

Superstar Firms and the Falling Labor Share

BY KODY CARMODY

In 1961, economist Nicholas Kaldor observed that the labor share, the percentage of a nation's GDP paid as wages, is roughly constant across countries and time. Until the 1980s this was broadly true — labor consistently received about two-thirds of GDP. Since then, however, there has been a marked decline in the labor share within most countries, including the United States. This trend has recently seen considerable attention from economists, policymakers, and the media, as it is central to discussions of growing wealth inequality. A declining labor share means that GDP growth might not translate into real wage growth.

Recent years have seen many explanations that rely on aggregate- or industry-level analyses. In a recent *American Economic Review* paper, David Autor, Christina Patterson, and John Van Reenen of the Massachusetts Institute of Technology, David Dorn of the University of Zurich, and Lawrence Katz of Harvard University argued that these macro-level analyses obscure important firm-level effects.

Autor and his co-authors presented a model of “superstar firms.” They argued that the fundamental character of U.S. markets has changed since the 1980s — industries have become increasingly “winner-take-most,” causing highly productive superstar firms to control larger shares of the market. By definition, more productive firms need fewer workers for a given level of production, and a market shift toward superstars could cause the aggregate labor share of income to fall, even as the average firm's labor share stays stable.

The researchers looked at six large sectors in the United States and found strong evidence of such a shift. For each sector, the concentration of sales, the share of sales going to top firms, and the concentration of employment have increased substantially since the 1980s. In 1982, the largest four retail trade firms accounted for less than 15 percent of sales; by 2012, that number had risen to about 30 percent. For most industries, concentration of employment is far below concentration of sales, suggesting that the top firms are capturing larger shares of the market while employing relatively fewer workers.

One possible explanation is that markets are becoming more competitive — increased international trade and Internet shopping, for example, may have made consumers more sensitive to price differences. It's possible, however, that larger firms are just better at lobbying to prevent competition. If so, dominant firms would have less incentive to

innovate and their productivity growth would be relatively stagnant. Instead, the authors found that manufacturing industries that have become more concentrated also saw the largest increases in productivity. This doesn't rule out the idea that markets are becoming less competitive in some ways, but it does suggest that differences in firm productivity, as opposed to anti-competitive practices, are an important driver of increasing market concentration.

If superstar firms are behind the falling labor share, we would expect the fall to be largest in industries that have seen the largest increases in concentration. In an MIT working paper, Autor and his co-authors tested this relationship for each five-year period between 1982 and 2012. In the first period, 1982-1987, they found no relationship between changes in concentration and labor share. For

the next period, 1987-1992, an increase in concentration predicted a small drop in labor share, and the effect became larger in each five-year period following. By 2007-2012, a 1 percentage point increase in an industry's concentration predicted a 0.4 percentage point fall in its labor share. That the

relationship didn't exist at first, but became stronger over time, is consistent with the idea that the rise of superstar firms was driven by a fundamental change in the character of markets.

Other authors have found results consistent with the superstar firms model. A 2017 working paper from Matthias Kehrig of Duke University and Nicolas Vincent of HEC Montreal looked closely at the U.S. manufacturing sector and concluded that a small number of “hyperproductive plants” are responsible for that sector's labor share decline. A 2017 working paper from Daniel Berkowitz of the University of Pittsburgh, Hong Ma of Tsinghua University, and Shuichiro Nishioka of West Virginia University provided evidence for the recent emergence of superstar firms in China.

Macro-level factors like trade, technology, housing, and the broader economy might explain some of the labor share's decline. But Autor and his co-authors, in their working paper, argued that their results are consistent with the superstar firms model and made the case for “a somewhat neglected firm-level perspective on the changes in the labor share.” They suggested that future research should further test their model, explore what allowed superstar firms to gain market share, and explore the links between superstar firms, the labor share, and inequality. **EF**

“Concentrating on the Fall of the Labor Share.” By David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen. *American Economic Review: Papers & Proceedings*, May 2017, vol. 107, no. 5, pp. 180-185.