

Education and Labor

Long-term economic growth requires a productive workforce with the skills necessary to compete in a global labor market. The Administration's commitment to boosting the high productivity of American workers is evident in successful education and training policies. These include initiatives to increase primary and secondary school accountability, to ensure broader access to higher education, and to train workers so that they may take advantage of new high-paying job opportunities.

Real disposable income grew steadily during the Administration, and earnings per hour outpaced inflation despite large increases in energy prices and a growing portion of employee compensation being paid in non-wage benefits. Real median household income did fall slightly during the Administration, but this decline began prior to the Administration taking office. The Administration included several years of strong growth in real median household income from 2004 to 2007. The strongest pension reform measures in over three decades were also enacted. These offered important protections to workers who depend on their firm's pension plans for their retirement incomes.

Challenges lie ahead, however, and the most successful initiatives of the Administration must be bolstered. A continued commitment to better quality in kindergarten through twelfth-grade (K–12) education and broader access to higher education will help produce the additional workers the United States needs to meet the increasing worldwide demand for highly skilled labor.

In addition to these challenges, some related issues will need to be addressed, and education and labor policy will be important elements. First, the high level of income inequality in the United States calls for educating and training a greater number of workers, as better and more widely dispersed skills will be a force in reducing income inequality in the United States. Furthermore, the United States also needs comprehensive reform of its immigration policies. The principles of this Administration's immigration plan, which include a number of education and labor initiatives, will likely be the starting point for future discussions.

The key points of this chapter are:

- Education benefits individuals through higher earnings, and benefits society as a whole. Administration initiatives to improve K–12 education,

most notably the No Child Left Behind Act, are demonstrating clear, measurable results.

- Access to higher education was maintained through an expanded Pell Grant program and proactive efforts that helped protect Federally subsidized student loans from recent credit issues faced elsewhere in the economy.
- Despite a small decline in real median household income, which had begun prior to the Administration taking office, hourly earnings of workers outpaced inflation, and real per capita disposable income rose substantially during the past 8 years. Median household income increased steadily after the recovery began in earnest in 2004. Also, pension reforms were enacted to help protect retirement income.
- Income inequality and immigration reform must still be addressed. Strong support for education and a focus on workers' skills can help close income gaps. Reform of immigration policies must provide border security while allowing the economic benefits that immigrant labor provides to the economy.

Economic Benefits of Education

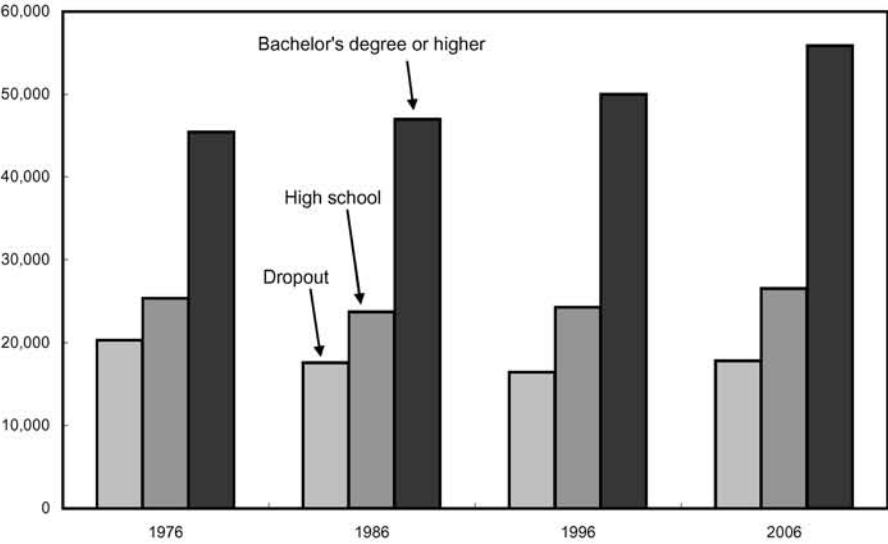
Education is an investment. As with other investments, people compare benefits and costs when deciding whether to invest. The benefits of a quality education are widespread, with greater earnings being enjoyed by people and families who invest in education. Also, there are additional, non-pecuniary benefits of education that are enjoyed by both individuals and society at large. Education is also a key component of worker productivity and long-term economic growth.

For most people, a strong motivation to obtain additional years of schooling is the labor market return they expect to receive. Indeed, according to Chart 8-1, adults with a bachelor's or an advanced degree earn considerably more than adults with a high school degree. Likewise, those with a high school degree earn more than those who failed to complete high school. The gap between the earnings of those with a college education and those with a high school education, however, has grown since the 1970s. Currently, the average recipient of a college degree earns well over twice the amount earned by the average adult without a degree. Although any one individual's benefit from a college degree will differ due to ability, choice of major, and other factors, the expected return for investments in education undoubtedly motivate people to attend college.

Chart 8-1 does not take into account other individual benefits of education, most notably improved health. A substantial number of recent studies have

Chart 8-1 Average Adult Real Earnings by Educational Attainment
Earnings increase substantially with education, and the return has grown over time.

Income per year (constant 2000 dollars)



Source: Department of Commerce (Bureau of the Census, Current Population Survey).

shown that a direct link exists between educational attainment and health, even after holding income constant. One reason for this link may be the fact that people with greater educational attainment make better choices that impact their health positively, such as getting more exercise or not smoking. Education might also improve one's ability to navigate a complex health care system. Although the health returns to education are difficult to price in monetary terms, people surely value their health.

