The American work force, 1992–2005

Historical trends, 1950–92, and current uncertainties

A number of demographic and economic influences have shaped the work force during the past four decades; recent events have heightened uncertainties surrounding the update of projections to 2005

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The trends important for the Bureau of Labor Statistics labor force, economic, and employment projections are better understood if placed in historical perspective. To aid in that understanding, this article discusses important historical trends of the 1950–92 period. Because the 1992–2005 period will be affected not only by the historical trends, but also by more recent developments, it also presents economic and demographic uncertainties that currently exist which may have a significant impact in shaping the course of the future economy.

Labor force

Over the 1950–80 period, the labor force expanded by more than 44 million persons, or by nearly 72 percent. More than half of that rapid expansion occurred in the decade of the seventies, when the labor force expanded by more than 24 million. (See table 1.) This 30-year period included several very important labor force developments, the most important being the impact of the entry of the baby-boom generation. The baby-boomers—persons who were born between 1946 and 1964—began entering the labor force in the 1960's. In several years in the late 1970's, the labor force was growing by 3 million annually, primarily because of this group.

After the very rapid growth of the 1970's, a slower rate of labor force growth began in the 1980's. The labor force expanded by about 17 percent during the 1980–90 period, compared with a 29-percent increase in the previous decade. This slowdown reflected the fact that by the early 1980's nearly all of the baby-boom generation who were to enter the labor force had already done so. The smaller cohort, sometimes called the baby-bust generation—those born between the end of the baby-boom period (or 1965) and the late 1970's—was beginning to enter into the labor force. This slower rate of growth still added up to a significant expansion of the labor force. There were 20 million more persons in the labor force in 1992 than in 1980.

Women began entering the labor force in increasing numbers over the 1950–80 span. In 1950, women represented less than 30 percent of the work force; by 1980, they had increased their share to more than 42 percent. During this period, women's labor force participation rate increased from 33.9 percent in 1950 to 51.5 percent by 1980. Growth was even faster for women aged 35–44, as shown in the following tabulation:

	Participation rate, women aged 35–44
1950	39.1
1960	43.3
1970	51.1
1980	65.5
1990	76.5
1992	76.8

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Table 1. **The U.S. civilian labor force, selected years, 1950–92**

Characteristic	1950	1960	1970	1980	1990	1992
Number (in thousands)	62,208	69,628	82,771	106,940	124,787	126,982
Percent distribution						
Men	70.4	66.6	61.9	57.5	54.7	54.5
Women	29.6	33.4	38.1	42.5	45.3	45.5
White, non-Hispanic	—	—	—	81.9	78.5	77.8
Minority[1]	—	—	—	18.1	21.5	22.2

[1] Includes blacks, Hispanic origin, and Asian and others.

NOTE: Dash indicates data not available.

SOURCE: Current Population Survey, a monthly survey of households conducted for the Bureau of Labor Statistics by the Bureau of the Census.

Labor force participation rates for women, which had increased so rapidly in the earlier decades, continued to increase in the 1980's, even though the rate of growth slackened among some age groups by the mid- to late-1980's. Younger women in their 20's and 30's clearly exhibited greater stability in labor force participation rates in this period, particularly when compared with the two decades, 1960 to 1980. The labor force participation rates for women in their 40's and 50's continued to increase appreciably over the 1980–92 period.

Another important development in the 1980–92 period was the convergence of labor force participation rates for white women and black women. In the earlier decades, in most age groups, labor force participation rates generally were lower for white women than for black women, but since then, rates for white women have been increasing more rapidly. Consequently, during the 1980–92 period, participation rates in many age groups converged between white women and black women. In most age groups, labor force participation rates tended to be lower for Hispanic women than for either white women or black women.

