue to pay benefits in future years because it allows the government to reduce its outstanding debt, which implies smaller future interest payments and, all else equal, makes it easier to keep the budget in surplus.

If, in fact, the budget outcome over the next several years is as favorable as the OMB and the CBO now anticipate under current policies, the reduction in the outstanding debt could be substantial.

Federal receipts in the twelve months ending in May 1998 were 10 percent higher than in the same period a year earlier—roughly twice the percentage increase for nominal GDP over the past year. Individual income tax receipts, which have been rising at double-digit rates since the mid-1990s, continued to do so over the past year as the surge in capital gains realizations likely persisted and sizable gains in real income raised the average tax rates on many households (the individual income tax structure being indexed for inflation but not for growth in real incomes). In contrast to the ongoing strength in individual taxes, corporate tax payments increased only moderately over the past year, echoing the deceleration in corporate profits.

Federal expenditures in the twelve months ending in May 1998 were only 1½ percent higher in nominal terms than during the twelve months ending in May 1997, with restraint evident in most categories. Outlays for defense were about unchanged, as were those for income security programs. In the latter category, outlays for low-income support fell as economic activity remained robust, welfare reform capped outlays for family assistance, and enrollment rates in other programs dropped. In the health area, spending on Medicaid picked up somewhat after a period of extraordinarily small increases, whereas growth in spending for Medicare slowed, in part because of the programmatic changes that were legislated in 1997. And, with interest rates little changed and the stock of outstanding federal debt no longer rising, net interest payments stabilized.

Real federal outlays for consumption and gross investment, the part of federal spending that is counted in GDP, fell about 2 percent between the first quarters of 1997 and 1998. The decrease was concentrated in real defense spending, which fell about 2¾ percent, roughly the same as over the preceding four quarters; real nondefense spending was unchanged, on balance. In the first quarter, real federal outlays fell at a 10 percent annual rate; the drop reflected a plunge in defense spending, which appears to have been reversed in the second quarter.

With debt held by the public close to $4 trillion, the government will continue to undertake substantial gross borrowing to redeem maturing securities. The government will also continue to adjust its issuance of short-term debt to accommodate seasonal swings in receipts and spending. The surplus during the first half of calendar year 1998—boosted by the huge inflow of individual income tax receipts—enabled the Treasury to reduce its outstanding debt $57 billion while augmenting its cash balance $40 billion. The reduction in debt included net paydowns of coupon securities and bills.

Looking ahead to projected surpluses for coming years, the Treasury announced that it will no longer issue three-year notes and will auction five-year notes quarterly rather than monthly. Over the past several years, the Treasury has accommodated the surprising improvement in federal finances by substantially reducing both bill and coupon issuance. The Treasury hopes that concentrating future coupon offerings in larger, less-frequent auctions will maintain the liquidity of these securities while still allowing for sufficient issuance of bills to maintain their liquidity as well. These changes are also intended to prevent further upcreep in the average maturity of the outstanding debt held by private investors, now standing at sixty-five months. The Treasury continues to work on encouraging the market for inflation-indexed securities, issuing a thirty-year indexed bond in April to complement the existing five-year and ten-year indexed notes.

State and Local

The fiscal position of state and local governments in the aggregate has also remained quite favorable. Strong growth of household income and consumer spending has continued to lift revenues, despite numerous small tax cuts, and governments have continued to hold the line on expenditures. As a result, the consolidated current account of the sector, as measured by the surplus (net of social insurance funds) of receipts over current expenditures in the national income and product accounts, held steady in the first quarter at around $35 billion (annual rate), roughly where it has been since 1995. State governments, which have reaped the main benefits of rising income taxes, have fared especially well: Indeed, all of the forty-seven states whose fiscal years ended by June 30 appear to have achieved balance or to have run surpluses in their general funds budgets in fiscal year 1998.

Real expenditures for consumption and gross investment by states and localities have been rising about 2 percent per year, on average, since the early 1990s, and the increase in spending for the first half of 1998 appears to have been a bit below that trend. These governments added jobs over the first half of the year at about the same rate as they did over 1997 as a whole. However, real construction outlays, which have been drifting down since early 1997, posted a sizable decline in the first quarter, and monthly data suggest that spending dropped further in the spring. The weakness in construction spending over the past year has cut across the major categories of construction and is puzzling in light of the sector's ongoing infrastructure needs and the good financial shape of most governments.

State and local governments responded to the low interest rates during the first half of the year by borrowing at a rapid rate, both to refinance outstanding debt and to fund new capital projects. Because debt retirements eased in the first quarter relative to the fourth quarter of 1997, net issuance increased substantially. Meanwhile, credit quality of state and local debt continued to improve, with much more debt upgraded than downgraded in the first half of the year.

External Sector

Trade and the Current Account

The nominal trade deficit on goods and services widened to $140 billion at an annual rate in the first quarter from $114 billion in the fourth quarter of last year. The current account deficit for the first quarter reached $189 billion (annual rate), 2¼ percent of GDP, compared with $155 billion for the year 1997. A larger deficit on net investment income as well as the widening of the deficit on trade in goods and services contributed to the deterioration in the first quarter of the current account balance. In April and May, the trade deficit increased further.

