Mr. Greenspan's testimony before the US House of Representatives Committee on the Budget Testimony by the Chairman of the Board of Governors of the US Federal Reserve System, Mr. Alan Greenspan, in Washington on 8/10/97.

After decades of budgetary imprudence, there has been a growing recognition of our fiscal problems in recent years and an increased willingness of Presidents and Congresses to address them. The capping of discretionary programs and the first steps to deal with entitlement programs are encouraging, as, unquestionably, is the slower pace at which we are creating new entitlement programs. But it is important to place this improvement in the context of the decades-long deterioration in our fiscal position; we have stopped the erosion for now, but we have made only a downpayment on the longer-range problem confronting us.

Moreover, much of the fiscal improvement of recent years is less the result of a return to the prudent attitudes and actions of earlier generations, than the emergence of benevolent forces largely external to the fiscal process. The end of the Cold War has yielded a substantial peace dividend, and the best economic performance in decades has augmented tax revenues far beyond expectations while restraining countercyclically sensitive outlays.

The payout of the peace dividend is coming to an end. Defense outlays have fallen from 6.2 percent of GDP in 1985 to 3.4 percent this year. Further cuts may be difficult to achieve, for even if we are fortunate enough to enjoy a relatively tranquil world, spending will tend to be buoyed by the need to replace technologically obsolescent equipment, as well as by the usual political pressures.

The long-term outlook for the American economy presents us with, perhaps, even greater uncertainties. There can be little doubt that the American economy in the last several years has performed far better than the history of business expansions would have led us to expect. Labor markets have tightened considerably without inflation emerging as it has in the past. Encouraged by these results, financial markets seem to have priced in an optimistic outlook, characterized by a significant reduction in risk and an increasingly benevolent inflation process.

For example, in equity markets, continual upward revisions of longer-term corporate earnings expectations have driven price-earnings ratios to levels not often observed at this stage of an economic expansion.

Contributing to the expected increases in profits is a perceived marked increase in the prospective rate of return on new business ventures. This is evidenced by the sharp increase in capital investment since early 1993, especially in hi-tech equipment, which has persisted and even accelerated in recent quarters.

Underlying this apparent bulge in expected profitability and rates of return, as I suggested in my July Humphrey-Hawkins testimony, may be a maturing of major technologies in recent years. The synergies of lasers and fiber optics have spurred large increases in communications investments. The continued extraordinary spread of computer-related applications, as costs of manipulating data and other information fall, has also been a major factor in increased investment outlays. The combination of advancing telecommunications and computer technologies have induced large investment outlays to support the Internet and utilize it to realize efficiencies in purchasing, production, and marketing.

This dramatic change in technology, as I pointed out in earlier testimony, has markedly shortened the lead times in bringing new production facilities on line to meet increased demand, and has accordingly significantly reduced longer-term bottlenecks and materials shortages, phenomena often leading to inflation in the past.

Indeed, this faster response of facility capacity, coupled with dramatic declines in transportation costs owing to a downsizing of products, has led to speculation that we are operating with a new "paradigm," where price pressures need rarely ever arise because low-cost capacity, both here and abroad, can be brought on sufficiently rapidly when demand accelerates.

Before we go too far in this direction, however, we need to recall that it was just three years ago that we were confronted with bottlenecks in the industrial sector. Though less extensive than in years past at similarly high levels of capacity utilization, they were nonetheless putting visible upward pressures on prices at early stages of the production chain. Further strides toward greater flexibility of facilities have occurred since 1994, but this is clearly an evolutionary, not a revolutionary, process. At least for the foreseeable future, it will still take time to bring many types of new facilities into the production process, and productive capacity will still impose limits on meeting large unexpected increases in demand in a short period.

More relevant, by far, however, is that technology and management changes have had only a limited effect on the ability of labor supply to respond to changes in demand. To be sure, individual firms have acquired additional flexibility through increased use of outsourcing and temporary workers. In addition, smaller work teams may be able to adapt more readily to variations in order flows. While these techniques put the right workers at the right spots to reduce bottlenecks, they do not increase the aggregate supply of labor. That supply is sensitive to changes in demand, but to a far more limited extent than facilities. New plants can almost always be built. But labor capacity for an individual country is constrained by the size of the working-age population, which, except for immigration, is basically determined several decades in the past. Its lead time reflects biology, not technology.

Of course, the demand for capital facilities and labor are not entirely independent. Within limits, labor and capital are substitutes, and slack in one market can offset tightness in another. For example, additional work shifts often can expand output without significant addition to facilities. Similarly, more labor-saving equipment can permit production to be increased with the same level of employment, an outcome that we would observe as increased labor productivity. As I will be discussing in a moment, we are seeing some favorable signs in this regard, but they are only suggestive, and the potential for increased productivity to enhance the effective supply of labor is limited.

