How raising the federal minimum wage would help working families and give the economy a boost

BY **DOUG HALL** AND **DAVID COOPER**

Over the past year, increasing attention has focused on the prevalence and growth of income inequality in the United States. While soaring incomes at the top of the income distribution have played a large role in these trends (Mishel and Sabadish 2012), so too has the failure to ensure that lower-income workers earn a fair wage.

On March 29, Sen. Tom Harkin (D-Iowa) introduced the Rebuild America Act, which includes an increase in the federal minimum wage from the current $7.25 (where it has been for three years) to $9.80 via three incremental increases of $0.85, after which it would be indexed to inflation. The tipped minimum wage (the minimum wage paid to workers who earn a portion of their wages in tips) would also be increased in $0.85 increments from its current value of $2.13 per hour, where it has languished since 1996, until it reaches 70 percent of the regular minimum wage. On July 26, Sen. Harkin introduced a stand-alone minimum-wage bill containing these provisions, S. 3453, The Fair Minimum Wage Act of 2012. On the same day, Rep. George Miller (D-Calif.) introduced legislation in the House of Representatives, H.R. 6211, mirroring Harkin's minimum-wage legislation.[1]

Raising the minimum wage would help workers still reeling from the effects of the recession. The resulting impact on the overall economy would be demonstrably positive, as minimum-wage workers would spend their new earnings immediately, generating a positive impact on GDP and related modest employment growth.

This paper begins by providing a demographic overview of the workers who would benefit from the proposed increase in the minimum wage, examining characteristics such as their gender, age, race and ethnicity, educational attainment,

work hours, family income, and family composition. Next, it details the estimated GDP and job creation impacts that would result from an increase in the federal minimum wage to $9.80.

Key findings include:

- Increasing the federal minimum wage to $9.80 by July 1, 2014, would raise the wages of about 28 million workers, who would receive nearly $40 billion in additional wages over the phase-in period.[2]

- Across the phase-in period of the minimum-wage increase, GDP would increase by roughly $25 billion, resulting in the creation of approximately 100,000 net new jobs over that period.

- Those who would see wage increases do not fit some of the stereotypes of minimum-wage workers.

  - Women would be disproportionately affected, comprising nearly 55 percent of those who would benefit.

  - Nearly 88 percent of workers who would benefit are at least 20 years old.

  - Although workers of all races and ethnicities would benefit from the increase, non-Hispanic white workers comprise the largest share (about 56 percent) of those who would be affected.

  - About 42 percent of affected workers have at least some college education.

  - Around 54 percent of affected workers work full time, over 70 percent are in families with incomes of less than $60,000, more than a quarter are parents, and over a third are married.

  - The average affected worker earns about half of his or her family's total income.
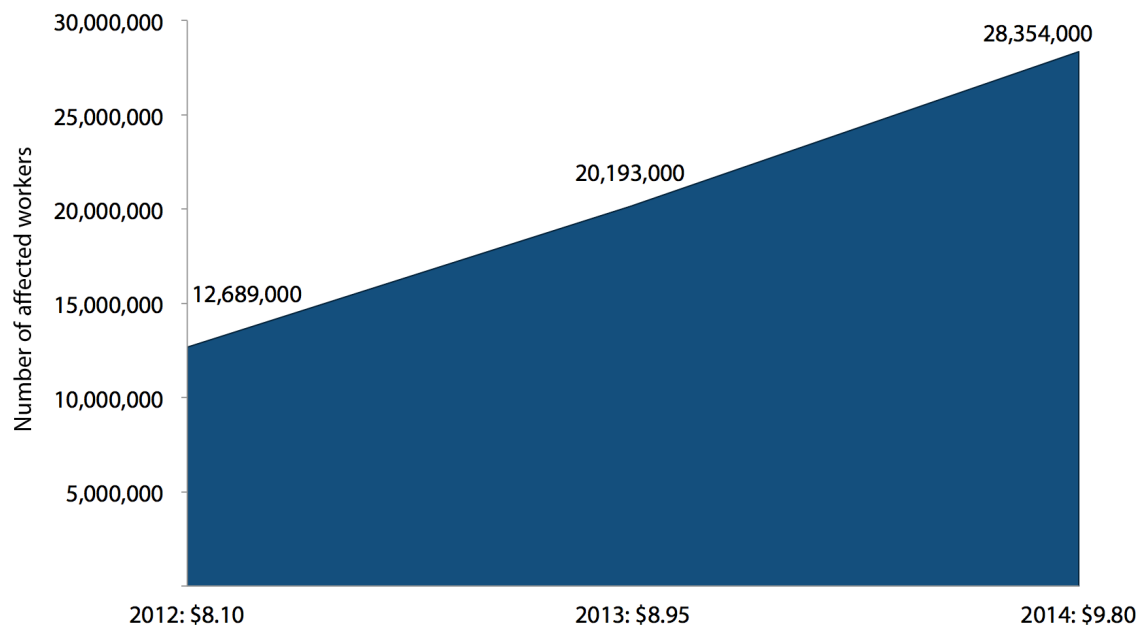
Demographic characteristics of affected workers