The quantity of imports of goods and services again grew vigorously in the first quarter. The annual rate of expansion at 17 percent exceeded that for 1997 and reflected the continued strength of U.S. economic activity and the effects of past dollar appreciation. Imports of consumer goods, automotive products, and machinery were particularly robust. Preliminary data for April and May suggest that real import growth remained strong. Non-oil import prices fell sharply through the second quarter, reflecting the rise in the exchange value of the dollar over the past year.

The quantity of exports of goods and services declined at an annual rate of 1 percent in the first quarter, the first such absolute drop since the first quarter of 1994. The weakness of economic activity in a number of our trading partners, with absolute declines in several economies in Asia, and the strength of the dollar, which also partly resulted from the Asian financial crises, largely account for the abrupt halt in the growth of real exports after a 10 percent rise last year. Declines were recorded for machinery, industrial supplies, and agricultural products. Exports to the emerging market economies in Asia, particularly Korea, as well as exports to Japan were down sharply while exports to western Europe and Canada rose moderately. Preliminary data for April and May suggest that real exports declined further.

The Capital Account

Foreign direct investment in the United States and U.S. direct investment abroad continued at near record levels in the first quarter of 1998, spurred by strong merger and acquisition activity across national borders.

In the first quarter, the booming U.S. stock market continued to attract large foreign interest. Net purchases by private foreigners were $29 billion, following record net purchases of $66 billion in the year 1997. Foreign net purchases of U.S. corporate bonds remained substantial, and net purchases of U.S. government agency bonds reached a record $21 billion. In contrast, net sales of U.S. Treasury securities by private foreigners, particularly large net sales booked at a Caribbean financial center, were recorded in the first quarter. U.S. net purchases of foreign stocks and bonds were modest.

Foreign official assets in the United States increased $10 billion in the first quarter. However, the net increase in the second quarter was limited by large dollar sales by Japan.

The Labor Market

Employment and Labor Supply

Labor demand remained robust during the first half of 1998. Growth in payroll employment averaged 243,000 per month, only a little less than in 1997 and well above the rate consistent with the growth in the working-age population. The unemployment rate held steady in the first quarter at 4¾ percent but dropped to the range of 4¼ percent to 4½ percent in the second quarter.

The services industry, which accounts for about 30 percent of nonfarm employment, continued to be the mainstay of employment growth over the first half of 1998, posting increases of 115,000 per month, on average. Within services, hiring remained brisk at computer and data-processing firms and at firms providing engineering and managerial services, but payrolls at temporary help agencies rose much less rapidly than they had over the preceding few years—apparently in part reflecting difficulties in finding workers, especially for highly skilled and technical positions. Sizable increases were also posted at wholesale and retail trade establishments and in the finance, insurance, and real estate category. Construction payrolls were bounced around by unusual winter weather but, on average, rose a brisk 21,000 per month—about the same as in 1997.

In contrast to the robust gains elsewhere, manufacturing firms curbed their hiring in the first half of 1998 in the face of slower growth in factory output. After having risen a torrid 6¼ percent in 1997, factory output increased at an annual rate of about 2½ percent between the fourth quarter of last year and May 1998; the deceleration reflected the effects of the Asian crisis as well as a downshift in motor vehicle assemblies and the completion of the 1996–97 ramp-up in aircraft production. In June, factory output is estimated to have fallen ½ percent; the GM strike accounted for the decline.

The labor force participation rate—which measures the percentage of the working-age population that is either employed or looking for work—trended up mildly over the past couple of years and stood at 67.1 percent, on average, in the first half of 1998, slightly above the previous cyclical highs achieved in late 1989 and early 1990. Participation among adult women has picked up noticeably in recent years, after having risen only slowly in the first half of the 1990s, and participation among adult men, which had been on a gradual downtrend through mid-decade, appears to have leveled out. In contrast, participation rates for teenagers, for whom school enrollment rates have risen, have continued to sag after having dropped sharply in the early 1990s. Strong labor demand clearly contributed importantly to the rise in overall participation over the past several years, but the expansion of the earned income tax credit and changes in the welfare system probably provided added stimulus.

Labor Costs and Productivity

Firms no doubt are continuing to rely heavily on targeted pay increases and incentives like stock options and bonuses to attract and retain workers. But the tightness of the labor market also appears to be exerting some upward pressure on traditional measures of hourly compensation, which have exhibited a somewhat more pronounced uptrend of late. Indeed, the twelve-month change in the employment cost index (ECI) for private industry workers picked up to 3½ percent in March, compared with 3 percent for the twelve months ending in March 1997 and 2¾ percent for the twelve months ending in March 1996. Hourly compensation accelerated especially rapidly for employees of finance, insurance, and real estate firms, some of whom received sizable bonuses and commissions. However, the acceleration was fairly widespread across industries and occupations and, given the relatively small rise in consumer prices over the past year, implies a solid increase in real pay for many workers.