The fact is, that despite large additions to the capital stock in recent years, the supply of labor has kept pace with the demand for goods and services and the labor to produce them only by reducing the margin of slack in labor markets.

Of the more than two million net new hires at an annual rate from early 1994 through the third quarter of this year, little more than half came from an expansion in the population aged 16 to 64 who wanted a job, and more than a third of those were net new immigrants. The remaining one million per year increase in employment was pulled from those who had been reported as unemployed (nearly 700 thousand annually) and those who wanted, but had not actively sought, a job (more than 300 thousand annually). The latter, of course, are not in the official unemployment count.

The key point is that continuously digging ever deeper into the available working-age population is not a sustainable trajectory for job creation. The unemployment rate has a downside limit, if for no other reason than unemployment, in part, reflects voluntary periods of job search and other frictional unemployment, and includes people whose skills are not well adapted to work today and would be very costly to employ.

In addition, there is a limit on how many of the millions who wanted a job but were not actively seeking one could be readily absorbed into jobs -- in particular, the large number whose availability is limited by their enrollment in school, and those who may lack the necessary skills or may face other barriers to taking jobs. The number of people saying they would like a job, but have not been engaged in active job search, declined dramatically in 1996. But, despite increasingly favorable labor markets, few more of these 5 million individuals have been added to payrolls in 1997. This group of potential workers, on balance, is at its lowest level relative to the working-age population since at least 1970. As a source of new workers we may have reached about as far as is feasible into this group of the population.

Presumably, some of the early retirees, students, or homemakers who do not now profess to want to work could be lured to the job market. Rewards sufficient to make jobs attractive, however, could conceivably also engender upward pressures on labor costs that would trigger renewed price pressures, undermining the expansion.

Thus, there would seem to be emerging constraints on potential labor input. If the recent 2 million plus annual pace of job creation were to continue, the pressures on wages and other costs of hiring large numbers of such individuals could escalate more rapidly. To be sure, job growth slowed significantly in August and September, but it did not slow enough to close, from the demand side alone, the gap of the demand for labor over the supply from increases in the working-age population.

Thus, the performance of the labor markets this year suggests that the economy has been on an unsustainable track. That the marked rate of absorption of potential workers since 1994 has not induced a more dramatic increase in employee compensation per hour and price inflation has come as a major surprise to most analysts.

The strengthened exchange value of the dollar, which has helped contain price increases, is certainly one factor in explaining business reluctance to grant wage increases. Another explanation I have offered in the past is that the acceleration in technology and capital investment, in part by engendering important changes in the types of facilities with which people work on a day-by-day basis, has also induced a discernible increase in fear of job skill obsolescence and, hence, an increasing willingness to seek job security in lieu of wage gains. Certainly, the dramatic rise in recent years of on-the-job training and a substantial increase in people returning to school -- especially those aged twenty-five to thirty-four, mainly at the college level -- suggests significant concerns about skills.

But the force of insecurity may be fading. Public opinion polls, which recorded a marked increase in fear of job loss from 1991 to 1995, a period of tightening labor markets, now indicate a partial reversal of that uptrend.

To be sure, there is still little evidence of wage acceleration. To believe, however, that wage pressures will not intensify as the group of people who are not working, but who would like to, rapidly diminishes, strains credibility. The law of supply and demand has not been repealed. If labor demand continues to outpace sustainable increases in supply, the question is surely when, not whether, labor costs will escalate more rapidly.

Of course, a fall-off in the current pace of demand for goods and services could close the gap and avoid the emergence of inflationary pressures. So could a sharp improvement in productivity growth, which would reduce the pace of new hiring required to produce a given rate of growth of real output.

Productivity growth in manufacturing, as best we can measure it, apparently did pick up some in the third quarter and the broader measures of productivity growth have exhibited a modest quickening this year. Certainly, the persistence, even acceleration, of commitments to invest in new facilities suggests that the actual profitability of recent past investments, and by extension increased productivity, has already been achieved to some degree rather than being merely prospective.

However, to reduce the recent two million plus annual rate of job gains to the one million rate consistent with long-term population growth would require, all else equal, a full percentage point increase in the rate of productivity growth. While not inconceivable, such a rapid change is rare in the annals of business history, especially for a mature industrial society of our breadth and scope.

Clearly, impressive new technologies have imparted a sense of change in which previous economic relationships are seen as being less reliable now. Improvements in productivity are possible if worker skills increase, but gains come slowly through experience, education, and on-the-job training. They are also possible as capital substitutes for labor, but that is limited by the state of current technology. Very significant advances in productivity require technological breakthroughs that alter fundamentally the efficiency with which we use our labor and capital resources. But at the cutting edge of technology, where America finds itself, major improvements cannot be produced on demand. New ideas that matter are hard won.