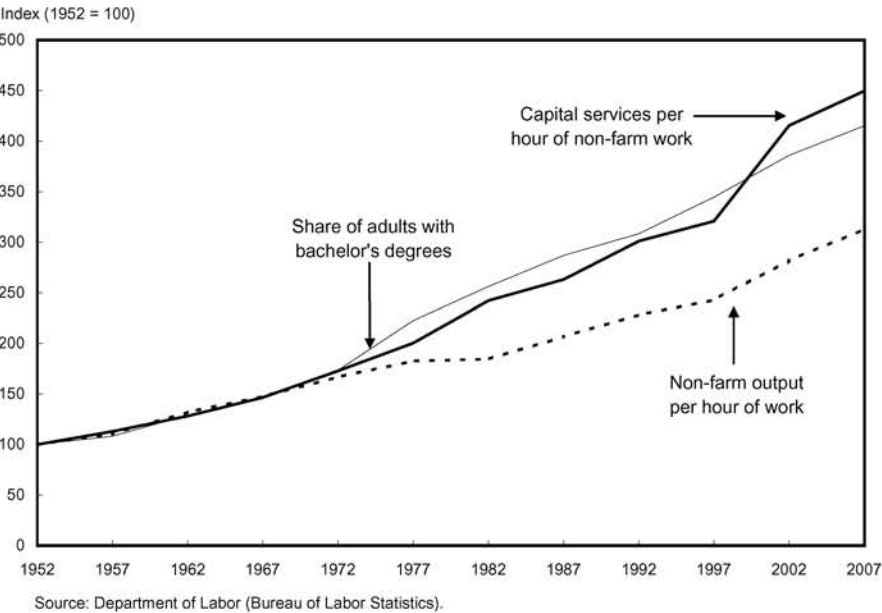
In addition to an individual's benefit from more education (greater earnings and better health), society benefits from a better-educated population. Education has been shown to foster civic-mindedness. For example, education makes it more likely someone will vote or support free speech. It also improves social skills and reduces crime. These effects of education positively affect fellow citizens as well as the individuals obtaining the education.

Finally, education is a key component of economic growth. Chart 8-2 illustrates the sustained productivity growth the United States has enjoyed throughout the past half century. It sets an index of output per hour of work for all non-farm workers to 100 in 1952 and displays the index over 5-year increments through 2007. The chart indicates that productivity has grown more than 200 percent over the past half century. Chart 8-2 also plots indexes of educational attainment (measured as the share of adults with a bachelor's degree) and capital services (for example, machinery and

equipment) per hour. Both educational attainment and capital intensity, which measures the extent to which capital is used with labor, show strong upward trends. This means that in recent decades, businesses have not only employed an increasingly educated workforce, but have also put more capital (especially computers and high-tech equipment) at the disposal of this workforce. Through better production processes and management, businesses have also become more efficient in using labor. Education, capital intensity, technological advances, and efficiency gains are all interrelated in complex ways, but research has credited education with as much as one-third of the growth of U.S. productivity from the 1950s to the 1990s.

As more of the population achieves higher levels of education and the education they receive is of better quality, additional productivity benefits start to take hold through *spillover effects*. Educated workers share their knowledge and skills with each other, thereby increasing their combined productivity. Moreover, an increasingly skilled workforce fosters technological advancements that increase the demand for even more skilled workers. This technologically driven increase in demand has been great enough in the United States to drive up the wages for skilled workers even as the supply of such workers is increasing.

Chart 8-2 Growth in Educational Attainment, Capital Intensity, and Labor Productivity over Time
Education and the use of capital per hour of work have grown, spurring productivity growth.



There are also benefits to moving the entire population up to a basic level of competence because the labor market continues to demand increasing skills of its participants in virtually all tasks. Thus, the focus of the current Administration on improving K–12 instruction of every student in the United States is well placed.

Primary and Secondary Education

A strong commitment to education begins with ensuring that every child has access to quality primary and secondary schools. The No Child Left Behind Act (NCLB), which is intended to accomplish this goal, has been the centerpiece of the Administration’s education policy. The NCLB Act was signed into law in January 2002 and has since reshaped the Federal role in the provision of K–12 education in the United States. It holds schools accountable for the performance of students, provides parents with more information and more choices, gives States and localities more flexibility in using Federal funds to meet the needs of children they serve, and promotes proven education methods. Among its many provisions, two innovative approaches to improve the quality of education stand out: holding schools accountable for making adequate yearly progress toward NCLB goals, and facilitating school choice options and supplemental education services for students in schools that are failing to meet standards.

Under the adequate yearly progress provisions of NCLB, each State is charged with developing its own guidelines for determining whether schools make sufficient progress each year toward the NCLB goal that all students be proficient in math and reading by 2014. If a school receives NCLB funds due to its low-income status and fails to meet its State’s standards for adequate yearly progress for consecutive years, that school is identified as needing improvement and faces an escalating set of interventions. Students can transfer to another school in the same district. In addition, low-income students in the schools are offered supplemental education services (such as tutoring services or other academic help), which are paid for out of Federal funds. School districts have the obligation to notify parents of these options and to provide a list of approved supplemental education service providers in their area. A school that continually fails to make adequate yearly progress is subject to takeover or restructuring by the State.

Early Signs of NCLB Success

The success of NCLB will take years to determine, as current cohorts of students complete high school and move on to college or the workforce, but early indications are encouraging. The top panel of Table 8-1 summarizes

recent trends in standardized math test scores for fourth graders as reported by the National Assessment of Educational Progress, which periodically tests fourth and eighth graders across the country. Researchers suggest that math test scores are a good way to judge achievement because they predict future labor market success well. The scores of students who were in fourth grade in 2005 and 2007 (no test was given in 2006) provide the most information because most if not all of their schooling to that point was during the time of the NCLB. These scores are from national standardized tests, and each State sets its own definition of proficiency, so the table is more indicative of general changes in student performance over time rather than actual progress toward a specific State's proficiency standard.

