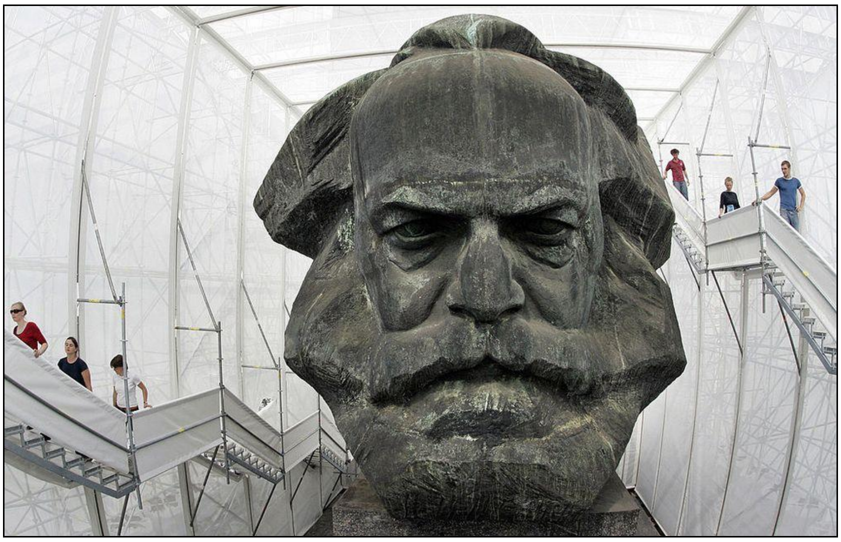
Why Workers Are Losing to Capitalists

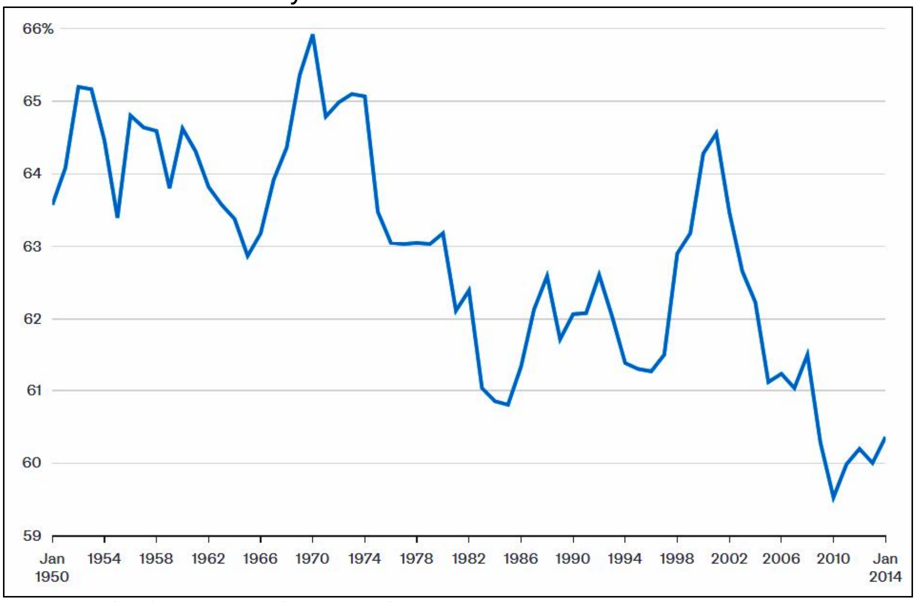
Automation and offshoring may be conspiring to reduce labor's share of income
Noah Smith, *Bloomberg*, 20 septembre 2017



Maybe he had a point.

Back in April, I wrote about one of the most troubling mysteries in economics (see below), the falling labor share. Less of the income the economy produces is going to people who work, and more is going to people who own things.

Less of the Pie for Labor
Share of GDP received by workers.



