The ECONOMY GETS but Once Again

By Kevin L. Kliesen
Historically, economic growth has been much faster shortly after the end of a recession than it is during any other time in the business cycle. This burst of activity, which is generically termed the economic “recovery,” generally leads to relatively large increases in employment and to falling unemployment. But the recoveries that followed the 1990-91 and 2001 recessions were uncharacteristically lackluster both in terms of economic growth and job creation. Indeed, the most popular moniker given to these two recoveries has been “jobless.”

Are there common threads between these two recoveries? Moreover, has the slow growth reflected weakness in certain sectors of the economy or in certain regions of the country, or has the U.S. economy fundamentally changed, resulting in a different pattern of growth during recoveries? Although there is evidence that labor markets have experienced some significant structural changes in the past 15 to 20 years, which may have contributed to the lack of job growth in the last two recoveries, there is as yet no conclusive evidence that future economic recoveries will be “jobless.” Instead, the last two recoveries have been marked by much weaker than average real GDP growth, which importantly determines job growth.
Economic Recoveries and the Labor Market

Fluctuations in the demand for goods and services, and in the supply of capital goods and other inputs devoted to the production of these goods and services, mean that economic growth varies over the business cycle. During recessions, as spending on goods and services by the private sector wanes, real GDP declines and unemployment increases. As the recession ends and the recovery period commences, unemployed labor and capital are re-employed, resulting in larger than normal increases in employment, spending and income. Shortly thereafter, when capital and labor are roughly fully employed, the growth of the economy (on average) tends to equal its potential rate of growth until the next downturn. In this article, I will arbitrarily define the economic recovery as the period of activity during the first six quarters of the expansion.

Cyclical vs. Structural Changes in Labor Demand

During the business cycle, the churning of the labor market (job creation and destruction) reflects either “cyclical” or “structural” effects. At times, one effect may be more dominant, but both tend to be present given the “creative destruction” aspects of our dynamic, market-driven economy. Cyclical changes in the demand for labor, such as in recessions, are inherently temporary. (The average recession in the post-World War II era lasts about 11 months.) During a recession, for example, most firms see their revenue reduced and profit margin cut. To minimize losses, firms will cut costs, which usually means reductions in hours worked and/or reductions in their workforce.

As aggregate economic growth resumes, workers who became unemployed during the recession are recalled or find new jobs as firms ramp up production. Moreover, output (real GDP) and employment growth tend to be strongest during the initial stages of an economic expansion, when profit and investment opportunities for business are plentiful, and inflation and interest rates tend to be relatively low.

The second type of labor market turnover is more permanent, what economists call “structural” job losses or gains. Structural unemployment occurs, for example, when new technologies lead to new labor-saving production processes or lead to new types of goods and services that replace existing products. In manufacturing and agriculture, for instance, industries have continually taken advantage of technological innovations that have lessened their demand for labor. The result is that fewer workers are needed to produce the same amount of output, and the firms and workers who remain in these industries are more productive. For example, from 1992 to 2002, the number of motor vehicles produced in the United States rose from 9.7 million to 12.5 million, while the number of production workers declined by about 5 percent to 222,000. “Big-box” retailers like Sam’s, Costco and Best Buy have fueled dramatic changes in the distribution and warehousing of goods. The information technology revolution has played an important role in this retail revolution. Although structural changes tend not to be the cause of recessions, they may nonetheless be a contributing factor to a jobless recovery.

Comparing Jobless Recoveries

During the average post-WW II (hereafter post-war) recovery, it took about 21 months for nonfarm payroll employment to surpass its previous peak. This interval was much longer after the 1990-91 and 2001 recessions. Prior to the 1990-91 recession, growth of nonfarm payroll employment during the first six quarters of the post-war expansions averaged 5.6 percent. But by the third quarter of 1992, which was a year and a half (six quarters) after the trough of the 1990-91 recession (March 1991), nonfarm payroll employment had only risen by 0.1 percent. It was not until February 1993 (32 months later) that nonfarm employment surpassed its June 1990 peak. Employment gains since the end of the 2001 recession in November 2001 have been even more elusive: Between the fourth quarter of 2001 and the second quarter of 2003 (six quarters), nonfarm payroll employment actually declined by 0.7 percent. Moreover, as of November 2003, nonfarm employment was still about 1.75 percent below its previous peak, seen in February 2001 (a span of 33 months). Not surprisingly, the lack of job growth has precluded the drop in unemployment that typically occurs during the recovery period, as seen in Table 1.

