



# MINIMUM WAGES AND POVERTY:

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Cornell University

September 2008

**Employment  
Policies**

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Will the Obama Proposal  
Help the Working Poor?

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# MINIMUM WAGES AND POVERTY:

## Will the Obama Proposal Help the Working Poor?

### Executive Summary

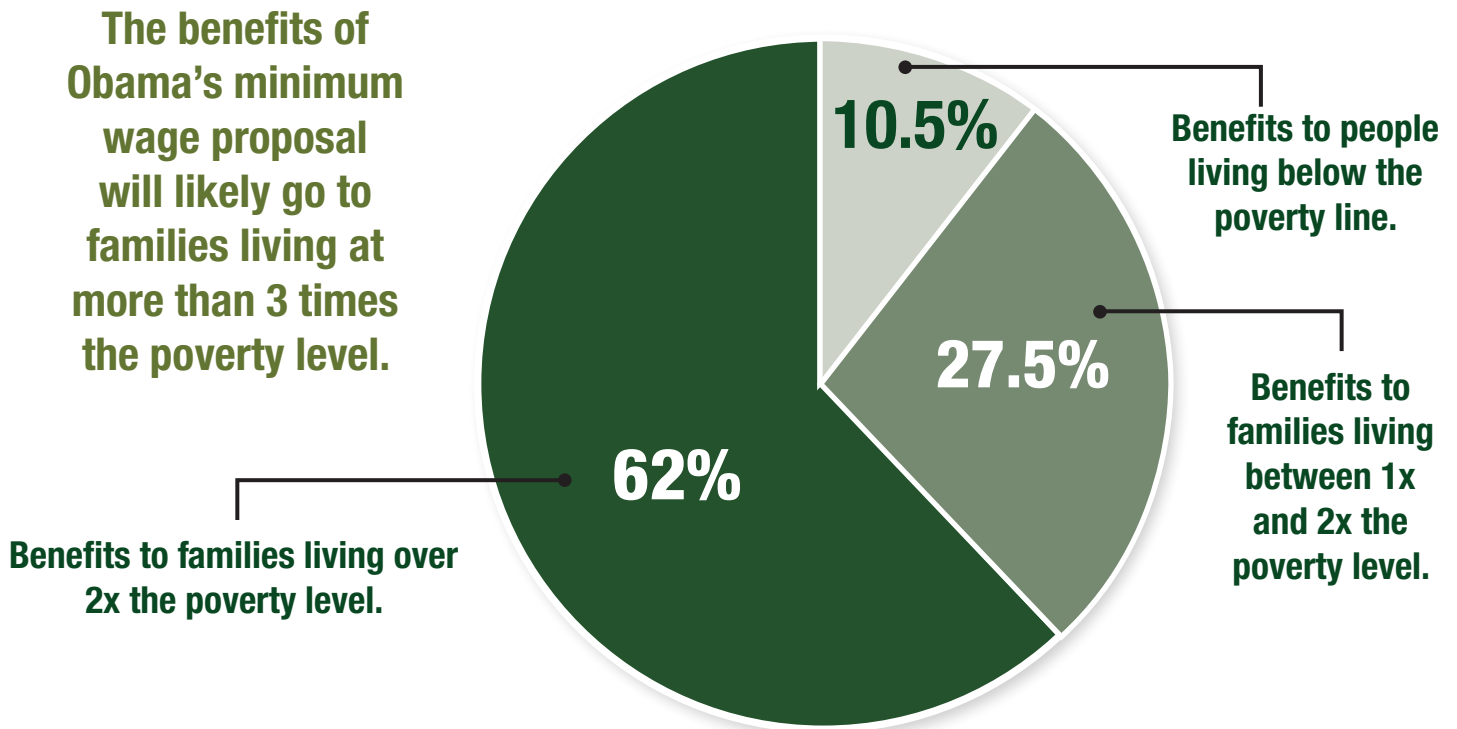
**A**ttempts to raise the minimum wage often focus on the purported poverty-alleviating results of these policies. Economic research, however, has found little connection between changes in poverty and increases in the minimum wage. This is likely a result of the fact that the majority of individuals who are earning the minimum wage no longer live in poor households. In addition, the job-killing effects attributed to increases in the minimum wage rate force vulnerable individuals out of the labor force and into poverty, thereby limiting the societal benefit. This study evaluates the effect of state-level minimum wage increases between 2003 and 2007 and finds no effect on poverty rates. It also estimates the expected reductions in poverty from Senator Barack Obama's proposed increase in the minimum wage to \$9.50 an hour.

Economists have long studied the effect of increases in the minimum wage on poverty. These studies are nearly unanimous in their finding that raising the wage floor

has no effect on poverty rates. This effect is true both for increases at the state and Federal levels. Perhaps importantly for social policy, there is no decrease in poverty found among families with children—a primary goal of policymakers who support increases in the wage floor. Drs. Sabia and Burkhauser expand on previous authors' work examining the effect on poverty of state-level increases in the minimum wage. In a relatively short time period from 2003–2007, 28 states increased their minimum wage above the Federal level. Using data from the Current Population Survey (CPS), the authors find no evidence of an effect of state-level minimum wages on poverty. Limiting the sample to only workers—a group that is most likely to benefit from the wage increase—the authors still find no evidence of any poverty reduction. Even expanding the definition of poor to 150 percent of the poverty line fails to expose any statistically significant reduction in poverty from state-level minimum wage increases.

There are two factors affecting the ability of a minimum wage increase to reduce poverty: poor target efficiency and job reductions. To determine target efficiency, we

## Estimated Net Benefits (%)



look at the percentage of the potential beneficiaries of a minimum wage hike who are poor. The authors find that only 10.5 percent of the beneficiaries of a minimum wage increase to \$9.50 an hour would be living in poor households (see chart above). If the definition of poor is increased to 200 percent of the poverty line, 62 percent of the beneficiaries from the proposed increase do not live in poor households. This suggests that the ability of the proposed minimum wage increase to actually reach poor families is limited.

Policymakers often focus on single mothers raising families on a low-wage income. Even for this group there is little evidence that these individuals are helped by a minimum wage increase. Only 11 percent of individuals assisted by the proposed minimum wage increase are single parents.

In addition to inefficiently targeting poor individuals, the potential for an increase in the wage floor to reduce poverty is limited by the potential offsetting job loss from these measures. Using a range of employment elasticities found in the literature, the authors find that estimated job losses from the proposed minimum wage increase range from 450,000 to 4 million. These job losses are much

greater than those following the previous minimum wage hike because far more workers will be affected by the increase. The authors include a literature review of past studies that overwhelmingly confirms the job loss effect.

As a result of these factors, only 10.5 percent of the benefits from this proposed increase in the minimum wage go to poor families. This is an exceptionally low rate for a program intended to reduce poverty. This poor target efficiency stands in stark contrast to other anti-poverty programs such as the Earned Income Tax Credit (EITC). Due to the EITC's focus on income rather than solely on wages rates, most of the families in poverty receiving no benefit from a \$9.50 minimum wage increase would actually (and meaningfully) benefit from an expansion to the EITC. If policymakers are truly interested in helping the working poor, they should concentrate on policies such as the EITC that directly help the working poor without disrupting the underlying labor market and abandon politically popular but ineffective anti-poverty measures such as the proposed minimum wage increase.