The acceleration in hourly compensation costs over the past year resulted mainly from faster growth of wages and salaries, which rose 4 percent over the twelve months ending in March; this increase was about ½ percentage point larger than the one recorded over the preceding twelve months. Separate data on average hourly earnings of production or nonsupervisory workers also show an ongoing acceleration of wages: The twelve-month change in this series was 4.1 percent in June, ½ percentage point above the reading for the preceding twelve months.

Benefits costs have generally remained subdued, with the increase over the year ending in March amounting to only about 2¼ percent. According to the ECI, employer payments for health insurance have picked up moderately in recent quarters after having been essentially flat over the previous couple of years, and indications are that further increases may be in the offing. Insurers whose profit margins had been squeezed in recent years by pricing strategies designed to gain market share reportedly are raising premiums, and many managed care plans are adding innovations that, while offering greater flexibility and protections to consumers, may boost costs. Additional upward pressure on premiums apparently has come from higher spending on prescription drugs. Among other major components of benefits, rising equity prices have reduced the need for firms to pay into defined benefit plans, and costs for state unemployment insurance and workers' compensation have fallen sharply.

Labor productivity in the nonfarm business sector posted another sizable advance in the first quarter of 1998, bringing the increase over the year ending in the first quarter to an impressive 2 percent.[3] Taking a slightly longer perspective, productivity has risen a bit more than 1½ percent per year, on average, over the past three years, after having risen less than 1 percent per year, on average, over the first half of the decade. At least in part, the recent strong productivity growth has likely been a cyclical response to the marked acceleration of output. But it is also possible that the high levels of business investment over the past several years—and the associated rise in the amount of capital per worker—are translating into a stronger underlying productivity trend. In addition, productivity apparently is being buoyed by the assimilation of new technologies into the workplace. In any event, the faster productivity growth of late is helping to offset the effects of higher hourly compensation on unit labor costs and prices, thereby allowing wages to rise in real terms.

Prices

Price inflation remained quiescent in the first half of this year. After having increased 1¾ percent in 1997, the consumer price index slowed to a crawl in early 1998 as energy prices plummeted, and it recorded a rise of only about 1½ percent at an annual rate over the first six months of the year. The increase in the CPI excluding food and energy—the so-called "core CPI"—picked up to 2½ percent (annual rate) over the first half of the year. However, this pickup follows some unusually small increases in the second half of 1997, and the

Alternative Measures of Price Change

Percent

Price measure	1996:Q1 to 1997:Q1	1997:Q1 to 1998:Q1
Fixed-weight		
Consumer price index	2.9	1.5
Excluding food and energy	2.5	2.3
Chain-type		
Personal consumption expenditures	2.6	1.0
Excluding food and energy	2.3	1.4
Gross domestic product	2.2	1.4

NOTE. Changes are based on quarterly averages.

3. According to the published data, productivity rose 1.1 percent at an annual rate in the first quarter. However, these data are distorted by inconsistencies in the measurement of hours associated with varying lengths of pay periods across months. Although the Bureau of Labor Statistics has already revised the monthly hours and earnings data to account for these inconsistencies, it will not update the productivity statistics until August. All else being equal, adjusting the productivity data to reflect the Bureau's revisions to hours would substantially raise productivity growth in the first quarter, but it would have little effect on the change over the four quarters ending in the first quarter.

twelve-month change has held fairly steady at about 2¼ percent since late last summer. The chain-type price index for personal consumption expenditures on items other than food and energy rose only 1½ percent over the year ending in the first quarter of 1998—the most recent information available; this measure typically rises less rapidly than does the core CPI, in part because it is less affected by so-called "substitution bias."

The relatively favorable price performance in the first half of 1998 reflected a number of factors that, taken together, continued to exert enough restraint to offset the upward pressures from strong aggregate demand and high levels of labor utilization. One was the drop in oil prices. In addition, non-oil import prices continued to fall, thus further lowering input costs for many domestic industries and limiting the ability of firms facing foreign competition to raise prices for fear of losing sales to producers abroad. Prices of manufactured goods were also held in check by the sizable increase in domestic industrial capacity in recent years and by developments in Asia, which, among other things, led to a considerable softening of commodity prices. Moreover, the various surveys of consumers and forecasters suggest that inflation expectations stayed low—even declined in some measures. For example, according to the Michigan survey, median one-year inflation expectations dropped a bit further this year, after having held fairly steady over 1996 and 1997, and inflation expectations for the next five to ten years edged down from about 3 percent, on average, in 1996 and 1997 to 2¾ percent in the second quarter of 1998.