Nonfarm payroll employment, as reported in the establishment survey, measures the number of jobs in the economy. However, it is but one of two measures of employment that economists look at to gauge trends in employment. Table 1 shows the other measure, civilian employment. Briefly, civilian employment, as reported in the household survey, is a broader measure that includes agricultural workers, the self-employed, unpaid family workers and private household workers—groups that are not counted in the establishment survey.

As seen in Table 1, civilian employment actually increased by 1 percent in the current recovery, while nonfarm payroll employment fell by 0.7 percent. We have a jobless recovery by one measure but not by the other. Different patterns of growth were also seen in the 1991-92 recovery, when growth of civilian employment was greater than the growth of nonfarm employment. In both cases, though, civilian employment gains in each recovery were weaker than normal. Some economists believe that the household survey is a more-accurate measure of employment gains early in a recovery because the establishment survey cannot accurately account for new business creations or the increases in self-employment. The Bureau of Labor Statistics has recently made a significant effort to improve its coverage of job gains in this area. And while both measures tend to move together over time, economists tend to give greater weight to the establishment survey because its estimates are based on a much larger sample, which means a smaller sampling error. Hence, the remainder of the article will focus on the establishment survey.

Why have employment gains been so tepid after the 1990-91 and 2001 recessions? The principle rea-
son arises from the fact that job growth and real GDP growth are highly correlated. Table 1 shows that economic growth has been much weaker during the last two economic recoveries than during earlier recoveries. Was there something unusual about the last two recoveries?

**A National Perspective**

The 1991-92 recovery was unique because it was the first episode without a surge in employment and in output. Such a surge had usually occurred during the post-war period. In attempting to explain this development, some economists have pointed to the following factors:

- Over-building in the commercial real estate sector in the 1980s, along with a heightened caution among lenders, meant that the construction sector, which is usually an important contributor to the growth in recoveries, was a drag on the economy.
- Government slowed down spending, as seen in the defense cutbacks after the Cold War ended, the Budget Enforcement Act of 1990 and the large fiscal imbalances at the state and local level.
- Excessive levels of debt accumulated by businesses and households meant a higher level of saving (reduced consumption and investment) to service the debt.

As seen in Table 1, many of these explanations seemed to bear out. First, on the one hand, real business (nonresidential) fixed investment in structures in the 1991-92 recovery only rose by 3.5 percent vs. a gain of 14.3 percent during the first year and a half of the average recovery. On the other hand, growth of real residential fixed investment was only moderately less robust than average. Second, real expenditures by the federal government declined in the recovery, and the growth of spending by state and local governments was appreciably weaker than usual. Third, growth of real consumer spending, while positive, was much weaker than normal. Another noteworthy feature of the 1991-92 episode was that the growth of real exports was stronger than average, and spending on imports was weaker than average, because the value of the dollar by the second quarter of 1992 had actually declined by about 5.5 percent from two years earlier.

While the 2001-03 jobless recovery bears some of the same similarities as the previous episode, there are several key differences. The most notable similarity is the weakness in real business (nonresidential) fixed investment: Between the end of the 2001 recession and the second quarter of 2003, growth of real business fixed investment remains negative (–1.1 percent). Real residential fixed investment, like business investment, is also usually a key driver of growth during recoveries. Although housing has been a source of strength during the 2001-03 recovery (new home sales have surged to record levels in 2003), its growth during this recovery lags behind the average by a substantial margin. The relatively strong performance of the housing sector during the 2001 recession probably stymied the burst in housing activity that normally occurs during a recovery.

One significant difference between the two recoveries is that real U.S. exports grew at a much weaker pace in 2001-03. Key reasons for this are the global economic slowdown in 2001 and 2002 and a nearly 13 percent rise in the real trade-weighted value of the dollar from late 1999 to early 2002. Another difference is the behavior of the stock market. While equity-price increases in the 1991-92 recovery were below par, over the first six quarters of the current recovery equity prices have declined rather sharply, a little more than 15 percent, instead of rising strongly as is more typical. The weak stock market exacerbated the decline in business investment because falling stock prices meant that firms were less willing to issue stock to finance planned capital expenditures.