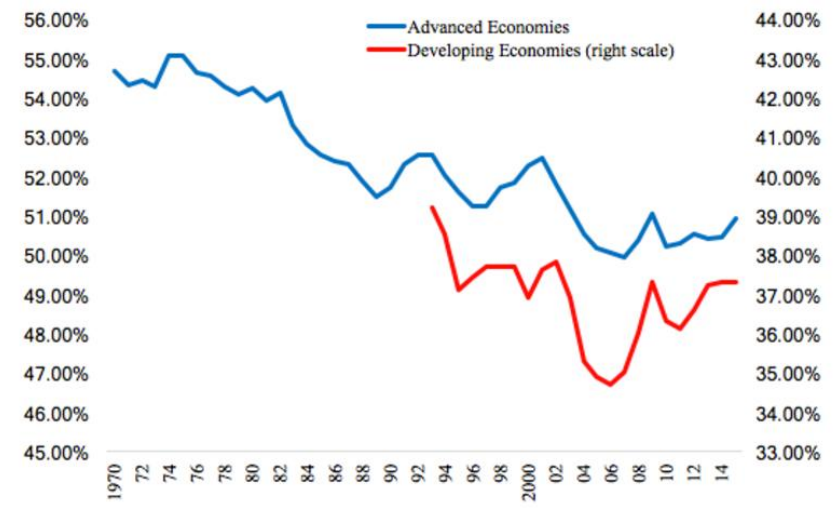
Source: Federal Reserve Bank of St. Louis

This trend is worrying because it contributes to increased inequality -- poor people own much less of the land and capital in the economy than rich people do. The devaluation of workers could also increase unemployment, social unrest and general malaise. No one would like to see capitalism transform into the kind of dystopia envisioned by Karl Marx. That's why even though the decline in labor's share has so far been relatively modest, economists are racing to diagnose the cause before the problem gets any worse.

Recently, a lot of attention has focused on the idea that monopoly power might be causing the shift. But the famous paper that draws this connection -- by David Autor, David Dorn, Lawrence Katz, Christina Patterson and John Van Reenen -- also shows that it can account for perhaps only 20 percent of the change. This means other possible explanations for labor's decline, like increasing automation or globalization, need to be re-examined.

Economists Mai Dao, Mitali Das and Zsoka Koczan of the International Monetary Fund argue that the culprit is not automation or offshoring alone, but the interaction between the two. As evidence, they note that the labor share has been falling not just in rich nations, but in developing countries as well. Here is a figure from their paper:

Figure 1 Evolution of labour's share of income



If globalization were purely to blame, this wouldn't be happening. Standard trade theories imply that because rich countries have a lot of capital and poor countries have a lot of labor, when these countries start to trade, labor's share of income should go down in the countries where it used to be scarce -- i.e., the rich world -- but should rise in the poor countries where it was previously abundant. That's not what's happening.

Meanwhile, if automation is just now starting to make workers obsolete, developing countries shouldn't be experiencing the fall in labor share at the same time, because in technological terms they're decades behind the rich countries. The authors confirm that investment goods -- machines, vehicles, computers, etc. -- haven't really gotten much cheaper in poor countries, as they have in rich ones. So the puzzle really boils down to this: Why is the labor share falling in the developing world?

Dao and his co-authors offer a hypothesis. It has to do with the types of industries that exist in poor countries before and after trade gets opened up. When poor countries are isolated from the global economy, they tend to specialize in things that rely on a lot of cheap labor -- farming, low-end services and simple labor-intensive manufacturing. Local landlords and other capital owners do well, but don't have a chance to get truly rich, because any investment in machinery or technology can be undercut by a flood of low-wage workers. So they don't bother making the investments in the first place. This dearth of capital spending is exacerbated by rudimentary or dysfunctional financial systems.

But when trade opens up, the rich countries start offshoring manufacturing jobs to the poor countries. These jobs offer better opportunities for workers, but *much* better opportunities for capitalists. Even as capitalists in the U.S. or Japan or France get rich cutting labor costs by shipping jobs to China, Chinese capitalists get rich because they're finally able to amass huge business empires.

The IMF economists also predict that global financial integration should help alleviate the pressure on labor in poor countries. If American, European, Japanese and Taiwanese companies are able to invest in a developing country like China, the inflow of foreign money will boost incomes for local workers and compete down the profits of local capital owners.

So what about rich countries? Here, the argument is that automation and globalization are working together -- companies in rich countries can ship labor-intensive manufacturing jobs in electronics assembly, toys and clothing to China and Bangladesh, while buying advanced machine tools and robots to do more high-end manufacturing of things like microprocessors and airplanes. As a result, workers in rich countries where routine jobs were more common were hit harder by both free trade and the advent of cheap automation.

In other words, the two most conventional explanations for rising inequality and falling wages might both be correct. A perfect storm of robots and free trade -- and some monopoly power to boot -- could be shifting power from the proletariat to the capitalists. With all these factors at work, maybe the real puzzle is why workers aren't doing even worse than they are.

