

Mr. Greenspan presents the Federal Reserve's semi-annual Humphrey Hawkins monetary policy testimony and report to the US Congress Testimony of the Chairman of the Board of the US Federal Reserve System, Mr. Alan Greenspan, before the US Congress on 24/2/98.

Mr. Chairman and members of the Committee,

I welcome this opportunity to present the Federal Reserve's semi-annual report on economic conditions and the conduct of monetary policy.

The US Economy in 1997

The US economy delivered another exemplary performance in 1997. Over the four quarters of last year, real GDP expanded close to 4 percent, its fastest annual increase in ten years. To produce that higher output, about 3 million Americans joined the nation's payrolls, in the process contributing to a reduction in the unemployment rate to 4¾ percent, its lowest sustained level since the late 1960s. And our factories were working more intensively too: Industrial production increased 5¾ percent last year, exceeding robust additions to capacity.

Those gains were shared widely. The hourly wage and salary structure rose about 4 percent, fueling impressive increases in personal incomes. Unlike some prior episodes when faster wage rate increases mainly reflected attempts to make up for more rapidly rising prices of goods and services, the fatter paychecks that workers brought home represented real increments to purchasing power. Measured consumer price inflation came in at 1¾ percent over the twelve months of 1997, down about 1½ percentage points from the pace of the prior year. While swings in the prices of food and fuel contributed to this decline, both narrower price indexes excluding those items and broader ones including all goods and services produced in the United States also paint a portrait of continued progress toward price stability. Businesses, for the most part, were able to pay these higher real wages while still increasing their earnings. Although aggregate data on profits for all of 1997 are not yet available, corporate profit margins most likely remained in an elevated range not seen consistently since the 1960s. These healthy gains in earnings and the expectations of more to come provided important support to the equity market, with most major stock price indexes gaining more than 20 percent over the year.

The strong growth of the real income of workers and corporations is not unrelated to the economy's continued good performance on inflation. Taken together, recent evidence supports the view that such low inflation, as closely approaching price stability as we have known in the United States in three decades, engenders many benefits. When changes in the general price level are small and predictable, households and firms can plan more securely for the future. The perception of reduced risk encourages investment. Low inflation also exerts a discipline on costs, fostering efforts to enhance productivity. Productivity is the ultimate source of rising standards of living, and we witnessed a notable pickup in this measure in the past two years.

The robust economy has facilitated the efforts of the Congress and the Administration to restore balance in the unified federal budget. As I have indicated to the Congress on numerous occasions, moving beyond this point and putting the budget in significant surplus would be the surest and most direct way of increasing national saving. In turn, higher national saving, by promoting lower real long-term interest rates, helps spur spending to outfit American firms and their workers with the modern equipment they need to compete successfully on world markets. We have seen a partial down payment of the benefits of better budget balance already: It seems reasonable to assume that the decline in longer-term Treasury yields last year owed, in part, to reduced competition -- current and prospective -- from the federal government for scarce private saving. However, additional effort remains to be exerted to address the effects on federal entitlement spending of the looming shift within the next decade in the nation's retirement demographics.

As I noted earlier, our nation has been experiencing a higher growth rate of productivity -- output per hour worked -- in recent years. The dramatic improvements in computing power and communication and information technology appear to have been a major force behind this beneficial trend. Those innovations, together with fierce competitive pressures in our high-tech industries to make them available to as many homes, offices, stores, and shop floors as possible, have produced double-digit annual reductions in prices of capital goods embodying new technologies. Indeed, many products considered to be at the cutting edge of technology as recently as two to three years ago have become so standardized and inexpensive that they have achieved near "commodity" status, a development that has allowed businesses to accelerate their accumulation of more and better capital.

Critical to this process has been the rapidly increasing efficiency of our financial markets -- itself a product of the new technologies and of significant market deregulation over the years. Capital now flows with relatively little friction to projects embodying new ideas. Silicon Valley is a tribute both to American ingenuity and to the financial system's ever-increasing ability to supply venture capital to the entrepreneurs who are such a dynamic force in our economy.

With new high-tech tools, American businesses have shaved transportation costs, managed their production and use of inventories more efficiently, and broadened market opportunities. The threat of rising costs in tight labor markets has imparted a substantial impetus to efforts to take advantage of possible efficiencies. In my Humphrey-Hawkins testimony last July, I discussed the likelihood that the sharp acceleration in capital investment in advanced technologies beginning in 1993 reflected synergies of new ideas, embodied in increasingly inexpensive new equipment, that have elevated expected returns and have broadened investment opportunities.

