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COUNCIL OF ECONOMIC ADVISERS
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Prepared Remarks of Edward P. Lazear, Chairman

"A Success Story: American Productivity"

At the National Economists Club

July 13, 2006

Thank you for inviting me to speak at the National Economists Club. It is a pleasure to be here. Speaking to you is more enjoyable when economic growth is strong so I have an easier task than some of my predecessors.

Economic Outlook

Let me begin by sketching a picture of the economy and the Administration's forecast of key parameters over the next couple of years. Real growth of gross domestic product (GDP) was at 3.2 percent over the four quarters of 2005, and is forecast to be at 3.6 percent over the four quarters of this year and 3.3 percent over the next year. We expect rates of inflation of about 3 percent, and even lower going forward from this point. These expectations are consistent with market data and with the consensus of private forecasts.

This week the Office of Management and Budget confirmed that strong economic growth is helping to increase federal revenue and reduce the budget deficit faster than expected. We have seen similar reports in past months from states on their budgets.

Job growth has been strong over the past couple of years. The economy has been producing about two million payroll jobs per year for a total of 5.4 million additional jobs since August 2003. That trend is largely expected to continue with some slight moderation. Our monthly estimate of employment growth for 2006 is 156,000. The unemployment rate, which was 5.1 percent in 2005, is forecast to average 4.7 percent in 2006. This is below the averages for each of the past four decades.

Last week there was the release of a very solid jobs report for June. It showed 121,000 payroll jobs being added and the unemployment rate remaining low at 4.6 percent. In addition, hourly wages spiked up for an increase of 0.5% for just June alone. Nominal wage growth has accelerated significantly over the past year. Nominal wage growth is strong and has been able to compensate for large and unanticipated increases in energy prices that raised inflation rates.

The most notable change in the economy since a year ago has been a significant increase in the price of gasoline and oil products. Since last May, the price of crude oil is up about 40 percent and nationally the price of gasoline at the pump is up about 35 percent. Higher energy prices strain family and business budgets, but thus far the economy has once again exhibited resiliency.

Although higher energy prices have played a role in boosting inflation over the past year to 4.2 percent, the rate of core inflation (excludes volatile food and energy prices) was only 2.4 percent, up very slightly from the 2.2 percent core inflation rate over the year-earlier period. These figures are from the consumer price index (CPI). Other measures show less inflation.

There have been some concerns in the past couple of months that the economy may slow this year. It is better described as likely moderating from very good growth to good growth. The first quarter of 2006 enjoyed real GDP growth at an annual rate of 5.6 percent. While we do not expect growth rates to continue at that level throughout the remainder of the year, we do expect that they will be sufficiently high to cause real GDP growth over the four quarters of 2006 to be in the neighborhood of three-and-a-half percent, as mentioned earlier.

We lead the major industrialized countries in economic growth and we have very good fundamentals for continued economic expansion. These fundamentals include a flexible labor market, few impediments to business formation, high levels of investment in skills and human capital, strong property rights, well developed and sophisticated capital markets, low taxes, and an entrepreneurial spirit. Americans' pioneering attitudes and openness to new ideas and new peoples have been instrumental in growing this economy.

<u>Productivity Growth</u>

Behind these strong numbers is high productivity growth, that has made our economy the strongest and most robust in the world. It is the common thread that ties all positive economic news together.

Productivity growth is a close relative of economic growth. Productivity growth leads to higher wages and improved standards of living. It helps keep inflation pressures moderate. And, it has proven to be one of our Nation's most important economic fundamentals and a defining characteristic of our international competitiveness.

The United States is the most productive country in the world by a variety of measures. U.S. output per capita is approximately 30 percent higher than the developed European countries and Japan. Furthermore, growth in American productivity has been high. The Bureau of Labor Statistics reports that U.S. productivity growth between 2001 and 2005 was at 3.3 percent per year, which is up from the 2.5 percent figure that prevailed from 1996 to 2000. The period between 1973 and 1995 experienced productivity growth that was only in the 1½ percent range (see Figure 1). This is indeed quite remarkable for a country that is already at the top of the productivity pyramid. Achieving high rates of productivity growth would seem to be easier for countries that could mimic the technology improvements made by other countries, so as to enjoy rapid productivity growth at least over the short run. But for the country that already leads the world in productivity, this is even more impressive.

