

# The Minimum Wage

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## Introduction

**This brief survey article will look at the various impacts of changes in the minimum wage.** All abstracts and citations are from EBSCO, specifically the EconLit database.

**Economists recognize three main impacts of the minimum wage. The two I will be concerned with here are impacts on employment and impacts on income distribution. The third effect, the impact on total income, I'll deal with in a cursory fashion.**

## Impacts on Employment

The most recent paper is by Jeremy R. Magruder (Journal of Development Economics, January 2013, v. 100, iss. 1, pp. 48-62), Using a two-sector model of the labor market in Indonesia, Magruder finds that an increase in the minimum wage increases employment in the formal sector and decreases employment in the informal sector. (The formal sector is covered by the minimum wage. The informal sector operates outside the law. Workers in this group are either avoiding taxes or willing to work for less than the minimum wage with wages usually paid in cash.) The net impact on unemployment is uncertain. The following paragraph is from the conclusion of the paper (pp. 61-62):

This big push discussion recalls much older economic thought which has been widely discredited within the profession. Few economists today argue as 1920s and 1930s economists did, that increasing wages and local demand could be a motor for economic growth. One reason is the limited (and potentially negative) effect these policies had on depression-era America. There are of course many differences between 1990s Indonesia and 1930s America. One, as a less-developed country receiving substantial foreign investment, Indonesia may have had new access to potential, unadopted, and profitable technologies that simply needed a market. A second is that much of the 1990s were a time of growth in Indonesia, when sticky wages may have limited wage growth (the opposite of conditions in the depression). Finally, Harrison and Scorse (2010) show that anti-sweatshop activism also raised labor standards in foreign firms without an accompanying drop in employment. This indicates that wages may have indeed been below marginal products in the 1990s, reducing coordination and creating an opening for policy. Of course, the analysis employed in this paper cannot determine

whether any of these conditions were important for these results. Further research, both empirical and theoretical is needed in considering the role of labor standards throughout the business cycle in modern less developed countries.

**Translation: Indonesia's economy was in exceptional circumstances during this period. It's a mistake to generalize this to developed economies.** Abstract:

Big push models suggest that local product demand can create multiple labor market equilibria: one featuring high wages, formalization, and high demand and one with low wages, informality, and low demand. I demonstrate that minimum wages may coordinate development at the high wage equilibrium. Using data from 1990s Indonesia, where minimum wages increased in a varied way, I develop a difference in spatial differences estimator which weakens the common trend assumption of difference in differences. Estimation reveals strong trends in support of a big push: formal employment increases and informal employment decreases in response to the minimum wage. Local product demand also increases, and this formalization occurs only in the non-tradable, industrializable industries suggested by the model (while employment in tradable and non-industrializable industries also conforms to model predictions).

Another relatively new work is by David Lee and Emmanuel Saez (Journal of Public Economics, October 2012, v. 96, iss. 9-10, pp. 739-49), The authors make some heroic assumptions to show that there is an optimal minimum wage. But at the beginning they acknowledge that a higher minimum wage increases unemployment. They then go on to assume that government values redistribution toward low wage workers and unemployment hits the lowest surplus workers first. The first assumption implies a social welfare function for the government. In other words, the government is making rational decisions to transfer income. The "lowest surplus" workers are, roughly, those with the smallest difference between the lowest wage they would accept to work and the minimum wage. This assumption seems reasonable. But the authors never deal with the incentive effects of redistribution policies. Higher-income individuals are likely to act to reduce their tax payments when confronted with redistribution. That, in turn, will reduce overall social welfare. Abstract:

This paper provides a theoretical analysis of optimal minimum wage policy in a perfectly competitive labor market and obtains two key results. First, we show that a binding minimum wage—while leading to unemployment—is nevertheless desirable if the government values redistribution toward low wage workers and if unemployment induced by the minimum wage hits the lowest surplus workers first. Importantly, this result remains true in the presence of optimal nonlinear taxes and transfers. In that context, a binding minimum wage enhances the effectiveness of transfers to low-skilled workers as it prevents low-skilled

wages from falling through incidence effects. Second, when labor supply responses are along the extensive margin only, which is the empirically relevant case, the co-existence of a minimum wage with a positive tax rate on low-skilled work is always (second-best) Pareto inefficient. A Pareto improving policy consists of reducing the pre-tax minimum wage while keeping constant the post-tax minimum wage by increasing transfers to low-skilled workers, and financing this reform by increasing taxes on higher paid workers. Those results imply that the minimum wage and subsidies for low-skilled workers are complementary policies.