—*Employment Policies Institute*



## Introduction

Proposals to increase the minimum wage are politically popular because they are widely seen as an effective way to help the working poor (AP-AOL, 2006). Former president William Jefferson Clinton captured this majority view in his statement of support for an increase in the Federal minimum wage when he said: “It’s time to honor and reward people who work hard and play by the rules... No one who works full time and has children should be poor anymore” (Clinton and Gore, 1992). The goal of helping the working poor was also an important motivation behind the most recent legislation to increase the Federal minimum wage from \$5.15 to \$7.25 per hour in 2007, and is echoed by U.S. Senator and 2008 Democratic presidential candidate Barack Obama (D-IL) in his support of legislation to increase the Federal minimum wage from \$7.25 to \$9.50 per hour:

“Barack Obama believes that people who work full time should not live in poverty. Before the Democrats took back Congress, the minimum wage had not changed in 10 years. Even though the minimum wage will rise to \$7.25 an hour by 2009, the minimum wage’s real purchasing power will still be below what it was in 1968. As president, Obama will further raise the minimum wage to \$9.50 an hour by 2011...” (BarackObama.com, 2008, p. 3).<sup>1</sup>

While reducing poverty among the working poor is a laudable policy goal, the evidence suggests that minimum wage increases have thus far provided little more than symbolic support to the working poor. The vast

majority of empirical studies find that past minimum wage increases have not reduced poverty (Sabia, 2008a; Burkhauser and Sabia, 2007; Neumark and Wascher, 2002; Card and Krueger, 1995; Gundersen and Ziliak, 2004; Leigh, 2007).

Two explanations have been offered for this finding. The first involves assessing who gains from increases in the minimum wage. The historical relationship between earning a low hourly wage rate and living in poverty is weak and has become weaker over time (Stigler, 1946; Burkhauser, Couch, and Glenn, 1996a; Burkhauser and Sabia, 2007). Hence, the majority of workers who gain from minimum wage increases do not live in poor households, and a significant share of the working poor already earn hourly wages above proposed minimums. The second explanation is based on the evidence that increases in the minimum wage reduce the employment of low-skilled workers (Neumark and Wascher, 2008). While an increase in the minimum wage will lift the families of some low-skilled workers who remain employed out of poverty, other low-skilled workers will lose their jobs or have their hours significantly cut, dropping their families into poverty (Neumark and Wascher, 2002; Neumark et al., 2004, 2005; Sabia, 2008a).

A new set of state and Federal minimum wage increases was initiated between 2003 and 2007 with the promise of helping the working poor.<sup>2</sup> And the newly proposed Federal minimum wage increase to \$9.50 per hour is also being justified as an important anti-poverty tool. Our paper provides a first look at the effectiveness of these more recent minimum wage increases on the working

<sup>1</sup>The Obama minimum wage plan has support among a number of leading Democrats, including Sen. Edward M. Kennedy (Zappone, 2007), former Sen. John Edwards (Montanaro, 2007), and Sen. Hillary Clinton (Zapone, 2007), who introduced Senate legislation (S.2514, “Standing with Minimum Wage Earners Act of 2007”) in December 2007 to increase the Federal minimum wage to \$9.50 per hour.

<sup>2</sup>Between 2003 and 2007, 28 states raised their minimum wage above the Federal level, and in 2007, the Federal minimum wage rose from \$5.15 to \$5.85 per hour. For examples of proponents of these hikes, see Economic Policies Institute (2006), Fiscal Policies Institute (2006), Bernstein (2004; 2007), Kerry (2004), Kennedy (2005), and Clinton (2006).

poor and compares the results with the potential effectiveness of the newly proposed Federal minimum wage hike.

Using data drawn from the outgoing rotation groups of the March Current Population Survey (CPS), we examine the effect of these recent minimum wage increases on poverty, and then compare the target efficiency of the last Federal minimum wage increase from \$5.15 to \$7.25 per hour to the target efficiency of a newly proposed hike to \$9.50 per hour. We find no evidence that minimum wage increases between 2003 and 2007 lowered state poverty rates. Moreover, we find that the newly proposed Federal minimum wage increase, like the last, is not well-targeted to benefit the working poor. Only 11.0 percent of workers who will gain from an increase in the Federal minimum wage to \$9.50 per hour live in poor households, an even smaller share than was the case with the last Federal minimum wage increase (15.1 percent). Sixty-two percent of those who will gain are second- or third-earners living in households with incomes twice the poverty line, and 41.0 percent live in households with incomes three times the poverty line, which is well above the median household income in 2007 (\$50,233).<sup>3</sup>

At an average employment elasticity of -0.3 for minimum wage workers, we estimate that nearly 1.5 million jobs will be lost if the Federal minimum wage is increased to \$9.50 per hour, including 178,000 jobs currently held by the working poor. We estimate that average employment elasticities greater (in absolute value) than -0.77 will cause net monthly earnings losses to the set of low-skilled workers who are affected by this proposed minimum wage legislation. We conclude that further increas-

es in the minimum wage will do little to reduce poverty and that they are a poor substitute for further expansions in the Federal Earned Income Tax Credit program as a mechanism for reducing poverty.

## Literature Review

### *Poverty Effects*

Several recent studies have examined the poverty effects of minimum wage increases (see, for example, Card and Krueger, 1995; Addison and Blackburn, 1999; Neumark and Wascher, 2002; Neumark et al., 2004, 2005; Burkhauser and Sabia, 2007; Sabia, 2008a), and all but one have found that past minimum wage hikes had no effect on poverty.<sup>4</sup> These studies have generally taken one of two approaches. The first approach uses matched CPS data and examines family income changes caused by minimum wage increases (Neumark and Wascher, 2002; Neumark et al., 2004, 2005). These studies find that some low-skilled workers living in poor families who remain employed see their incomes rise and move out of poverty when the minimum wage increases. However, other low-skilled workers lose their jobs or have their hours substantially reduced as a result of minimum wage hikes, causing income losses and increased poverty. On net, Neumark and Wascher (2002) find that the families of low-skilled workers are no better off and may be made worse off by minimum wage hikes. Sabia (2008a) finds a similar result for less-educated single mothers.

A second approach, taken by Card and Krueger (1995) and Burkhauser and Sabia (2007), estimates the effect of state minimum wage increases on state poverty rates. These studies also find no evidence that minimum wage

<sup>3</sup>In 2007, the poverty line for a family of four was \$20,650. Three times the poverty threshold for a family this size is \$61,950, well above the median household income of \$50,233 in 2007 (DeNavas-Walt, Proctor, and Smith, 2008).

<sup>4</sup>The one exception is Addison and Blackburn (1999), who find that minimum wage increases reduce poverty among junior high school dropouts. However, as Neumark and Wascher (2008) note in their forthcoming book, junior high school dropouts are older and unlikely to have small children, whereas most anti-poverty efforts focus on families with younger children.

increases during the 1980s, 1990s, and early 2000s have significantly reduced poverty either among the families of all individuals or among the families of workers. However, no studies in the literature have estimated the effect of minimum wages on state poverty rates from 2003–2007, a period during which 28 states increased their minimum wages above the Federal level, and the Federal minimum wage rose from \$5.15 to \$5.85 per hour.