America's high productivity growth is partly reflected in the fact that GDP has been growing in the United States at rates that are not only high by historical measures, but are also at the top of the G-7. After all, productivity growth is measured by looking at the change in the ratio of output to labor used. If output is growing rapidly, then it is not unlikely that productivity is also growing rapidly. But the reverse also holds true. A large part of the reason that output has grown rapidly in the United States is that productivity has been increasing. This was particularly true during the early years of the recovery when labor growth was flat. In more recent years we have produced increasing output not only through productivity gains, but also by putting more people to work.

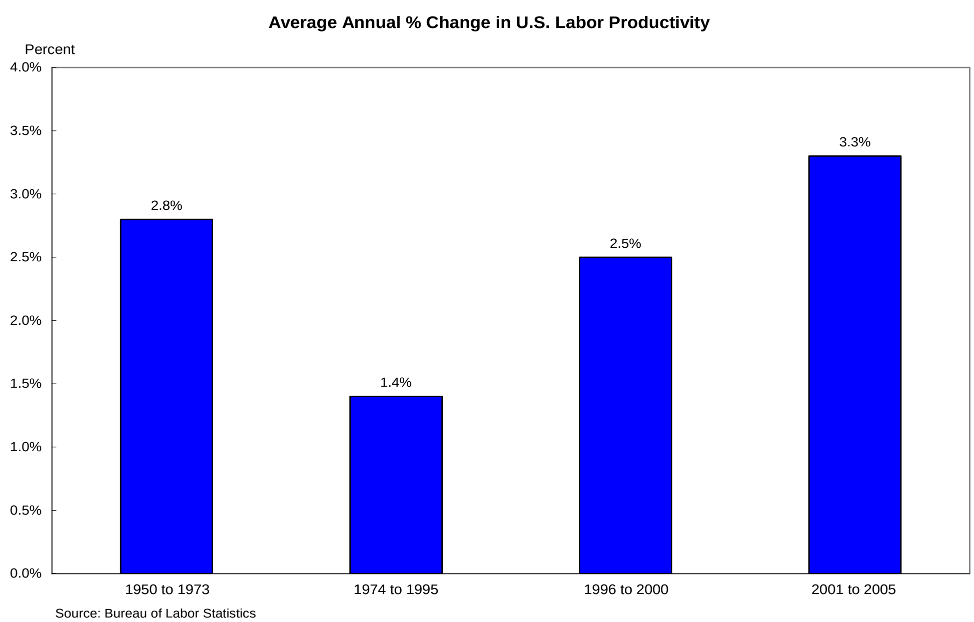
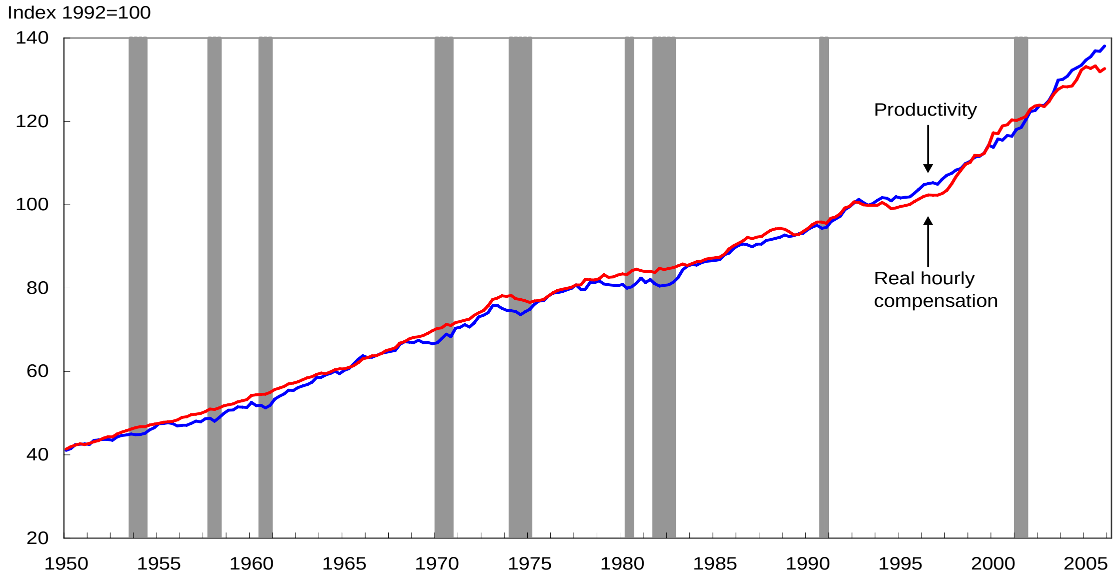