Men's labor force participation rate over the 1950–80 span experienced a long-term, but gradual, decline—from 86.4 percent in 1950 to 77.4 percent by 1980. While this decline occurred in most age groups, it was more rapid among those aged 55 years and older. The following tabulation illustrates this point:

	Participation rate, men aged 55–64
1950	86.9
1960	86.8
1970	83.0
1980	72.1
1990	67.7
1992	67.0

The decline in labor force participation of older men reflected the trend toward earlier retirement. The forces influencing earlier retirement were complex. While some men in this age group were seeking earlier retirements, others, because of industrial restructuring, could not find satisfactory employment and, consequently, chose to stay out of the labor force. The labor force participation rates for black men and white men have tended to diverge over time—with rates for black men declining more rapidly than those for white men. Although reasons for these diverging trends are difficult to disentangle, among the contributing factors have been the changing educational preparation required for many jobs, and the gap in educational preparation among the race and ethnic groups. Also contributing has been the decline of factory jobs in which black men were more heavily concentrated. It is important to note, however, that labor force participation has declined among both minority and majority older men with lower educational attainment.

In the 1980–92 period, labor force participation rates for men also saw some modification of the trends observed over the 1950–80 period. This was most noticeable among men aged 55 and older. As noted above, sharp declines prevailed in earlier periods; these declines abated and, in some instances in the latter 1980's, showed evidence of reversals—albeit very modest.

Teenagers and minorities. Teenagers, 16–19 years old, both male and female, have exhibited much year-to-year fluctuation in their labor force participation rates over the 1950–92 period. This lack of long-term trends reflects, among other factors, the offsetting influences of the trend toward youth staying in school longer and the trend for many young people to work, at least part time, while in school. Participation rates are lower for minority (blacks, Hispanics, and Asian and others) youth, particularly black males, than for white youth.

A very significant labor force development over the 1950–92 period has been the increase in the minority share of the work force. In 1980, minorities composed 18.1 percent of the labor force;

by 1992, their share had increased to more than 22 percent. Blacks, whose share of the labor force had grown by about 1 percentage point a decade in earlier periods, continued at about that same rate during the 1980–92 period. By contrast, the share of the work force represented by the Asians and other races group doubled between 1975 and 1992. Hispanics also experienced very rapid expansion in the labor force. Comparable data for Hispanics are not available before 1980, at which time they were 6 percent of the work force. By 1992, their share had reached nearly 8 percent. This rapid expansion of the Hispanic labor force results from their immigration into the United States as well as from a higher birth rate leading to a younger age distribution among Hispanics than among other groups.

Economic trends

The U.S. economy, as measured by real gross domestic product (GDP), increased at an annual rate of 3.3 percent during the 1950–80 period. Among the factors influencing the growth are labor force and labor productivity. Analysts of the U.S. economy's long-term economic trends have focused on the pre- and post-1973 periods. For reasons that are not fully understood, 1973 marks a point of important change in trends in the rate of growth in productivity and in real GDP. For comparison purposes, over the 1950–73 period, annual rates of growth were 3.7 percent for GDP and 2.8 percent for labor productivity in the business sector; over the 1973–92 period, the annual growth rates were 2.2 percent for GDP and 0.9 percent for business productivity.

The real GDP growth rate was 2.3 percent per year over the 1980–92 period. This rate clearly was affected by the recessions of 1980 and 1982 at the beginning of the period, and by the 1990–91 recession toward the end of the period. In reviewing the economy's long-term rate of growth, it is important to be aware that business cycles are an important influence on GDP. Also, important in the 1980–92 period was the slowdown in the rate of growth of the labor force. As described earlier, the rapid labor force growth in the 1970's was spurred by the entry of baby-boomers, along with the entry of an increasing proportion of women. However, by the 1980's, a smaller cohort was entering the labor force and affected the rate of growth of GDP. The annual real GDP growth over the 1980–92 period, however, was still very similar to that for the 1973–80 period because of a very slow rate of productivity growth in the 1973–80 period. Thus, the labor force slowdown of the 1980's was offset by a very modest improvement in the productivity growth rate. This recovery is described as modest in the sense that the rate of productivity growth during the 1980's was somewhat improved over that of the 1973–80 period, but still was considerably slower than that experienced over the 1950–73 period.