### ***Employment and Hours Worked Effects***

Another explanation for the ineffectiveness of past minimum wage increases in reducing poverty is related to its adverse labor demand effects. Neoclassical economic theory suggests that minimum wage increases reduce the demand for low-skilled labor, reducing employment and hours worked (see Stigler, 1946). Much of the literature examining the employment effects of minimum wage increases has focused on low-skilled workers, usually teenagers and high school dropouts, or on workers in low-skilled industries, because these populations are more likely to be affected by such increases.

Neumark and Wascher (2007) review more than 90 studies published since the Card and Krueger (1994, 1995) studies of the mid-1990s and conclude that there is overwhelming evidence that the least-skilled workers experience the strongest disemployment effects from minimum wage increases (see, for example, Abowd et al., 1999; Campolieti et al., 2006; Campolieti et al., 2005; Burkhauser, Couch, and Wittenburg, 2000a,b; Deere, Murphy, and Welch, 1995; Neumark, 2001; Neumark and Wascher, 1992, 2002; Neumark et al., 2004; Partridge and Partridge, 1999; Currie and Fallick, 1996; Williams, 1993; Couch and Wittenburg, 2001; Sabia, 2008a,b,c). Median employment elasticities range from -0.1 to -0.3, though a few studies have found employment elasticities that are larger (around -0.8) for less-educated single mothers (Sabia, 2008a) and younger high school dropouts (Burkhauser, Couch, and Wittenburg,

2000b). Recently, however, papers by Dube, Lester, and Reich (2008) and Addison et al. (2008) have renewed this debate. These authors argue that the identification strategy used in many national panel studies is flawed due to unmeasured low-skilled employment trends across states. To better ensure common underlying trends across treatment and comparison states, the authors use variation in minimum wages in contiguous counties across borders for identification, and find no evidence of adverse employment effects across low-skilled sectors. But this finding is far from definitive. Other studies that have examined low-skilled workers across sectors have found evidence of adverse employment and welfare take-up effects even after controlling for unmeasured state trends (Page et al., 2005; Sabia, 2008a; Sabia and Burkhauser, 2008).

Examining only employment effects, however, may mask full labor demand effects. Firms may respond to minimum wage hikes by (i) reducing both employment and average hours worked by employed workers or (ii) increasing hours of retained workers to compensate for reduced employment (Couch and Wittenburg, 2001; Neumark and Wascher, 2007). The evidence on hours worked effects is mixed. Couch and Wittenburg (2001) and Sabia (2008c) find some evidence that employment effects alone understate full labor demand effects, but Sabia (2008a) and Sabia and Burkhauser (2008) find little evidence of conditional hours worked effects.

### ***Simulations of Distributional Effects***

While adverse labor demand effects may help to explain the ineffectiveness of past minimum wage increases in reducing poverty (Neumark and Wascher, 2002; Neumark et al., 2004; 2005; Sabia, 2008c), another explanation may be poor target efficiency. A series of studies by Burkhauser and Finegan (1989), Burkhauser, Couch, and Glenn (1996), Burkhauser and Harrison (1999), and Burkhauser and Sabia (2007) have avoided the contro-

versies surrounding the magnitude of employment and hours worked effects of past minimum wage increases and have instead focused on the target efficiency of proposed increases. These studies assume no behavioral effects of the minimum wage, giving proposed hikes their best chance to benefit affected workers. But even under the optimistic assumption of no employment or hours worked effects, the authors find that few benefits of past minimum wage increases were received by workers living in poor households. They instead find most workers in these households already earned hourly wages that were greater than the proposed state or Federal minimum wages, and that most workers who did gain were second or third-earners living in households well above the poverty line.

One important critique of these simulations is that they overstate the benefits of minimum wages to the working poor because the simulations ignore employment effects. As the authors note, because they assume zero employment elasticities, their simulations are likely to be upper-bound estimates of the benefits to workers (Burkhauser and Sabia, 2007). And, in a recent case study of New York State, Sabia and Burkhauser (2008) find that when they account for the adverse labor demand effects of the minimum wage, workers in poor households receive an even smaller share of a shrinking pie of additional net wage earnings.

This paper integrates and contributes to previous studies in the literature in several ways. First, we extend the work of Burkhauser and Sabia (2007) by estimating the effects of minimum wage increases from 2003 to 2007 on state poverty rates. Second, we examine the target efficiency of the current proposal to raise the Federal minimum wage from \$7.25 to \$9.50 per hour, and then

compare its target efficiency to that of the last Federal minimum wage increase from \$5.15 to \$7.25 per hour. Finally, while previous simulations in the literature have assumed no behavioral effects of the minimum wage, we simulate the distribution of benefits from the proposed minimum wage increase using a range of employment elasticities estimated in the literature. Specifically, we use these elasticities and workers' wage rates to estimate individual-specific probabilities of job loss and expected net benefits from the newly proposed minimum wage increase.

## Data and Estimation Strategy

Our analysis uses data drawn from the outgoing rotation groups of the March Current Population Survey (CPS). We use the March CPS because it contains information not only on current employment and wage rates but also on household income and household size, which we use, along household size-specific poverty thresholds, to calculate an income-to-needs ratio for each worker.<sup>5</sup> For example, in 2007, the poverty threshold for a household size of four was \$20,650. Thus, a household of four with total household income of \$41,300 would have an income-to-needs ratio of 2.0. Workers in households with income-to-needs ratios less than 1.0 are classified as poor, and those with income-to-needs ratios between 1.0 and 1.5 are defined as “near poor.”

Information on individual wage rates and hours worked of workers comes from the outgoing rotation group and are measured in the last week. For workers who report being paid hourly, their wage rate is directly reported from their current job. For those who are not paid hourly, wage rates are calculated as the ratio of weekly earnings to weekly hours in the past week. Information on house-

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<sup>5</sup>These data also contain information on family income and family size, which can be used to construct poverty measures using the family unit, as has been done in the previous literature (Card and Krueger, 1995; Burkhauser and Sabia, 2007).

hold income comes from the previous calendar year, so mapping individual wages to the poverty status of the household requires the assumption that the income-to-needs ratio of the household was the same in 2007 as it was in March 2008 (see Burkhauser, Couch, and Glenn, 1996, and Burkhauser and Sabia, 2007, for a discussion of this issue).

### Poverty Effects

To examine the effect of past minimum wage increases on state poverty rates, we pool data from the March 2004 through March 2008 CPS and estimate a fixed effects model similar to Card and Krueger (1995) and Burkhauser and Sabia (2007). To be consistent with this poverty literature, we follow these authors and use the family unit to calculate poverty status, and estimate the following model:<sup>6</sup>

$$(1) P_{st} = \alpha + \beta MW_{st} + \mathbf{X}'_{st} \delta + \theta_s + \tau_t + \varepsilon_{ist}$$

where  $P_{st}$  is the natural log of the poverty rate in state  $s$  at time  $t$ ,  $MW_{st}$  is the natural log of the higher of the state or Federal minimum wage,<sup>7</sup>  $\mathbf{X}_{st}$  is a vector of state-specific, time-varying socioeconomic controls including the unemployment rate for prime-age males aged 25 to 54, the average adult wage for working individuals aged 25 to 54, the share of older (aged 55 to 64) and younger

(aged 16-24) individuals in the state population, a time-invariant state effect ( $\theta_s$ ) and a state-invariant time effect ( $\tau_t$ ). Because household income is measured in the previous year, the sample used in the regression corresponds to calendar years 2003 to 2007. The key parameter of interest in this model is  $\beta_1$ . Thus, much of the identifying variation is coming from state minimum wage increases.<sup>8</sup>

### Simulations

To simulate the employment and distributional consequences of the newly proposed Federal minimum wage increase as well as the last Federal minimum wage hike from \$5.15 to \$7.25 per hour,<sup>9</sup> we follow Burkhauser and Simon (2008), Yelowitz (2008), and Baicker and Levy (2008), who use estimates of employment elasticities from the minimum wage literature to simulate the effect of pay-or-play health insurance reforms. We use the household unit to link workers to the poverty status of their households, consistent with the income distribution literature and Burkhauser and Sabia (2007). This simulation approach uses the March CPS to identify the set of workers who are affected by a policy change. For the last Federal minimum wage increase, we define these workers are those earning hourly wages between \$5.00 and \$7.24 per hour in the March 2007 CPS, and for the new Federal minimum wage increase, these are workers

<sup>6</sup>The results are not sensitive to using the household unit to calculate poverty.