More recent evidence remains consistent with the view that this capital spending has contributed to a noticeable pickup in productivity -- and probably by more than can be explained by usual business cycle forces. For one, the combination of continued low inflation and stable to rising domestic profit margins implies quite subdued growth in total consolidated unit business costs. With labor costs constituting more than two-thirds of those costs and labor compensation per hour accelerating, productivity must be growing faster, and that step-up must be roughly in line with the increase in compensation growth. For another, our more direct observations on output per hour roughly tend to confirm that productivity has picked up significantly in recent years, although how much the ongoing trend of productivity has risen remains an open question.

The acceleration in productivity, however, has been exceeded by the strengthening of demand for goods and services. As a consequence, employers had to expand payrolls at a pace well in excess of the growth of the working age population that profess a desire for a job, including new immigrants. As I pointed out last year in testimony before the Congress, that gap has been accommodated by declines in both the officially unemployed and those not actively seeking work but desirous of working. The number of people in those two categories decreased at a rate of about one million per year on average over the last four years. By December 1997, the sum had declined to a seasonally adjusted 10½ million, or 6 percent of the working age population, the lowest ratio since detailed information on this series first became available in 1970. Anecdotal information from surveys of our twelve Reserve Banks attests to our ever tightening labor markets.

Rapidly rising demand for labor has had enormous beneficial effects on our work force. Previously low- or unskilled workers have been drawn into the job market and have obtained training and experience that will help them even if they later change jobs. Large numbers of underemployed have been moved up the career ladder to match their underlying skills, and many welfare recipients have been added to payrolls as well, to the benefit of their long-term job prospects.

The recent acceleration of wages likely has owed in part to the ever-tightening labor market and in part to rising productivity growth, which, through competition, induces firms to grant higher wages. It is difficult at this time, however, to disentangle the relative contributions of these factors. What is clear is that, unless demand growth softens or productivity growth accelerates even more, we will gradually run out of new workers who can be profitably employed. It is not possible to tell how many more of the 6 percent of the working-age population who want to work but do not have jobs can be added to payrolls. A significant number are so-called frictionally unemployed, as they have left one job but not yet chosen to accept another. Still others have chosen to work in only a limited geographic area where their skills may not be needed.

Should demand for new workers continue to exceed new supply, we would expect wage gains increasingly to exceed productivity growth, squeezing profit margins and eventually leading to a pickup in inflation. Were a substantial pickup in inflation to occur, it could, by stunting economic growth, reverse much of the remarkable labor market progress of recent years. I will be discussing our assessment of these and other possibilities and their bearing on the outlook for 1998 shortly.

Monetary Policy in 1997

History teaches us that monetary policy has been its most effective when it has been pre-emptive. The lagging relationship between the Federal Reserve's policy instrument and spending, and, even further removed, inflation, implies that if policy actions are delayed until prices begin to pick up, they will be too late to fend off at least some persistent price acceleration and attendant economic instabilities. Preemptive policymaking is keyed to judging how widespread are emerging inflationary forces, and when, and to what degree, those forces will be reflected in actual inflation. For most of last year, the evident strains on resources were sufficiently severe to steer the Federal Open Market Committee (FOMC) toward being more inclined to tighten than to ease monetary policy. Indeed, in March, when it became apparent that strains on resources seemed to be intensifying, the FOMC imposed modest incremental restraint, raising its intended federal funds rate $\frac{1}{4}$ percentage point, to $5\frac{1}{2}$ percent.

We did not increase the federal funds rate again during the summer and fall, despite further tightening of the labor market. Even though the labor market heated up and labor compensation rose, measured inflation fell, owing to the appreciation of the dollar, weakness in international commodity prices, and faster productivity growth. Those restraining forces were more evident in goods-price inflation, which in the CPI slowed substantially to only about $\frac{1}{2}$ percent in 1997, than on service-price inflation, which moderated much less -- to around 3 percent. Providers of services appeared to be more pressed by mounting strains in labor markets. Hourly wages and salaries in service-producing sectors rose $4\frac{1}{2}$ percent last year, up considerably from the prior year and almost $1\frac{1}{2}$ percentage points faster than in goods-producing sectors. However, a significant portion of that differential, but by no means all, traced to commissions in the financial and real estate services sector related to one-off increases in transactions prices and in volumes of activity, rather than to increases in the underlying wage structure.

Although the nominal federal funds rate was maintained after March, the apparent drop in inflation expectations over the balance of 1997 induced some firming in the stance of monetary policy by one important measure -- the real federal funds rate, or the nominal federal funds rate less a proxy for inflation expectations. Some analysts have dubbed the contribution of the reduction in inflation expectations to raising the real federal funds rate a "passive" tightening, in that it increased the amount of monetary policy restraint in place without an explicit vote by the FOMC. While the tightening may have been passive in that sense, it was by no means inadvertent. Members of the FOMC took some comfort in the upward trend of the real federal funds rate over the year and the rise in the foreign exchange value of the dollar because such additional restraint was viewed as

appropriate given the strength of spending and building strains on labor resources. They also recognized that in virtually all other respects financial markets remained quite accommodative and, indeed, judging by the rise in equity prices, were providing additional impetus to domestic spending.