The rate of growth in GDP and in employment are interrelated. The changes in the structure of the demand portion of GDP also are important in the projections process because of their impact on the industry and occupational composition of employment. In a broad sense, the changes in the composition of employment reflect a number of changes in the economy, including the structure of GDP demand and in the relative rates of productivity growth among industries. (Industry employment is discussed by James Franklin on pages 41–57; occupational employment is discussed by George Silvestri on pages 58–86; and changes in GDP are discussed by Norman Saunders on pages 11–30.)

A number of important changes in the structure of real demand GDP are apparent in table 2. For example, personal consumption expenditure's share of demand has grown appreciably over the 1950–92 period. This increasing share reflects growth in personal income (as a share of total income) and a long-term decline in the personal savings rate. The growth in consumption's share of GDP has been apportioned by consumer to purchases of services and also, to a lesser extent, purchases of durable goods. The rapid increase of services as a share of consumption has resulted from, among other things, expenditures for health care.[1]

Other changes in the composition of demand GDP over the 1950–80 period included a very pronounced increase in the share attributable to exports and imports, which more than doubled as the U.S. economy became increasingly internationalized. The 1980–92 period has two very distinct trends for exports and imports. The exchange rate experienced sharp changes during the period, greatly influencing the rate of growth of exports and of imports. Because of these exchange rate movements, exports, in real terms, hardly changed at all during the 1980–86 period—growing by less than 3 percent. Consequently, while exports were 8.5 percent of GDP in 1980, they had declined to 7.5 percent by 1986. Over the same period, imports increased by more than 67 percent—raising their GDP share from 7.7 percent in 1980 to 11.1 percent in 1986. From 1986 to 1992, however, an important reversal took place in exchange rates. As a consequence, exports expanded at a rapid 9.8 percent per year, while imports slowed from the nearly 9.0 percent per year expansion to 4.0 percent annual growth. Another important event during this period was the rapid growth in services as a component of foreign trade, particularly the export of services.

Other shifts in the composition of demand over the 1950–92 period include the long-term decline in residential structures and the increased share of GDP devoted to producer durable equipment, reflecting, among other factors, an increasing investment in computers by businesses. After 1960, a decline in the share of Federal Government purchases of goods and services is evident, reflecting, in recent years, a change in trend in Federal Government defense purchases. In 1976, 5.4 percent of GDP was spent on defense purchases—a post Vietnam low. After that, a gradual defense buildup began which accelerated in the early- to mid-1980's and peaked in 1987, when defense accounted for 6.4 percent of GDP. Since then, its share has continued to decline, reflecting an absolute decline in real defense spending following the end of the Cold War and the resulting defense cutback. By 1992, the defense share of GDP had declined to 5.2 percent.

Employment

By industry. In 1950, nonfarm wage and salary employment was 45.2 million. By 1980, it had doubled to 90.4 million. (See table 3.) However, growth was not even over the 30-year period: the 1960's experienced a larger increase in percentage terms, while the 1970's experienced a slightly smaller percentage growth, but a numerical growth of nearly 20 million nonfarm jobs. As with GDP and productivity, cyclical patterns can be seen in employment growth, particularly when annual data are reviewed. Nonfarm wage and salary employment was more than 19 million higher in 1990 than in 1980. Still, in 1991 and 1992, it was lower than the 1990 level because of the most recent recession.

The change in the overall employment level was not the only change taking place over the 1950–92 period. Dramatic shifts in the industrial structure of employment are apparent. (See table 3.)

Among the apparent industry shifts are manufacturing's share of employment which fell 11 percentage points, from nearly 34 percent in 1950 to slightly more than 22 percent in 1980. The level of manufacturing employment peaked in 1979, declined through 1983, and since has shown periods of modest increases as well as further declines before experiencing another cyclical decline during the 1989–92 period. Consequently, manufacturing's share of employment continued to decline, reaching 16.8 percent of nonfarm employment by 1992. The following tabulation shows the level of manufacturing employment for selected years, 1950–92 (data are from the BLS Current Employment Statistics program):

	Employment in manufacturing (in thousands)
1950	15,241
1960	16,796
1970	19,367
1979	21,040
1980	20,285
1985	19,248
1990	19,076
1992	18,040

Mining employment peaked in the early 1980's. Since then, it has fallen both because of the continued long-term employment decline in coal mining and the concurrent sharp drop in employment in oil and gas well drilling and exploration.

