CENBR/98-6 | Issued November 1998

# CENSUS BRIEF

U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

# New Ideas for Measuring Labor Productivity

WHEN DAN RATHER TELLS network TV news viewers about the economy, he often cites a key statistic called labor productivity. For example, he may tell viewers the nation's labor productivity, or output per hour of nonfarm work, grew by 1.4 percent in 1997.

But John Haltiwanger of the Census Bureau's Center for Economic Studies would like to be able to provide Rather and the nation with even more detailed statistics. He would like the aggregate productivity number broken down to measure the contributions of existing businesses, new businesses entering the market and businesses exiting the field.

"If you look just at aggregate productivity growth, you're missing most of the story," says Haltiwanger, who is chief economist at the U.S. Bureau of the Census. "It hides what is happening at the micro level — that some businesses may be doing spectacularly well and others may not be doing so well."

## CHURNING IS KEY TO U.S. ECONOMIC GROWTH

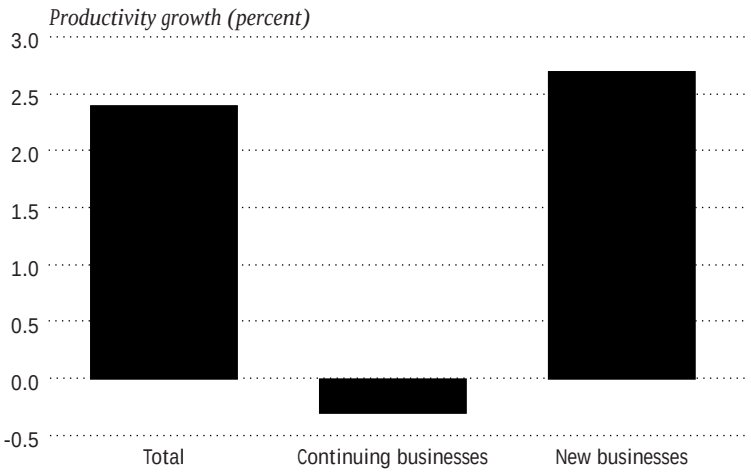
To illustrate this point, Haltiwanger and his colleagues, Lucia Foster and C.J. Krizan, broke down aggregate productivity numbers for the automobile repair industry. The Bureau of Labor Statistics (BLS) reported that output per worker grew by 2.4 percent in the automobile repair industry from 1987 to 1992. But when Haltiwanger and his colleagues, using Census Bureau data, looked more closely at the number, they found that a dramatic amount of churning had occurred below the surface.

New businesses entering the auto repair industry accounted for more than the total productivity growth between 1987 and 1992 at 2.7 percent, while continuing businesses had a slight productivity loss of 0.3 percent during the period, giving the industry a net gain of 2.4 percent.

In addition, new businesses and expanding, existing businesses had a gross job creation rate of 51 percent, which means that more than half of the jobs in 1992 did not exist in 1987. Existing businesses that exited or contracted had a gross job destruction rate of 43 percent, meaning that more than 4 in 10 jobs that existed in 1987 had been eliminated by 1992. The net employment change was plus 8 percent for the period.

"Churning in the economy — or moving resources like capital and labor away from less productive businesses to more productive businesses — is a fundamental part of U.S. economic growth," says Haltiwanger, who has presented these findings at economic statistics conferences. "So if we want to understand how to grow, we must measure the magnitude of churning as well as the contribution of this churning to productivity growth."

### Auto Repair Industry – Labor Productivity Breakdown: 1987-1992

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## PUBLIC POLICY IMPLICATIONS

Haltiwanger thinks that more detailed statistical data could help businesses boost their productivity and better inform public policy.

"A large part of productivity growth is through reallocation — that can make you a big advocate of a flexible-market economy," Haltiwanger says. "But there also is a challenge. There are businesses shutting down here and that imposes real costs on the employee who has to find another job and, moreover, leaves resources vacant for a period of time. Some of the exit may be inefficient. So the detailed numbers are fundamental to understanding what kind of market structure we should have and what institutions we should set up."

## RESOURCES NEEDED FOR FURTHER STUDY

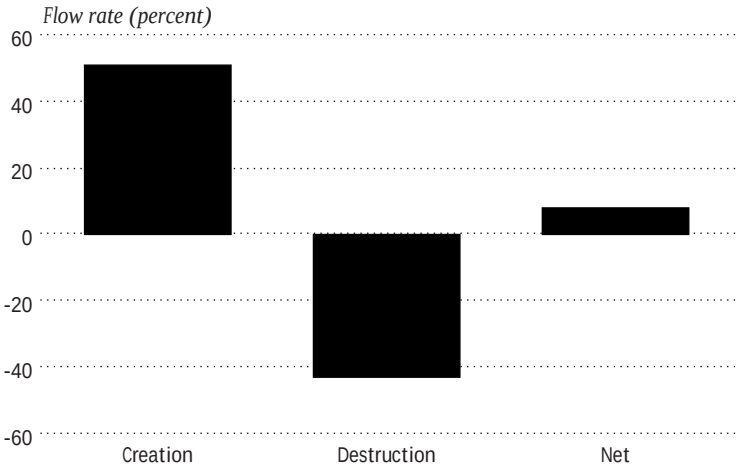
"Government statistical agencies are moving toward more meaningful measures of churning and productivity," Haltiwanger says. "For example, the BLS plans to publish job creation and job destruction statistics by industry, region and size of business within the next year."

The next step is to measure the contribution of this micro-level churning to aggregate productivity growth, he says.

"The good news is no new surveys are required, but it will require processing the data in a manner that permits linking the micro-behavior of individual businesses in terms of entry and exit and change to the aggregate statistics," Haltiwanger says. "This will be a formidable task given that there are more than 7 million businesses with paid employees in the United States. Also, greater coordination among U.S. statistical agencies will be required."

For more information about this research, contact the Center For Economic Studies at 301-457-1843. A white paper is available: "Aggregate Productivity Growth: Lessons from Microeconomic Evidence," written by Haltiwanger, Foster and Krizan.

### Auto Repair Industry – Gross Employment Flows: 1987-1992

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