The Outlook for 1998

There can be no doubt that domestic demand retained considerable momentum at the outset of this year. Production and employment have been on a strong uptrend in recent months. Confident households, enjoying gains in income and wealth and benefitting from the reductions in intermediate- and longer-term interest rates to date, should continue to increase their spending. Firms should find financing available on relatively attractive terms to fund profitable opportunities to enhance efficiency by investing in new capital equipment. By itself, this strength in spending would seem to presage intensifying pressures in labor markets and on prices. Yet, the outlook for total spending on goods and services produced in the United States is less assured of late because of storm clouds massing over the Western Pacific and heading our way.

This is not the place to examine in detail what triggered the initial problems in Asian financial markets and why the subsequent deterioration has been so extreme. I covered that subject recently before several committees of the Congress. Rather, I shall confine my discussion this morning to the likely consequences of the Asian crisis for demand and inflation in the United States.

With the crisis curtailing the financing available in foreign currencies, many Asian economies have had no choice but to cut back their imports sharply. Disruptions to their financial systems and economies more generally will further damp demands for our exports of goods and services. American exports should be held down as well by the appreciation of the dollar, which will make the prices of competing goods produced abroad more attractive, just as foreign-produced goods will be relatively more attractive to buyers here at home. As a result, we can expect a worsening net export position to exert a discernible drag on total output in the United States. For a time, such restraint might be reinforced by a reduced willingness of US firms to accumulate inventories as they foresee weaker demand ahead.

The forces of Asian restraint could well be providing another, more direct offset to inflationary impulses arising domestically in the United States. In the wake of weakness in Asian economies and of lagged effects of the appreciation of the dollar more generally, the dollar prices of our non-oil imports are likely to decline further in the months ahead. These lower import prices are apparently already making domestic producers hesitant to raise their own prices for fear of losing market share, further contributing to the restraint on overall prices. Lesser demands for raw materials on the part of Asian economies as their activity slows should help to keep world commodity prices denominated in dollars in check. Import and commodity prices, however, will restrain US inflation only as long as they continue to fall, or to rise at a slower rate than the pace of overall domestic product prices.

The key question going forward is whether the restraint building from the turmoil in Asia will be sufficient to check inflationary tendencies that might otherwise result from the strength of domestic spending and tightening labor markets. The depth of the adjustment abroad will depend on the extent of weakness in the financial sectors of Asian economies and the speed with which structural inefficiencies in the financial and nonfinancial sectors of those economies are corrected. If, as we suspect, the restraint coming from Asia is sufficient to bring the demand for American labor back into line with the growth of the working-age population desirous of working, labor markets will remain unusually tight, but any intensification of inflation should be delayed, very gradual, and readily reversible. However, we cannot rule out two other, more worrisome possibilities. On the one hand, should the momentum to domestic spending not be offset significantly by Asian or other developments, the US economy would be on a track along which spending could press too strongly

against available resources to be consistent with contained inflation. On the other, we also need to be alert to the possibility that the forces from Asia might damp activity and prices by more than is desirable by exerting a particularly forceful drag on the volume of net exports and the prices of imports.

When confronted at the beginning of this month with these, for the moment, finely balanced, though powerful forces, the members of the Federal Open Market Committee decided that monetary policy should most appropriately be kept on hold. With the continuation of a remarkable seven-year expansion at stake and so little precedent to go by, the range of our intelligence gathering in the weeks ahead must be wide and especially inclusive of international developments.

The Forecasts of the Governors of the Federal Reserve Board and the Presidents of the Federal Reserve Banks.

In these circumstances, the forecasts of the governors of the Federal Reserve Board and presidents of the Federal Reserve Banks for the performance of the US economy over this year are more tentative than usual. Based on information available through the first week of February, monetary policymakers were generally of the view that moderate economic growth is likely in store. The growth rate of real GDP is most commonly seen as between 2 and 2¾ percent over the four quarters of 1998. Given the strong performance of real GDP, these projections envisage the unemployment rate remaining in the low range of the past half year. Inflation, as measured by the four-quarter percent change in the consumer price index, is expected to be 1¾ to 2¼ percent in 1998 -- near the low rate recorded in 1997. This outlook embodies the expectation that the effects of continuing tightness in labor markets will be largely offset by technical adjustments shaving a couple tenths from the published CPI, healthy productivity growth, flat or declining import prices, and little pressure in commodity markets. But the policymakers' forecasts also reflect their determination to hold the line on inflation.