Table 8-1 shows that early in this decade, less than 10 percent of low-income students and less than 25 percent of all students were proficient in math (with low-income defined as being eligible for government-sponsored free lunch programs). Over 50 percent of low-income students were below even basic levels at that time. By 2007, however, 82 percent of students had reached the basic level, and the number of students achieving proficiency had increased from 24 percent in 2000 to 39 percent in 2007. For low-income students, the percent proficient has nearly tripled, from 8 percent in 2000 to 22 percent in 2007. This is encouraging evidence, but we must use caution in attributing these increased test scores to NCLB directly. For example, there were increases in math and reading scores from 2000 through 2003, and this may reflect some upward trending of scores before NCLB took effect in 2002. This pre-NCLB trend could be reflective of an accountability movement that was taking shape across the country, which culminated in Federal

TABLE 8-1.—*Proficiency Levels of Fourth Graders*

Math Achievement					
	1996	2000	2003	2005	2007
Percent Proficient or Above					
Among All Students.....	21%	24%	32%	36%	39%
Among Students Eligible for Federal Lunch Programs.....	8%	8%	15%	19%	22%
Percent at Basic Level or Above					
Among All Students.....	63%	65%	77%	80%	82%
Among Students Eligible for Federal Lunch Programs.....	40%	43%	62%	67%	70%
Reading Achievement					
	1998	2000	2003	2005	2007
Percent Proficient or Above					
Among All Students.....	29%	29%	31%	31%	33%
Among Students Eligible for Federal Lunch Programs.....	13%	13%	15%	16%	17%
Percent at Basic Level or Above					
Among All Students.....	60%	59%	63%	64%	67%
Among Students Eligible for Federal Lunch Programs.....	39%	38%	45%	46%	50%

Source: U.S. Department of Education (National Center for Educational Statistics)

law through NCLB. The continuing upward trend after NCLB was enacted is noteworthy, however, and under NCLB, test scores clearly are higher than they were before NCLB.

Although not shown, math test scores for eighth graders have improved as well, but the gains are slightly more modest. This is perhaps because the eighth graders have not had the benefit of NCLB for their entire school careers. More time will need to pass to appropriately evaluate results for eighth graders.

NCLB Challenges

Although the success in math that is illustrated in Table 8-1 is encouraging, the reading scores in the bottom panel of Table 8-1 have not increased as much as math scores. Math scores are better predictors of future labor market success, but the slower pace of improvement in reading scores should not be dismissed. The Administration's Reading First Program was enacted as part of the NCLB Act in 2002. This Department of Education program supports State educational agencies and local school districts that submit a plan to implement a scientifically based instructional reading program. Each submitted plan must demonstrate that students will be able to read by the end of third grade. The amount of support is based on the proportion of children in low-income households in each State. The program has demonstrated success in improving reading comprehension. For example, 44 State educational agencies reported improvements, and 31 of them reported an increase of at least 5 percentage points. Unfortunately, funding for this program was substantially reduced in fiscal year (FY) 2008.

Low test scores in poorer households are improving, according to Table 8-1, and achievement gaps are narrowing. Continuing to narrow the achievement gaps by raising test scores of low-income students remains an ongoing challenge that will require that attention be paid to some unique problems facing schools in high-poverty areas. For example, there is a high rate of teacher turnover in schools that serve low-income students. The most recent data available show a turnover rate in public schools in high-poverty areas that is 50 percent higher than in low-poverty areas.

Two components of the NCLB program that may help address the needs of low-income students are NCLB's supplemental education service and school choice options for students in failing schools. These programs are currently underutilized, alarmingly so in some districts. Parental outreach could be improved by providing more timely and better information about students' eligibility for these programs, and new Department of Education regulations specifying early notification requirements may help. In addition, ways to make school choice options more convenient for parents should be explored, because many parents are currently reluctant to enroll their children

in alternative schools largely because of the perceived inconvenience of doing so. School choice options are limited, however, for many districts where there are no schools to which a student can reasonably transfer.

Finally, high school graduation is valuable for future labor market success (Chart 8-1) and is the most likely path to college enrollment. An accurate method of calculating graduation rates that is uniform across States is necessary to improve high school accountability. Requiring school officials to have written confirmation that a student transferred out, immigrated to another country, or is deceased before removing the student from their graduation cohort will improve the accuracy of graduation rate calculations. Written confirmation will ensure that students who have dropped out of school are not counted as transfers; consequently, schools will be held accountable for dropouts and others who do not graduate from high school with a regular diploma. The final NCLB regulations require States to use the methodology adopted by the National Governors Association. This “4-year adjusted cohort graduation rate” uses the number of students who graduate in 4 years with a regular high school diploma divided by the number of students who entered high school 4 years earlier (adjusting for transfers in and out). The use of the 4-year adjusted cohort graduation rate is an improvement over previous systems not only because it is a uniform method of calculating graduation rates, which will allow for more meaningful cross-State comparisons, but also because this particular method will give parents and educators a more accurate picture of high school completion in their communities. This will improve the understanding of the scope and characteristics of the population of students who do not earn regular high school diplomas or take longer to graduate. Educators will be able to use this information to help local education agencies meet their State graduation rate goals and thus make adequate yearly progress.