Figure 1

While output and productivity are of interest in and of themselves, they are of particular importance because wages and workers' standard of living depend on productivity, even over the relatively short run. Over the longer run, hourly compensation and productivity move one-for-one.

Productivity and Real Compensation Grow Together

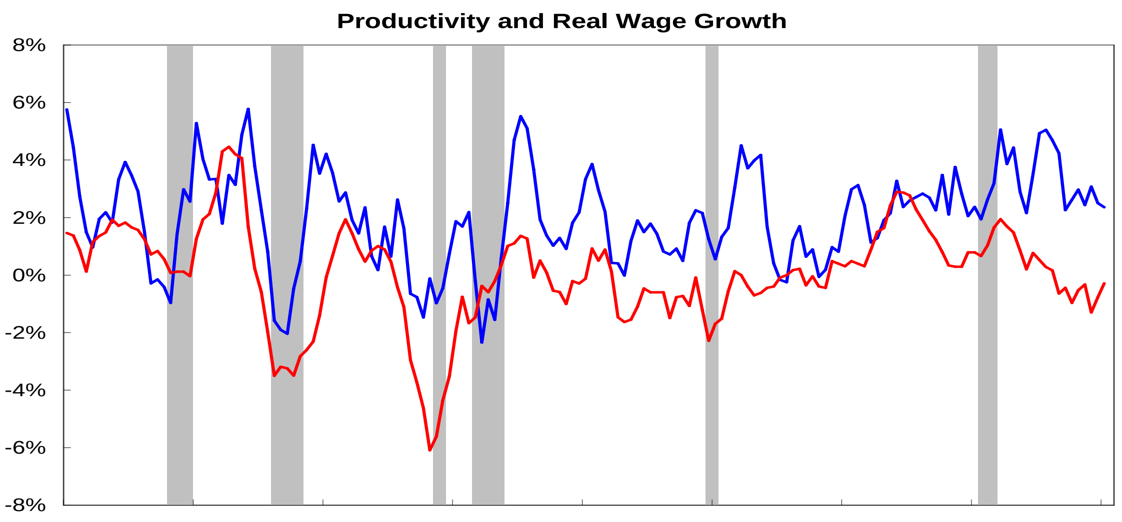


Note: These data cover all persons (including supervisory and proprietors) in the nonfarm business sector. The real product wage is hourly compensation deflated by the price index for nonfarm output. Shaded areas denote recessions.
Source: Bureau of Labor Statistics.

Figure 2

The chart shown here (Figure 2) demonstrates the very strong correlation between productivity increases and real hourly compensation. While there are periods during which the two series diverge, they tend to catch up to one another. In particular, wages sometimes lag productivity—especially coming out of recessions. That was the case in the 1990s, where hourly compensation lagged productivity in the mid-90s and caught up only during the late 90s. And it was also true after the recession that occurred a few years ago. 2006 has seen significant increases in nominal wages above the levels of past years. Indeed, the nominal wage growth associated with increases in productivity has virtually offset the unanticipated and extraordinary increase in prices associated with energy cost increases that have occurred since June of 2005. Over this period, nominal wages grew 3.9 percent – with 0.5 percentage point of this in June 2006 alone (nearly 6 percent at an annual rate). Additionally, in the first quarter, real compensation grew more than 3 percent at an annual rate. If this trend continues, 2006 will be a period during which real wages increase commensurate with earlier gains in productivity, despite the fact that we have been subject to large price hikes in the energy sector.