<sup>7</sup>If multiple minimum wages prevailed during the year, this variable is coded as the average minimum wage that prevailed during the year, weighted by the share of the year each wage was in effect.

<sup>8</sup>During this period, the following 28 states raised their minimum wages: AZ, AR, CA, CO, CT, DE, DC, FL, HI, IL, ME, MD, MA, MI, MN, MO, NV, NH, NJ, NY, NC, OH, OR, PA, RI, VT, WA, and WI. The Federal minimum wage rose from \$5.15 to \$5.85 per hour on July 24, 2007.

<sup>9</sup>The Federal minimum wage rose again from \$5.85 to \$6.55 per hour on July 24, 2008, and will increase again to \$7.25 per hour in July 2009.

<sup>10</sup>As discussed below, the Federal minimum wage in March 2008 was \$5.85 per hour. Thus, we are taking a conservative approach by assuming that workers earning hourly wages between \$5.70 and \$7.24 will be earning \$7.25 at the time the Obama plan is being considered in the next session of Congress in 2009. As in past simulations (see Burkhauser and Sabia, 2007; Burkhauser, Couch, and Glenn, 1996; Burkhauser and Finegan, 1989), we assume that workers earning hourly wages less than 15 cents below the current Federal minimum wage are in the “uncovered” sector. Theoretically, workers earning wages greater than \$9.50 per hour could benefit from minimum wage increases if there are wage spillovers. But there is little empirical evidence that such spillovers exist (see, for example, Sabia and Burkhauser, 2008).

earning between \$5.70 and \$9.49 per hour in the March 2008 CPS.<sup>10</sup> For each simulation, we calculate an individual-specific probability of job loss:

$$(2) \quad p_i = \frac{(FMW - w_i)}{w_i} |e_i|$$

where FMW is the Federal minimum wage,  $w_i$  is worker  $i$ 's current hourly wage rate, and  $e$  is the estimated employment elasticity that applies to worker  $i$ . The true employment elasticity that should be applied to each minimum wage worker is unknown. We use a range of elasticities for minimum wage workers that range from zero (Card and Krueger, 1995; Dube et al., 2008; Addison et al., 2008), to "consensus" elasticities of -0.1 to -0.3 (Neumark and Washer, 2007), to upper-bound estimates of -0.6 to -0.77 (Burkhauser, Couch, and Glenn, 2000b; Sabia, 2008a; Sabia and Burkhauser, 2008). Thus, the distribution of job loss by the income-to-needs ratio of households will depend on (i) the share of minimum wage workers in each income-to-needs category, (ii) the magnitude of the gap between the worker's current wage and the new Federal minimum wage, and (iii) the elasticity that should be applied to each worker. Total job loss is calculated by summing the product of the individual probabilities of job loss and the population weights attached to each worker.

To simulate the expected net benefits of the minimum wage increase to each minimum wage worker, we calculate expected net benefits for each worker as follows:

$$(3) \quad EB_i = \left(1 - \frac{(FMW - w_i)}{w_i} |e_i|\right) (FMW - w_i) H_i - \left(\frac{(FMW - w_i)}{w_i} |e_i|\right) w_i H_i$$

where  $H_i$  is the usual monthly hours worked by worker  $i$ . The first term on the right-hand side of equation (2) is the expected monthly earnings gains from a Federal minimum wage hike from a retained job. The second term on the right-hand side is the expected earnings

losses from a job loss due to the minimum wage increase. Total net benefits for each income-to-needs category are calculated by aggregating individual net benefits using earnings weights.

There are a number of simplifying assumptions needed to interpret the expression in equation (2) as the expected net benefit to minimum wage workers. First, we assume that there are no wage spillovers to workers earning more than the Federal minimum wage. This assumption is reasonable given that we find no evidence that minimum wage increases have important spillover effects (Burkhauser and Sabia, 2007; Sabia, 2008a; Sabia and Burkhauser, 2008). Second, as in the simulation of job loss, we must make assumptions about the employment elasticities that are applied to minimum wage workers. As above, we apply a broad range of employment estimates from the literature to estimate employment and distributional effects. Third, we assume that minimum wages have no effect on hours worked by retained workers. Existing estimates in the literature tend to point to either no effects or only small negative effects (see, for example, Sabia, 2008c; Sabia and Burkhauser, 2008); thus, we conservatively assume no adverse hours worked effects. Finally, we assume that if a worker is laid off, his monthly earnings are zero.

There are, of course, limitations to these simplifying assumptions. For instance, if consumers face higher prices as a result of higher costs of producing goods and services (Aaronson and French 2006, 2007) or if our employment estimates are underestimated due to a failure to capture the full lagged effects of minimum wage increases (Neumark et al. 2004; Burkhauser et al., 2000a; Page et al., 2005; Baker et al., 1999; Campolieti et al., 2006), our estimates will overstate the true benefits of the minimum wage. Moreover, if there are heterogeneous effects of the minimum wage by poverty status, our simulations may mask other distributional effects. While our assumptions

**TABLE 1. Estimates of Relationship Between the Minimum Wage and Log of State Poverty Rates, 2003-2007**

	Poverty Rate (INR <sup>a</sup> < 1.0)		Poverty Rate (INR < 1.25)		Poverty Rate (INR < 1.5)	
	Overall	Workers	Overall	Workers	Overall	Workers
	(1)	(2)	(3)	(4)	(5)	(6)
Log (minimum wage)	-0.052 (0.146)	-0.020 (0.203)	-0.016 (0.104)	-0.013 (0.186)	0.004 (0.132)	0.045 (0.196)
Prime-age male unemployment rate	1.71** (0.754)	1.52* (0.901)	1.52** (0.025)	1.59** (0.779)	0.748 (0.599)	0.560 (0.658)
Log (average adult wage rate)	-0.103 (0.121)	-0.025 (0.155)	-0.072 (0.101)	-0.010 (0.136)	-0.21 (0.090)	0.013 (0.107)
Percentage of individuals aged 54-64	0.558 (1.00)	0.059 (1.11)	0.013 (0.780)	-0.933 (1.06)	0.447 (0.645)	-0.487 (0.836)
Percentage of individuals aged 16-24	2.18*** (0.681)	3.49*** (1.26)	1.23* (0.672)	2.20** (1.03)	0.529 (0.540)	0.989 (0.695)
State effects?	Y	Y	Y	Y	Y	Y
Year effects?	Y	Y	Y	Y	Y	Y
Mean of dependent variable	0.108	0.059	0.144	0.067	0.183	0.093
N	225	255	255	255	255	255

\*\*\*Indicates significance at the 1 percent level

\*\*Indicates significance at the 5 percent level

\*Indicates significance at the 10 percent level

Notes:

<sup>a</sup>Income-to-Needs Ratio (INR)

The poverty rate is calculated using family income and the family size-adjusted poverty line.