Currently, high school dropout rates hover around 10 percent and have fallen since the inception of NCLB, from 10.5 percent in 2002 to 9.3 percent in 2006. High school dropout rates among certain population groups, however, remain remarkably high. For example, Hispanic students dropped out of school at a rate of 22.1 percent in 2006. Although this has decreased from 25.7 percent in 2002, it is still over twice the national average. Dropout rates in the southern United States (11.7 percent) far exceed those in the Midwest (6.1 percent) and Northeast (6.5 percent).

Because teachers are on the front line of the NCLB mission, future Administrations will need to do more to keep our best teachers in the classroom, particularly those who have been successful in reaching low-income students. The Administration supported tax deductions for the out-of-pocket expenses teachers incur while providing instruction, as well as loan forgiveness programs for teachers in low-income schools. While both of these programs are likely to provide some financial incentives, the need to find new ways to

help keep good teachers in classrooms still remains a challenge for improving K–12 education. The President’s Teacher Incentive Fund has supported several pay-for-performance models around the country to help reward and retain outstanding teachers.

Higher Education

The U.S. higher education system is the best in the world. World rankings are dominated by American institutions, and the United States has long been the destination of many of the world’s best students, teachers, and researchers. The American Competitiveness Initiative embodies the Administration’s strong commitment to maintain the United States’s standing as a leading producer of scientific knowledge, and it would increase the funding capabilities of grant organizations and expand the math and science curricula at primary and secondary schools. While keeping American universities competitive should remain a priority, maintaining student access to these institutions is perhaps even more important.

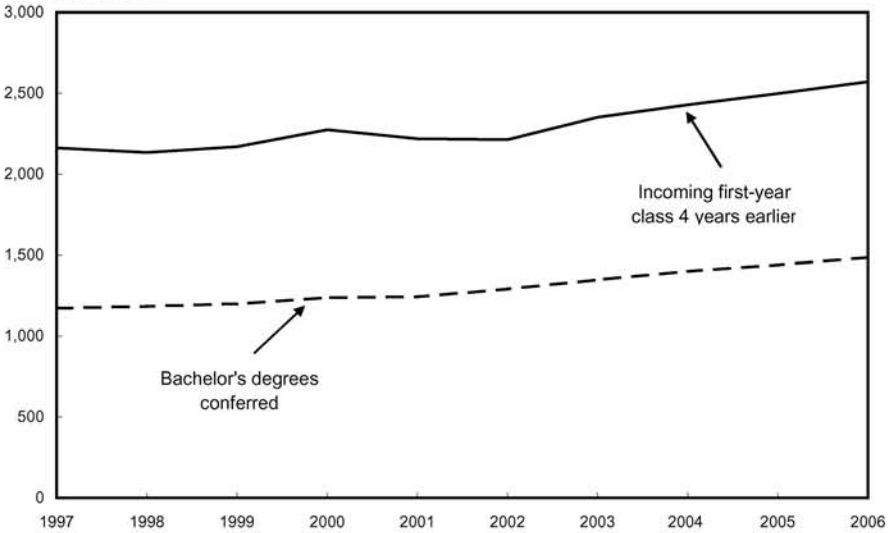
After several decades of growth, the share of high school graduates immediately transitioning to either a 2- or 4-year college has hovered around two-thirds since 1996. Although college enrollment is more likely among high school graduates from high-income families, about half of the students who graduated from high school in the poorest fifth of families have immediately enrolled in college since 2000.

Enrollment does not necessarily mean that a student receives a college degree. According to Chart 8-1, completing a 4-year degree is associated with the highest earnings. Thus, Chart 8-3 shows an unfortunate trend. Since 1996, there has been a large and steady gap between the number of students completing a bachelor’s degree and the number of students enrolling in college 4 years before. Because it is true that many students take longer than 4 years to graduate from college, the gap depicted in Chart 8-3 does not capture everyone who will drop out. Nevertheless, the relative steady space between the two trends does show that college completion rates are low. This finding is backed up by more exact information on the number of enrollees who ultimately complete college (regardless of the number of years it takes), which indicates that the completion rate is only slightly above 50 percent. Furthermore, among 25- to 29-year-olds, the proportion of all college attendees with no bachelor’s degree has remained at about 50 percent over the past decade. There are two things that can be done to help increase completion rates: continue with the Administration’s efforts to improve K–12 education so that students are better prepared for college, and maintain access to grant aid to defray the increasing costs of education.

Chart 8-3 Enrollees and Degrees Conferred

The number of college graduates continues to rise, but the number of enrollees far exceed the number of degrees conferred.

Thousands of students



Source: National Center for Educational Statistics.

College Preparedness

One reason for low college completion rates may be that many students are ill-prepared for the rigors of college education. One recent study suggests that nearly half of public high school graduates attending college in 2005 felt that there were notable gaps in their high school preparation. Moreover, college professors reported that about 42 percent of public high school graduates are not prepared for college-level classes.

There are reasons to be optimistic, however, because of the improved scores for fourth and, to some extent, eighth graders. In addition, the American Competitiveness Initiative contains a sound plan to devote significant resources to improving college preparedness through investments in math and science education. Congress also recently enacted the Adjunct Teacher Corps, a program proposed by the President that encourages well-qualified math and science professionals to serve as adjunct middle or high school teachers. There is more work to do at the high school level, however, and encouraging good teachers to remain in classrooms would likely improve college preparedness.

Funding Higher Education

The real cost of education (tuition and fees less aid and tax benefits) has increased substantially during this decade. In response to the rising costs, the Administration substantially expanded the Pell Grant program. Under this Administration, the total value of Pell Grants more than doubled from \$8 billion in the 2000–2001 school year to \$16.3 billion in the 2008–2009 school year. During 2008–2009, the maximum award available was \$4,731, which exceeds the annual tuition and fees of attending a public 2-year institution and covers over 70 percent of the average tuition and fees of a public 4-year college. Pell Grant aid, however, is targeted to families with the greatest financial need, so the reality is that even large expansions in grant programs cannot keep up with increasing college costs for many families whose incomes are too high to qualify for Pell Grants. For millions of students, Federal Stafford loans provide essential assistance to help cover costs.