Of course, as mentioned earlier, it is not always the case that wages and productivity move together over the very short run. Figure 3 shows that growth rates in real hourly earnings have diverged from growth rates in productivity following recessions (see 1983, 1992 through 1993, and 2003). It is also clear from the graph that, on average, hourly wage growth lies below output per hour growth—despite the fact that the earlier graph shows that they are linked one-to-one. The reason is the deviation between hourly wages and real compensation. Benefits have been growing over time, so hourly wages have grown more slowly than total compensation. That is to be expected, since the relevant measure both from the worker and firm point of view is total compensation, and hourly wages are simply the monetary component of total compensation.



Note: Productivity and wage growth are both calculated as 4-quarter percent changes. Wage growth is defined as the average hourly earnings of production workers. Shaded areas denote recessions.
Source: Bureau of Labor Statistics.

Figure 3

Productivity rises when output increases more rapidly than the number of hours worked. After the mild recession that occurred in 2001, output initially grew strongly, despite the fact that the number of hours worked did not increase. Instead, productivity rose, and the economy was able to get more output out of the same number of hours. The success that has characterized the American economy over the longer run was evidenced especially during this particular period when productivity jumped, output jumped, and hours of work remained even. More recently, employment and hours worked have risen as well, and the increases in output that we have seen over the past couple of years have been accounted for in part by productivity gains, and in part by employment gains.

