policy brief



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1. See Adie [1973]; Brown, Gilroy and Kohen [1981]; Card [1992a, b]; Fleisher [1981]; Hammermesh [1982]; Meyer and Wise [1981, 1983a]; Minimum Wage Study Commission [1981]; Neumark and Wascher [1992]; Ragan [1981]; Vandenbrink [1987]; Welch [1974, 1978]; [Welch and Cunningham 1978]. For effect on African-Americans see Al-Salam, Quester, and Welch [1981], Iden [1980], Betsey and Dunson [1981]Mincer [1976], Moore [1971], Ragan [1977], Williams [1977a,b].

2. See Mulligan, Casey, Attack of the Minimum Wage, Economix Blog, New York Times, January 20, 2010.

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Who Lost Jobs When the Minimum Wage Rose?

Michael J. Hicks, PhD

In September 2008 I estimated the effect of recent Federal increases to the minimum wage across states. In Indiana, the 2008 increase in the minimum wage cost the state roughly 8,000 jobs. Since that time, the state has plunged far deeper into recession and has begun a slow recovery. The minimum wage has again increased to \$7.25 per hour. It is once again useful to evaluate the impact of this policy, in particular focusing on those whom the legislation impacts.

THE ECONOMICS OF THE MINIMUM WAGE

Economic theory is clear in its understanding of the minimum wage – it unambiguously reduces the demand for labor, but only if the minimum wage is above the market wage for unskilled entry level labor. In practice, the minimum wage has been far beneath the going wage for unskilled, entry level workers. Increasing the minimum wage at these levels would have no effect on employment or wages. As a consequence, research findings have ranged from zero to modest job losses as the minimum wage increases.¹

Unfortunately, the latest round of minimum wage increases, which occurred in late July 2007, 2008 and 2009, occurred from the peak through the trough of the recession. These increases were, at 14, 12 and 11 percent respectively, the largest since 1978 and the largest three-year percentage change since 1950. These changes were not fortuitously timed to have a benign effect on employment.

As a consequence, it is worthwhile to once again examine the impact the minimum wage hike has had on employment. Repeating the model of employment and minimum wage presented in September 2008 we find another 12,000 fewer workers in Indiana as a consequence of the minimum wage increase. But who were they?

Casey Mulligan, a professor at the University of Chicago, implicated the minimum wage in the sharp decline of part-time workers in the latter half of 2009.² His analysis of the actual versus forecasted gap between part-time workers increased sharply in July 2009 when the most recent minimum wage increase was enacted. This was surprising because part-time employment often rises as full-time employment declines. Mulligan reports that the loss of five full-time jobs during a downturn typically increases part-time employment by one position. This relationship stopped in July 2009.

THE EMPLOYMENT IMPACT OF THE MINIMUM WAGE IN 2008 AND 2009

To test this, I created a statistical model which, like that presented in my 2008 minimum wage study, accounts for trends in employment, the recession and changes to the minimum wage. In my most recent model, the minimum wage increase accounts for roughly 550,000 fewer part-time jobs now than would otherwise be the case without the most recent three minimum wage increases. This is a significant decline, but still begs the question: Who are these workers? Earlier research has indicated that teenage workers, especially minority teenagers, bear the bulk of minimum wage job

4,500 June 2009 4,000 3,500 3,000 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Figure 1: Employment of Part-Time Workers, Age 16-19

losses. To test this, I examine data on part-time workers form the Bureau of Labor Statistics, focusing on all workers age 16-19 employed in minimum wage jobs from 1999 through December 2009. Using the same modeling approach for teenage part-time workers, I find that there are roughly 310,000 fewer teenagers working part-time today as a consequence of the increase in the minimum wage. This translates to roughly 6,800 fewer Hoosier teenage workers, a remarkably large impact that requires some context.

THE SIZE OF CHANGES AND THE BUSINESS CYCLE

Previous minimum wage increases had a negligible impact on employment because there were so few workers employed at the minimum wage. For example, on the eve of the recession, the 14 percent increase in the minimum wage affected very few workers. This is because in most of the country, the market wage for unskilled entry-level labor was above the new minimum wage. However, in just 25 months the minimum wage grew by more than one-third at a time when inflation was essentially unchanged. No doubt a significant number of minimum wage workers were no longer viable to employ during this period. The new minimum wage made them simply too costly for the value of their contribution to the business. The result was a decline in part-time employment.

The business cycle should have mitigated the job losses in part-time employment. As Mulligan pointed out, part-time employment is often used to sustain production during lean periods

for companies. As a consequence, a recession and its immediate aftermath should see an increase in part-time employment. It appears this impact was especially hard on younger workers.