The CPI for goods other than food and energy rose at an annual rate of 1 percent over the first six months of 1998, only a bit above the meager ½ percent rise over 1997 as a whole. In the main, the step-up reflected a turnaround in prices of used cars and trucks, and prices of tobacco products and prescription drugs also rose considerably faster than they had in 1997. More generally, prices continued to be restrained by the effect of the strong dollar on prices of import-sensitive goods. For example, prices of new vehicles fell slightly over the first half of the year, while prices of other import-sensitive goods—such as apparel and audio-video equipment—were flat or down. In the producer price index, prices of capital equipment were little changed, on balance, over the first half of 1998; they, too, were damped by the competitive effects of falling import prices.

The CPI for non-energy services increased 3 percent over the first six months of 1998, about the same as last year's pace. After having fallen somewhat last year, airfares picked up in the first half of the year, and owner's equivalent rent seems to be rising a bit faster than it did in 1997. In addition, increases in prices of medical services, which had slowed to about 3 percent per year in 1996–97, have been running somewhat higher so far this year. Price changes for most other major categories of services were similar to or smaller than those recorded in 1997.

Energy prices fell sharply in early 1998, as the price of crude oil came under severe downward pressure from weak demand in Asia, a decision by key OPEC producers to increase output, and a relatively warm winter in the Northern Hemisphere. After having averaged about $20 per barrel in the fourth quarter of 1997, the spot price of West Texas intermediate dropped to a monthly average of $15 per barrel in March, where it more or less remained through the spring. Crude prices dropped sharply in June following reports of high levels of inventories and revised estimates of oil consumption in Asia but have since firmed in response to an agreement by major oil producers to restrict supply in the months ahead; they now stand at $14½ per barrel. Reflecting the decline in crude prices, retail energy prices fell at an annual rate of 12 percent over the first half of the year, led by a steep drop in gasoline prices.

Developments in the agricultural sector also helped to restrain overall inflation in the first half of this year. Excluding the prices of fruits and vegetables—which tend to be bounced around by short-term swings in the weather—food prices have been rising a scant 0.1 percent per month, on average, since late 1997. Although farmers in some regions of the country are experiencing more prolonged weather problems, conditions in the major crop-producing areas of the Midwest still look relatively favorable, and it appears that aggregate farm production will be sufficient to maintain ample supplies over the coming year, especially in the context of sluggish export demand.

Credit and the Monetary Aggregates

Credit and Depository Intermediation

The total debt of U.S. households, governments, and nonfinancial businesses increased at an annual rate of 5¾ percent from the fourth quarter of 1997 through May of this year. Domestic nonfinancial debt now stands a little above the midpoint of the 3 percent to 7 percent range established by the FOMC for 1998. Debt growth has picked up since 1997, as an acceleration of private credit associated with strong domestic demand and readily available supply has more than offset reduced federal borrowing. Indeed, federal debt declined 1¼ percent at an annual rate between the fourth quarter of 1997 and May 1998, whereas nonfederal debt increased 8¼ percent annualized over the same period. The growth of nonfederal debt has slowed only slightly over the past several months.

Credit on the books of depository institutions rose at roughly the same pace as total credit in the first half of the year. Commercial bank credit advanced rapidly in the first quarter and at a more subdued rate in the second. This slowdown was especially acute in securities holdings, which had surged in both the fourth quarter of 1997 and the first quarter of this year. Responses to the Federal Reserve's May survey on bank lending practices suggest that the earlier run-up in securities reflected the efforts of banks to boost returns on equity by increasing leverage; much of the rise in securities holdings was concentrated at banks that were constrained by recent mergers from using their profits to repurchase shares. Loan growth also slowed in the second quarter, although the various loan categories behaved quite differently: Real estate lending expanded most slowly in May and June, whereas business lending rebounded in those months after having stalled out in March and April. Outstanding loans at branches and agencies of foreign banks declined in the second quarter, and survey responses identified an actual or expected weakening in the capital position of the parent banks as the primary impetus for a tightening of loan terms and standards.

The Report of Condition and Income (the Call Report) showed that banks' return on equity was about unchanged in the first quarter, staying in the elevated range it has occupied since 1993. Call Report data also indicated that delinquency and charge-off rates on commercial and industrial loans and on real estate loans remain quite low, while delinquency and charge-off rates on consumer loans have leveled off after their previous rise. Indeed, bank profits have benefited importantly in recent years from a low level of provisioning for loan losses. Nevertheless, bank supervisors have been concerned that intense competition and favorable economic conditions might be leading banks to ease standards excessively. They reminded depositories that credit assessments should take account of the possibility of less positive economic circumstances in the future.

The trend toward consolidation in the banking industry continued in the first half of the year. Some of the announced mergers involve combinations of banks and nonbank financial institutions, such as thrifts and insurance companies. Many of the mergers were designed to capitalize on the economies of scale and diversification of risk in nationwide banking; other mergers were undertaken to expand the range of services offered to customers. Although some observers are concerned that consolidation might raise banks' market power, greater national concentration in banking over the past several years has not increased banking concentration in most local markets.