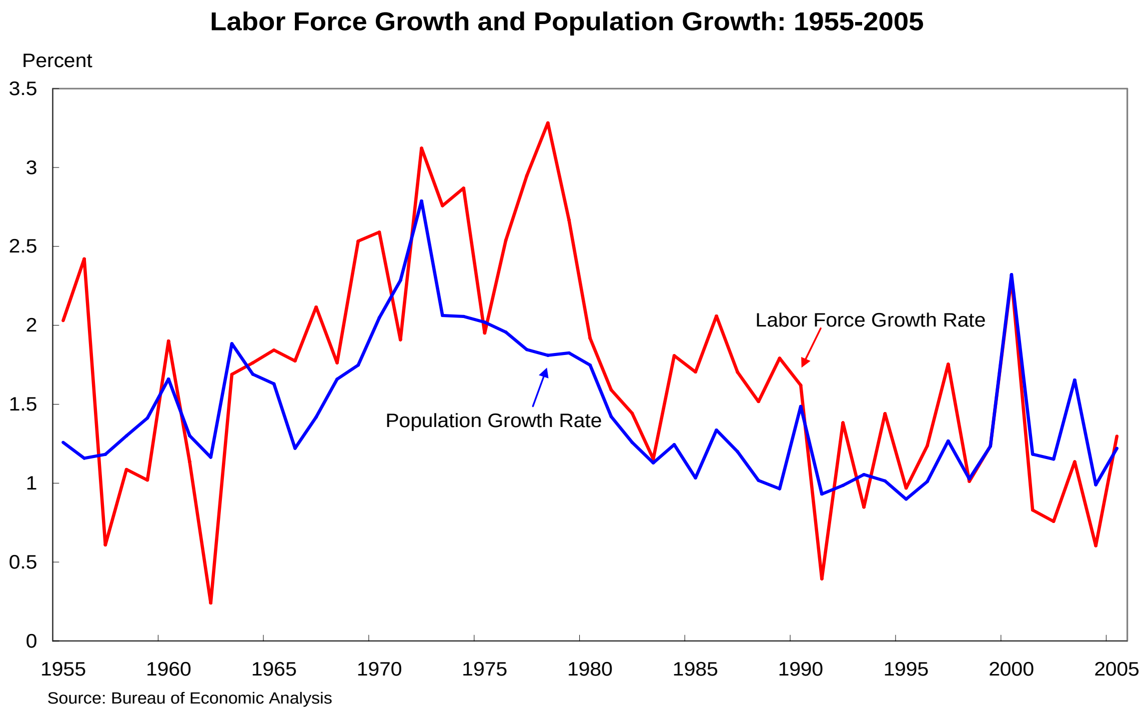


Figure 4

As we go into the future, unemployment rates are now sufficiently low that it is unrealistic to expect to see huge gains in output from increased labor. That is true even more so as we move into the distant future, because the slowing growth of the population and the aging of baby boomers will mean a smaller supply of workers to support the economic engine. By far the single most important determinant of jobs in the economy is population. In Figure 4, it is apparent that there is a high correlation between population growth rates and labor force growth rates. In order to sustain growth and output, it will be necessary, therefore, to ensure that productivity increases. To put this in historical perspective, note that the U.S. working age population increased by 84 percent between 1950 and 2000. During the next fifty years, the population is projected to increase by 31 percent. And our situation, incidentally, is less problematic than that facing other countries. For example, Japan's population is expected to decline by 34 percent over that same period, and Italy's population will decline by 33 percent. All of these trends increase the dependency ratio and make productivity growth even more important.

Productivity growth in the United States exceeds that of the other G-7 countries and is among the worldwide leaders. In one sense, it is a bit surprising that the United States is a leader in terms of economic output and performance. It is far easier for countries that are behind to mimic the technology and performance of leaders than it is for a leader to push out the frontier, and yet the United States has done exactly that. America's leadership position is even more surprising when one considers how the average number of hours worked in the United States exceeds that in most European countries by a good margin. For example, a typical worker in the U.S. works one eight hour day per week more than the typical worker in France and Germany. Since productivity tends to decline with additional hours worked, the American situation is even more surprising.

There have been a number of potential explanations for the differences between the United States and other countries. The leading candidates include labor market flexibility and high levels of investment, both physical and human. Some of this was documented in Edward Prescott's Richard T. Ely Lecture at the 2002 American Economic Association Meetings, "Prosperity and Depression."[1] A number of observers believe that low marginal tax rates on work, high incentives to invest in physical capital, and a climate of employment at will have been major contributors. It is certainly true that job security provisions pervasive in Europe and less prevalent in the United States are primary suspects for output limitations found in Europe.[2]

In addition to having a free and mobile labor market, the U.S. also encourages entrepreneurship and business formation. By almost any measure, the U.S. is one of the leading nations in terms of the ease with which individuals can start a new business (see Figure 5).

As important as physical investment is to American productivity, human capital is probably the key driver of productivity growth in any country. Historically, the United States has led the G-7 in tertiary educational attainment (see Fig. 6).