Short of a marked slowing in the demand for goods and services and, hence, labor -- or a degree of acceleration of productivity growth that appears unlikely -- the imbalance between the growth in labor demand and the expansion of potential labor supply of recent years must eventually erode the current state of inflation quiescence and, with it, the solid growth of real activity.

In this context, the economic outlook sketched out for the United States by both the Office of Management and Budget and the Congressional Budget Office is realistic, even in some sense conservative. But you should recognize the range of possible long-term outcomes, both significantly better or worse, has risen markedly in the last year.

An acceleration of productivity growth, should it materialize, would put the economy on a higher trend growth path than they have projected. The development of inflationary pressures, on the other hand, would doubtless create an environment of slower growth in real output than that projected by OMB or CBO. A re-emergence of inflation is, without question, the greatest threat to sustaining what has been a balanced economic expansion virtually without parallel in recent decades. In this regard, we at the Federal Reserve recognize that how we handle monetary policy will be a significant factor influencing the path of economic growth and, hence, fiscal outcomes.

Given the wider range of possible outcomes that we face for long-term economic growth, the corresponding ranges of possible budget outcomes over the next five to ten years also has widened appreciably.

In addition to the uncertainties associated with economic outcomes, questions may be raised about other assumptions behind both projected receipts and outlays. With regard to the former, it is difficult to believe that our much higher-than-expected income tax receipts of late are unrelated to the huge increase in capital gains, which since 1995 have totaled the equivalent of one-third of national income. Aside from the question of whether stock prices will rise or fall, it clearly would be unrealistic to look for a continuation of stock market gains of anything like the magnitude of those recorded in the past couple of years.

On the outlay side, the recently enacted budget agreement relies importantly on significant, but as-yet-unspecified, restraints on discretionary spending to be made in the years 2001, 2002, and thereafter. Supporters of each program expect the restraints to fall elsewhere. Inevitably, the eventual publication of the detail will expose deep political divisions, which could make the realization of the budget projections less likely. In addition, while the budget agreement included significant cuts in Medicare spending, past experience has shown us how difficult Medicare is to control, raising the possibility that savings will never be realized. More generally, I wonder whether there is enough funding slack to accommodate contingencies, or the inevitable new, but as yet unidentified, spending programs.

Budget forecasts are understandably subject to fairly large errors. Seemingly small changes in receipts and outlays are magnified in the budget deficit. For example, during the 1990s, the average absolute error in the projections of February for receipts and outlays in the fiscal years starting the subsequent October has been greater than four percent. A four percent error in both outlays and receipts in opposite directions amounts to more than $125 billion annually. Indeed, the uncertainty of budget forecasts is no better illustrated than by an admittedly extreme case. During the last two and a half years the projection of the fiscal balance, excluding new initiatives, for the year 2002 has changed by about $250 billion. While all this fortunately has been in the direction of smaller deficits, the degree of uncertainty suggests that the error could just as easily be on the other side.

With this high level of uncertainty in projecting budget totals and associated deficits, the Congress needs to evaluate the consequences to long-term economic growth of errors in fiscal policy. A base issue in such an evaluation is whether we are better off to be targeting a large deficit, balance, or a chronic surplus in our unified budget.

There is nothing special about budget balance per se, except that it is far superior to deficits. I have always emphasized the value of a budgetary surplus in increasing national savings, especially when American private domestic savings is low, as it is today.

Higher national savings lead in the long run to higher investment and living standards. They also foster low inflation. Low inflation itself may be responsible, in part, for higher productivity growth and larger gains in standards of living.

If economic growth and rising living standards, fostered by investment and price stability, are our goal, fiscal policy in my judgment will need to be biased toward surpluses in the years immediately ahead. This is especially so given the inexorable demographic trends that threaten huge increases in outlays beyond 2010. We should view the recent budget agreement, even if receipts and outlays evolve as expected, as only an important downpayment on the larger steps we need to take to solve the harder problem -- putting our entitlement programs on a sound financial footing for the 21st century.

Moreover, targeted surpluses could hopefully help to offset the inbuilt political bias in favor of budget deficits. I have been in too many budget meetings in the last three decades not to have learned that the ideal fiscal initiative from a political perspective is one that creates visible benefits for one group of constituents without a perceived cost to anybody else, a form of political single-entry bookkeeping.