Stafford loans come in two forms. *Subsidized loans* defer payments until after students complete college, and the Government pays the interest while the students are in school. *Unsubsidized loans* allow deferred payments, but interest accrues while students are in school. Schools can sign up for Stafford loans to be handled by the Department of Education through the Federal Direct Loan Program or through private lenders that offer students loans through the Federal Family Education Loan Program. Because students represent a greater credit risk (they tend to be younger and have lower incomes), private lenders rely on the Government's guarantee against borrowers defaulting on loan payments. The Administration took action this year, as discussed in Box 8-1, to ensure continued access to the Federal student loan program in the face of credit markets disruptions.

Box 8-1: The Ensuring Continued Access to Student Loans Act of 2008

Largely unnoticed in the turmoil of the financial markets in 2008 was the fact that the Administration was proactive in avoiding a crisis in the student loan market. Many student lenders finance their lending by repackaging student loans and reselling them to investors in the secondary market. However, in early 2008, the disruption in credit markets made it increasingly difficult for lenders to resell loans. As a result, many of these lenders warned that they might not take part in the Federal student loan program for the 2008–2009 school year.

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Box 8-1 — continued

The Administration stepped in with an innovative program that was embraced by both parties in Congress.

On May 7, 2008, the President signed into law HR 5715, the Ensuring Continued Access to Student Loans Act of 2008. One of the critical provisions of this law granted the Secretary of Education the authority to purchase Federal Family Education Loan (FFEL) Program loans. Under this authority, the Department of Education created two programs: one in which it offers lenders the option to sell fully disbursed FFEL loans and another in which it purchases a participation interest in 2008–2009 FFEL loans. The programs were designed to retain lenders who might otherwise not have participated in the FFEL program; the ability to sell loans to the Department assured lenders that even if they had difficulty reselling the loans in the secondary market, they would not be stuck with the loans. The programs have also ensured that lenders originated new loans to students because lenders who sold their loans to the Department then had the funds necessary to originate new loans.

The intervention has helped the Federal student loan program function effectively so far this academic year despite the condition of financial markets. A projected 8.5 million students are attending college partly because they were able to finance their studies through the FFEL program. Recognizing that the financial crisis may impact the student loan program for the 2009–2010 year, Congress recently extended the authority for the Department of Education to purchase loans for another year. The Department has announced that it will replicate the current programs for the 2009–2010 school year. This will help ensure that students who are investing in their future through education will have access to Federal student loans despite current conditions in credit markets.

Labor Issues: Income Trends, Worker Flexibility, and Pension Reform

Real hourly earnings grew during the Administration, and real per capita disposable income (which includes income from labor and non-labor sources) rose substantially. The Administration also worked to promote retraining so that workers could fill jobs in demand. Finally, pension reform enacted in 2006 will help protect retirement incomes.

Recent Trends in Real Incomes

A common belief is that the incomes of working American families have not kept pace with inflation in recent years. Adjusting for inflation, it is indeed true that the annual median household income (measured in 2007 dollars) was \$408 less in 2007 than it was at its peak in 1999, two years before this Administration took office. Although this is a decline in real terms, it tells an incomplete story of what happened during the Administration. Real median household income fell through 2004, but this represented a trend that began before the Presidency. Real median income strongly rebounded beginning in 2004 and reached near-peak levels by 2007.

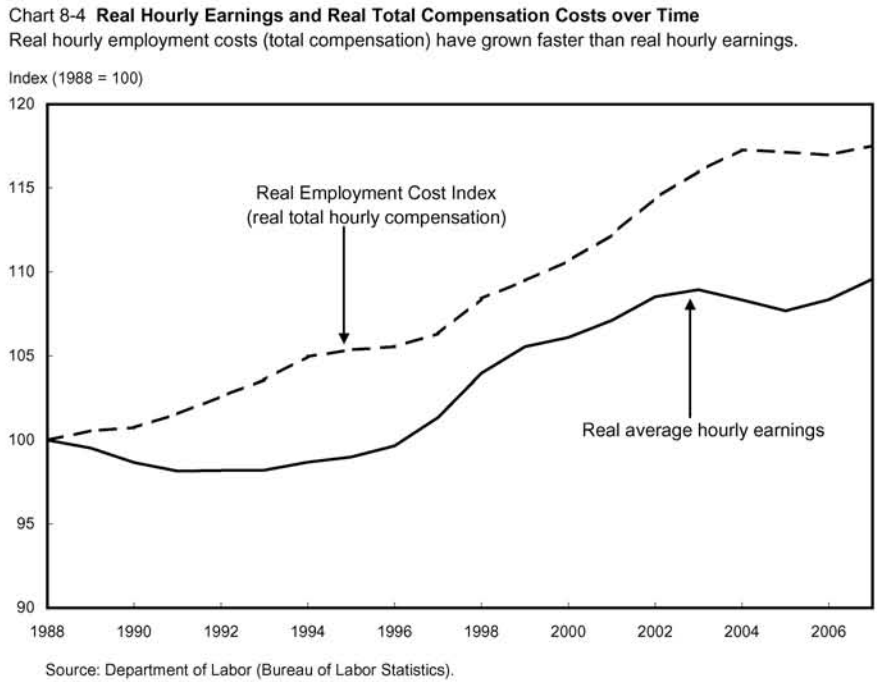
Annual median household income, as reported by the Census Bureau, also includes both labor income and non-labor income. Thus, changes in median household income can be driven not only by changes in labor income but also by changes in income from investments and government transfer payments, such as Social Security or unemployment benefits. Turning to more specific measures of labor income, workers fared well during the Administration. Chart 8-4 plots an index of real hourly earnings for private non-farm production or non-supervisory workers from 1988–2007 (with real earnings in 1988 set to 100). The chart shows that real hourly earnings fell slightly through the early 1990s. After that, however, there was a long period of strong growth starting in the mid 1990s and continuing into the early part of this decade. Although it is true that real earnings are still less than their historic highs in the 1970s, 2007 marked their highest point since 1979.