The Monetary Aggregates

The broad monetary aggregates grew more rapidly in the first half of 1998 than they did in 1997, although the pace of their expansion has slowed noticeably in recent months. M2 grew 7¼ percent at an annual rate between the fourth quarter of last year and June of this year, placing it well above the top of its 1 percent to 5 percent growth range. When the FOMC established this range in February, it noted that annual ranges represented benchmarks for money growth under conditions of stable prices and velocity behavior in accordance with its pre-1990 historical experience. In fact, nominal spending and income have grown more rapidly than is consistent with price stability and sustainable real growth, and the velocity of M2 (defined as the ratio of nominal GDP to M2) has fallen relative to the behavior predicted by the pre-1990 experience.

For several decades before 1990, M2 velocity showed little overall trend but varied positively from year-to-year with changes in M2 opportunity cost, which is generally defined as the interest forgone by holding M2 assets rather than short-term market instruments such as Treasury bills. The relationship was disturbed in the early 1990s by a sharp increase in velocity; however, since mid-1994, M2 velocity and opportunity

Growth of Money and Debt

Percent

Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1988	4.3	5.7	6.3	9.1
1989	.5	5.2	4.0	7.5
1990	4.2	4.1	1.8	6.7
1991	7.9	3.1	1.2	4.5
1992	14.4	1.8	.6	4.5
1993	10.6	1.3	1.1	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	5.7	8.8	5.0
Quarterly (annual rate)[2]				
1998:Q1	3.0	8.0	11.0	6.2
Q2	.3	7.3	9.6	n.a.
Year-to-date[3]				
1998	.9	7.3	9.8	5.8

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.

3. From average for fourth quarter of 1997 to average for June (May in the case of domestic nonfinancial debt).

n.a. Not available.

cost have again been moving roughly together, though not in lockstep. Indeed, velocity has declined recently despite almost no change in the standard measure of opportunity cost. The dip in velocity may be partly attributable to the flatter yield curve, which has reduced the return on longer-term investments relative to M2 assets—bank deposits and money market mutual funds. Money demand may also be bolstered by the efforts of households to rebalance their portfolios in the face of a booming stock market. By the end of 1997, households' monetary assets had ebbed to the smallest share of their total financial assets in many years, and households may want to reduce the concentration of their assets in relatively risky equities and increase their holdings of less volatile M2 assets. However, in spite of both the flatter yield curve and the rebalancing motive, flows into both bond mutual funds and stock mutual funds have been quite heavy this year.

M2 increased 7¼ percent at an annual rate in the second quarter, compared with 8 percent in the first quarter. A buildup in household liquid accounts in preparation for individual income tax payments substantially boosted money growth in April; the clearing of these payments depressed May growth by a roughly equal amount. At an annual rate, M2 increased about 6 percent on average over April and May and about 5 percent in June, suggesting a larger deceleration than is shown by the quarterly average figures.

M3 grew 9¾ percent at an annual rate between the fourth quarter of last year and June, placing it far above the top of its 2 percent to 6 percent growth range. As with M2, the FOMC chose the growth range for M3 as a benchmark for growth under conditions of price stability and historical velocity behavior. The components of M3 not included in M2 increased 17½ percent at an annual rate over the first half of the year, following an even faster run-up in 1997. Rapid expansion of large time deposits in the first quarter was driven importantly by strong credit growth at depository institutions. More recently, gains in this category have diminished as bank credit growth has slowed. Holdings of institutional money market mutual funds climbed more than 20 percent in each of the past three years, and that strength has mounted in 1998 as businesses' interest in outsourcing their cash management evidently has intensified. Because in-house management often involves short-term assets that are not included in M3, the shift to mutual funds boosts M3 growth.

M1 rose 1 percent at an annual rate between the fourth quarter of 1997 and June of this year. Currency expanded 6½ percent annualized over that period, a bit below its increase last year. Foreign demand for U.S. currency apparently weakened substantially in the first five months of the year, with an especially large decline in shipments to Russia. Deposits in M1 declined in the first half of the year owing to the continued introduction of "sweep" programs. M1 growth has been depressed for several years by the spread of these programs, which sweep balances out of transactions accounts, which are subject to reserve requirements, and into savings accounts, which are not. Depositors are unaffected by this arrangement because the funds are swept back when needed; banks benefit because they can reduce their holdings of reserves, which earn no interest. New sweeps of other checkable deposits have slowed sharply, but sweeps of demand deposits into savings deposits—an activity that has become popular more recently—continue to spread. Because many banks have already reduced their required reserves to minimal levels, the total flow of new sweep programs is tapering off, although it remains considerable.

The drop in transactions accounts in the first half of the year caused required reserves to fall 3¾ percent at an annual rate, a much slower decline than in 1997. The monetary base grew 5½ percent over the same period, as the runoff in required reserves was more than offset by the increased demand for currency.