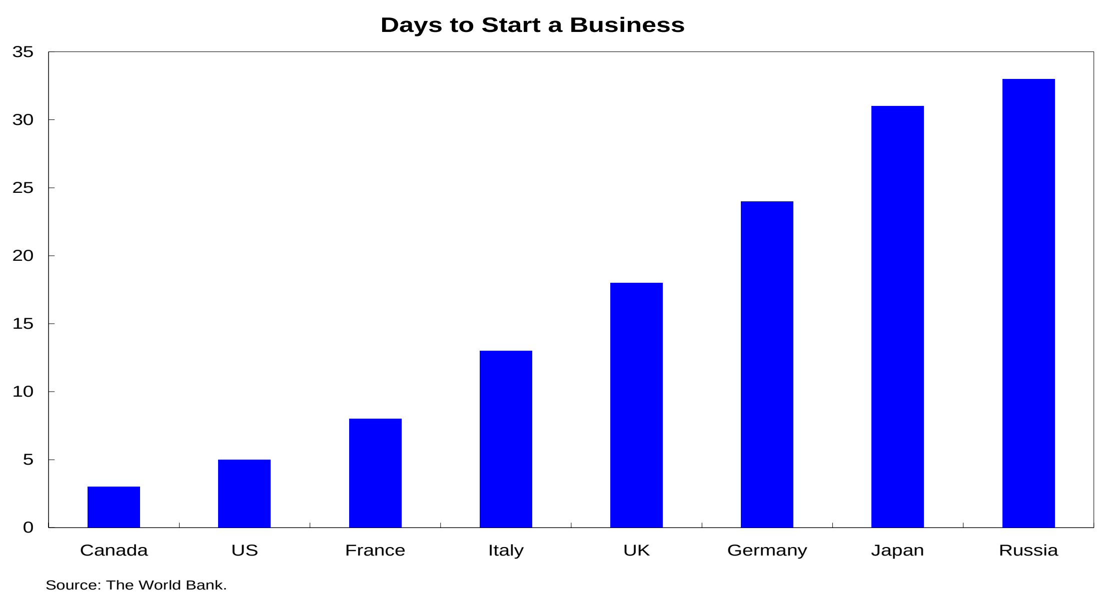


Figure 5

[1] The full text of Prescott's Ely Lecture can be obtained at http://minneapolisfed.org/research/WP/WP618.pdf.
[2] In my 1990 paper "Job Security Provisions and Employment" in the Quarterly Journal of Economics (Vol. 105, No. 3. (Aug., 1990), pp. 699-726), I found that job security provisions were instrumental in limiting employment in developed countries.

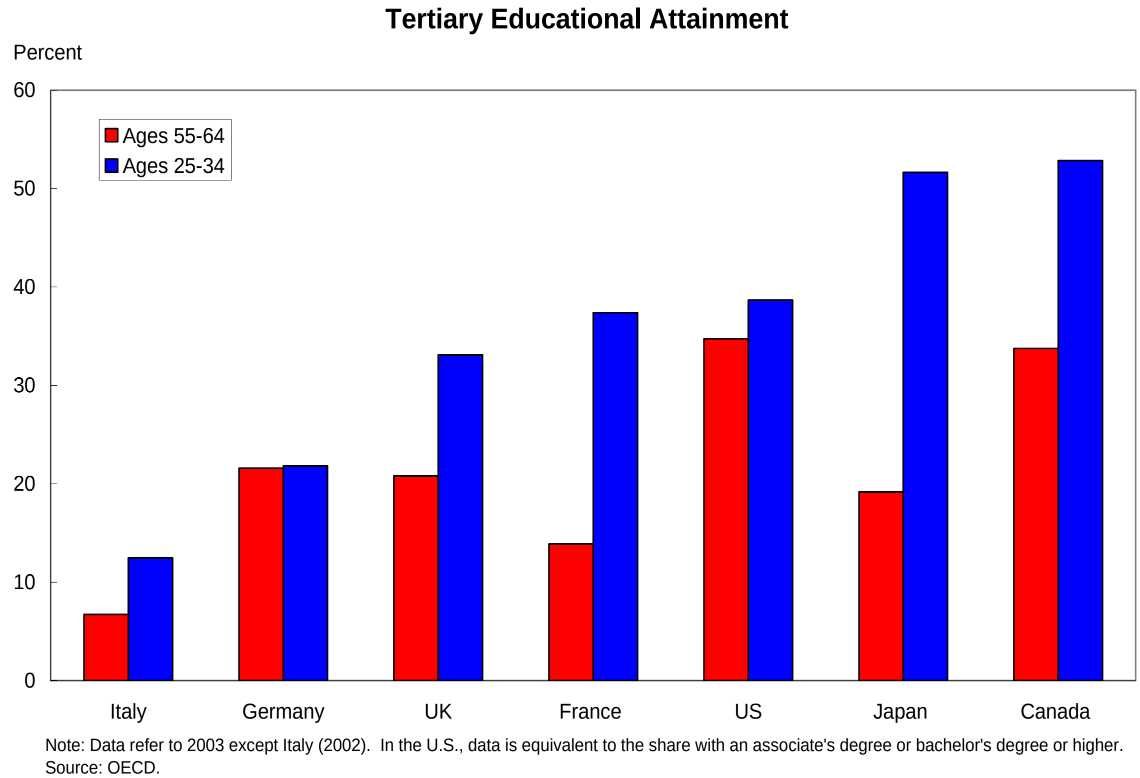


Figure 6

Note that the red bar for the U.S. that depicts tertiary educational attainment among the cohort of individuals currently aged 55 to 64 is the highest among G-7 countries. But it is also important to note that while our tertiary educational attainment has gone up, we have lost in relative terms to the other G-7 countries—most notably Japan, Canada, and France. In order to maintain our edge in the future, it will be necessary to ensure that we do not allow our investment in human capital to slip.

