DON'T FEAR THE ROBOTS:

Why Automation Doesn't Mean the End of Work

By Mark Paul

Lump-of-Labor Fallacy

Many are concerned with the idea that automation will displace workers—and they are partially right, though the story is not so simple. There have been, and will continue to be, innovations that replace workers throughout the economy. But those workers are only permanently displaced if we think there is a *fixed amount of work* to be done in the economy. This idea, which gives rise to the notion that an increase in the amount each worker can produce actually reduces the total number of jobs an economy can support, is known as the "lump-of-labor fallacy."

Think about the personal secretary. The advent of the computer, combined with advances in software, have lead to the decline of this profession. This undoubtedly displaced hundreds of thousands of workers (Jacobs 2015). Do these workers permanently leave the labor market? Are those jobs gone forever, never to be replaced by other jobs? If we think there is only a fixed amount of work to be done in the economy, we would rightly want to bash these machines. After all, they will take all the work!

But that is not how the real economy functions. First, our economy is a dynamic one. Every month, new jobs are created as other jobs are destroyed. When we read the headline numbers from the U.S. Bureau of Labor and Statistics (BLS) on job creation every month, what we are seeing is the difference between jobs created and jobs destroyed. Luckily, the government tracks these numbers in the BLS Job Openings and Labor Turnover Survey (JOLTS). In 2017, the economy destroyed 62.6 million jobs—but it also created 64.7 million, meaning that the economy added 2.2 million net jobs (BLS 2018b). The economy will continue to destroy specific jobs, but that is not necessarily a bad thing for the overall economy.¹On average, the economy destroys low-productivity jobs and replaces them with higher-productivity jobs—opening the door for higher wages and rising living standards.

Second, we do not know what the jobs of the future are. A generation ago, people would not have predicted that information technology (IT) jobs would be where they are today. It is clear from the media reports that the fear of destroying jobs sells. What is missed by this half-truth is the fact that technological developments also generate new jobs. As the recent Deloitte report argues, technology creates far more jobs than it destroys (Stewart et al. 2018).

Third, the fallacy misdirects public policies. Arguments are frequently made that we need to bring back our old jobs or rejuvenate declining industries like coal. Given the destruction of communities in the wake of increased trade and an economy transitioning away from coal and general manufacturing, such arguments are understandable. But policies directed to look backward instead of forward are misguided. While this does little to combat the economic despair caused by losing these jobs, the answer is in building public policies for the future. The fatalism perpetuated by the lump-of-labor fallacy, inciting fear that the economy cannot create new and better jobs, leads to a decline in public pressure on policymakers to help create an economy with full employment and rising wages. Policymakers must recognize and adapt to the fact that the economy is dynamic, but also that getting the policies right is essential to the creation of new and better jobs. After all, the level of unemployment and wages in our modern economy is largely dictated by policy choices.

In sum, as long as there are unmet needs in society, there will be work to be done.

 $1\ To be sure, the personal consequences from losing a job can be catastrophic. For this reason, we discuss below why policymakers should improve social insurance programs, support policies to aid in rapidly transitioning workers to new jobs, and push for permanent full employment through direct government hiring.\\$