Adult wage measures and unemployment rates are calculated for those aged 25-54.

All regressions are weighted by the relevant population of workers and standard errors are corrected for clustering in the state.

Source: Computed by the authors.

are imperfect, incorporating estimates of the behavioral consequences of past minimum wage increases will be an important improvement over past simulations.

## Results

### Poverty Effects

Table 1 presents fixed effects estimates of the effect of recent minimum wage increases on state poverty rates among 16 to 64 year olds. In column (1), we find no evidence that minimum wage increases between 2003 and 2007 affected overall state poverty rates. While the sign on the estimate of  $\beta_1$  is negative, the effect is not sta-

tistically different from zero and is, in fact, smaller than the estimate obtained by Burkhauser and Sabia (2007) in their examination of the 1988-2003 period (-0.052 in column 1 of Table 1 vs.—0.082 in column 4 of Table 7 of their paper). When the sample is restricted to workers (column 2), which gives the minimum wage its best chance to reduce poverty by raising incomes of low-skilled workers, we still find no effect on poverty rates. In fact, the magnitude of the poverty elasticity (-0.020) is even smaller.

When we define poverty more broadly—those with incomes falling below 125 percent of the poverty line—es-

estimates remain statistically insignificant and small across all individuals (column 3) and workers (column 4). Finally, when we estimate poverty as those with family incomes below 150 percent of the poverty line (columns 5-6), the estimate of  $\beta_1$  actually becomes positive, though still statistically indistinguishable from zero.

Taken together, the estimates in Table 1 suggest that recent minimum wage increases enacted between 2003 and 2007 had no effect on state poverty rates, much like past minimum wage increases (Card and Krueger, 1995; Burkhauser and Sabia, 2007). One reason for this finding may be adverse labor demand effects, but another may be poor target efficiency. We now turn to exploring the question of who would gain from the newly proposed Federal minimum wage increase to \$9.50 per hour, and how this population compares to those who were affected by the last increase.

### Who Will Benefit?

Table 2 shows cross-tabulations of the wage distribution of non-self-employed 16 to 64 year olds by the income-to-needs ratio of their households using the March 2008 CPS. Each column shows a different wage category, and each row shows the income-to-needs ratio of workers' households. Workers who are expected to be directly affected by the proposed increase are those who earn between \$7.25 and \$9.49 per hour. However, in March 2008, when wage rates of workers are measured, the Federal minimum wage was \$5.85 per hour. The Federal minimum wage was increased to \$6.55 on July 24, 2008, and will increase again to \$7.25 on July 24, 2009. We take a conservative approach and assume that workers earning between \$5.70 and \$9.49 in March 2008 will be affected by the newly proposed Federal minimum wage increase.<sup>11</sup> Those who earned less than \$5.70 per hour are assumed to be in the sector uncovered by the

**TABLE 2. Wage Distribution of All Workers in 2008 by Income-to-Needs Ratio of Their Household Hourly Wage Categories<sup>a</sup>**

Income-to-Needs Ratio	\$0.01 to \$5.69	\$5.70 to \$7.24	\$7.25 to \$9.49	\$9.50 to \$11.99	\$12.00 to \$15.99	\$16.00 and over	Total	Percent of All Workers	Percent of Workers Earning More than \$5.70 and Less Than \$9.49
Less than 1.00	5.7	12.7	32.7	19.5	15.5	13.9	100.0	4.4	11.0
1.00 to 1.24	2.3	10.1	32.1	22.1	19.7	13.8	100.0	2.6	6.1
1.25 to 1.49	6.1	10.4	30.7	22.5	19.2	11.2	100.0	2.5	5.9
1.50 to 1.99	3.6	6.7	30.0	20.2	21.7	17.8	100.0	6.4	13.3
2.00 to 2.99	2.8	5.4	17.2	19.6	28.2	26.7	100.0	16.3	21.2
3.00 or above	1.4	2.8	8.2	8.9	17.6	61.1	100.0	67.8	42.5
Whole Category Share <sup>b</sup>	2.1	4.3	13.3	12.5	19.6	48.2	100.0	100.0	100.0

Notes:

<sup>a</sup>Hourly wage rates are based on a direct question concerning earnings per hour on their current primary job. All household income data used to calculate income-to-needs ratios come from retrospective information from the previous year because that is the period for which it is reported. Wages are in 2008 dollars.

<sup>b</sup>Share of all workers with wage earnings in each category

Source: Estimated from the outgoing rotation group of the Current Population Survey, March 2008.

<sup>11</sup>Following Burkhauser and Finegan (1989), Burkhauser, Couch, and Glenn (1996), and Burkhauser and Sabia (2007), we assume that workers earning \$0.15 below the Federal minimum wage—in this case, those earning hourly wages between \$5.70 and \$5.84 per hour in March 2008—are working in jobs covered by the Federal minimum wage and their wages simply reflect reporting error.



Federal minimum wage, such as tipped employees and restaurant workers.

We see from Table 2 that a minority of workers will be affected by the newly proposed Federal minimum wage increase. Only 17.7 percent of all workers in the United States earned hourly wages between \$5.70 and \$9.49 per hour and stand to be directly affected by the increase, while 80.3 percent of all workers earn hourly wages of \$9.50 per hour or more.

To assess how well the proposed Federal minimum wage hike will target the working poor, we first examine the share of workers living in poor households who will be affected by the new Federal minimum wage increase. Just 4.4 percent of all workers live in poor households. But not all of them will be affected by this minimum wage increase since 48.9 percent already earn wages greater than \$9.50 per hour.

In the final column of Table 2, we show the distribution of workers who earn between \$5.70 per hour and \$9.50 per hour by the income-to-needs ratios of their households. We find that only 11.0 percent of these minimum wage workers live in poor households. When workers living in near-poor households are also included (households with income-to-needs ratios between 1.0 and 1.5), this number rises to 23.0 percent. However, 63.7 percent of minimum wage workers live in households with incomes over twice the poverty line, and 42.5 percent live in households with incomes over three times the poverty line (\$61,950 for a four-person household). In sum, the descriptive evidence in Table 2 suggests that raising the Federal minimum wage to \$9.50 per hour will not be a target efficient anti-poverty tool because (i) most workers who will benefit are not poor, and (ii) many poor

and near-poor workers already earn hourly wages greater than \$9.50 per hour.

How does the target efficiency of the new Federal minimum wage proposal compare to that of the last increase from \$5.15 to \$7.25? Table 3 replicates Appendix Table A3 from Burkhauser and Sabia (2007) using the March 2007 Current Population Survey.<sup>12</sup> As we saw in Table 2, not all of the working poor would gain from an increase in the Federal minimum wage to \$9.50 per hour because 48.9 percent already have an hourly wage that is greater than \$9.50. This was an even bigger problem with respect to the last Federal minimum wage increase from \$5.15 to \$7.25 per hour since an even larger percentage (71 percent) of the working poor already earned more than \$7.25 per hour. Nonetheless, the percentage of workers who will gain from an increase in the minimum wage to \$9.50 (11.0 percent—see the last column of Table 3) is still less than the percentage who gained from the previous increase in the minimum wage to \$7.25 per hour (15.1 percent—see the next-to-last column of Table 3). Like the last increase, the current proposal will largely affect workers living in non-poor households with incomes that are more than twice or three times the poverty line.

