Minimum Wages, Efficiency and Welfare

Based on BFI Working Paper 2022-10, “Minimum Wages, Efficiency and Welfare,” by David W. Berger, Duke University; Kyle F. Herkenhoff, University of Minnesota; and Simon Mongey, University of Chicago

Higher minimum wages can improve welfare, but most welfare gains stem from redistribution rather than by alleviating efficiency losses from monopsony power (when one firm faces little competition from other firms in the labor market), as much current research claims.

Recent debate about the US federal minimum wage has centered around the call to boost the rate to $15 an hour from the current $7.25, which has been in place since 2009. In addition, the minimum wage has remained roughly constant in real terms since the late 1980s. Fifteen dollars is more than 2019 wages for 41 percent of workers without a college education, 11 percent for college educated workers, and 29 percent for workers overall (see related Figure).

There are two key rationales for a positive minimum wage: efficiency and redistribution. In the first case, if firms have market power in the labor market, wages are generically less than the marginal product of labor, and employment at each firm is inefficiently low. Writing in 1933, before the introduction of the federal minimum wage in 1938, labor economist Joan Robinson described how a minimum wage could help alleviate efficiency losses from monopsony power by inducing firms to hire more workers (monopsony describes when a firm doesn’t have to compete particularly hard to hire workers in the labor market). Regarding redistribution, a higher minimum wage has the potential to benefit low-income workers and reduce profits that tend to accrue to business owners and high-income workers, redistributing economic output.

Figure 1 • Minimum Wages in the US, 1960-2020

a) Real Minimum Wage (2020 Dollars)

b) Distribution of Wages

Note: The authors computed real wages in Panel A by deflating by the Consumer Price Index for All Urban Consumers (CPI-U). In Panel B, Current Population Survey (CPS) data was constructed using MORG from 2019 and weighted. Please see the full working paper for a detailed description of the authors’ model.
This work addresses the first rationale for a minimum wage—efficiency—and thus focuses on the ability of a national minimal wage to address inefficiencies due to labor market power. In particular, the authors develop a quantitative framework to study the effect of minimum wages on welfare and the allocation of employment across firms in the economy. Broadly described, the model they construct includes interaction among heterogeneous firms in concentrated labor markets, as well as workers that are heterogeneous in terms of wealth and productivity. They use the model to study the macroeconomic effects of minimum wages, accounting for effects that ripple through the whole economy. (Please see the full paper for a detailed description of the authors’ model.)

When the authors’ model is calibrated to US data it proves consistent with a wide body of empirical research on the direct and indirect effects of minimum wage changes, and delivers the following findings:

- Under the conditions specified in the model, an optimal minimum wage exists, and this wage trades-off positive effects from mitigating labor market power against negative effects from misallocation.

- Quantitatively, the efficiency maximizing minimum wage is around $8 per hour, consistent with the current US Federal minimum wage.

- However, higher minimum wages can be justified through redistribution when other government policies for redistribution are unavailable. When the authors apply social welfare considerations, they find an optimal minimum wage of around $15 an hour. Under such a policy, 95 percent of welfare gains come from redistribution and only 5 percent from improved efficiency.

The authors stress that their results do not rule out the minimum wage as a tool for reducing income inequality or increasing labor’s share of income, which are common empirical proxies for inequality and worker power, respectively. Indeed, they show that under a higher minimum wage, income inequality falls within and across worker types, and labor’s share of income increases. They warn, however, that as the minimum wage increases, wage inequality keeps on falling well past the point that welfare is maximized.