Table 2. **Gross domestic product, selected years, 1950–92**

Gross domestic product	1950	1960	1970	1980	1990	1992
Total, billions of 1987 dollars	$1,418.5	$1,970.8	$2,873.9	$3,776.3	$4,897.3	$4,986.3
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Personal consumption expenditures	61.6	61.4	63.1	64.8	66.8	67.0
Durables	6.7	5.9	6.4	7.0	9.0	9.2
Nondurables	28.2	26.7	25.0	22.8	21.7	21.3
Services	26.7	28.8	31.8	35.0	36.1	36.5
Gross private domestic investment	18.1	14.8	15.0	15.7	15.2	14.7
Nonresidential structure	3.8	4.1	4.3	4.5	3.7	3.0
Producer durable equipment	5.5	4.7	5.9	7.1	7.5	7.6
Residential structures	7.1	5.6	4.6	4.4	4.0	4.0
Net exports	.2	–.4	–1.2	.8	–1.1	–.7
Exports	3.7	4.5	5.6	8.5	10.4	11.6
Imports	–3.5	–4.9	–6.8	–7.7	–11.5	–12.3
Government	20.0	24.1	23.1	18.6	19.0	19.0
Federal government	10.2	13.1	11.0	7.5	7.9	7.5
Federal defense	—	—	—	5.1	5.8	5.2
Federal nondefense	—	—	—	2.4	2.1	2.2
State and local government	9.8	11.0	12.2	11.1	11.2	11.5

NOTE: Dash indicates data not available.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 3. **Nonfarm wage and salary employment, selected years, 1950–92**

Nonfarm employment	1950	1960	1970	1980	1990	1992
Total (in thousands)	45,197	54,189	70,880	90,406	109,419	108,519
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0
Mining	2.0	1.3	.9	1.1	.6	.6
Construction	5.2	5.4	5.1	4.9	4.7	4.1
Manufacturing	33.7	31.0	27.3	22.4	17.4	16.6
Transportation, communications, and public utilities	8.9	7.4	6.4	5.6	5.3	5.3
Wholesale trade	5.8	5.8	5.7	5.9	5.6	5.6
Retail trade	14.9	15.2	15.6	16.6	17.9	17.8
Finance, insurance, and real estate	4.2	4.8	5.1	5.7	6.1	6.1
Services	11.8	13.6	16.2	19.7	25.5	26.8
Government	13.3	15.4	17.7	18.0	16.7	17.2

SOURCE: Bureau of Labor Statistics Current Employment Statistics program.

The declines in manufacturing employment have been more than compensated for by job gains among service-producing industries. The services industry division, particularly health and business services, showed noteworthy contributions to the growth in nonfarm wage and salary employment. The services industry division in the 1980–92 period expanded by 60 percent, adding more than 11 million nonfarm wage and salary jobs. Health services and business services specifically were an important part of that expansion. One industry within business services—temporary help—was very small in the 1970's, but added more than 1 million jobs over the 1980–92 period. The larger portion of the expansion in government employment was at the local government level. However, the share of government employment declined somewhat after 1980, as its rate of growth slowed. Retail trade also has shown significant gains in employment, both in share and in absolute levels. In contrast, employment shares in transportation, communication, and public utilities declined over most of the 1950–92 period.

Agriculture employment (including wage and salary workers, the self-employed, and unpaid family workers) declined from 7.2 million in 1950 to 3.3 million in 1980, as shown in the following tabulation (data are from the Current Population Survey):

	Employment in agriculture (in thousands)
1950	7,160
1960	5,458
1970	3,463
1980	3,364
1990	3,186
1992	3,207

Agriculture employment has shown only very modest declines over the 1980–92 period—at least when compared with the sharp declines experienced over the 1950–70 period.