But how do these facts square with the stereotypical image of a minimum wage worker—a single mother struggling to support her children? They don't, because as Table 4 shows, only 11.1 percent of those who will gain from the proposed increase in the minimum wage to \$9.50 per hour are single mothers, down from 12.0 percent from the last Federal increase. But even the stereotype that the minimum wage earner is the primary earner in the household is incorrect. Only about one-half of those who would gain from the minimum wage increase to \$9.50 are the primary earners in their house-

<sup>12</sup>Burkhauser and Sabia (2007) used the March 2003 CPS. The March 2007 CPS is the latest annual March CPS available when all workers faced a Federal minimum wage of \$5.15 per hour.

**TABLE 3. Wage Distribution of All Workers in 2007 by Income-to-Needs Ratio of Their Household Hourly Wage Categories<sup>a</sup>**

Income-to-Needs Ratio	\$0.01 to \$4.99	\$5.00 to \$5.14	\$5.15 to \$7.24	\$7.25 to \$8.99	\$9.00 to \$14.99	\$15.00 and over	Total	Percent of All Workers	Percent of Workers Earning More than \$4.99 and Less Than \$7.25	Percent of Workers Earning More than \$5.70 and Less Than \$9.49 in 2008
Less than 1.00	6.0	1.2	21.9	23.6	37.1	10.3	100.0	4.6	15.1	11.0
1.00 to 1.24	3.4	1.1	14.3	24.6	48.3	8.3	100.0	2.3	5.4	6.1
1.25 to 1.49	1.7	0.9	16.0	20.3	44.5	16.6	100.0	2.7	6.8	5.9
1.50 to 1.99	3.0	0.5	10.2	15.5	46.0	24.8	100.0	7.0	11.6	13.3
2.00 to 2.99	1.0	0.5	8.1	11.8	43.6	35.0	100.0	16.6	21.7	21.2
3.00 or above	0.9	0.2	3.8	6.0	24.8	64.4	100.0	66.8	39.4	42.5
Whole Category Share <sup>b</sup>	1.4	0.3	6.4	9.3	31.1	51.6	100.0	100.0	100.0	100.0

Notes:

<sup>a</sup>Hourly wage rates are based on a direct question concerning earnings per hour on their current primary job. All household income data used to calculate income-to-needs ratios come from retrospective information from the previous year because that is the period for which it is reported. Wages are in 2007 dollars.

<sup>b</sup>Share of all workers with wage earnings in each category

Source: Estimated from the outgoing rotation group of the Current Population Survey, March 2007.

**TABLE 4. Demographic Characteristics of Workers Affected by Past and Future Increases in the Federal Minimum Wage: Family Type and Gender<sup>a</sup>**

Family Type	Total (%)	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)
	Obama Proposal			Last Federal Increase		
Not highest-earner in family	50.2	20.0	30.2	56.6	23.9	32.7
Highest-earner, unmarried female, children under 18 years old in family	11.1	—	11.1	12.0	—	12.0
Highest-earner, unmarried male, children under 18 years old in family	5.8	5.8	—	5.8	5.8	—
Highest-earner, married with children under 18 years old in family	9.3	5.1	4.2	6.7	2.8	3.9
Highest-earner, family size greater than 1, no children	10.5	4.7	5.9	7.5	3.4	5.1
Highest-earner, family size equal to 1	12.9	6.4	6.5	10.3	5.5	4.8
Whole Category Share	100	42.1	57.9	100	41.5	58.5

Notes:

<sup>a</sup>The first three columns (“Obama Proposal”) consists of a weighted sample of workers that includes all non-military, non-self employed workers who earned between \$5.70 and \$9.49 per hour in March 2008, based on the March 2008 CPS outgoing rotation group. The final three columns (“Last Federal Increase”) consists of weighted sample of workers that includes all non-military, non-self-employed workers who earned between \$5.00 and \$7.24 per hour in March 2007, based on the March 2007 CPS outgoing rotation group.

hold, up from 43.4 percent from the last Federal increase. But this difference is mainly because more of the gainers are living in one-person households or in households without children.

Table 5 compares the age distribution of those who will be affected by the new proposal with those who were affected by the last. The evidence suggests that the new proposal will help more workers aged 40 and over (31.2 percent versus 23.8 percent), fewer teenagers (16.7 percent versus 28.0 percent), and more non-whites (23.2 percent versus 21.8 percent) than the last. However, as Tables 2 and 3 demonstrate, these workers are less likely to be poor or near-poor.

Taken together, the results in Tables 2 and 4 suggest that, like past state and Federal minimum wage hikes (Tables 1 and 3), the current proposal to raise the Federal minimum wage to \$9.50 per hour will not be well targeted to poor workers and, in fact, may be even less target efficient than the last Federal increase.

## Simulations

Poor target efficiency is one important reason why minimum wage increases are ineffective at reducing poverty; adverse labor demand effects are another. In Table 6, we simulate expected job losses from the proposed Federal minimum wage increase. We estimate that the proposed hike to \$9.50 per hour will affect more than 22 million workers (final row, column 2), including 2.45 million workers living in poor households and 2.66 million living in near-poor households. To estimate job losses, we calculate individual probabilities of job loss as described in equation (2) using a range of employment elasticities from the literature. Columns (3) and (4) present estimates of job losses by income-to-needs ratios of households using “consensus” estimates in the literature (Neumark and Wascher, 2007), while columns (5) and (6) present simulations using upper-bound estimates of -0.6 and -0.77 (Burkhauser, Couch, and Wittenburg, 2000b; Sabia, 2008a; Sabia and Burkhauser, 2008). Lower-bound elasticity estimates imply job losses of 489,000 to 1.47 million, while upper-bound estimates imply job losses of approximately 3 to 4 million.

**TABLE 5. Demographic Characteristics of New York Workers Affected by Past and Future Increases in the Federal Minimum Wage: Age, Race, and Gender<sup>a</sup>**

Age Group	Total (%)	Male (%)	Female (%)	Non-white (%)	White (%)	Total (%)	Male (%)	Female (%)	Non-white (%)	White (%)
	Obama Proposal					Last Federal Increase				
Age 16 to 19	16.7	7.6	9.2	2.7	14.0	28.0	12.9	15.1	3.0	24.9
Age 20 to 25	24.5	12.0	12.5	4.8	19.6	22.4	9.9	12.5	5.0	17.4
Age 26 to 39	27.6	12.1	15.5	8.4	19.2	25.9	9.5	16.4	7.3	18.6
Age 40+	31.2	10.5	20.7	7.3	24.0	23.8	9.2	15.6	6.5	17.3
Whole Category Share <sup>b</sup>	100	42.1	57.9	23.2	76.8	100	41.5	58.5	21.8	78.2

Notes:

<sup>a</sup>The first three columns (“Obama Proposal”) consists of a weighted sample of workers that includes all non-military, non-self employed workers who earned between \$5.70 and \$9.49 per hour in March 2008, based on the March 2008 CPS outgoing rotation group. The final three columns (“Last Federal Increase”) consists of weighted sample of workers that includes all non-military, non-self employed workers who earned between \$5.00 and \$7.24 per hour in March 2007, based on the March 2007 CPS outgoing rotation group.

