

Drivers of Declining Labor Share of Income

blog-imfdirect.imf.org/2017/04/10/drivers-of-declining-labor-share-of-income/

10/04/2017

By [Mai Chi Dao](#), [Mitali Das](#), [Zsoka Koczan](#), and [Weicheng Lian](#)

After being largely stable in many countries for decades, the share of national income paid to workers has been falling since the 1980s. [Chapter 3](#) of the April 2017 *World Economic Outlook* finds that this trend is driven by rapid progress in technology and global integration.

Labor's share of income declines when wages grow more slowly than productivity, or the amount of output per hour of work. The result is that a growing fraction of productivity gains has been going to capital. And since capital tends to be concentrated in the upper ends of the income distribution, [falling labor income shares](#) are likely to raise income inequality.

Trending down

In advanced economies, labor income shares began trending down in the 1980s. They reached their lowest level of the past half century just prior to the global financial crisis of 2008, and have not recovered materially since. Labor income shares now are almost 4 percentage points lower than they were in 1970.

Despite more limited data, labor shares have also declined in emerging market and developing economies since the early 1990s. This is especially the case for the larger economies in this group. In China, for example, despite impressive gains in poverty reduction over the past two decades, labor shares still fell by almost 3 percentage points.

Indeed, as growth remains subpar in many countries, an increasing recognition that the gains from growth have not been broadly shared has strengthened a backlash against economic integration and bolstered support in favor of inward-looking policies. This is especially the case in several advanced economies.

Our [study](#) takes an in-depth look at the symptoms and drivers of this downward trend in labor share of income.

Technology: a key driver in advanced economies

In advanced economies, about **half** of the decline in labor shares can be traced to the impact of technology. The decline was driven by a combination of rapid progress in information and telecommunication technology, and a high share of occupations that could be easily be automated.

Global integration—as captured by trends in final goods trade, participation in global value chains, and foreign direct investment—also played a role. Its contribution is estimated at about **half that of technology**. Because participation in global value chains typically implies offshoring of labor-intensive tasks, the effect of integration is to lower labor shares in tradable sectors.

Admittedly, it is difficult to cleanly separate the impact of technology from global integration, or from policies and reforms. Yet the results for advanced economies is compelling. Taken together, technology and global integration explain close to 75 percent of the decline in labor shares in Germany and Italy, and close to 50 percent in the

Labor is losing out

The share of national income paid to workers has been declining in many countries.

(evolution of the labor share of income, percent)



Source: IMF, World Economic Outlook, April 2017.



United States.

Global integration: largely benign in emerging market economies

In emerging markets and developing economies, global integration has allowed for expanded access to capital and technology and, by raising productivity and growth, has led to a rise in living standards and lifted millions from poverty.

However, these forces may also be associated with declining labor income shares, by shifting the production in emerging market and developing economies towards more capital-intensive activities. We find that global integration, and more specifically participation in global value chains, was the key driver of declines in labor shares in emerging markets.

This effect could, however, be interpreted as benign: it is the result of capital deepening that is not necessarily accompanied by dislocation of employment or reduction in wages. In Turkey, for example, the decline in labor income share of around 5 percentage points is explained almost exclusively by the rapid rise in participation in global value chains.

Technology, in contrast, has played a small role in these economies. This reflects a smaller decline in the relative price of investment goods as well as a lower share of automatable jobs.

Hollowing out of the middle-skilled labor share

Another key finding of our research is that the decline in labor shares in advanced economies has been particularly sharp for middle-skilled labor. Routine-biased technology has taken over many of the tasks performed by these workers, contributing to job polarization toward high-skilled and low-skilled occupations.

This “hollowing-out” phenomenon has been reinforced by global integration, as firms in advanced economies increasingly have access to a global labor supply through cross-border value chains.

Dealing with disruption

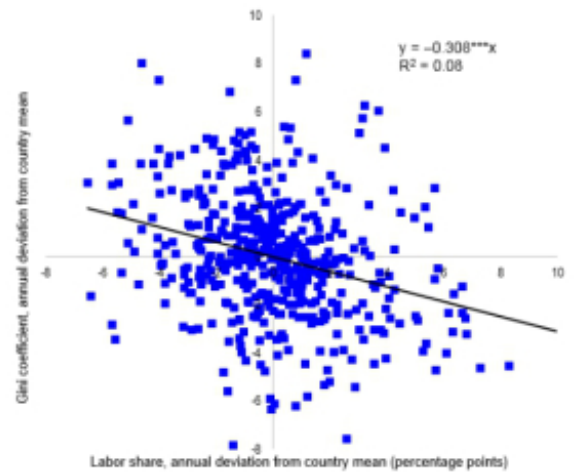
We conclude that although technological advancement and global economic integration have been key drivers of global prosperity, their effects on labor shares challenge policymakers to find ways to spread those benefits more broadly. The design of specific policy responses, of course, will have to depend on country circumstances and be anchored in their social contracts.

In Part 2 of this blog, we will discuss our findings on the skill and sectoral trends in labor income shares as well as possible policy responses. We also elaborate on a new cross-country index to measure the share of occupations that are at risk of being automated. Stay tuned!

Inequality rising

Falling labor income shares are associated with higher inequality.

(labor shares and income inequality, annual within-country changes)



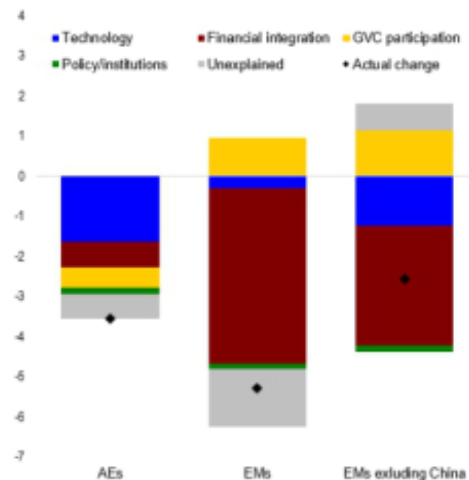
Source: IMF, World Economic Outlook, April 2017.
Note: *** indicates 1 percent statistical significance.



Driving forces

Technology and global integration are key drivers of falling labor shares.

(contributions to aggregate labor share changes, deviation from regression constant)



Source: IMF, World Economic Outlook, April 2017.
Note: AEs = advanced economies; EMs = emerging markets; GVC = global value chain.



