LEHD Fact Sheet

Human Capital Project

Purpose

Measuring the quality of the workforce is extremely difficult, yet increasingly important to developing an understanding of what kind of workers businesses hire and how this affects business competitiveness. Getting information on the education and occupation of large samples of workers is expensive and burdensome. This project uses the LEHD data to estimate the amount of human capital each employee brings to the current employer in the form of measured skills (experience and education) and unmeasured skills (estimated using a model from labor economics). A major contribution of this work is LEHD's ability to directly link the relationship between firm investment in technology and the demand for skilled workers.

Approach

The LEHD data from the state partners are combined to estimate the human capital each worker brings to each job over the period from 1990:1 to 2000:2 (earliest to latest available data). We examine the distribution of this human capital within each business a multiple points in time. Our current focus is 1992 and 1997 because we are able to use data from the Economic Censuses conducted in those years to measure labor productivity and capital investments, especially information technology investment.

What is returned to the state partners?

- LEHD produces national estimates.
- Comparable estimates for the businesses in partner states are returned to the states.

Results for California, Florida, Illinois, and Maryland

- There has been a consistent up-skilling of the workforce in these partner states during the 1990s.
- While the amount of human capital increased for the typical business, there are tremendous differences across businesses – even within industries. Some businesses upskill and others downskill over the same period.
- Continuing businesses and entering businesses use more human capital at the end of the 1990s than they did at the beginning of the decade – not because they employ more workers, but because the workers they employ are more skilled.
- Exiting businesses generally used less human capital than do either continuers or new entrants.
- High productivity businesses, capital intensive businesses, and businesses with heavy new investment in information technology all tend to employ more human capital.

Supporting documentation

"Estimating the Human Capital in American Businesses" reports dated January 2001 and January 2002 by John M. Abowd, Kevin L. McKinney and Paul Lengermann.
"Within and Between Firm Changes in Human Capital, Technology, and Productivity," report dated December 2001 by John M. Abowd, John Haltiwanger, Julia Lane and Kristin Sandusky