



A STEALTHY STIMULUS

How boosting the minimum wage is helping to support the economy

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The recently enacted American Recovery and Reinvestment Act included policies to help struggling families and create jobs. But an extremely effective and simple policy that achieves both of these goals is often overlooked: increases in the minimum wage. Each increase provides financial relief directly to minimum wage workers and their families and helps to stimulate the economy. By increasing workers' take-home pay, families gain both financial security and an increased ability to purchase goods and services, thus creating jobs for other Americans.

In 2007, Congress passed a three-step federal minimum wage increase. The first two increases took effect in July 2007 and July 2008, and the final will take effect in July 2009. These increases boost consumer spending and stimulate the economy in the following ways:

- The first two increases will have generated an estimated \$4.9 billion of spending by July 2009, precisely when our economy needed it the most.
- The final increase in July 2009 is expected to generate another \$5.5 billion over the following year.
- The increase to \$9.50 by 2011 that President Obama promised during the campaign would generate an estimated \$60 billion of additional spending over a two-year period.

Minimum wage as stimulus

A recent study by economists at the Federal Reserve Bank of Chicago examined 23 years of household spending data and found that an increase in the minimum wage leads households with a minimum wage worker to significantly increase their spending over the next year (Aaronson et al. 2008). The study found that for every dollar increase in the minimum wage, families with minimum wage workers tend to increase spending by more than \$800 per quarter. This is an expected response to a boost in household income, especially for those households that have low incomes. The minimum wage increase is an increase in their permanent income, which allows these families to significantly adjust their consumption

patterns in the short term. In the long term, however, this spending increase must partially fade in order to match the increase in income.

By combining the estimates of the per family spending increase and of the number of families impacted, it is possible to gauge the economy-wide impact of each increase in the minimum wage on consumption. The number of families impacted by an increase in the minimum wage, consistent with definitions used by Aaronson et al. (2008), is determined through an analysis of the Current Population Survey (see Appendix for details.)

In July 2007, the federal minimum wage increased from \$5.15 to \$5.85 per hour. There were over 700,000 families with at least one minimum wage worker who benefited from this increase, resulting in \$1.7 billion of additional spending between August 2007 and July 2008 (see **Table 1**). The next step in July 2008, to \$6.55, benefited 1.3 million families, creating a \$3.1 billion boost to the economy. This will add an extra \$240 million to household consumption each month until July 2009.

At that point, the third step of the federal minimum wage increase will take place, helping an estimated 2.3 million families and adding over \$5.5 billion to the economy over the next year. The total impact of these three increases is \$10.4 billion of additional spending between August 2007 and July 2009.

This stimulative effect may help explain why studies of the minimum wage rarely find that an increase leads to higher unemployment. One common misconception about the minimum wage is that increases in the wage will result in businesses hiring fewer people, and thus,

more unemployment. However, recent studies (Card and Krueger (1995); Baiman et al. (2003); FPI (2006); and Wolfson (2006)) have failed to find a significant impact on unemployment from raising the minimum wage. There are several potential explanations for this, including increased productivity and morale along with reduced turnover and absenteeism (for details, see Bernstein and Schmitt (1998); Card and Krueger (1995)). In addition to these explanations, the stimulative effect may play a role. If raising the minimum wage leads to millions of families spending billions of more dollars, then this spending creates jobs for other workers and helps offset the theoretically negative impact on employment.

Another common misconception about the minimum wage is that these workers are mostly teenagers in well-off families. This study, like the study by Aaronson et al. (2008), intentionally excludes such workers and still finds a large effect. In fact, when considering all minimum wage workers (including teenagers), the vast majority are adults. Using the most recent data available (from the increase in 2008 to \$6.55), close to 70% of the 2 million affected workers are at least 20 years old, and over 60% come from families earning less than \$35,000 per year. Furthermore, more than 520,000 affected workers support at least one child.

Future increases could provide more stimulus

The results above show the economic impact of legislation that has already passed. Looking forward, we can also predict the effects of future minimum wage bills.