Chart 8-4 reveals one other important point about recent trends in labor income. Workers are increasingly getting less of their pay in terms of cash wages and more in terms of benefits. Real total compensation per hour for private non-farm workers is plotted using the Employer Cost Index, which includes wages, salaries, and employer costs for employee benefits. Again, the index is set to 100 in 1988. Real total employee compensation grew considerably faster throughout the last 20 years than real hourly earnings. In 2007, total employee compensation in real terms reached its highest point on record. The growth appears most pronounced during the first half of this decade. This rise in total compensation likely stems from the growth in the costs of employer-provided health and retirement benefits, which far outpaced the growth in cash wages (and inflation) during the Administration. The increase in the dollar value of compensation received in the form of non-wage benefits has reduced the real wage increases that workers would have otherwise received.

Finally, the real household income decline noted at the start of this section, as well as the changes in worker wages, masks one other important factor. These are pretax measures and therefore are imperfect gauges of what people

and households are able to spend, save, and invest. One measure that looks at after-tax income tells a much different story. Specifically, real per capita disposable income, another important measure of income derived from the Bureau of Economic Analysis's National Income and Product Accounts, reflects after-tax income and is more reflective of purchasing power. From 2000 to 2007, there was a steady increase in per capita real disposable income that averaged 1.68 percent per year, compared with 2.12 percent annual growth in real disposable income over the 8 years from 1992 to 2000. Given the rise in energy prices during the current Administration, however, as well as the fact that there was an economic downturn over its first several years, the growth in real disposable income is noteworthy. Like real median household income, however, real per capita disposable income reflects both labor and non-labor income.

Although 2008 and 2009 will undeniably be difficult for many workers and their families as unemployment rises, data from 2000–2007 show that most measures of real income (that is, labor income, total compensation, and per capita disposable income) grew during the Administration.



Worker Flexibility and Training

The U.S. labor market is part of a dynamic worldwide market with constantly changing demands brought about by technological change and international trade. The U.S. labor market, however, is well structured to meet these challenges. The United States has a long history of limiting the amount of government intervention between workers and firms, thus allowing for flexibility in the American workforce. Specifically, businesses in the United States are less limited than businesses in other developed countries in their ability to discharge a worker, thereby making them more willing to hire workers, knowing that they can more easily fire an unproductive employee. In times of growth, job openings are plentiful and workers are willing to search for the job that best matches them. The flexible employment relationship in the United States is evidenced by the relatively high rate of job mobility. Although it must be recognized that workers do build up specific skills from remaining at a firm and that not all job separations are advantageous, a growing economy still requires that workers be flexible and change jobs to find the correct match for their skills.

Among countries in the Organization for Economic Co-operation and Development (OECD), the United States has by far the most mobile workforce. Since January 2001, about 1 in 30 workers separated from their job in an average month (or about 4.39 million jobs were vacated). During these months, an average of 4.54 million workers were hired each month, suggesting that the economy was both creating new jobs and that workers were quickly filling positions that opened. The majority of job separations during these years were also created by workers voluntarily quitting, suggesting that many workers left jobs for new opportunities. Although these numbers have become more volatile in the latter half of 2008, with layoffs making up a higher percentage of job separations, during times of growth the rate of job openings in the United States is a testament to the relative flexibility of the U.S. labor market.

Workers in the United States have also shown more willingness to move to where jobs are located. According to the OECD, in each year from 2000 to 2005, over 3 percent of the U.S. working-age population moved across State lines. In comparison, only 1 percent of the working-age population in the EU-15 (the 15 European Union members before the 2004 expansion) moved between the 72 recognized European regional subdivisions. Moreover, less than 0.25 percent moved between EU-15 countries annually over this period. Obviously language barriers preclude some EU-15 mobility, but the greater geographic mobility in the United States also compares favorably to Australia and Canada. In short, the willingness of workers in the United States to move is an important part of the structure of the labor force and a reason for its flexibility.

Another key to meeting the growing demand for new and changing skills in the labor force will be the continued willingness of American workers to get the education and training needed to fill the new jobs that are created in the economy. A commitment to education, particularly in more technical fields, will prove to be important in the coming decades. The Administration's job training initiatives, including the Community-Based Job Training Grants and the High Growth Job Training Initiative, have helped prepare workers for jobs in high-demand industries. The Administration also proposed Career Advancement Accounts that put funds directly in the hands of people to pay for expenses related to education and training and put strict limits on administrative overhead in order to increase resources available for job training. Finally, international trade has also created many new opportunities for American workers, and Box 8-2 describes programs aimed to help workers take advantage of these opportunities.

Retiree Income

As life expectancies increase, American workers will likely spend an increasing amount of time in retirement. The Federal Government provides substantial retirement assistance through the Medicare and Social Security programs, but the challenges faced by these entitlement programs are substantial and are discussed in Chapter 6. Private savings and individual pensions provided by employers continue to be essential.

