Technology and displacement

A fair amount of research has been conducted on the impact of foreign trade on job displacement and displaced workers. Far less research has been done on the impact of other fundamental causes of displacement, such as technological change, changes in demand patterns, or low firm productivity within an otherwise healthy part of the economy.

Daniel Aaronson and Kenneth Housinger seek to remedy this by analyzing the implications of technology on displacement. Writing in the second quarter 1999 issue of the Federal Reserve Bank of Chicago's *Economic Perspectives* journal, they find support for the idea that "displacement due to elimination of positions is more likely in high-tech industries, consistent with the notion that job destruction (and creation) is more common in technologically dynamic industries." There was less evidence of a connection between technological variables and other types of job displacement such as plant closings.

Aaronson and Housinger studied data on workers aged 30 to 59 from two supplements to the Current Population Survey—the Displaced Worker Survey and the Tenure Survey. The variables Aaronson and Housinger used as proxies for technological intensity included computer usage as reported in a 1993 supplement to the Current Population Survey, computer investment as a share of capital spending, the list of high-tech industries developed by William Luker, Jr. and Donald Lyons in the June 1997 issue of this *Review*, growth in output per hour, and the National Bureau of Economic Research data on total factor productivity in manufacturing. They are careful to note that many of the results of regressions are moderately sensitive to the particular measure of technology used. The results on probability of reemployment were especially susceptible to this effect.

Lottery prizes and life changes

How much would your life change if you won a substantial lottery prize? If you are like a typical participant in a recent study by Guido W. Imbens, Donald B. Rubin, and Bruce Sacerdote, winning $15,000 a year for 20 years would not have a major effect on your life. However, if you instead won $80,000 a year for 20 years, it would affect your labor force participation, automobile expenditures, the value of the home you own, and your savings, according to the study.

Imbens, Rubin, and Sacerdote, in Working Paper 7001 from the National Bureau of Economic Research, analyzed a survey that they conducted of 496 Massachusetts lottery winners. The survey participants were divided into three groups: winners of one-time prizes between $100 and $5,000; winners of a yearly amount of less than $25,000 for 20 years, with an average annual prize of $15,000; and winners of at least $25,000 a year for 20 years with an average prize of $80,000 annually.

The researchers found that a prize of $15,000 a year had little effect on the labor supply of the winners. However, they also found that winning $80,000 rather than $15,000 reduced labor supply significantly. Additionally, estimates by Imbens, Rubin, and Sacerdote indicated that, in this case, car values rose (by at least $5,500 on average), home values increased (by $30,000 on average), and savings went up (especially in the form of bonds and mutual funds).

Bequests and retirement

Other than winning the lottery, bequests and other cross-generation wealth transfers may be another way current workers might finance their retirement. According to an item in the *Economic Trends* newsletter published by the Federal Reserve Bank of Cleveland, baby-boomers in the labor force today are faced with "uncertain prospects" for Social Security and other sources of retirement income. As a result, we should question whether this large cohort can rely on bequests and other transfers to support their retirement consumption.

The Cleveland Fed's analysts say there are reasons to doubt that there will be much greater inheritances available than there were 35 years ago. First, the very size of the baby-boom cohort suggests that even if the parent generation's bequests are somewhat larger than before, they must be distributed among more siblings. Second, the parents are living longer, and thus consuming more of their savings. Third, greater spending on medical care exacerbates that consumption of wealth.

Using standard population and mortality data and making "reasonable assumptions" for the share of wealth that is passed on, the *Economic Trends* article says, "bequests are estimated to have grown just a little faster than labor compensation. That is, baby-boomers are not receiving substantially larger bequests relative to their labor compensation than did their counterparts in the 1960s." □

We are interested in your feedback on this column. Please let us know what you have found most interesting and what essential reading we may have missed. Write to: Executive Editor, *Monthly Labor Review*, Bureau of Labor Statistics, Washington, DC. 20212, or e-mail MLR@bls.gov