

The Distributional Impact of the Minimum Wage in the Short and Long Run

Based on BFI Working Paper 2022-91, [*"The Distributional Impact of the Minimum Wage in the Short and Long Run,"*](#) by Erik Hurst, Chicago Booth; Patrick Kehoe, Stanford; Elena Pastorino, Stanford; and Thomas Winberry, Wharton

A permanent increase in the minimum wage to \$15 has beneficial effects on low-earning workers in the short run but detrimental effects in the long run.

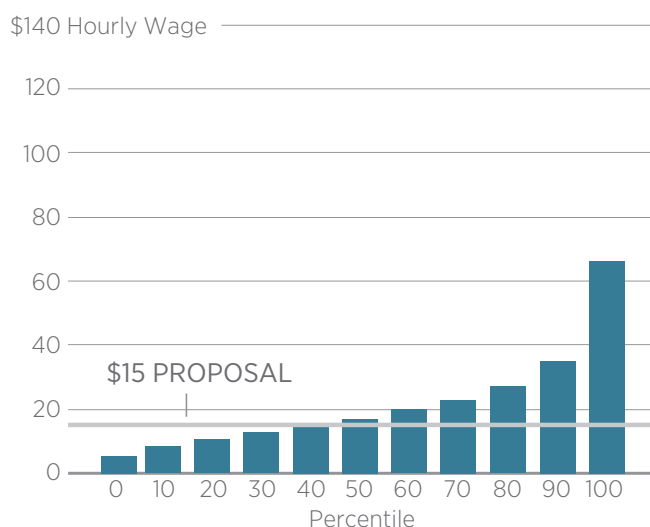
Recent proposals in the United States to increase the federal minimum wage from its current level of \$7.25 (per hour) to at least \$15 would impact a large fraction of the US workforce. About 40% of non-college-educated workers and 10% of college-educated workers currently earn a wage lower than \$15. However, not all workers within those education groups would experience a wage increase in the same way. For example, as the accompanying figure illustrates, a \$15 minimum wage would nearly double the wages of workers in the bottom 20% of the non-college wage

distribution but would not bind on workers in the top 60%. The variation in wages within an education group is an order of magnitude larger than the variation in wages across education groups.

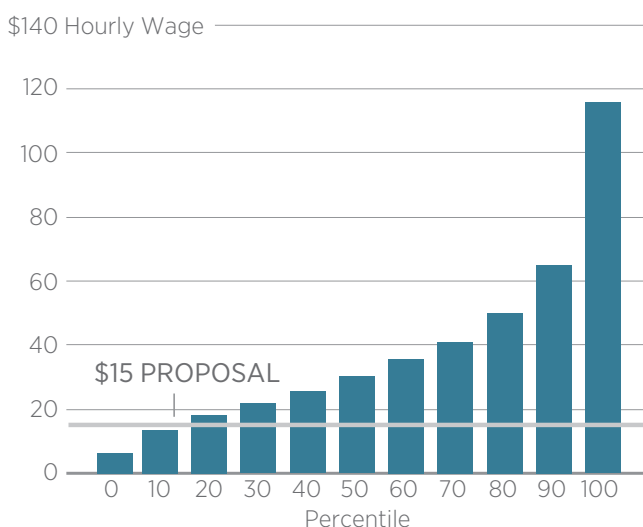
This substantial heterogeneity in wages raises an important question: What is the extent to which firms will substitute away from those workers who benefit from the large minimum wage? Existing research implies a low elasticity of substitution across workers in the short run; in other words, firms cannot quickly find other

Figure 1 • Wage Distribution of Full-Time Employed Workers Over Age 16

Non-College Wage Distribution



College Wage Distribution



Notes: This figure displays empirical wage distributions of full-time employed workers over the age of 16 from the 2017-2019 American Community Survey (ACS) data.

means of production (by, say, replacing humans with machines or replacing low-skilled workers with more productive workers) and therefore must pay workers the higher minimum wage.

But the short run is not the whole story—a study of the distributional impact of the minimum wage across workers must distinguish between short- and long-run effects. The authors address this challenge by developing a framework to assess the distributional impact of the minimum wage over time. Broadly described, this novel framework includes features that reflect the effects of a minimum wage increase on the US economy in the short and long run, including a large sampling of jobs and a low degree of substitutability among inputs in the short run, as well as monopsony power in labor markets (or when one or a few firms face little competition for labor). Their main findings include:

- A permanent increase in the minimum wage to \$15 has beneficial effects on low-earning workers in the short run, when even a sizable increase in the minimum wage induces only a small adjustment in the employment of workers who initially earn less than the new minimum wage. Hence, an increase in the minimum wage leads to an increase in labor income and welfare for such workers.
- In the long run, though, firms slowly reorganize their production and start substituting away from such workers by, for example, gradually hiring more higher-skilled workers for whom the minimum wage does not bind and fewer of those for whom it does.
- The resulting welfare of such workers in response to large changes in the minimum wage needs to account for both the short-run benefits and the long-run costs.

- The authors show that other policies, such as an expansion of the Earned Income Tax Credit (EITC), which distributes funds to workers based on income and number of children, are more effective than the minimum wage in terms of helping lower-income workers in the long run.
- All that said, there is a role for a minimum wage. The authors find that a modest minimum wage of about \$9, which serves as a complement to the EITC, performs much better than either a minimum wage policy on its own, or an EITC policy on its own.

Bottom line for those hoping to improve the welfare of low-wage workers: Combine a modest minimum wage with a progressive tax-transfer scheme, such as the EITC, as opposed to a large increase in the minimum wage that may prove beneficial in the short run, but that effectively prices workers out of the market in the long run.

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