The substantial decline in required reserves over the past several years has raised concern that the federal funds rate might become more volatile. Required reserves are fairly predictable and must be maintained on only a two-week average basis. As a result, the Federal Reserve has generally been able to supply a quantity of reserves that is close to the quantity demanded at the federal funds rate intended by the FOMC, and banks have accommodated many unanticipated imbalances in reserve supply by varying the quantity demanded across days. Banks also hold reserve balances to avoid overdrafts after making payments to other banks. But this precautionary demand is more variable and difficult to predict than requirement-related demand, and it cannot be substituted across days. As required reserves drop, more banks will hold deposits at the Federal Reserve only to meet these day-to-day demands, reducing the potential for rate-smoothing behavior.

So far, however, the federal funds rate has not become noticeably more volatile on a maintenance-period average basis. This outcome has occurred partly because the Federal Reserve has responded to the changing nature of reserve demand by conducting open market operations on more days than had been customary and by arranging more operations with overnight maturity, thereby bringing the daily reserve supply more closely in line with demand. At the same time, banks have borrowed more reserves at the discount window and have improved the management of their accounts at Reserve Banks. Between 1995 and 1997, banks also significantly increased their required clearing balances, which they precommit to hold and which earn credits that can be applied to Federal Reserve priced services. Like required reserve balances, required clearing balances are predictable by the Federal Reserve and can be substituted across days within the two-week maintenance period. Going forward, the Federal Reserve's recent decision to use lagged reserve accounting rather than contemporaneous reserve accounting will increase somewhat the predictability of reserve demand by both banks and the Federal Reserve. Still, further declines in required reserves might increase funds-rate volatility. Moreover, one-third of the banks responding to the Federal Reserve's recent Senior Financial Officer Survey report that reserve management is more difficult today than in the past. One way to diminish these problems would be to pay interest on reserve balances, which would reduce banks' incentives to minimize those balances.

Financial Markets

Interest Rates

Yields on intermediate- and long-term Treasury securities moved in a fairly narrow band during the first half of 1998, centered a little below the levels that prevailed in the latter part of 1997. The thirty-year bond yield touched its lowest value since the bond was introduced to the regular auction calendar in 1977; it was also lower than any sustained yield on the twenty-year bond (the longest maturity Treasury security before the issuance of the thirty-year bond) since 1968. Meanwhile, the average yield on five-year notes in the first half of the year was the lowest since early 1994.

Several factors have contributed to the decline in intermediate- and long-term interest rates over the past year. For one, developments in the U.S. economy and overseas reduced expected inflation and, perhaps, uncertainty about future inflation. Between the second quarter of 1997 and the second quarter of 1998, the median long-term inflation expectation in the Michigan Survey Research Center survey of households dropped ¼ percentage point, and the average expectation in the Philadelphia Federal Reserve's Survey of Professional Forecasters fell almost ½ percentage point. Over the same period, the variance of long-term inflation expectations in the Michigan survey was halved. This greater consensus of expectations suggests that people may now place less weight on the possibility of a sharp acceleration in prices; a reduction in perceived inflation risk would tend to reduce term premiums and thereby cut long-term interest rates. A damping of expected growth in real demand here and abroad, triggered importantly by the Asian financial crisis, also has probably pulled rates lower, as has an apparent shift in desired portfolios away from Asia and, to some extent, from other emerging market economies. Lastly, diminished borrowing by the federal government has restrained interest rates by reducing the competition for private domestic saving and for borrowed funds from abroad.

Assessing the relative importance of some of these factors might be aided, in principle, by comparing yields on nominal and inflation-indexed Treasury notes. Between the second quarters of 1997 and 1998, the nominal ten-year yield fell more than 1 percentage point, whereas the inflation-indexed ten-year yield increased a bit. Unfortunately, the relatively recent introduction of inflation-indexed securities and the thinness of trading makes interpreting their yield levels and movements difficult. In particular, light trading may lead investors to view these new securities as providing less liquidity than traditional Treasury notes, and investors may value liquidity especially highly now in the face of uncertainty about developments in Asia.

The yield curve for Treasury securities has recently been flatter than at any point since the beginning of the decade. For example, the difference between the ten-year-note yield and the three-month-bill yield was smaller in the first half of 1998 than in any other half-year period since early 1990. In that earlier episode, the yield curve had been flattened by a sharp run-up in short-term interest rates as the Federal Reserve tried to check an upcreep in inflation. In the current episode, short rates have held fairly steady, while long-term rates have declined significantly. Some of the current flatness of the term structure probably stems from the apparent reduction in term premiums noted above. But the flat yield curve may also reflect the expectation that short-term real interest rates, which have been boosted by the decline in inflation over the past year, will drop in the future. Supporting that notion, the yield curve for inflation-indexed debt has become inverted this year, as the return on the five-year indexed note has risen above the return on the ten-year indexed note, which exceeds the return on the new thirty-year indexed bond.

Equity Prices

Equity markets have remained ebullient this year. The S&P 500 composite index rose sharply in the first several months of 1998; it then fell back a little before moving up to a new record in July. The NASDAQ composite, NYSE composite, and Dow Jones Industrial Average followed roughly similar patterns, and these indexes now stand about 17 to 28 percent above their year-end marks. Small capitalization stocks have not fared so well this year, with the Russell 2000 index up about a third as much on net.

