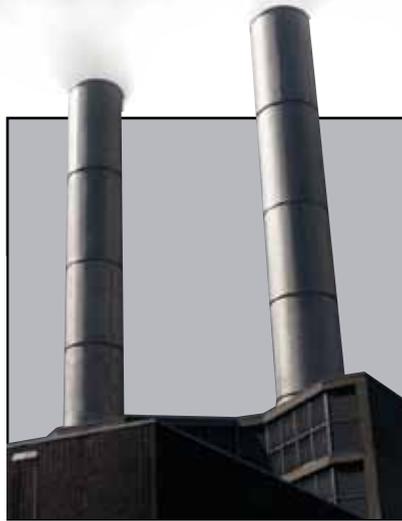




Not your father's recovery:



The changing dynamics of labor productivity

The National Bureau of Economic Research, which is the body that determines the dates of U.S. business cycles, considers a wide range of information and data before making its official determinations about U.S. business cycles, such as the start of a recession or the beginning of an economic recovery.

For many Americans, however, the reality of either a recession or a recovery hinges more closely on a single issue: jobs. Certainly, viewed through a political lens from elected officials facing a recession, though a wide range of data may show signs of an economic recovery, it might not be viewed as a “real” recovery until the jobs numbers show a significant rebound.

This idea of a recovery that does not “feel like” a recovery has become more common in recent U.S. experience. In the aftermath of both the 1990-91 and 2001 recessions, the nation had what are referred to as “jobless recoveries.” During both, the economy resumed growing while joblessness continued to rise for more than a year afterward. In both cases, many analysts noted faster growth in labor productivity as contributing to the growth in output. For policymakers, understanding the way productivity has changed in recent years is important for gauging the outlook

for the current recovery as well as what role productivity may play in future economic cycles.

More productive

Although productivity is a key component of the nation’s economy, for a non-economist, the concept may be difficult to grasp, especially when presented in quantifiable terms. For example, most workers would say that, regardless of economic conditions, their individual productivity changes little, if at all. Meanwhile, the Bureau of Labor Statistics announces quarterly productivity reports that show sometimes substantial increases or decreases in productivity.

The overall productivity for the U.S. economy is measured as the output of U.S. factories and firms per hour worked. For example, at its most basic level, if the nation’s output shrinks while hours worked remain steady, then productivity drops. Conversely, if output rises while hours hold steady, productivity rises.

“Until the mid-1980s, productivity rose during expansions and fell during contractions along with output,” says Willem Van Zandweghe, a Federal Reserve Bank of Kansas City economist. “But in recent years,

the behavior of productivity has become more weakly related to the state of the business cycle. For instance, it no longer tends to fall during recessions.”

Van Zandweghe recently completed a research project on the shifting dynamics of labor productivity. Although his research looked at changes across the business cycle and did not focus specifically on recessions or periods of economic growth, a historical look at recessions can help to illustrate how dramatically the dynamics of productivity have shifted.

For example, during the 1981-82 recession, Van Zandweghe notes that productivity weakened slightly with hours worked declining more slowly than the drop in output. However, during the most recent recession, productivity moved the other way. From the fourth quarter of 2007 through the second quarter of 2009, output in the nonfarm business sector fell while labor productivity actually increased.

In his research, Van Zandweghe considered two hypotheses that could explain such changes in the business cycle behavior of productivity. The first is that supply shocks are playing a diminished role in the business cycle. An example of a supply shock would be a dramatic increase in energy prices that forces firms to scale back production. The second hypothesis is that there have been structural changes in the labor market that have changed traditional methods of managing personnel, such as a more aggressive use of hirings and layoffs. He found it was the second of these—structural changes in labor markets—that likely had the more significant impact on the shift in productivity dynamics.

Among the changes he notes is a transition away from a practice known as “labor hoarding.” Under this practice, firms focused on smoothing employment and paid more workers than needed through the low points in the business cycle. Labor hoarding could be driven by several factors including firms looking to avoid the high costs of hiring and firing, a desire to hold onto staff with



ALTHOUGH PRODUCTIVITY is relatively simple to measure at a factory, the concept of overall U.S. economic productivity may be a difficult concept to comprehend. Still, changes in productivity, and in the behavior of productivity, could have important ramifications for the economic recovery.

specialized skills or concerns about the impact labor adjustments can have on morale.

A decline in some of these various forms of labor adjustment costs was likely among the factors contributing to the demise of labor hoarding.

The decline in labor adjustment costs may be related in part to technological innovation. For example, computers have reduced the value of some job-specific skills, especially for those workers with moderate education who perform routine tasks.

“It has exposed the middle tier of white-collar workers to replacement by computers or outsourcing,” Van Zandweghe says. “There is evidence suggesting firms have increasingly turned to flexible labor, including temporary employees, part-time hiring and overtime.”

Collectively, this more aggressive management of the workforce became increasingly prominent during the 1990-91 recession.



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Another potentially important structural change in labor markets relates to the outlook held by individual firms for product demand. For example, in the 2001 recession, many industries that lost jobs during the recession continued to lose jobs in the recovery. Meanwhile, many industries that gained jobs during the 2001 recession continued to expand payrolls during the recovery. In these cases, the firms shedding jobs seemed convinced either of a continuing downturn in their industry or, at the very least, a very uncertain future.

“If a firm perceives the recession as heralding a permanent decline in the demand for its products, the firm has a strong incentive to cut hours and eliminate jobs,” Van Zandweghe says, “despite the associated costs.”

The future

Determining the roles of these various trends is difficult, Van Zandweghe says. For example, there are no measures of labor hoarding and how it may change during a particular economic climate. However, his research does show a change in the behavior of productivity that could have implications for the recovery and future economic cycles.

Early in the current expansion, employ-

ment continued to decline while productivity surged. In the last three quarters of 2009, productivity expanded at an average annual rate of 7.2 percent, more than twice as fast as the annual growth rate of 2.7 percent since 1995.

Productivity was clearly boosted by a decline in worker hours during 2009, he says, but changes in technology likely also had an impact.

“The analysis suggests that new technologies will continue to contribute to fluctuations in productivity to the same extent as what we saw before the mid-1980s,” he says.

Changes in the relative contribution of supply shocks therefore do not appear to explain the altered dynamics of productivity.

A decline in the practice of labor hoarding by firms is a more plausible explanation for the shift in the behavior of productivity in recent decades. Van Zandweghe says that means that during the recovery and economic expansion, productivity growth should slow. At that point, the expansion will be driven primarily by job gains and a rise in hours per worker.



BY TIM TODD, TEN CONTRIBUTING WRITER

FURTHER RESOURCES

“WHY HAVE THE DYNAMICS OF LABOR PRODUCTIVITY CHANGED?”

By Willem Van Zandweghe
KansasCityFed.org/TEN

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.