Box 8-2: Trade Adjustment Assistance

International trade brings substantial benefits to the U.S. economy. Not only are American consumers able to take advantage of a greater number of goods at lower prices, but workers in industries whose products and services are in high demand internationally benefit as well. In 2006, for example, an estimated 13 million U.S. jobs were supported by exports. The wages of manufacturing workers in plants that export are 9 percent higher than the wages of workers in non-exporting plants, and the wage premium in service-oriented firms that export is 13 percent over non-exporting firms. Furthermore, exports accounted for approximately 30 percent of economic growth in 2006.

Although the benefits of trade are enormous, workers in industries that must compete with imports can be adversely affected. Because of this, Trade Adjustment Assistance (TAA) exists to provide benefits to workers who are potentially adversely affected by trade. Though

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Box 8-2 — continued

the TAA has been in operation since 1974, it was changed substantially when it was reauthorized in the Trade Act of 2002. The Act consolidated the TAA and the North American Free Trade Agreement (NAFTA) TAA programs, expanded the eligibility to cover workers affected by shifts in production to certain other countries and to workers secondarily affected upstream or downstream from TAA-certified firms, expanded the training opportunities available, provided a health coverage tax credit, and promoted earlier intervention to allow more rapid enrollment, training, and reemployment of eligible workers. In FY 2007, firms covered by TAA certifications employed nearly 147,000 workers. Of these, over 49,000 eligible workers entered TAA training.

Of the eligible workers who took up benefits in the program in fiscal year 2007, 68 percent received some form of training, 59 percent received specific occupational training, and 13 percent received remedial training. The TAA program has also become successful over time in finding new employment for workers. While in 2001 only 63 percent of workers who exited the program were successfully reemployed, with a wage replacement rate of 87 percent, by 2006, 72 percent of workers exiting the program were reemployed, with a wage replacement rate of 89 percent.

In discussions of TAA reauthorization during 2007, debate developed in Congress over potential ways to expand the TAA program. The Administration supported reforms to the TAA to improve the delivery of services, to offer greater flexibility, and to enhance training for eligible workers. Several legislators and policymakers, however, suggested a number of expansions to TAA benefits, most notably: (a) allowing service workers, in addition to manufacturing workers, to receive benefits; (b) allowing workers who produce service-related goods to receive benefits; (c) allowing entire sectors to be eligible for coverage under TAA benefits; and (d) increasing the amount of funding for benefits and training. The fiscal and economic costs of such an expansion were uncertain, and some estimates indicated they would be substantial (the Congressional Budget Office estimated an additional \$8.6 billion over the 2008–2017 period). Beyond the fiscal cost, however, there were additional concerns regarding economic efficiency. Extending TAA benefits to substantially more workers could lead to economic losses by creating longer-term, higher unemployment in the covered industries. Furthermore, service workers experience minimal wage loss during displacement when compared with manufacturing workers, indicating that expanding benefits to them may not be justified. Finally, there were worries that expansion would open the door for further, unwarranted expansions of TAA benefits.

Employer-provided pensions come in one of two types: defined benefit plans or defined contribution plans. *Defined benefit pension plans* specify an amount to be paid upon retirement, normally calculated using a formula based on an employee's years of service with the company and his or her earnings history. *Defined contribution pension plans* consist of an individual employee account into which the employer and/or employee contribute, usually at a fixed percentage of the employee's salary. Upon retirement, individuals have access to the balance in the account. Historically, defined benefit plans have been dominant, but over the past several decades, defined contribution plans have become more popular.

The first Federal protections of worker pensions were set by the Employee Retirement Income Security Act (ERISA) of 1974, which, among other things, established the fiduciary responsibilities of plan managers. It also established the Pension Benefit Guaranty Corporation, which protects the defined benefit plans (up to a statutory limit) of private sector workers against the possibility that an employer will fail to pay the promised benefits. The Pension Benefit Guaranty Corporation is funded primarily through premiums established by law paid by the sponsors of defined benefit plans.

There have been many changes in pension provision since ERISA was passed in 1974, including the increased prevalence of defined contribution plans and heightened concerns regarding underfunded private plans. The Pension Protection Act of 2006 accomplished several important goals. First, with regard to defined benefit plans, greater premiums were imposed on companies with underfunded plans. Moreover, caps on the amount employers could put into plans were raised to allow employers to build a cushion during good economic times.

The Pension Protection Act also addressed the growing use of defined contribution plans by including provisions that give workers more information and control over the investment of their account balances. It also provided incentives for employers to automatically enroll new employees in defined contribution plans, which likely will increase plan participation. Furthermore, after observing the potential for notable shortfalls in pension plan funding, the act also improved the process employed to value plan assets and liabilities. By utilizing fair-market valuations, the pension reform was able to limit the use of valuation-smoothing practices that often made it difficult to detect gaps in pension funding, thus helping to prevent funding shortfalls. The various reforms in the Pension Protection Act followed an initiative led by the President in his 2005 pension reform proposal. These reforms will make retirement incomes of millions of Americans more secure.

Looking Ahead

As we look toward the future, there are a number of education and labor issues that will likely receive attention. First, the distribution of income in the United States is more skewed toward the wealthy than in other developed countries. The lower level of intergenerational economic mobility in the United States, compared with other countries, suggests this is a concern that will persist. Second, a need for comprehensive immigration reform exists and will necessarily require education and labor policies to be balanced with border security. The Administration has been a strong supporter of such reform, and the ideas generated by the Administration will likely shape discussions in the years ahead.