By occupation. Several distinct occupational employment trends emerged over the 1972–92 period.[2] One was the steady increase in employment share for the managerial, professional, and technician major occupational groups. In 1992, these three groups represented 30 percent of total occupational employment; in 1972, they represented 21 percent. Experiencing declines over this period were the operators and the farm occupational categories. Other occupational groups experienced much smaller shifts. The clerical worker occupational group reversed its direction, showing a growing share over the 1972–80 period, and a declining share thereafter as the impact of office automation began to slow employment of clerical workers to a rate slower than that of the overall economy.

These occupational employment trends have another important dimension. Occupational groups with an increasing share of employment generally require some post-secondary education. Most occupations with declining shares are ones in which workers do not have post-secondary education. The service worker occupational group is the exception to this trend—it has increased its share over the period, but generally most service workers do not have post-secondary education.

Current uncertainties

In preparing projections, BLS has always faced uncertainty as to what is the nature of the future. However, the end of the Cold War is clearly an unusually important event that can be argued has raised the level of uncertainty. This event is likely to affect military expenditures, Eastern European immigration, and trade, to name a few. Also, Europe currently is attempting to unify for trade and other important purposes. If successful, trade, immigration, and military expenditure patterns are likely to be affected—perhaps significantly so. Similarly, the United States is considering a North

Table 4. **Occupational structure of employment, selected years, 1972–92**

[In percent]

Occupation	1972	1975	1980	1985	1990	1992
Total	100.0	100.0	100.0	100.0	100.0	100.0
Managers	8.9	9.4	10.3	11.4	12.6	12.6
Professionals	10.8	11.5	11.9	12.7	13.4	13.9
Technicians	2.3	2.5	2.9	3.0	3.3	3.6
Sales	10.4	10.7	10.9	11.8	12.0	11.8
Clerical	16.0	16.2	16.8	16.2	15.8	15.8
Service	13.2	13.5	13.2	13.5	13.4	13.7
Craft	12.6	12.3	12.4	12.4	11.6	11.2
Operators	21.2	19.4	18.2	15.7	15.1	14.4
Farm	4.7	4.4	3.7	3.3	2.9	2.9

SOURCE: Current Population Survey, a monthly household survey conducted for the Bureau of Labor Statistics by the Bureau of the Census.

American free trade zone, evidenced by the proposed North American Free Trade Agreement (NAFTA) which may affect specific industries as well as immigration patterns, at least in the long run. These events, coupled with continued longer term developments in other areas, illustrate that the level of uncertainty has increased as BLS updates its projections.

This article reviews the trends of the last few decades in terms of the four subjects included in the BLS projections—labor force, economic, and industry and occupational employment. While such a review can be informative and useful in its own right, the primary purpose is to introduce the projections presented in the articles that follow. The big question is which of the trends are likely to continue into the future? Which trends may change?

Labor force. The growth rate of the labor force from 1992 to 2005 will be determined by future population growth, including immigration, and by changes in labor force participation rates. Persons who will join the labor force by 2005 are already born, removing one uncertainty—the projection of future births. Therefore, changes in the labor force participation rates and in net immigration are the two factors with greater uncertainty in terms of their influence on the size and composition of the future labor force. The dramatic changes in labor force participation rates appear to be behind us. Women's overall labor force participation rates increased so dramatically over the past 25 to 30 years that they now have reached levels such that they cannot increase in the future at the same rate as in the past. However, for individual groups, some uncertainty remains. Younger women's labor force participation growth has slowed over the last 5 to 6 years. Is this slowing permanent or temporary? Adult men have experienced a gradual long-term decline in labor force participation. However, the decline for men aged 55 and older has been quite dramatic—again slowing or leveling off in the last 5 to 6 years. Is this a new long-term trend or a temporary lull? These uncertainties are important for projecting how many young women or older men will be in the labor force, but they do not have the same importance for projecting the overall size of the future labor force.