Another ingredient to economic success is the feeling that individuals have the ability to succeed in this society. When young individuals do not believe that they have a chance to attain levels of success commensurate with their effort, they cease trying. But the United States has always been a place where opportunities to move up are widespread. One illustration of this is looking at the earnings of immigrants over time. We, of course, are a nation of immigrants. It is another one of our defining characteristics. First generation immigrants in 2003 had median incomes of about $27,000. Their children, who form the second generation, had median incomes of about $38,000. Thus, in one generation, immigrants go from being below the median to above the median. Of course, the success that is displayed by the gains among the children of immigrants is not universal throughout our society and it is necessary that we continue to strive to open doors for all of our citizens. Only by doing so will we ensure that individuals have the appropriate incentives to invest and acquire those skills that will help the economy grow. It is also the right thing to do.

Economic Policies

What can we do specifically to ensure that we grow at high rates and encourage additional economic growth? First, we must make sure that marginal tax rates stay low. The most important way to encourage growth in an economy is to maintain high rates of return to investments, both in physical and human capital. To allow for high rates of investment in physical capital, business taxes and returns to capital investments through dividends, capital gains and other payments must not be taxed at high rates. Raising the level of capital per worker makes workers more productive and leads to higher wages in the long run. Congress' recent actions with the President to extend the capital gains and dividends tax cuts are very positive moves in this direction. The President also continues to seek the complete elimination of the Death Tax and we believe that such a policy would be favorable to create a climate that is positive for both saving and investment.

Second, we must ensure that we do not discourage investment in human capital. The most important source of capital in the economy is the capital that is embodied in people through their skills. To make sure that individuals have incentives to invest in skills by going to college, graduate school, or vocational schools to obtain other forms of skills on the job, it is necessary to keep the tax rates on wage income low. If individuals see that returns to investments in their skills will only be dissipated through high tax rates on moderate to high wage earners, the incentives to invest in human capital will be dampened.

Third, we must remain open to foreign commerce. For example, foreign investment has been an important source of capital for the United States. The amount of investment in the U.S. accounted for by foreign individuals and institutions is currently 34 percent. Approximately one in 20 workers is employed in a foreign-owned firm and about 45 million workers are employed by firms that engage in significant amounts of international trade. As such, we must make sure that we keep pushing for freer trade, especially in the area of services which has become a larger and larger part of our economy.

Fourth, the President has outlined a competitiveness initiative to make sure that Americans have the skills to compete in the modern world. We must continue to push for reform in K-12 education, which has been the weakest component in our human capital investment structure. Fortunately, our colleges and graduate schools are the best in the world. We export education by training large numbers of foreign students in our American colleges and universities and it is good for us to continue to do that, but we must also make sure that those Americans who do not necessarily go on to college also get the skills that are important for them to compete in a modern American economy. As such, keeping students in high school, reducing our drop-out rates, and ensuring that the education quality that is provided to all of our young citizens is high will be important not only in the near future, but as we move into the later years of the 21st Century. The President’s efforts over the past several years to improve education with the No Child Left Behind Act, community college initiative, and job training reforms will help.

In conclusion, productivity grows as a result of investment in physical and human capital, and physical and human capital are enhanced when incentives remain strong. The American economy is strong and relatively unimpeded by restrictions that hinder productivity growth in other countries. It is necessary to maintain the openness of the U.S. economic environment to ensure that productivity will continue to generate improvements in the typical worker's standard of living. The President's initiatives for low taxes and his focus on the improvement of the skills of all Americans are positives steps.

Again, thank you for the opportunity to discuss these issues with you.