Figure 1 illustrates the number of part-time workers, age 16-19. Here, the sharp declines in July 2008 and July 2009 are clearly visible. Other data on this age group paints an even more alarming story. The unemployment rate for white teenagers rose from 17.3 to 18.9 percent from December 2008 to December 2009. While this is high, the growth rate in unemployment was rather modest when compared to that of the labor force as a whole. Alarmingly, the unemployment rate for African-American teenagers rose from a seasonally adjusted level of 28.5 percent in December 2008 to 43.6 percent in December 2009.

The most consistent finding of researchers into the dis-employment effects of the minimum wage are that teenagers, especially low skilled, male and minority suffer disproportionate job losses as a consequence of an increase in the minimum wage.

There are several plausible reasons for this. Workplace discrimination against minorities and the youth cannot be ruled out. However, the educational achievement gap between minority and white teenagers almost certainly plays the dominant role in these unemployment rate differences. Exacerbating this problem are local labor market conditions that would tend to concentrate teenagers in locations by skill level. A large local supply of unskilled workers would tend to create higher overall unemployment rates for low-skilled workers.

POLICY CONSIDERATIONS

The minimum wage legislation has long been popular precisely because it holds the promise of helping low wage workers without an associated cost. The legislation was a chimerical free lunch - no cost and no meal. The truth has largely been that it has not helped workers, and has been costless because until 2008, the United States had gone for two generations with the minimum wage largely trailing the hourly compensation of unskilled-entry level workers. By the summer of 2009, the increases in the minimum wage pushed ahead of that which many employers were willing to pay for unskilled workers. As a consequence, the number of part-time workers declined by more than a half million, with teenagers comprising two-thirds of these workers.

Abandoning the minimum wage would have little or no adverse economic effects. Indeed, it would most likely boost employment. But, that does not mean there are not benefits from the legislation, many of which could be preserved even with modifications to the minimum wage legislation that boosted employment.

It is convenient to classify minimum wage workers into four groups; food service workers, the physically and mentally handicapped, adult and teenage workers. For most workers in this first group, tips dominate their wages. For most in the second group, wages are highly subsidized, and employment often designed with rehabilitation and training aspects. These groups represent more than half those working for minimum wage. Teenagers, most of whom from middle to high income households, with 67 percent of teenage and young adult minimum wage workers living in households with incomes at least twice the poverty level.³ Adult workers toiling at minimum wage suffer immense, opportunity limiting, skill deficits. Two-thirds of all adult minimum wage workers have a high school degree or less.⁴ Despite enormous investment in K-12 education, these workers failed to heed the market signals that low education levels limits opportunity and income. Minimum wage legislation keeps some of these workers out the labor market, and exposes them to additional education and training in the workforce development network. In essence, a healthy adult who cannot command the minimum wage needs significant training and education.

The minimum wage may also serve to benchmark entry level wages for workers and employers, albeit at a very high cost in dis-employment. There are already cumbersome training tax incentives which compensate employers for training workers. This is not a cost effective alternative for a firm hiring a minimum wage worker, and is aimed at more skilled employees.

Two significant policy innovations could preserve the minimum wage, while mitigating some of its dis-employment effects. First, the adoption of a "student minimum wage" would permit employers to hire seasonal workers without bearing the full cost of adult employment. Second, introducing a tenure scaled minimum wage would remove the disincentive for employers to hire unskilled workers. Under this scheme, unskilled workers could be hired at a lower level. but must be paid at a higher level (such as the current minimum wage), but only after 90-120 days of employment (this is well over the average duration of employment for current minimum wage employees). Such a policy would allow more seasonal employment by youths, and permit employers to risk the training of workers who are currently viewed as lacking the labor market value at the level our Congress deems its minimum.

Both of these policies recommendations would create different tiers of workers: students and new hires. While this is not typically a desirable outcome of legislation, it is a vast improvement on the current legislation which has its own tiers of workers: those with jobs at the minimum wage, and those without jobs who would be willing to work at wages beneath the current Federal minimum.

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"Two significant policy innovations could preserve the minimum wage, while mitigating some of its disemployment effects."

^{3.} See Headerman, Rea and James Shirk "Who Earns the Minimum Wage--Single Parents or Suburban Teenagers?" The Heritage Foundation, August 3, 2006.

^{4.} The data on occupations of minimum wage workers by educational level is limited. But, given the high share and relative complexity of many food service industry jobs, it is likely that adult holders of pure minimum wage jobs (those without tips) are heavily dominated by those without high school degrees.

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CENTER FOR BUSINESS AND ECONOMIC RESEARCH POLICY BRIEF

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