**TABLE 6. Simulated Employment Losses of Proposed Federal Minimum Wage Increase to \$9.50 per Hour, by Household Income-to-Needs Ratio<sup>a,b</sup>**

Income-to-Needs Ratio	Percent of Workers Earning More than \$5.70 and Less Than \$9.49 <sup>a,b</sup>	Number of Workers in Thousands	Employment Losses in Thousands (e = -0.1) <sup>c</sup>	Employment Losses in Thousands (e = -0.3) <sup>c</sup>	Employment Losses in Thousands (e = -0.6) <sup>d</sup>	Employment Losses in Thousands (e = -0.77) <sup>d</sup>	Percent of Total Job Loss
Less than 1.00	11.0	2,451	59.3	177.9	355.8	455.4	12.1
1.00 to 1.24	6.1	1,355	29.4	88.2	176.4	226.1	6.0
1.25 to 1.49	5.9	1,304	28.7	86.1	172.2	220.8	5.9
1.50 to 1.99	13.3	2,960	60.8	182.4	364.8	467.5	12.4
2.00 to 2.99	21.2	4,731	103.2	309.6	619.2	793.2	21.0
3.00 or above	42.5	9,462	208.0	624	1,248	1,598	42.5
<b>Total</b>	<b>100.0</b>	<b>22,263</b>	<b>489.5</b>	<b>1,469</b>	<b>2,937</b>	<b>3,761</b>	<b>100.0</b>

Notes:

<sup>a</sup>Hourly wage rates are based on a direct question concerning earnings per hour on their current primary job. All household income data used to calculate income-to-needs ratios come from retrospective information from the previous year because that is the period for which it is reported. Wages are in nominal dollars. Sample restricted to 16–64 year olds who report positive weeks and weekly hours worked in previous year.

<sup>b</sup>This wage category corresponds to March 2008.

<sup>c</sup>Consensus estimates in minimum wage literature (see Neumark and Wascher, 2007).

<sup>d</sup>Upper-bound estimates found in new minimum wage literature (see Burkhauser, Couch, and Wittenberg, 2000b; Sabia, 2008a; Sabia and Burkhauser, 2008).

Importantly, the share of job losses experienced by workers in poor households (12.1 percent; column 7, row 1) is larger than the share of minimum wage workers who are poor (11.0 percent). This is because their hourly wage rates were on average lower than those of affected workers living in non-poor households, thus leading to a higher probability of job loss. But this is likely to understate the actual difference between workers living in poor and non-poor households, since the demand for these workers may be more elastic than that of non-poor workers as a group (see, for example, Sabia, 2008a).

The magnitude of simulated job losses from the current proposal are much larger than from the last increase, because the last increase affected far fewer workers (see Table 7). Using an employment elasticity of -0.3 for minimum wage workers, we simulate that the last Federal minimum wage hike from \$5.15 to \$7.25 will, when fully imple-

mented, reduce employment by approximately 391,500 jobs. However, in contrast to the current proposal, the last increase did not yield higher percentage job losses among the working poor.

While job losses are certainly possible and, perhaps, probable given the consensus of existing empirical evidence (Neumark and Wascher, 2008), net income gains are still possible if adverse employment effects are sufficiently small. But are the gains from minimum wage increases received, in the main, by working poor, as proponents expect? In Table 8, we simulate the expected monthly benefits from the proposed Federal minimum wage hike to \$9.50 per hour. Column (1) shows the distribution of monthly benefits assuming no behavioral effects of the minimum wage, as was assumed by Burkhauser and Finegan (1989), Burkhauser, Couch, and Glenn (1996), and Burkhauser and Sabia (2007). If no minimum wage

**TABLE 7. Simulated Employment Losses from the Last Federal Minimum Wage Increase to \$7.25 per Hour, by Household Income-to-Needs Ratio<sup>a,b</sup>**

Income-to-Needs Ratio	Percent of Workers Earning More than \$5.00 and Less Than \$7.25 in 2007 <sup>a,b</sup>	Number of Workers in Thousands	Employment Losses in Thousands (e = -0.3)	Percent of Total Job Loss
Less than 1.00	15.1	1,281	59.9	15.3
1.00 to 1.24	5.4	456.6	24.4	6.2
1.25 to 1.49	6.8	578.3	22.2	5.7
1.50 to 1.99	11.6	988.5	48.1	12.3
2.00 to 2.99	21.7	1,844	79.8	20.4
3.00 or above	39.4	3,347	157.0	40.1
<b>Total</b>	<b>100.0</b>	<b>8,496</b>	<b>391.5</b>	<b>100.0</b>

Notes:

<sup>a</sup>Hourly wage rates are based on a direct question concerning earnings per hour on their current primary job. All household income data used to calculate income-to-needs ratios come from retrospective information from the previous year because that is the period for which it is reported. Wages are in nominal dollars. Sample restricted to 16–64 year olds who report positive weeks and weekly hours worked in previous year.

<sup>b</sup>This wage category corresponds to March 2007.

**TABLE 8. Simulated Monthly Net Benefits from Proposed Federal Minimum Wage Increase to \$9.50, by Household Income-to-Needs Ratio<sup>a,b</sup>**

Income-to-Needs Ratio	Net Benefits in Billions \$ (e = 0)	% Net Benefits (e = 0)	Net Benefits in Billions \$ (e = -0.1)	Net Benefits in Billions \$ (e = -0.3)	% Net Benefits (e = -0.3)	Net Benefits in Billions \$ (e = -0.6)	Net Benefits in Billions \$ (e = -0.77 <sup>c</sup> )
Less than 1.00	0.445	10.6	0.386	0.269	10.5	0.0932	-0.005
1.00 to 1.24	0.288	6.8	0.251	0.177	6.9	0.0648	0.002
1.25 to 1.49	0.273	6.5	0.238	0.168	6.5	0.0632	0.004
1.50 to 1.99	0.596	14.2	0.520	0.368	14.1	0.140	0.012
2.00 to 2.99	0.885	21.0	0.769	0.536	21.0	0.186	-0.010
3.00 or above	1.72	40.9	1.50	1.05	41.0	0.374	-0.004
<b>Total</b>	<b>4.21</b>	<b>100.0</b>	<b>3.66</b>	<b>2.56</b>	<b>100.0</b>	<b>0.921</b>	<b>0.000</b>

Notes:

<sup>a</sup>Expected benefits are calculated as the weighted sum of  $(1-p)(\$9.50-w)H - pwH$  for each minimum wage worker, where  $p$  is the probability of job loss from the minimum wage hike,  $[(\$9.50-w)/w]e$ ,  $w$  is the worker's hourly wage rate,  $H$  is monthly hours worked, and  $e$  is the employment elasticity.

<sup>b</sup>The analysis uses data from the outgoing rotation groups of the March 2008 CPS. A minimum wage worker is defined as earning between \$5.70 and \$9.49 per hour in March 2008. Sample restricted to 16–64 year olds who report positive weeks and weekly hours worked in previous year.