The final major difference between the two jobless recoveries was the number of unexpected developments that increased uncertainty among consumers, businesses and investors. These events included the terrorist attacks on Sept. 11 and the wars in Afghanistan and Iraq, which caused federal

### Table 1

<table>
<thead>
<tr>
<th>Factor</th>
<th>1991-92 Recovery</th>
<th>2001-03 Recovery</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP and Components</td>
<td>10.6</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>PCE</td>
<td>8.1</td>
<td>3.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Fixed Investment</td>
<td>16.9</td>
<td>7.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Nonresidential Residential</td>
<td>14.3</td>
<td>3.5</td>
<td>–1.1</td>
</tr>
<tr>
<td>Residential Residential</td>
<td>25.9</td>
<td>20.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Inventory Investment</td>
<td>5.4</td>
<td>1.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Government</td>
<td>6.2</td>
<td>0.6</td>
<td>5.9</td>
</tr>
<tr>
<td>Federal</td>
<td>8.3</td>
<td>–2.3</td>
<td>14.0</td>
</tr>
<tr>
<td>State and Local</td>
<td>4.2</td>
<td>2.8</td>
<td>1.4</td>
</tr>
<tr>
<td>Exports</td>
<td>9.4</td>
<td>11.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Imports</td>
<td>20.5</td>
<td>11.7</td>
<td>10.7</td>
</tr>
<tr>
<td>Nonfarm Productivity</td>
<td>6.3</td>
<td>4.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Real Disposable Income</td>
<td>8.6</td>
<td>3.5</td>
<td>6.3</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>21.6</td>
<td>11.4</td>
<td>–15.1</td>
</tr>
<tr>
<td>Nonfarm Employment</td>
<td>5.6</td>
<td>0.1</td>
<td>–0.7</td>
</tr>
<tr>
<td>Civilian Employment</td>
<td>4.2</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>–1.8</td>
<td>1.0</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**NOTE:** The recovery period is arbitrarily defined as the six quarters following the trough of the business cycle as determined by the National Bureau of Economic Research. Averages exclude the short 1980 recession and recovery. Change in the unemployment rate is in percentage points. Figures may not add up because of rounding. Last updated Oct. 24, 2003.
government spending in the 2001-03 recovery to be both stronger than in the previous recovery and much stronger than normal. The threat of additional terrorist attacks, coupled with the corporate governance scandals, also may have caused businesses to postpone new investment projects and expand their payrolls.

A Regional Perspective

Table 2, which lists the regional growth of nonfarm payroll employment during the last five economic recoveries, suggests that the last two jobless recoveries were not the result of inordinately weak growth in one part of the country. Rather, all regions generally experienced much weaker job growth in the last two recoveries compared with the previous three recoveries. Nonetheless, Table 2 reveals there was some fairly significant regional variation in employment growth in the 1991-92 jobless recovery. In that period, job growth was negative in the New England and Southern Atlantic regions, but positive everywhere else. Falling employment in these areas probably reflected the aforementioned weakness in the commercial real estate sector and the cuts in outlays for national defense, both of which seemed to affect the Northeast and the Pacific regions of the country more than other areas. In the current recovery, weak job growth seems to be more of a national phenomenon and with less variation in growth across regions. Still, job declines have been more pronounced in the New England (−1.5 percent), East North Central (−1.4 percent) and West North Central (−1.1 percent) regions.

A couple of other interesting patterns are evident from Table 2. First, job growth in the Mountain States has been exceptionally weak during all but one of the five economic recoveries. In contrast, job growth in economic recoveries generally seems to be the strongest in the Mountain, East South Central and South Atlantic regions. This pattern continued to some degree in the current recovery, as the Mountain and South Atlantic regions were the only areas to exhibit positive employment gains since the end of the recession.

Can We Explain It?

For economic policymakers, it would be helpful to know whether the current jobless recovery largely reflects temporary disturbances that might be more easily offset by countercyclical monetary and fiscal policies, or whether it is the result of a series of disturbances that are more permanent (what economists call “shocks”) that might require a different set of policies (or perhaps no response at all).

Cyclical Explanations?