The increase in equity prices combined with the recent slowdown in earnings growth has kept many valuation measures well above their historical ranges. The ratio of prices in the S&P 500 to consensus estimates of earnings over the coming twelve months reached a new high in April and has retreated only slightly from that point. At the same time, the real long-term bond yield—measured either by the ten-year indexed yield or by the difference between the ten-year nominal Treasury yield and inflation expectations in the Philadelphia Federal Reserve's survey—is little changed since year-end. As a result, the forward-earnings yield on stocks exceeds the real yield on bonds by one of the smallest amounts in many years. Apparently, investors share analysts' expectations of robust long-term earnings growth, or they are content with a much smaller equity premium than the historical average.

International Developments

Events in Asia, including in Japan, have continued to dominate developments in global asset markets so far in 1998. During the first months of the year, many financial markets in Asia appeared to stabilize, and progress in implementing economic and financial reform programs was made in most of the countries seriously affected by the crises. In early April, the agreement between Korean banks and their external bank creditors to stretch out short-term obligations was implemented, ending an interval of roll-overs by creditors that was endorsed by the authorities in countries that had pledged to support the Korean program. Indonesia reached a second revised agreement with the International Monetary Fund (IMF) in April on a reform program, which was subsequently derailed by political strife and the resignation of the president in late May; the change in political regime was followed by calm, and a new agreement was reached with the IMF management in late June and approved by the IMF Executive Board on July 15.

After having risen sharply during the final months of 1997 through mid-January of 1998, the exchange value of the dollar in terms of the currencies of Korea, Indonesia, Thailand, and other ASEAN countries partly retraced those gains during February, March, and April. Since then, however, market pressures have again led to further sharp increases in the exchange value of the dollar in terms of the Indonesian rupiah while the dollar has changed little against most of the other Asian emerging-market currencies. Since the end of December, the dollar has declined, on balance, 24 percent against the Korean won and nearly 14 percent against the Thai baht and has risen moderately in terms of the Taiwan dollar and increased about 130 percent in terms of the Indonesian rupiah.

During the first weeks of the year, the dollar depreciated in terms of the Japanese yen as improved prospects elsewhere in Asia and market uncertainty regarding potential intervention by the Japanese monetary authorities lent support to the yen. Indications that significant measures for economic stimulus might be announced also put upward pressure on the yen. In February, the dollar resumed its appreciation with respect to the yen. The rise in the dollar was only temporarily interrupted by sizable intervention purchases of dollars by Japanese authorities in April. Upward pressure on the dollar relative to the yen intensified in late May and June. Renewed signs of cyclical weakness in the Japanese economy and lack of market confidence in the announced programs for addressing the chronic problems within the financial sector contributed to pessimism toward the yen. Persistent weakness in the Japanese economy and the yen, in turn, heightened concerns about prospects elsewhere in Asia; the lower yen adversely affected the competitiveness of goods produced in the Asian emerging-market economies and raised questions about the sustainability of current exchange rate policies in China and Hong Kong.

On June 17, the monetary authorities in the United States and Japan cooperated in foreign exchange intervention purchases of yen for dollars. This intervention operation was the first by U.S. authorities since August 1995. In announcing the market intervention, Treasury Secretary Rubin cited Japanese government plans to restore the health of their financial system and to strengthen Japanese domestic demand. He pointed to the stake of Asia and the international community as a whole in Japan's success. The yen rose somewhat following the exchange market intervention and has since partially given back that gain. In the wake of the recent election, which cost the Liberal Democratic Party numerous seats in the upper house of the Diet and precipitated the resignation of Prime Minister Hashimoto, the yen changed little. On balance, the dollar has appreciated about 7 percent in terms of the yen since the end of December.

Equity prices in the Asian emerging-market economies have been volatile so far this year as well. These prices recovered somewhat in the first weeks of the year in response to the market perception that the crisis was easing; after having fluctuated narrowly, they began moving back down in March and April, reaching new lows in June in Korea, Thailand, and Hong Kong. On balance, these equity prices have moved down about 25 percent (Singapore and Malaysia) to up about 20 percent (Indonesia) since the end of last year. Equity prices in Japan also rose early in the year on improved optimism but then gave back those gains over time with the release of indicators suggesting additional weakness in the Japanese economy. Since the middle of June, Japanese equity prices have rebounded on the perception that significant fiscal stimulus is now more likely. On balance, Japanese equity prices are up about 9 percent from their level at the end of last year. Japanese long-term interest rates continued through May on their downward trend that began in mid-1997, declining an additional 50 basis points during the first five months. Since then, long-term interest rates have retraced more than half of that decline, in part in response to the announcement of the plan for financial restructuring and in part in response to the outcome of the recent election, which heightened expectations of additional fiscal stimulus.