Another important determinant in the size and structure of the future labor force is immigration. The number of immigrants documented and undocumented who may enter the U.S. economy during the 1992–2005 period will be important in projections of the level and racial and ethnic structure of the labor force in 2005. Recent trends have shown a high level of immigration with a heavily Hispanic and Asian racial and ethnic composition. Will this trend continue? Many factors in the United States and the economic and political trends of other countries determine immigration patterns. A collapsing economy or political repression in one area of the world often can change U.S. immigration quickly. Howard Fullerton discusses two alternative assumptions for immigration used in projecting the 1992–2005 labor force on pages 31–40.

Economic trends. Productivity growth is an important determinant of the long-term rate of growth of real GDP. The earlier review of the U.S. economy's performance outlined several subperiods with appreciably different rates of productivity growth. The economy has experienced some modest improvement in productivity from the lower rates of the 1980's, as it recovered from the latest (1990–91) recession; in particular, the productivity increases of 1992 have raised hope of a longer term recovery. Is future productivity growth more likely to be like that of the 1960's, the 1970's (particularly after 1973), or the 1980's? The assumption for productivity growth used in BLS projections of GDP, is closer to that which prevailed in the 1980's.

Beyond the factors that affect the overall rate of GDP growth, there are also elements that could be

important in the distribution of GDP. For example, the share of real GDP devoted to defense has been declining since 1987, its most recent peak, and is expected to continue to decline, at least for the next 4 to 6 years. Beyond that period, the likely course for real defense spending is not certain because of the possibility of changes in the international situation and the obsolescence of our military technology. Military planners must continue to make decisions on the tradeoff of the distribution of defense expenditures among military forces, new weapons procurement, or research and development. Further, changes in international situations could occur which could lead to a reversal of some of the expected decline in expenditures for defense.

In the foreign trade arena, considerable uncertainty involves currently debated trade agreements such as the General Agreement on Tariffs and Trade (GATT) and the North American Free Trade Agreement (NAFTA). These agreements could affect the level and distribution of U.S. exports and imports of goods and services. Other factors adding to the uncertainty of foreign trade are the emerging markets in Eastern Europe and the Republics of the former Soviet Union, the recent dramatic rise of U.S. trade with China as well as our considerable trade with Japan and other Asian countries, and the possible emergence of a larger and a more united European Common Market. If the faster growth rate of services in international trade continues, this would seem to favor the United States, but competition is increasing among some categories of services. As discussed earlier, the 1980's had two distinct periods of trends of import–export growth. If, over the 1992–2005 period, the trend of the latter 1980's was to continue, the U.S. trade deficit would soon disappear; if the trend of the early 1980's should return, the trade deficit would worsen very quickly. BLS describes the projections of exports and imports over the 1992–2005 period as being generally between these two extremes.

Another issue widely discussed is the rapidly increasing share of GDP devoted to providing health care. This increase, coupled with the fact that segments of the U.S. population currently do not have health insurance, adds an additional uncertainty to future trends of health care expenditures. Medical and health care expenditures have accounted for an increasing share of GDP, from 5.3 percent in 1960 to 14.6 percent by 1993. It is uncertain if this expanding share can be slowed and, if so, how quickly, while at the same time, the coverage is broadened. Slowing down expenditures for health care is a challenge, particularly in view of the fact that the fastest growing segment of the population is those aged 75 and older, the biggest per capita users of medical care. The expanding elderly population, combined with the increasing ability of medical technology to diagnose and treat illnesses, further increases the uncertainty for future expenditures for health care. Moreover, the current debate on this issue suggests the possibility of real change in both coverage and funding for health insurance.