To be sure, in recent years we have been showing some real restraint in our approach to fiscal policy. Yet, despite terminating a number of programs, the ratio of federal nondefense, noninterest, spending to GDP still stands at nearly 14 percent, double what it was in the 1950s. This may be one reason why inflation premiums, embodied in long-term interest rates, still are significant. There is, thus, doubtless a lot of catching up to do.

The current initiatives toward welfare, social security, and Medicare reform are clearly steps in the right direction, but far more is required. Let us not squander years of efforts to balance the budget and the benefits of ideal economic conditions by failing to address our long-term imbalances.

A critical imbalance is the one faced by social security. Its fund's reported imbalance stems primarily from the fact that, until very recently, the payments into the social security trust accounts by the average employee, plus employer contributions and interest earned, were inadequate, at retirement, to fund the total of retirement benefits. This has started to change. Under the most recent revisions to the law, and presumably conservative economic and demographic assumptions, today's younger workers will be paying social security taxes over their working years that appear sufficient to fund their benefits during retirement. However, the huge liability for current retirees, as well as for much of the work force closer to retirement, leaves the system, as a whole, badly underfunded. The official unfunded liability for the Old Age, Survivors and Disability funds, which takes into account expected future tax payments and benefits out to the year 2070, has reached a staggering $3 trillion.

This issue of funding underscores the critical elements in the forthcoming debate on social security reform, because it focusses on the core of any retirement system, private or public. Simply put, enough must be set aside over a lifetime of work to fund the excess of consumption over claims on production a retiree may enjoy. At the most rudimentary level, one could envision households saving by actually storing goods purchased during their working years for consumption during retirement. Even better, the resources that would have otherwise gone into the stored goods could be diverted to the production of new capital assets, which would, cumulatively, over a working lifetime, produce an even greater quantity of goods and services to be consumed in retirement. In the latter case, we would be getting more output per worker, our traditional measure of productivity, and a factor that is central in all calculations of long-term social security trust fund financing.

Hence, the bottom line in all retirement programs is physical resource availability. The finance of any system is merely to facilitate the underlying system of allocating real resources that fund retirement consumption of goods and services. Unless social security savings are increased by higher taxes (with negative consequences for growth) or lowered benefits, domestic savings must be augmented by greater private saving or surpluses in the rest of the government budget to help ensure that there is enough savings to finance adequate productive capacity down the road to meet the consumption needs of both retirees and active workers.

The basic premise of our current largely pay-as-you-go social security system is that future productivity growth will be sufficient to supply promised retirement benefits for current workers. However, even supposing some acceleration in long-term productivity growth from recent experience, at existing rates of domestic saving and capital investment this is becoming increasingly dubious.

Accordingly, short of a far more general reform of the system, there are a number of initiatives, at a minimum, that should be addressed. As I argued at length in the Social Security Commission deliberations of 1983, with only marginal effect, some delaying of the age of eligibility for retirement benefits will become increasingly pressing. For example, adjusting the full-benefits retirement age to keep pace with increases in life expectancy in a way that would keep the ratio of retirement years to expected life span approximately constant would help to significantly narrow the funding gap. Such an initiative will become easier to implement as fewer and fewer of our older citizens retire from physically arduous work. Hopefully, other modifications to social security, such as improved cost of living indexing, will be instituted.

There are a number of thoughtful reform initiatives that, through the process of privatization, could increase domestic saving rates. These are clearly worthy of intensive evaluation. Perhaps the strongest argument for privatization is that replacing the current underfunded system with a fully funded one could boost domestic saving. But, we must remember it is because privatization plans might increase savings that makes them potentially valuable, not their particular form of financing. As I have argued elsewhere, unless national savings is increased, shifting social security trust funds to private securities, while increasing government retirement system income, will lower retirement incomes in the private sector to an offsetting degree. This would not be an improvement to our overall retirement system.

The types of changes that will be required to restore fiscal balance to our social security accounts, in the broader scheme of things, are significant but manageable. More important, most entail changes that are less unsettling if they are enacted soon, even if their effects are significantly delayed, rather than waiting five or ten years or longer for legislation.

Minimizing the potential disruptions associated with the inevitable changes to social security is made all the more essential because of the pressing financial problems in the Medicare system, social security's companion program for retirees. Medicare as you are well aware is in an even more precarious position than social security. The financing of Medicare faces some of the same problems associated with demographics and productivity as social security but faces different, and currently greater, pressures owing to the behavior of medical costs and utilization rates. Reform of the Medicare system will require more immediate and potentially more dramatic changes than those necessary to reform social security.

We owe it to those who will retire after the turn of the century to be given sufficient advance notice to make what alterations in retirement planning may be required. The longer we wait to make what are surely inevitable adjustments, the more difficult they will become. If we procrastinate too long, the adjustments could be truly wrenching. Our senior citizens, both current and future, deserve better.