Cracking the Mystery of Labor's Falling Share of GDP

There are four main theories, each of which falls apart under scrutiny
Noah Smith, *Bloomberg*, 24 avril 2017

Economists are very worried about the decline in labor's share of U.S. national income. One reason they're concerned is because when less of an economy's wealth flows to workers, it exacerbates inequality and increases the risk of social instability. But another reason is that this trend throws a wrench in economists' models. For decades, macroeconomic models assumed that labor and capital took home roughly constant portions of output -- labor got just a bit less than two-thirds of the pie, capital slightly more than one-third. Nowadays it's more like 60-40.

Economists are therefore scrambling to explain the change. There are, by my count, now four main potential explanations for the mysterious slide in labor's share. These are: 1) China, 2) robots, 3) monopolies and 4) landlords.

The China hypothesis basically says that the opening of the Chinese and Indian economies, combined with the invention of globalizing technologies like the internet and containerized shipping, dumped a flood of low-cost labor onto the world market, allowing multinationals to shop around for cheap workers while raising their profits. This view received some support from a 2013 paper by Michael Elsby, Bart Hobijn and Asegul Sahin, who found that the trade and manufacturing sectors had the biggest declines for labor income.

One problem with this theory is that, according to Chinese statistics, labor's share has been falling there, too. From China's perspective, opening the country to trade brought in a flood of new capital, so capital's income share should have been the one to fall. This chips away at the globalization explanation, assuming those Chinese government numbers can be trusted.

The robots hypothesis says that as technology gets cheaper, employers are substituting machines for workers. A 2013 paper by Lukas Karabarbounis and Brent Neiman found that costs of capital goods have been getting cheaper, and concluded that companies are substituting technology for human labor. This fits with other research showing adverse effects on wages from the adoption of new technologies like industrial robots.

But there are problems with this thesis as well. A recent study by David Autor, David Dorn, Lawrence Katz, Christina Patterson and John Van Reenen found that the labor share is falling across the whole economy, but not within companies. In other words, companies themselves aren't substituting machines for workers, as we might expect them to do if robots were getting really cheap. Instead, the economy is simply shifting resources toward a few large companies that are very capital-intensive, and away from the more numerous, smaller companies that use more human labor. Autor et al. blame increasing monopoly power for labor's decline.

Then there's the idea that landowners, not corporate overlords, are taking money away from workers. While analyzing the work of French economist Thomas Piketty, Matt Rognlie found that national income accounts showed an increasing amount flowing to owners of land. More recently, economist Dietrich Vollrath examined a paper by Simcha Barkai about rising profits, and found that profits from owner-occupied housing also rose sharply.

Supporters of the other theses have yet to really grapple with the landlords explanation. The reason is that the people pushing this fourth idea justify it based on national income accounts, while supporters of the other three explanations tend to look at corporate behavior up close. When economists speak in different languages, it's harder to have a debate.

So that leaves us with as many as four competing explanations, each with some reasonably compelling circumstantial evidence in its favor. What to do? Eventually, economists will probably find new, better ways of putting these theories head to head. But in the meantime, it's worth asking whether some of these explanations could actually be measuring different parts of the same phenomenon.

A recent blog post by Paul Krugman offers a possible insight. Krugman notes that it's possible that some companies are more capital-intensive and some are more labor-intensive -- think of factories making televisions with robots while others assemble them by hand. When the productivity of the capital-intensive companies improves -- due to mechanization, or the internet, or globalization -- it shifts production toward those companies, and lowers wages in the process.

Now suppose that those capital-intensive companies are a small handful of superstar multinationals, while the labor-intensive companies are a bunch of small, local competitors. Improvement in robots, information technology and globalization would therefore be shifting resources away from the many and toward the few -- in other words, exactly the same phenomenon that Autor et al. describe. Huge companies are probably more capable of building automated factories, using online supply chains to outsource production to China.

So monopoly power, robots and globalization might all be part of one unified phenomenon -- new technologies that disproportionately help big, capital-intensive multinational companies. Meanwhile, technology that augments human labor-power -- for example, cheap energy -- might have languished in recent decades, due to the failure to replace oil and gas with better power sources. Hence, small companies that use lots of workers might be losing out in the age of information technology.

That theory still doesn't explain how landlords might fit into the picture. But it provides a possible way to unify at least some of the competing explanations for this disturbing economic trend.