Increasing the minimum wage to $9.80 would benefit millions of workers whose characteristics—in terms of their gender, age, race and ethnicity, educational attainment, work hours, family income, and family composition—contradict some prevailing beliefs about minimum-wage workers. In the first year, with an increase from $7.25 to $8.10, nearly 13 million directly and indirectly affected workers would see higher wages. This number would rise to about 20 million workers with the second incremental increase to $8.95 in 2013, and to more than 28 million workers with the third incremental increase to $9.80 in 2014, as shown in **Figure A**.[3] As detailed later in this section, the vast majority of these workers are not teenage part-time workers; rather, most are at least 20 years old, over half work full time, and many are struggling to support their families.

Gender

While increasing the minimum wage would have a sizable impact on both men and women, it would disproportionately affect women. That women comprise 54.5 percent of workers who would be affected by a potential minimum-wage increase makes it a women's issue (see **Figure B**). The share of those affected who are women varies somewhat by state, from a low of 49.3 percent in California to a high of 64.4 percent in Mississippi (according to the authors' analysis of Current Population Survey Outgoing Rotation Group microdata). California and Nevada, also at 49.3 percent, are the only states where women do not constitute the majority of those who would benefit.

Number of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)

Number of affected workers

30,000,000

28,354,000

25,000,000

20,193,000

20,000,000

12,689,000

15,000,000

10,000,000

5,000,000

2012: $8.10   2013: $8.95   2014: $9.80

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

Age

Minimum-wage workers are older and, as discussed later, have greater family responsibilities than commonly portrayed. The facts do not support the perception of minimum-wage workers as primarily teenagers working for spending money (though even if true, it would not justify paying teens subpoverty wages).

Instead, as seen in **Figure C**, 87.9 percent of workers who would be affected by increasing the federal minimum wage to $9.80 are at least 20 years old. This share varies from a low of 77.1 percent in Massachusetts to 92.4 percent in Florida (and 93.9 percent in the District of Columbia). Thus, in every state, more than three-fourths of workers who would be affected are at least 20 years old.

Race/ethnicity

Increasing the minimum wage would substantially benefit both minority and non-minority workers. **Figure D** reveals that nationally, 56.1 percent of workers who would be affected are non-Hispanic white workers. Nearly a quarter (23.6 percent) are Hispanic, 14.2 percent are black, and 6.1 percent are Asian or of another race or ethnicity.

As one would expect given the country's diverse social and cultural makeup, the racial and ethnic composition of workers affected by increasing the federal minimum wage to $9.80 varies considerably by state (according to an analysis of Current Population Survey Outgoing Rotation Group microdata):

Gender of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)
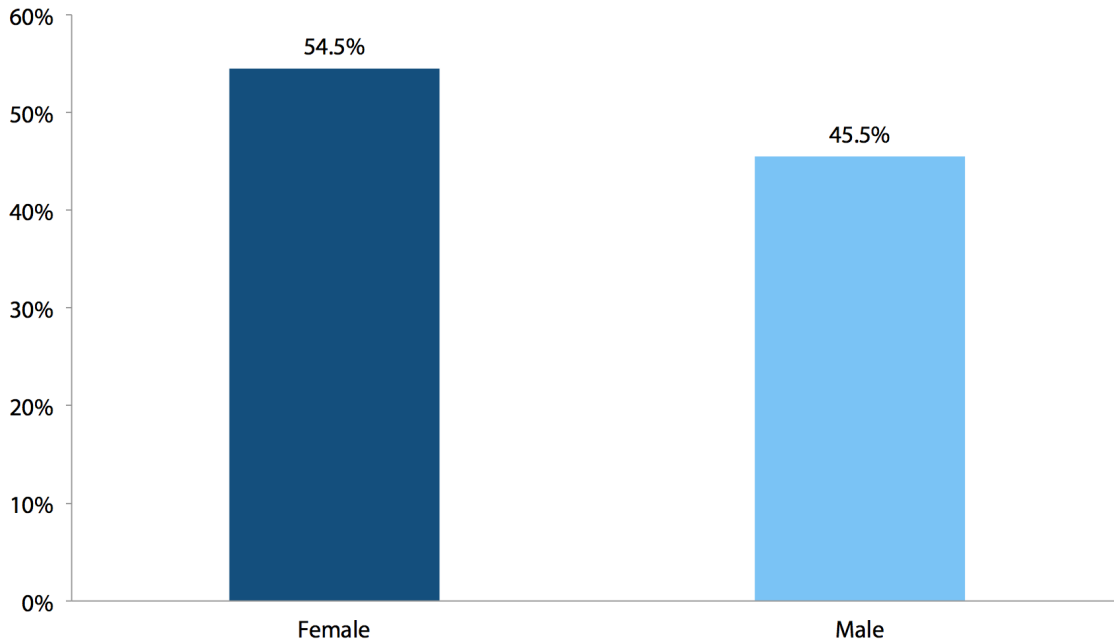
Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