<sup>c</sup>The break-even elasticity is -0.7683.

**TABLE 9. Comparison of Simulated Monthly Net Benefits from Proposed Federal Minimum Wage Increase to the Last Federal Minimum Wage Increase, by Household Income-to-Needs Ratio<sup>a,b</sup>**

Income-to-Needs Ratio	Net Benefits in Billions \$ from Obama Proposal (e = -0.3)	% Net Benefits from Obama Proposal (e = -0.3)	Net Benefits in Billions \$ from Last Federal Increase (e = -0.3)	% Net Benefits from Last Federal Increase (e = -0.3)	Net Benefits in Billions \$ from Last Federal Increase (e = -0.81)
Less than 1.00	0.269	10.5	0.073	14.0	0.000
1.00 to 1.24	0.177	6.9	0.026	5.0	-0.001
1.25 to 1.49	0.168	6.5	0.034	6.5	0.001
1.50 to 1.99	0.368	14.1	0.074	14.2	0.000
2.00 to 2.99	0.536	21.0	0.117	22.4	0.002
3.00 or above	1.05	41.0	0.198	37.9	-0.003
<b>Total</b>	<b>2.56</b>	<b>100.0</b>	<b>0.522</b>	<b>100.0</b>	<b>0.000</b>

Notes:

<sup>a</sup>Expected benefits from last Federal minimum wage increase are calculated as the weighted sum of  $(1-p)(\$7.25-w)H - pwH$  for each minimum wage worker, where  $p$  is the probability of job loss from the minimum wage hike,  $[(\$7.25-w)/w]e$ ,  $w$  is the worker's hourly wage rate,  $H$  is monthly hours worked, and  $e$  is the employment elasticity.

<sup>b</sup>The analysis uses data from the outgoing rotation groups of the March 2007 CPS. A minimum wage worker is defined as earning between \$5.00 and \$7.24 per hour in March 2007. Sample restricted to 16–64 year olds who report positive weeks and weekly hours worked in previous year.

<sup>c</sup>The break-even elasticity is -0.8045.

workers are laid off and none have their hours reduced, the minimum wage increase is simulated to yield \$4.2 billion in monthly benefits. This estimate can be considered an upper-bound estimate of benefits, given our optimistic behavioral assumptions. However, even under these assumptions, just 10.6 percent (\$445 million) of these benefits will be received by the working poor (column 2), and 23.9 percent of the benefits will be received by workers living in poor or near-poor households. Nearly 62 percent of the benefits will be received by workers in households with incomes more than twice the poverty line, and 40.9 percent will be received by workers in households with incomes more than three times the poverty line. Thus, even under optimistic assumptions of zero employment elasticities (Card, 1992; Card and Krueger, 1994; 1995; Dube et al., 2008 Addison et al., 2008), only a small share of the benefits will be received by the working poor.

In columns (3)-(8), we improve on the previous literature's simulations by allowing for behavioral effects of the Federal minimum wage increase. At a conservative employment elasticity of -0.1, the total net benefits from the minimum wage fall by 13.1 percent to \$3.66 billion, but the distribution of benefits remains similar to that when no employment effects were assumed: approximately 10.5 percent of benefits are received by workers living in poor households.

At higher employment elasticities, net benefits fall substantially. An employment elasticity of -0.3 reduces net benefits by 39.2 percent to \$2.56 billion (column 4), and an elasticity of -0.6 reduces net benefits by 78.1 percent to \$0.921 billion (column 5). We estimate the “break-even” employment elasticity where equation (4) equals zero to be -0.77 (column 8). While an employment elasticity of -0.77 is large relative to the consensus estimates in the

literature, a few studies have found estimates as large for less-educated single mothers (Sabia, 2008c) and young dropouts (Burkhauser, Couch, and Wittenburg, 2000b; Sabia and Burkhauser, 2008). Each of these groups of low-skilled workers is more likely to be poor than other minimum wage workers (i.e., teenagers); thus, it is not implausible to imagine that the benefits of a minimum wage increase to \$9.50 to the working poor workers would be quite small, or even negative.

When we compare the distribution of benefits from the current proposal at an assumed employment elasticity of  $-0.3$  (Table 9, columns 1-2) to the distribution of benefits of the last increase (Table 9, columns 3-4), we find that the benefits from the new proposal are even less well targeted than the last. Approximately 14.0 percent of the simulated monthly net benefits of the last increase went to workers living in poor households compared to 10.5 percent of the benefits from increase to \$9.50 per hour. The “break-even” elasticity of the last Federal minimum wage increase is  $-0.81$  (column 5), comparable to the current proposal.


## Conclusions

This study first examines the effect of recent minimum wage increases on state poverty rates, and then compares the target efficiency of the last Federal minimum wage increase from \$5.15 to \$7.25 per hour to the target efficiency of a newly proposed hike from \$7.25 to \$9.50 per hour. Our results show that recent minimum wage increases between 2003 and 2007 had no effect on state poverty rates. Moreover, the proposal to raise the Federal minimum wage to \$9.50 per hour is unlikely to be any better at reducing poverty because (i) most workers (89.0 percent) who are affected are not poor, (ii) many poor workers (48.9 percent) already earn hourly wages greater than \$9.50 per hour, and (iii) the minimum wage increase is likely to cause adverse employment ef-

fects for the working poor. Our evidence also suggests that the target efficiency of Federal minimum wage increases is not improving, and may actually be worsening. When compared to the last Federal increase, the current proposal appears even less target efficient; 14.0 percent of the benefits of the last increase were received by the working poor compared to 10.5 percent from the current proposal. At an employment elasticity of  $-0.3$  for minimum wage workers, we forecast that nearly 1.5 million low-skilled workers will lose their jobs if the Federal minimum wage is raised to \$9.50 per hour, including 178,000 jobs held by the working poor. And at employment elasticities greater than  $-0.77$ , we estimate that net monthly benefits from the minimum wage increase will actually become negative.

## Policy Implications

While raising the Federal minimum wage is an increasingly ineffective anti-poverty strategy, expansions in the Earned Income Tax Credit (EITC) program may be a promising alternative for several reasons. First, because eligibility is based on family income rather than a wage rate, the benefits are much more likely to be received by workers living in poor families (Congressional Budget Office, 2007; Burkhauser and Sabia, 2007; Burkhauser, Couch, and Glenn, 1996; Neumark and Wascher, 2001). Thus, most of the 48.9 percent of poor workers who earned hourly wages greater than \$9.50 per hour in March 2008 and who would thus not gain from the proposed increase in the Federal minimum wage, could gain from expansions in the EITC. Second, because the costs of the EITC are not directly borne by employers, expansions in this wage subsidy do not cause adverse labor demand effects. In fact, a large body of empirical literature finds that expansions in the EITC increase employment among low-skilled single mothers (Hotz and Scholz, 2003; Eissa and Hoynes, 2005; Meyer and Rosenbaum, 2000, 2001; Ellwood, 2000; Grogger, 2003; Hotz et al., 2002; Eissa



and Liebman, 1996). Given that employment is an important anti-poverty mechanism and wage subsidies can increase income to the working poor, expansions in the EITC may be a more effective means of aiding the working poor than increasing the Federal minimum wage.

We conclude that further increases in the minimum wage will do little to reduce poverty and that they are a poor substitute for further expansions in the Federal EITC program as a mechanism for reducing poverty.



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