## Higher Minimum Wages Will Give High Tech a Boost

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Another way of using your head.

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**Economics** 



When labor is pricey, businesses invest more in machines that free up people to do more valuable work.

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David Neumark, an economist at the University of California-Irvine, could safely be called a minimum-wage <u>skeptic</u>. Neumark has written a number of <u>papers</u> on the <u>topic</u>, all of which have found that minimum wages <u>reduce</u> employment by substantial amounts. This makes him a bit of an outlier in terms of the overall research <u>consensus</u>, which tends to find modest or no employment effects.

But unlike many researchers, who maintain a laser-like focus on the question of whether minimum wage cuts jobs in the short term, Neumark has examined the policy from many angles. A <u>recent paper</u> of his, along with Grace Lordan of the London School of Economics, looks at how automation responds to minimum-wage increases.

## QuickTake Minimum Wage

This is a timely research paper, because many people are <u>worried</u> about automation making human workers obsolete. It's pretty obvious that higher minimum wages give employers an incentive to replace humans with machines. For example, fast-food servers can be partially replaced with automated kiosks. Japan already <u>has plenty</u> of these, and they work very well -- you order your food from a menu, get a ticket and pick it up at a counter.

Lordan and Neumark focus on so-called automatable jobs. Economists don't really know which jobs are more vulnerable to automation -- few might have predicted that hedge-fund <u>managers</u>, for example, could be put out of work by robots -- but they can make some guesses. Lordan and Neumark use the <u>definitions</u> of automatable jobs provided by star labor economists David Autor and David Dorn. These jobs are mostly of the routine variety -- fast-food workers, for example.

The authors find that when states have higher minimum wages, low-skilled workers are less likely to work in automatable jobs. That implies that minimum wages really do spur business owners to replace humans with robots. They also find that when minimum wages are high, workers with automatable jobs are more likely to become unemployed. That could indicate that unemployment rises when minimum wages increase, but it could also just mean that when minimum wages are high, low-wage workers with routine jobs tend to switch jobs more often.

Lordan and Neumark's findings seem to confirm people's fears that minimum wages will hasten the dreaded rise of the robots. That will certainly be used by minimum-wage opponents to make policy makers think twice about raising the wage floor. But this fearful reaction is probably overdone. Automation spurred by high wages could be a very good thing for the economy, in the long term.

To see why, we should first think back to the Industrial Revolution, which began in Great Britain and the Netherlands in the 1700s. This was the greatest, most spectacular episode of automation that ever occurred -- miners, farmers, weavers and craftspeople of all types were put out of a job by steam engines, power looms and other machines. This <u>hurt lots</u> of people, but in the end, it resulted in the greatest explosion of human wealth and <u>prosperity</u> in history.

Why did this happen? No one knows for sure, but one<u>major theory</u> is that high wages spurred the creation of industrial technology. Economic historian Robert Allen notes that labor was especially expensive in pre-industrial London and Amsterdam, with British wages especially high. Where businesspeople in China or India or Russia might hire armies of low-paid workers to make cloth or mine coal, British entrepreneurs had to find ways to make machines to do those jobs, because human hands were just too expensive.

But unlike hiring a bunch of cheap workers, investing in innovation has positive spillovers -- one invention leads to another. Thus, high wages might have provided the spark that set humanity on the path to its current wealthy state. Growth economist Paul Romer, currently chief economist of the World Bank, formalized a similar idea in a 1987<u>paper</u>. Romer hypothesized that low labor costs are actually bad for development, because they reduce the incentive to innovate and invent.

Seen in this light, automation resulting from high minimum wages could be a long-term blessing. As long as humans find new useful things to do, installation of automated kiosks, self-checkout machines and industrial robots will be a boon to the workers' wealth. There will be a period of adjustment, in which some low-wage workers are hurt. Neumark claims this adjustment will be large, although other researchers claim it will <u>be small</u>. But ultimately, as long as human labor doesn't become superfluous, faster automation is a good thing.

Therefore, the only people who should be scared of the long-term technological impact of higher minimum wages are pessimists who believe that humans are on the verge of obsolescence. But even these pessimists should realize that if obsolescence is on the way, lower minimum wages won't slow it down by much. If we're facing the rise of the robots, we might as well face it now.

So don't be scared that the minimum wage will replace human labor with machines. Ultimately, saving labor is what technology is all about. And it looks like the minimum wage can help. This column does not necessarily reflect the opinion of the editorial board or Bloomberg LP and its owners.

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