Income Inequality

In addition to arguments centered in theories of social justice, high income inequality may create more tangible problems. Some argue that inequality leads to a breakdown in social cohesion, which lowers a population's aggregate health (even holding income constant). Violent crime also increases as gaps between the poor and wealthy widen. Apart from that, high inequality threatens to squander the abilities and talents of a larger number of children in poorer families if upward economic mobility is also low. This is the case in the United States, where intergenerational mobility is relatively low and income inequality is high.

The most common method for measuring income inequality is the Gini coefficient, which is a value that ranges from zero (perfect equality, or everyone has an equal amounts of income) to one (perfect inequality, or all income is held by one family). The U.S. Gini coefficient is currently 0.45, according to the most recent cross-country comparison measures from the Central Intelligence Agency (or 0.46, according to the most recent Census Bureau estimates, which measures U.S. inequality). This level of inequality exceeds that of most other developed countries, with many European nations having Gini coefficients below 0.30. In fact, the U.S. level of inequality exceeds that in some lesser developed countries such as Indonesia (0.36) and is comparable to Kenya (0.45). Only a few countries noticeably exceed the United States in terms of inequality (for example, Brazil (0.57) and South Africa (0.65)). In short, the level of inequality in the United States is unusually high given our level of development and wealth.

In addition to the Gini coefficient of the United States being high by international standards, it has steadily risen over the past several decades. Many researchers have tried to explain the reasons for the high and growing level of income inequality in the United States. Although some have attributed the

greater inequality to institutional factors such as the declining real value of the minimum wage and lower rates of unionization, institutional explanations fail to match some of the more recent trends in inequality that look beyond the Gini coefficient. Specifically, an analysis of the wage distribution of workers suggests that the gap between mid-level earners and low-wage workers has remained relatively steady over the past decade despite a declining real value of the minimum wage. Instead, the gap between the highest earners and mid-level earners has increased over the past decade.

This most recent analysis of trends argues that technological change since the 1990s, particularly in the area of information technology, has benefited workers who possess skills for which these advances are complementary. These include highly skilled workers who are in jobs where technology is used in combination with interpersonal skills, such as in management or professional positions. These jobs are not as easily automated or outsourced as the tasks performed by middle-educated white collar or production workers. Those with less education but wages in the middle of the distribution have seen the difference between their wages and the wages of the highest earners widen.

One way to bring more of the workforce into the group of highly skilled workers whose jobs are not easily automated or outsourced is to provide a greater emphasis on education, particularly in math and science. Recent successes in raising math test scores and expanding the Pell Grant program are important steps. A continuing focus on increasing educational attainment for children across the income distribution is critical. Increased access to quality education will create more productive workers and greater wages for an increasing share of the population, thereby closing income gaps.

Immigration Reform

The United States is a nation of immigrants and has long depended on the contributions of the foreign-born to its economy. A sound immigration policy must continue to foster the economic benefits of immigrants by recognizing that foreign-born labor complements the existing strengths of the U.S. workforce. Such an immigration policy should also promote fluency in English, which not only enhances the earnings potential of immigrants but also can help improve productivity. Furthermore, the flow of immigration must also be regulated and restricted to legal channels.

Residents of foreign countries will immigrate when the benefits of migration outweigh the costs. The benefits typically are the earnings differentials between the United States and their home country. Because of this, the United States usually attracts immigrants of all skill levels. The highly skilled

are attracted to the greater earnings they receive in the United States given their skill level. Immigrants with fewer skills are attracted to the better wages and potential opportunities for their families.

The United States benefits from both types of immigration. The scientific establishment and high-technology industries have long benefited from workers with superior skills who immigrate to the United States and boost productivity. Immigrants with fewer skills perform jobs that complement existing labor in this country.

Education and labor policies have their roles in a comprehensive approach to immigration policy in the United States. While many immigrants are highly skilled, the average educational attainment of immigrants lags behind the native-born. Promoting English fluency is important because it increases labor market opportunities for immigrants, boosts their productivity, facilitates higher earnings, and promotes greater assimilation. To enhance the potential contribution of immigrants and to improve their well-being, it is also important to continue this Administration's sound education policies. NCLB, Reading First, and policies that increase access to higher education are all targeted toward students that need the most assistance, and the U.S. immigrant population stands to gain much from these programs. The U.S. economy will benefit in turn.

The issues the United States confronts with regard to its immigration policy are complex, and the Administration introduced comprehensive immigration reform as part of its domestic policy agenda in 2004. This proposal addressed many issues, including devoting more manpower to border security and increasing worksite enforcement of immigration laws. To ensure that the United States has an immigrant workforce that complements the existing U.S. workforce and meets economic needs, the Administration called for a flexible temporary guest worker program. To improve the productivity of immigrants, enhance their contributions to U.S. labor markets, and improve their welfare, assimilation proposals that promoted English and cultural literacy were advanced. The sweeping reforms of this proposal, however, failed to gain the necessary Congressional support. The need for these immigration reforms endures, and the Administration's plan remains one that is sound in terms of both securing borders and promoting economic progress.

Conclusion

The Administration has been committed to ensuring that the U.S. labor force remains productive for decades to come. Significant progress has been made in the U.S. educational system to help current and future students meet the ever-increasing and changing demand for skills in the more global,

competitive labor market. K–12 education has improved, test scores are rising, and students in underperforming schools now have more education options. Also, access to the U.S. higher education system has improved through expansions of the Pell Grant program and reforms enacted in the student loan program. Despite these successes, there are challenges that remain. Income inequality in the United States is high and suggests that a continued emphasis on education is necessary to raise the incomes of those in the lower half of the income distribution. Also, education and labor policy will need to be part of comprehensive immigration reform in the United States. This reform must reduce illegal immigration while continuing to allow the U.S. economy to benefit from legal immigrants.