The Asian financial crises have resulted in a sharp drop in the pace of economic activity in the region. Output declined precipitously in the first quarter in those countries most affected, such as Korea, Indonesia, and Malaysia, and slowed in other Asian economies, such as China and Taiwan, that have suffered a loss of competitiveness and reduced external demand as a consequence of the crises. Data for recent months suggest that additional slowing has occurred and that the risk of further spread and deepening of cyclical weakness throughout the region cannot be ruled out. Depreciation of their respective currencies has led to acceleration of domestic prices in several of these economies, particularly in Indonesia and Thailand.

Real GDP in Japan also fell sharply in the first quarter, and output indicators suggest a further decline in the second quarter. Consumer price inflation remains very low. Japanese authorities have announced a series of fiscal measures that are expected to boost domestic demand during the second half of this year. In addition, officials have announced a package of steps directed at restoring the soundness of the financial sector, including (1) introduction of a bridge bank mechanism to facilitate the resolution of failed banks while permitting some of their borrowers to continue to receive credit, (2) measures to improve the disposal of bad bank loans, (3) enhanced transparency and disclosure by banks, and (4) strengthened bank supervision. These actions are intended to restore confidence in Japanese financial institutions and in the prospects for the economy more broadly.

In the other major industrial countries, economic developments so far this year have generally been favorable. The exchange value of the dollar in terms of the German mark has fluctuated narrowly and, on balance, is little changed since the end of December. Market perceptions that progress toward the start of the final stage of European Monetary Union (EMU) is going smoothly and signs of momentum in the U.S. and German economies resulted in little pressure in either direction on the exchange rate. The dollar also fluctuated narrowly against the U.K. pound with little net change so far this year. Moves to tighten monetary conditions in the United Kingdom lent support to the pound, countering some tendency for weak external demand to depress the currency. The Canadian dollar rebounded following a tightening of monetary conditions by the Bank of Canada on January 30. Since early March, however, it has tended to move down as market participants have come to believe that further upward shifts of official interest rates are unlikely and as weakness in global commodity markets, partly the result of reduced economic activity in Asia, have weighed on the currency. The exchange value of the U.S. dollar in terms of the Canadian dollar reached new highs in July and, on balance so far this year, has risen about 4 percent.

Long-term interest rates have declined, and equity prices have generally risen strongly in European and Canadian markets this year. Despite signs of strengthening activity in Germany and other continental European countries and continued healthy expansion in the United Kingdom and Canada, long-term rates have moved down since December; long rates are about 60 basis points lower in Germany and less than half that amount lower in Canada. Shifts of international portfolios away from Asian assets and toward those perceived to be safer have probably contributed to rate declines in Continental Europe and in the United States. Stock prices have also continued to rise in Europe and Canada. Since December, the gains have ranged from about 40 percent in Germany and France to about 10 percent in Canada.

The pace of real economic activity improved somewhat in the first quarter in Germany and on average in the eleven countries slated to proceed with currency union on January 1, 1999.[4]

4. Those countries are Austria, Belgium, Finland, France, Ireland, Italy, Germany, Luxembourg, the Netherlands, Portugal, and Spain.

Production and employment data for more recent months suggest continued expansion. Business confidence has firmed as progress toward EMU has continued. Domestic demand is becoming more buoyant in several of these countries, offsetting weakening of external demand arising from events in Asia. On average, inflation remains subdued within the euro area. In the United Kingdom and Canada, real output continues to expand at a relatively rapid rate. U.K. inflation threatens to exceed the government's target of 2½ percent, and the Bank of England raised its official lending rate 25 basis points in June in order to lessen price pressures. Consumer price inflation in Canada remains very low.

Events in Asia have spilled over to affect developments in Latin American countries. Declines in global oil prices have contributed to downward pressure on the exchange value of the Mexican peso. The peso declined sharply in terms of the dollar at the start of the year but then stabilized in February through May as Asian markets partially recovered. It depreciated further in May and June, resulting in a net decline of about 9 percent in terms of the dollar so far this year. The Brazilian exchange rate regime of a controlled crawl and the Argentine regime of pegging the peso to the dollar remain in place, and Brazilian short-term interest rates have been lowered from the very high levels to which they were raised when the Asian crisis intensified in late 1997. Equity prices in these three Latin American countries have been volatile, rising early in the year and giving back those gains since April. On balance this year, equity prices have declined about 10 percent in Mexico and Argentina and have risen about 8 percent in Brazil.

Real output growth remains strong in Mexico and Argentina, but the rate has slowed somewhat from last year's vigorous pace. In Brazil, economic activity has weakened more sharply, in part in response to the tightening of monetary conditions that followed the outbreak of the Asian crisis.

Lower global oil prices have combined with a poorly functioning domestic tax system to trigger a financial crisis in Russia. Russian officials have reached agreement with IMF management on a revised program that includes proposed increased funds from the IMF and other sources. To help finance this program, the General Arrangements to Borrow are being activated in light of the inadequacy of IMF resources to meet actual or expected requests for financing and a need to forestall impairment of the international monetary system. The General Arrangements to Borrow provide the IMF with supplementary lines of credit from the G-10 countries. ■