



Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2021

ANSWERING CAUSAL QUESTIONS USING OBSERVATIONAL DATA

The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel

THE ROYAL SWEDISH ACADEMY OF SCIENCES, founded in 1739, is an independent organisation whose overall objective is to promote the sciences and strengthen their influence in society. The Academy takes special responsibility for the natural sciences and mathematics, but endeavours to promote the exchange of ideas between various disciplines.

Productivity. Minimum wages may also raise productivity, since they make it more valuable for workers to hold on to their jobs after a minimum wage increase. Coviello, DeSerrano, and Persico (2020) showed that productivity among workers at a large US retailer improved, while profits and employment were unaffected, in response to minimum wage hikes. Productivity may also rise in the aggregate because of a reallocation effect. Dustmann et al. (2020) showed that the introduction of the minimum wage in Germany induced low-wage workers to move from small, low-paying, firms to larger, high-paying, firms.

Price responses. Minimum wages primarily “have a bite” in low-wage service sectors provided in local markets, such as the fast-food restaurants analyzed by Katz and Krueger (1992) and Card and Krueger (1994). A change in the minimum wage, whether at the state or national level, will affect all local service providers. And they may all raise their prices without much of a reduction in product demand. When the product demand elasticity is low, minimum wage increases can be shifted onto consumers without much loss in product demand and employment. Several papers document that prices respond to minimum wage changes (e.g., Aaronson, 2001; Renkin, Montialoux, and Siegenthaler, 2020).

Things are different in tradeable sectors of the economy. Here, firms facing a higher minimum wage compete with firms that do not. Such firms cannot raise prices without losing demand, and, thus, we should expect more negative effects of the minimum wage in the tradeable sector. Recent studies lend some support for this hypothesis (Harasztosi and Lindner, 2019, and Cengiz, Dube, Lindner, and Zipperer, 2019). Note, though, that few minimum wage workers work in the tradeable sector.

Imperfect competition in the labor market. In a model with search frictions, employers have some market power (see Burdett and Mortensen, 1998). Employers may use that market power to set wages lower than in a perfectly competitive market. Fewer workers are willing to work at this lower wage than in the competitive equilibrium. In such a monopsonistic setting, the employment impact of a minimum wage increase is *a priori* ambiguous. A marginal increase in the minimum wage can increase employment because of a positive labor supply response.

Broader research impact: Monopsony and firm wage setting

As discussed above, the results regarding the minimum wage are consistent with the view that firms have market power in the labor market. Such market power may come from employers being large relative to the local labor market, or from search frictions of the kind considered by Burdett and Mortensen (1998). An important implication is that firms’ wage-setting policies will matter for wage dispersion, and hence for inequality in the labor market. The renewed interest in the monopsony model following the findings from Card and Krueger’s papers from the early 1990s has stimulated an extensive research literature on the impact of firms’ wage-setting behavior.²¹

Following Abowd, Kramarz, and Margolis (1999), several studies have used matched employer-employee data to decompose wages into a firm component and an individual component as a way of quantifying the importance of firms in explaining wage inequality. The general result is that 10–20 percent of the variance of earnings is attributable to stable firm effects. Card is an important contributor to this literature. Among other things, Card, Heining, and Kline (2013) showed that about a quarter of the increased wage inequality in Germany between 1985 and 2009

²¹ The recent literature on the consequences of imperfect competition in labor (and product) markets is vibrant. An incomplete list includes papers by Azar, Marinescu, and Steinbaum (2020), Berger, Herkenhoff, and Mongey (2019), Kroft, Luo, Mogstad, and Setzler (2020), and Lamadon, Mogstad, and Setzler (2020). Azar et al. (2019) asked whether employment effects of minimum wages are more positive in more concentrated labor markets; the answer to this question is yes.