The discussion from Table 1 suggests that the current and previous jobless recoveries stemmed importantly from much weaker-than-normal real GDP growth. In attempting to explain the root factors behind this relatively weak output growth, a survey of forecasters in Blue Chip Economic Indicators (September 2003) found that the following five factors were probably important:

• Excess investment by businesses in the late 1990s led to over-capacity; investment spending has remained weak while firms whittle away at this excess capacity.
• A mild recession tends to be followed by a weak recovery because there is little pent-up demand.
• The economy suffered a series of shocks, including Sept. 11, the corporate governance scandals and the war with Iraq.
• The more-than-three-year bear market in stocks sapped consumer confidence and reduced firms’ willingness to boost capital outlays.
• The weak labor market hurt consumer confidence and consumer spending.

Looking at this list, it becomes apparent rather quickly that disentangling cyclical from structural effects can be a fairly daunting endeavor. For example, was the stock market and investment boom a reflection of the New Economy, or was it a euphoria that got detached from fundamentals (“irrational exuberance”)? Another difficulty is one of disentangling cause from effect. In this case, was the weak economy responsible for weak investment, or was the reluctance of firms to invest a product of falling stock prices, which reduced consumer wealth and, hence, consumer spending? Or maybe firms were reluctant to invest because of war or terrorist-related uncertainty?

Structural Changes?

There is some evidence that there have been some significant structural changes in the economy and the way that firms compete for and use workers in the labor market. According to a recent study published by the Federal Reserve Bank of Kansas City, firms have increasingly adopted “just-in-time” workforce practices, such as hiring workers through temporary employment agencies, using...
part-time workers and adjusting over-
time. A more-flexible workforce, in this
sense, enables firms to respond more
rapidly to changes in product demand
and, perhaps, reduce costs.6
Related to this argument is the assertion
that the U.S. economy has undergone
some significant structural changes in the
past couple of decades because of
improvements in production technolo-
gies (increased use of high-tech capital
goods), inventory management practices
(just-in-time inventories) or increased
global competition. In this view, firms
(or even industries) that have failed to
adapt to these changes have been forced
to pare their workforce or go out of busi-
ness altogether. A recent study published
by the Federal Reserve Bank of New York
presents some evidence that a propor-
tionately larger share of the employment
losses following the 1990-91 and 2001
recessions have been structural rather
than cyclical compared with the 1970s
and 1980s.6
An additional piece of evidence show-
ing that the labor force is undergoing
structural change is the percentage of
the unemployed who are classified as
“permanent” layoff (those workers not
expected to be called back to their former
place of employment). It has been much
higher after the past three recessions
than in the previous post-war recessions.
(See the data begin in 1967.)
During the past three recoveries, the
percentage of those classified as perma-
nently unemployed has risen to about
43 percent, much higher than the
roughly 33 to 36 percent seen after the

Is the United States Deindustrializing?

Another reason some analysts cite to
explain the current jobless recovery is the
alleged deindustrialization of the United
States through international trade. This
includes the movement of production
capital to countries where labor costs
are lower, such as China, and the closure
of firms in the United States because
their goods or services ostensibly cannot
compete with lower-priced imports.
A quick look at the data suggests that the
number of job losses arising from these
trade effects is a very small percentage of
total unemployment.

According to the Bureau of Labor
Statistics’ report Extended Mass Layoffs,
the number of layoffs occurring from
“overseas relocation” and “import com-
petition” increased from 18,100 in 1996
to 32,400 in 1999.10 These layoffs then
decreased modestly in 2000, before rising
to 43,700 in 2001. Although the rate of
so-called trade-related layoffs moderated
in 2002 (falling to about 32,500), the pace
has quickened somewhat in 2003; layoffs
totaled a little more than 19,800 through
the first two quarters (an annual rate of
about 40,000). Still, at their peak in 2001,
trade-related layoffs represented only 0.6
percent of total unemployment. Indeed,
in congressional testimony in October
2003, Douglas Holtz-Eakin, director
of the Congressional Budget Office, argued
that “only about 90,000” lost jobs in the
manufacturing sector from 1998 to 2002
could be attributed directly to the import
of goods from China.