John T. Addison, McKinley L. Blackburn, and Chad D. Cotti looked at county-level employment data in the U.S. restaurant-and-bar sector (British Journal of Industrial Relations, September 2012, v. 50, iss. 3, pp. 412-35). They found that **what matters is not the level of the minimum wage, but the minimum wage relative to other states or localities. This is, of course, consistent with the well-known proposition that relative prices and wages are important while absolute price and wage levels are not.**

Abstract:

We use US county-level data on employment and earnings in the restaurant-and-bar sector to evaluate the impact of minimum-wage changes in low-wage labour markets. Our estimated models are consistent with a simple competitive model in which supply-and-demand factors affect both the equilibrium outcome and the probability of the minimum wage being binding. Our evidence does not suggest that minimum wages reduce employment once controls for trends in county-level sectoral employment are incorporated. Rather, employment appears to exhibit an independent downward trend in states that have increased their minimum wages relative to states that have not, thereby predisposing estimates towards reporting negative outcomes.

## **Impacts on Income Distribution**

The most recent study is by Mark B. Stewart (Oxford Economic Papers, October 2012, v. 64, iss. 4, pp. 616-34). In "Wage Inequality, Minimum Wage Effects, and Spillovers" the paper finds that changes in the minimum wage in the U.K. have no discernable impact on the upper half of the wage distribution. Abstract:

This paper investigates possible spillover effects of the UK minimum wage. The halt in the growth in inequality in the lower half of the wage distribution (as measured by the 50:10 percentile ratio) since the mid-1990s, in contrast to the continued inequality growth in the upper half of the distribution, suggests the possibility of a minimum wage effect and spillover effects on wages above the minimum. This paper analyses individual wage changes, using both a difference-in-differences estimator and a specification involving comparisons across

minimum wage upratings, and concludes that there have not been minimum wage spillovers. Since the UK minimum wage has always been below the 10th percentile, this lack of spillovers implies that minimum wage changes have not had an effect on the 50:10 percentile ratio measure of inequality in the lower half of the wage distribution.

[pullquote]Our results highlight that, political rhetoric notwithstanding, minimum wages are poorly targeted as an anti-poverty device and are at best an exceedingly blunt instrument for dealing with poverty.[/pullquote]

Michele Campolieti, Morley Gunderson and Byron Lee (Journal of Labor Research, September 2012, v. 33, iss. 3, pp. 287-302) find that raising the minimum wage has little impact on employment among the poor. Specifically, the poor get about 30% of the earnings gain (non-poor get the other 70%) and the poor bear the brunt of job losses. As the authors so eloquently put it,

Abstract:

We estimate the effect of minimum wages on poverty for Canada using data from the Survey of Labour and Income Dynamics (SLID) for 1997 to 2007 and find that minimum wages do not have a statistically significant effect on poverty and this finding is robust across a number of specifications. Our simulation results, based on the March 2008 Labour Force Survey (LFS), find that only about 30% of the net earnings gain from minimum wage increases goes to the poor while about 70% “spill over” into the hands of the non-poor. Furthermore, we find that job losses are disproportionately concentrated on the poor. Our results highlight that, political rhetoric notwithstanding, minimum wages are poorly targeted as an anti-poverty device and are at best an exceedingly blunt instrument for dealing with poverty.

## **Impact on Total Income**

**Total income is the product of the number of hours worked per year and the wage rate per hour. If the number of hours worked does not change, any increase in the wage must cause total income to rise. However, demand curves slope downward. We can be certain that the number of hours worked will fall. Thus the wage rises and hours worked fall. What will happen to total income (wage x hours)?**

**The answer depends on the elasticity of labor demand with respect to the wage rate. I'm willing to accept without debate that for low-income workers demand is inelastic. That means total income will rise for those workers who keep their jobs. As economists have repeatedly observed, the true minimum wage is zero which is what workers who lose their jobs earn. And some workers will certainly become unemployed.**

Here's a parenthetical note about why demand for labor matters and supply of labor does not. I have assumed the minimum wage is above the equilibrium wage. That means total employment is determined exclusively by demand. The difference between the quantity supplied of labor and quantity demanded is unemployment and underemployment. But the supply curve only determines willingness to work at the minimum wage, having no impact on the actual number of worker hours hired.

## **Conclusion**

These are but a few of the studies. Anyone can do what I've done here. Find a library that subscribes to the EconLit database. Log in and search for "minimum wage." And have fun.

I will end by noting that there are a few studies that purport to show that raising the minimum wage increases employment. These studies are usually produced by "Marxist economists" identifiable by either their university affiliation (the University of Massachusetts, Amherst is one example) or their citations. These studies generally torture the data until it is no longer recognizable, then perform statistical tests on what amounts to no data at all. You are welcome to believe those studies, but, if you make that choice, please do not call yourself an economist.