

## Analyzing employment trends

Job growth during the current economic expansion has been slower than in previous expansions. During the period from December 2001 to March 2006, the average monthly increase in payroll employment was 77,000. Over a comparable period following the 1990–91 recession, the average increase was 168,000. Explanations for slower growth in the current period tend to focus on factors related to aggregate demand and labor demand, such as health care costs, outsourcing, and productivity growth. But part of the explanation might relate to supply-side factors such as slower labor force growth. Todd E. Clark and Taisuke Nakata of the Federal Reserve Bank of Kansas City examine these issues in “The Trend Growth Rate of Employment: Past, Present, and Future,” a study published in the Bank’s *Economic Review*.

Economists sometimes refer to the “trend growth rate of employment”—the number of jobs that must be added each month to keep pace with population growth and changing trends in labor force participation. Common “rule-of-thumb” estimates of trend growth currently put the figure at 150,000 jobs per month. This means that over-the-month changes in payroll employment exceeding 150,000 generally are interpreted as strong job growth, while smaller increases are seen as weak job growth. Such interpretations have important implications for monetary and fiscal policy. Clark and Nakata hypothesize that the current trend growth rate may be too high: “If trend job growth were too slow, actual growth in jobs that appears weak by historical standards could exceed the new trend rate.” They find that declining growth rates in the population and in labor force participation have led to slower job growth in recent decades.

The first section of the article analyzes employment trends from the BLS payroll and household surveys for the 1955–2005

period. Clark and Nakata begin by examining employment growth for the 1955–84 and 1985–2005 periods. Next, in a “simple approach” to separating trend growth from business cycle influences the authors look at employment changes from peak to peak in the business cycles. Third, they analyze job growth using more sophisticated statistical methods that separate the trend and cyclical components of employment growth. Clark and Nakata conclude that all three results suggest that employment growth has slowed considerably since 1955.

The second part of the article analyzes various employment projections for the 2005–15 period. The authors argue that combining information from several forecasts might provide a more accurate estimate than individual forecasts. Noting that BLS and other Government agencies expect payroll employment to increase by 1.0 to 1.3 percent annually during the 2005–15 period, Clark and Nakata estimate a trend growth rate for the coming decade of 1.1 percent per year, or about 120,000 jobs per month. They point out, however, that a reasonable confidence interval ranges from 0.8 to 1.3 percent annually, or 85,000 to 150,000 jobs per month.

## Household spending on energy

The urban population of the United States devoted an average of 8.0 percent of their total annual expenditures to energy over the 1982–2004 period. The share of total expenditures allocated to the purchase of gasoline and motor oil was 3.8 percent; electricity accounted for 2.8 percent of total spending, and natural gas and fuel oil accounted for the remainder.

The share of the household budget spent on energy consumption at different times and by various groups is the subject of “Household energy expenditures, 1982–2005,” by David B. Cashin and Leslie McGranahan (*Chicago Fed Letter*, June 2006).

The share of household spending devoted to energy expenditures—which is a function of energy prices, quantities consumed, and total expenditures—was at its recent high in the early 1980s. During that period, energy expenditures averaged 11 percent of the household budget. Between 1990 and 2004, household spending on energy dropped to an average of 7 percent of expenditures. For last year, 2005, the authors estimate that households saw 8.5 percent of their spending go for energy products.

Until 2005, the inflation-adjusted price of gasoline, the largest component of energy consumption, has been below its 1982 level. However, prices of electricity have gradually declined since the 1980s. Natural gas prices rose through the mid-1980s, fell during the late-1980s and 1990s, and have risen since 2000. Per household consumption of gasoline has remained relatively steady during this period, while natural gas consumption has declined and consumption of electricity has increased.

A look at energy expenditures among income quartiles shows that the energy’s share of expenditures decreases as income increases. The bottom income quartile, with the lowest income, had the highest share of energy spending. This would be attributable to the fact that home energy, like food, is a basic necessity.

A comparison of energy expenditures of elderly and non-elderly consumers shows that while energy spending as a whole is nearly the same for both groups, the allocation of expenditures among the various types of energy is somewhat different: the elderly spend less on gasoline and more on electricity, natural gas, and fuel oil. This is not too surprising, given that elderly persons are likely to be retired, while the non-elderly are likely to be commuting to work by car.

The authors’ analysis of differences in energy expenditures among various groups yields the same results in different periods and at different energy price levels. □