

On Fears of Automation's Impact on Labor

Combatting Displacement Regardless of Source

JFI is an applied research organization that is exploring guaranteed income policies, including universal basic income, to strengthen the social safety net, combat poverty, and ensure against economic displacement due to factors such as trade, globalization, and technological changes like automation and the development of artificial intelligence.

There is a view, prevalent among proponents of universal basic income, that this latter factor, technological change in the form of automation and artificial intelligence, represents a distinct threat to the wellbeing of working and middle class households; that we are close to undergoing an “automation apocalypse,” where most, if not all, jobs will be eliminated. In this view, a universal basic income becomes the necessary response to a massive restructuring of the economy and the end of work as a source of income for most households.

JFI does not subscribe to this dire forecast, which is not well-supported by the data. We instead view automation and artificial intelligence as the latest incarnation of ever-present technological change. As is always the case with technological change, we expect these developments to be disruptive. But we attach no special significance to their effects; nor do they require a special response: there are many perhaps more significant sources of disruption. Trade and globalization have also transformed the economy; deregulation and the decline in the power of unions have led to stagnant wages and precarious employment for many. In fact, in states that passed right-to-work legislation, wages are 3.2 percent lower, according to a study from the Economic Policy Institute in 2011. Moreover, the transformation of the social safety net into one more heavily conditioned on work has gated vital aid behind employment and left families at the mercy of economic cycles. Some of these economic transformations are “exogenous” and outside of our control, but many are the

direct result of the choices that lawmakers have made at the federal, state, and local level over the last several decades. For example, a growing number of economists argue that the weakening of antitrust legislation at the federal level has generated conditions of monopsony in low-wage sectors, which are responsible in part for driving down wages. So, while it is prudent to understand the effects that automation has had and may have, it is crucial that attention to automation does not distract from other potentially more consequential causes of precarity and poverty or from the actions that lawmakers can take to address them in the present.

Exposure to Automation \neq Job Loss Through Automation

It's now common to hear of reports that 20, 30, or even 50 percent of jobs could be lost to automation over the coming decades. When one digs a bit deeper into the sources of these figures, however, it is clear these reports are being misinterpreted. A large percentage of jobs face exposure to automation, but this does not imply that those jobs are at risk of elimination. It is just as possible that the nature of a job will change due to automation. That could mean either a decrease in wage—or an increase, if automation generates increased worker productivity in specific instances.

Technological advances have historically led to large changes in the nature of work: entire industries have vanished and surviving jobs have been transformed both in terms of their required skill sets and in their associated tasks. So, concern that automation may disrupt the lives of many is well-placed. But at the same time, technological change has led to the creation of new jobs and new industries. The “churning” generated by technological change has left overall employment levels relatively untouched even if it has negatively affected particular households and communities. Those who warn of the automation apocalypse, of course, argue that this time it is different. And anything is possible, but so far automation has not generated anything indicating that we are headed toward their feared scenario.

No Evidence That Automation Is Having The Effects That Doomsayers Predict

Though there is a great deal of attention currently being paid to automation, it has been with us for decades. And researchers have studied its effects so far. Scholars like MIT professors Daron Acemoglu and David Autor, have tracked automation from early 1990s through the present, and while it can be difficult to disentangle the effects of automation from those of concurrent changes like “globalization,” or from economic cycles, their findings are consistent: so far, there has been no net loss in jobs, and no net decrease in civilian workforce participation rate that can be attributed to automation.

One might argue that automation is just getting started and that eventually we will see net losses in jobs. Perhaps, but we do not see any early indicators that this is occurring. For example, if automation was, in fact, having a transformational impact on the economy it would be reflected in individual productivity data; productivity would be increasing rapidly as new machines and software allowed existing workers to generate more with less (thus reducing the need for workers). There is, however, no evidence that overall individual productivity has “spiked” in this manner. In fact, labor productivity has been historically weak over the past decade. The story is the same with other potential indicators: returns to education, corporate capital investment, etc. It is possible, of course, that there are flaws in data collection or in the methodologies used to assess the effects of automation. But, if so, the burden of proof is on those who dispute the data, and, so far, they have not made their case effectively.

Build a Robust Safety Net Now

It is good that the issue of automation has called attention to the fact that too many are at the mercy of economic forces beyond their control. But, as I have argued, automation is not a unique threat nor does it require a unique response. American households have already faced decades of stagnant wages, growing inequality, and increasing precarity. Rather than worry about an unlikely future

in which robots have taken all of our jobs, we should focus on our present, dismal state; it should be sufficient to motivate efforts to bolster our social safety net and guard against displacement and disruption regardless of source.

RECOMMENDED RESOURCES

JFI produces and is connected to leading research on welfare policy, and can be a resource for further briefings on this topic. Please reach out to stephen.nunez@jainfamilyinstitute.org with any requests. Below are some additional readings related to any known impacts of automation.

“The zombie robot argument lurches on,” from the Economic Policy Institute (EPI)

<https://www.epi.org/publication/the-zombie-robot-argument-lurches-on-there-is-no-evidence-that-automation-leads-to-joblessness-or-inequality/>

“Democrats, Avoid the Robot Rabbit Hole,” by Economist Paul Krugman

<https://www.nytimes.com/2019/10/17/opinion/democrats-automation.html>

“Don’t expect robots to take everyone’s job,” by Economic Commentator & Journalist Noah Smith, PhD

<https://www.bloomberg.com/opinion/articles/2018-11-01/don-t-expect-robots-to-take-everyone-s-job>

“Beyond Automation: The Law & Political Economy of Workplace Technological Change” By Legal Scholar Brishen Rogers

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3327608

“Automation and the Future of Work” By Historian Aaron Benav

<https://static1.squarespace.com/static/59821b9ff14aa110e16b69c0/t/5d9de991367c9e460ec4a624/1570630034098/Aaron+Benav%2C+Automation+and+the+Future+of+Work+1%2C+NLR+119%2C+September+October+2019.pdf>

McGahey, Richard. “Universal Basic Income and the Welfare State,” in The Welfare State Revisited. Juan Antonio Ocampo and Joseph Stiglitz, editors. Columbia University Press, 2018.

About JFI

Founded in 2015, JFI is a nonpartisan applied research organization that works on designing more equitable social and economic policy in theory and practice. JFI has three main initiatives: 1) guaranteed income; 2) higher education finance; and 3) digital ethics and governance.

For guaranteed income, our research focuses on microeconomic and macroeconomic effects; meta-analyses of cash transfer studies around the world; and, most extensively, on policy design and implementation. We partner with governments in the US and abroad to build and implement pilots and policies that will answer some of the most important remaining questions about direct cash transfers. We also work with research institutions and universities from around the world to develop best practices to improve collaboration and data-sharing.

We believe that guaranteed income is a promising income support option and aim to generate reliable evidence to support analysis of this and the broader suite of related policies. We’ve worked with partners such as SEED, ESP, the Russell Sage Foundation, and major U.S. cities.