The Ranges for the Debt and Monetary Aggregates

The FOMC affirmed the provisional ranges for the monetary aggregates in 1998 that it had selected last July, which, once again, encompass the growth rates associated with conditions of approximate price stability, provided that these aggregates act in accord with their pre-1990s historical relationships with nominal income and interest rates. These ranges are identical to those that had prevailed for 1997 -- 1 to 5 percent for M2 and 2 to 6 percent for M3. The FOMC also reaffirmed its range of 3 to 7 percent for the debt of the domestic nonfinancial sectors for this year. I should caution, though, that the expectations of the governors and Reserve Bank presidents for the expansion of nominal GDP in 1998 suggest that growth of M2 in the upper half of its benchmark range is a distinct possibility this year. Given the continuing strength of bank credit, M3 might even be above its range as depositories use liabilities in this aggregate to fund loan growth and securities acquisitions. Nonfinancial debt should come in around the middle portion of its range. In the first part of the 1990s, money growth diverged from historical relationships with income and interest rates, in part as savers diversified into bond and stock mutual funds, which had become more readily available and whose returns were considerably more attractive than those on deposits. This anomalous behavior of velocity severely set back most analysts' confidence in the usefulness of M2 as an indicator of economic developments. In recent years, there have been tentative signs that the historical relationship linking the velocity of M2 -- measured as the ratio of nominal GDP to the money stock -- to the cost of holding M2 assets was reasserting itself. However, a persistent residual upward drift in velocity over the past few years and its apparent cessation very recently underscores our ongoing uncertainty about the stability of this relationship. The FOMC will continue to observe the evolution of the monetary and credit aggregates carefully, integrating information about these variables with a wide variety of other information in determining its policy stance.

Uncertainty about the Outlook

With the current situation reflecting a balance of strong countervailing forces, events in the months ahead are not likely to unfold smoothly. In that regard, I would like to flag a few areas of concern about the economy beyond those mentioned already regarding Asian developments.

Without doubt, lenders have provided important support to spending in the past few years by their willingness to transact at historically small margins and in large volumes. Equity investors have contributed as well by apparently pricing in the expectation of substantial earnings gains and requiring modest compensation for the risk that those expectations could be mistaken. Approaching the eighth year of the economic expansion, this is understandable in an economic environment that, contrary to historical experience, has become increasingly benign. Businesses have been meeting obligations readily and generating high profits, putting them in outstanding financial health.

But we must be concerned about becoming too complacent about evaluating repayment risks. All too often at this stage of the business cycle, the loans that banks extend later make up a disproportionate share of total nonperforming loans. In addition, quite possibly, twelve or eighteen months hence, some of the securities purchased on the market could be looked upon with some regret by investors. As one of the nation's bank supervisors, the Federal Reserve will make every effort to encourage banks to apply sound underwriting standards in their lending. Prudent lenders should consider a wide range of economic situations in evaluating credit; to do otherwise would risk contributing to potentially disruptive financial problems down the road.

A second area of concern involves our nation's continuing role in the new high-tech international financial system. By joining with our major trading partners and international financial institutions in helping to stabilize the economies of Asia and promoting needed structural changes, we are also encouraging the continued expansion of world trade and global economic and financial stability on which the ongoing increase of our own standards of living depends. If we were to cede our role as a world leader, or backslide into protectionist policies, we would threaten the source of much of our own sustained economic growth.

A third risk is complacency about inflation prospects. The combination and interaction of significant increases in productivity-improving technologies, sharp declines in budget deficits, and disciplined monetary policy has damped product price changes, bringing them to near stability. While part of this result owes to good policy, part is the product of the fortuitous emergence of new technologies and of some favorable price developments in imported goods. However, as history counsels, it is unwise to count on any string of good fortune to continue indefinitely. At the same time, though, it is also instructive to remember the words of an old sage that "luck is the residue of design". He meant that to some degree we can deliberately put ourselves in position to experience good fortune and be better prepared when misfortune strikes. For example, the 1970s were marked by two major oil-price shocks and a significant depreciation in the exchange value of the dollar. But those misfortunes were, in part, the result of allowing imbalances to build over the decade as policymakers lost hold of the anchor provided by price stability. Some of what we now see helping rein in inflation pressures is more likely to occur in an environment of stable prices and price expectations that thwarts producers from indiscriminately passing on higher costs, puts a premium on productivity enhancement, and rewards more effectively investment in physical and human capital.

Simply put, while the pursuit of price stability does not rule out misfortune, it lowers its probability. If firms are convinced that the general price level will remain stable, they will reserve increases in their sales prices of goods and services as a last resort, for fear that such increases could mean loss of market share. Similarly, if households are convinced of price stability, they will not see variations in relative prices as reasons to change their long-run inflation expectations. Thus,

continuing to make progress toward this legislated objective will make future supply shocks less likely and our nation's economy less vulnerable to those that occur.