A More-Productive Workforce

When demand grows at a slower than
normal pace, firms are reluctant to hire
new workers to boost production; instead,
the firms prefer to meet existing product
demand out of inventories (which helps
explain why inventory investment was
much weaker than usual in the past two
recoveries) or by making their employees
more productive. In the current recovery,
firms have been able to get more out of
their existing workforce because they are
still reaping the gains from the surge in
capital investment in the late 1990s and
into early 2000, which, combined with
the aforementioned technological
improvements, significantly improved
the productivity of their workforce. As seen
in Table I, output per hour (labor produc-
tivity) in the nonfarm business sector
increased by 6.7 percent in the 2001-03
recovery, faster than the 1991-92 recovery
and the post-war average. However,
the growth of output per hour in the current
recovery is all the more impressive given
that labor productivity growth remained
rapid through the recession. During
recessions, output per hour tends to fall
(growth turns negative) as real GDP
declines by more than employment or
hours worked.

In the seven post-war recoveries prior
to the 1991-92 episode, gains in labor
productivity and hours worked contributed
about equally to the gain in economic
growth (nonfarm business output). But
in the past two recoveries, hours worked
has declined, meaning that all of the gain
in output has stemmed from labor pro-
ductivity growth. Hence, the recent rapid
productivity growth has obviated the need
for firms to expand their payrolls to the
extent they usually do during an economic
recovery.11 Eventually, though, higher
productivity growth means higher income,
higher spending and increased employ-
ment. In short, this is why we see real
GDP continuing to increase while labor
input (hours and employment) has not.

Kevin L. Kliesen is an economist at the
Federal Reserve Bank of St. Louis. Thomas A. Pollmann
provided research assistance.

ENDNOTES

1 The U.S. economy’s potential rate of
growth is usually defined as the sum
of the growth of its labor inputs
(hours worked) and its labor produc-
tivity (output per hour) in the private,
nonfarm business sector.

2 See McKinsey Global Institute.


4 Their formal designations are the
Current Employment Statistics Survey
(establishment) and the Current
Population Survey (household).


6 See the 1993 Economic Report of
the President.

7 See Lown and Wenninger (1994)
and ibid.

8 See Schreft and Singh (2003). Firms
that employ temporary or part-time
workers are not forced to pay benefits
like health insurance or pension con-
tributions, so they are for their full-
time workers.

9 See Groshen and Potter (2003).

10 An extended mass layoff occurs when
50 or more initial claims for unem-
ployment compensation are filed dur-
ing a consecutive five-week period,
and with 50 or more workers separated
from their job for more than 31 days.
See www.dol.gov/owps/emp.htm.

11 See recent remarks by Mankiw (2003)

REFERENCES

Council of Economic Advisers. Economic
Report of the President. U.S. Govern-
ment Printing Office (January 1993).

Groshen, Enica L. and Potter, Simon.
“Has Structural Change Contributed to
a Jobless Recovery?” Federal
Reserve Bank of New York. Current
Issues in Economics and Finance, Vol. 9,
No. 8, August 2003.

Kitchen, John. “A Note on the Observed
Downward Bias in Real-Time Esti-
mates of Payroll Jobs Growth in Early
Expansions.” Manuscript, Committee
on the Budget, U.S. House of
Representatives, August 2003.

Kohn, Donald L. “Productivity and
Monetary Policy.” Remarks at the
Federal Reserve Bank of Philadelphia
www.federalreserve.gov/boarddocs/
speeches/2003/20030924.

Lown, Cara and Wenninger, John. “The
Role of the Banking System in the
Credit Slowdown,” in Studies on
Causes and Consequences of the
1989-92 Credit Slowdown, Federal
Reserve Bank of New York, February
1994, pp. 69-112.

Mankiw, N. Gregory. Remarks of the
Chairman of the Council of Economic
Advisers to the annual meeting of the
National Association of Business
Economists, Atlanta, Ga., Sept. 15,
2003. www.whitehouse.gov/cea/
mankiw_speech_nabe_20030915.pdf

McKinsey Global Institute. U.S. Pro-
ductivity Growth 1995-2000: Under-
standing the Contribution of Information
Technology Relative to Other Factors,

Schreft, Stacey L. and Singh, Aarti. “A
Closer Look at Jobless Recoveries,”
Federal Reserve Bank of Kansas City
Economic Review, Second Quarter,
2003, pp. 45-73.

Schweitzer, Mark. “Another Jobless
Recovery?” Federal Reserve Bank of
Cleveland Economic Commentary,
March 1, 2003.

The Regional Economist • January 2004
www.stlouisfed.org