Also, we are often reminded that individuals in the United States save less than those in many other industrial countries. This means that the United States devotes a smaller share of GDP to investment than do many other advanced industrial countries. It is widely believed that higher productivity would result if a greater share of national output were devoted to investment in producer durable equipment and to expenditures for research and development. The payoff for these expenditures would be long term, so that even if the share of national expenditures devoted to investment and research and development were to increase, it would take considerable time, perhaps most of the 1992–2005 period, for it to have an appreciable impact on the rate of productivity growth. This is one factor considered in the projection of only a modestly higher rate of productivity growth over the 1992–2005 period than indicated by recent trends. The benefits of improved productivity growth would be to increase the economy's growth in per capita disposable income—one measure of the standard of living. In other categories of demand, there are questions of whether sufficient investments have been made in infrastructure, and the impact the investments may have had on the slowing in the rate of productivity growth.

Employment. Many of the factors which affect the projections of the labor force and economic trends also have important implications for employment. This is true of nearly all of the factors discussed earlier, such as immigration and health care costs. However, there are important uncertainties unique only to employment. Among them are questions regarding recovery from the recent recession. In developing medium-term projections of employment, it is easier to develop employment projections from a point of reasonable full employment to a future point of equally full employment. However, because the U.S. economy experienced a recession over the July 1990–April 1991 period, it is not possible to do so in this round of projections. From an employment viewpoint, the jobs lost in the recession were not recovered until the spring of 1993. The question remains: How long will it take the U.S. economy to return to a longer term employment growth rate which would reflect that it has fully recovered from the most recent recession? Then, there is the

corollary question: When, if ever, will the recession-sensitive sectors, particularly construction and manufacturing, recover their respective job losses of the last recession? The overall employment recovery from this recession has been slower than previous recoveries, and this is most apparent in manufacturing and in construction. Further, of course, the downsizing of our military commitments also has an important effect on manufacturing.

Other uncertainties with respect to employment concern the exact nature of future jobs. One facet of this is whether future jobs can be expected to be full time or part time. During recessions, more jobseekers desiring full-time work can only find part-time employment. Add to this the phenomenon of the last decade of very rapid growth in temporary help employment. Another dimension of the industrial and occupational structuring is the implication this has for the type of jobs. Whether viewed in the context of "good jobs–bad jobs" or job availability by educational level, the uncertainty as to the jobs available now and those projected for the future is cause for additional concern for jobseekers, for new entrants to the job market who have just completed formal education or training, and for jobseekers who are affected by the economy's ongoing job restructuring. As noted earlier, the latest recession added an additional dimension of uncertainty to the preparation of these projections because it is often difficult to differentiate between the short-term cyclical movements of employment by an industry or occupation and a new long-term secular trend which may be just beginning.

An additional element of job restructuring is the very gradual change in occupational segregation. The current distribution of jobs by occupation between men and women or among racial or ethnic groups still shows that large concentrations of a demographic group in a particular type of job, and a very low representation in another type of job. This occupational segregation is complicated by gaps in the educational attainment among racial and ethnic groups, making it more difficult for some groups to compete for jobs, particularly jobs which require a higher level of education.

Summary. Any look at the future must take into account the uncertainties discussed above. For some of the BLS projections discussed in this issue of the *Review*, the uncertainty surrounding the assumptions are very large. While the BLS develops three alternative projections, these are based on high, moderate, and low growth assumptions, and do not reflect the entire range of possible assumptions discussed above. Because of the limitations of data and resources as well as time constraints, the BLS alternative projections make reasonable assumptions about the most important uncertainties. □

Footnotes

[1] The increase in health care expenditures in personal consumption expenditures reflects both growth in personal expenditures for health care as well as governmental transfer payments, such as for Medicare. Medicaid payments in the national income and product accounts are treated as grants and, as a result, show up in these accounts as State and local government expenditures.

[2] Because of changes in the classification of occupations over time, it is not possible to provide as long a time series on the changing structure of employment by occupation as is shown for other data series in this article. At the detailed occupational level, comparable data are available only from 1983 to date. However, it is possible at the major occupational level to develop reasonably comparable data beginning in 1972. Data are from the Current Population Survey. The occupational analysis in the article by George Silvestri also uses data from the Occupational Employment Statistics Survey.