TABLE 1

Impact of minimum wage increase on household consumption

Step	Increase to:	Change	Households	Consumption increase (millions)
1	\$5.85	July 24, 2007	719,111	\$1,750
2	6.55	July 24, 2008	1,284,191	3,125
3	7.25	July 24, 2009	2,282,205	5,553
	8.25	Estimated: July 2010	5,114,280	17,777
	9.50	Estimated: July 2011	9,655,640	41,954

SOURCE: Number of households: EPI analysis of Current Population Survey. Consumption: EPI analysis based on number of households impacted and consumption estimates by Aaronson et al. (2008).

Barack Obama said during his presidential campaign that if elected, he would increase the minimum wage to \$9.50 by 2011. This would supplant the minimum wage in all states (some of which are currently higher than the current federal rate), benefiting millions of low-income workers. To estimate the total effect, we assume that this increase is in two steps: first to \$8.25 in July 2010, then to \$9.50 in July 2011. The first step increase would benefit an estimated 5.1 million families and add \$18 billion to the economy over the following year. The second step would benefit almost 10 million families and generate \$42 billion of spending over the following year.

Conclusion

These results demonstrate that an increase in the minimum wage would not only benefit low-income working families, but it would also provide a boost to consumer spending and the broader economy. Increasing the minimum wage is an effective stimulus that helps workers who need it the most and supports the economy.

Appendix: Methodology

The number of “affected workers” is determined by examining the monthly CPS ORG data using the same criteria as in the paper by Aaronson et al. (2008): adult workers who are earning more than 60%, but less than 120%, of the current minimum wage (see **Table 2**), and who are one of the top two wage earners in their family. This range is used because workers who are earning slightly less and slightly more than the minimum wage are likely to experience indirect wage increases (Card and Krueger (1995)). Considering only the top two wage earners in

each family increases the probability that the minimum wage worker’s income is a significant part of the family income. For the first two minimum wage increases, data are used from the entire year before the change (August to July). The 2009 estimate is derived from the most recent data available, using 60% of the effective minimum wage for 2008.¹ Table 2 shows the range of wages for affected workers in each year.

Only workers in states where the federal minimum wage is effective before the increase occurs are included in the counts. This list of states changes over time as states change their minimum wage laws, and as the federal minimum surpasses some states’ minimum wages.

Aaronson et al. (2008) find that after a \$1 minimum wage increase, families with at least one minimum wage worker increase spending by \$869 per quarter in the near-term. The analysis also finds that spending continues at about this level for approximately one full year.² After that period, it is assumed that spending reverts back to a baseline level.³ Given that the federal minimum wage increased by \$0.70 in 2007, 2008, and 2009, we should expect that each household with an affected worker will then spend an additional:

$$\begin{aligned} & \$0.7 \text{ MW increase} * \$869 / \text{quarter} * 4 \text{ quarters/year} \\ & = \$2,433 \text{ per year per household} \end{aligned}$$

For the proposed increases to \$8.25 in 2010 and \$9.50 in 2011, the analysis is conducted using data from August 2007 to July 2008, the most recent available. Wages are assumed to increase by 2.2% each year (consistent with the Congressional Budget Office’s estimate of price inflation).

TABLE 2

Wage range considered to identify number of impacted families

Step	Change	Data	60% (low cutoff)	Current minimum wage	New minimum wage	120% (high cutoff)
1	July 24, 2007	Aug 2006 - July 2007	\$3.09	\$5.15	\$5.85	\$6.18
2	July 24, 2008	Aug 2007 - July 2008	3.51	5.85	6.55	7.02
3	July 24, 2009	Aug 2007 - July 2008	3.51	6.55	7.25	7.86

SOURCE: EPI calculations using minimum wage laws from Department of Labor.

Endnote

1. These workers are likely to receive a raise from the 2008 increase, and will then be earning at or near the effective minimum wage in 2009.
2. Figure 4 in Aaronson et al. (2008) shows this for families strongly affected by a minimum wage increase; however, detailed results are not provided for the particular group presented here. Personal communication with the author confirms that the estimate we used (\$869 per quarter) is accurate for at least a year, especially given that this estimate is an average from several quarters after a minimum wage increase.
3. In general we might expect a more permanent increase in spending. However, the Aaronson et al. (2008) results also show that much of the initial spending is on durables, suggesting a more permanent increase in consumption that may not be fully reflected in spending after the first year. The assumption that the spending impulse lasts just one year means that we may be understating the stimulative impact over longer horizons.

References

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