- The Asian/other composition ranges from 0.5 percent in West Virginia to 75.2 percent in Hawaii.

- The black composition ranges from 0.0 percent in Montana to 43.9 percent in Mississippi (and 53.3 percent in the District of Columbia).

- The Hispanic composition ranges from 0.6 percent in Vermont to 58.7 percent in California.

- The white composition ranges from 9.8 percent in Hawaii to 94.7 percent in West Virginia.

Educational attainment

Data on educational attainment of those who would be affected by a minimum-wage increase further dispel the misperception of minimum-wage workers as high school students working in low-wage jobs for spending money. In fact, nationally just 22.6 percent of those who would be affected have less than a high school degree, while fully 42.3 percent have some college education, an associate degree, or a bachelor's degree or higher (see **Figure E**).

Work hours

Among those who would be affected by increasing the minimum wage to $9.80, only 15.0 percent are part-time workers (defined as those who work less than 20 hours per week). More than half (54.1 percent) work full time (35 or more hours per week), while 30.9 percent work between 20 and 34 hours per week, as seen in **Figure F**.

FIGURE C

Share of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014) who are age 20 or older, by state
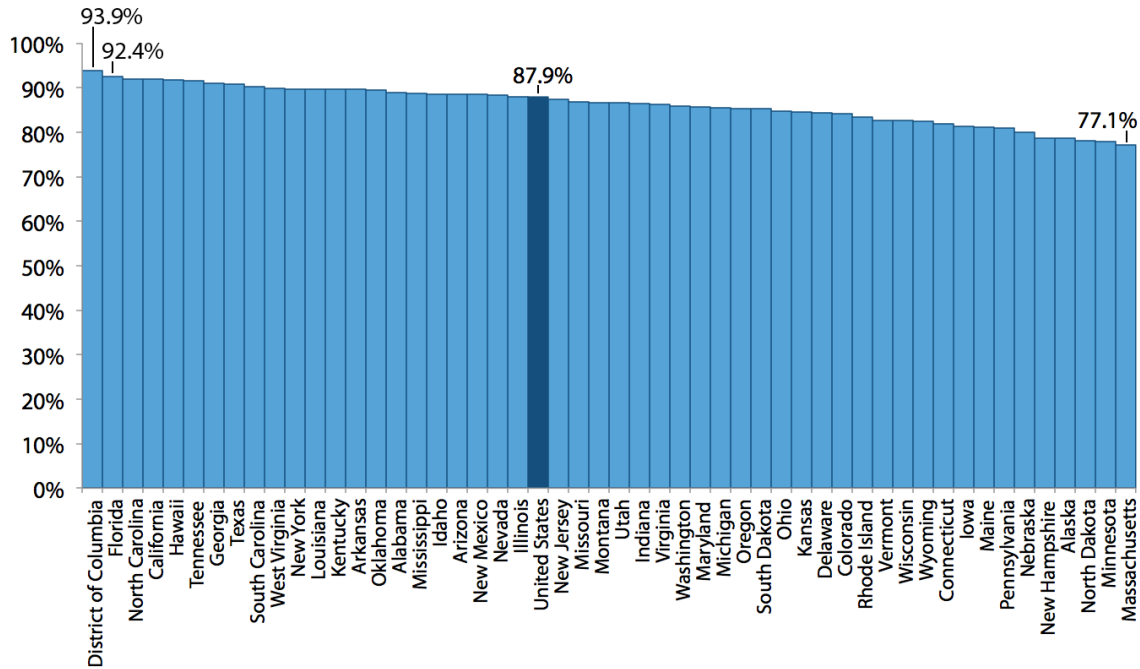
Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

As depicted in **Figure G**, Southern states generally have a much smaller share of affected workers who work part time. The states with the lowest shares include Texas (8.6 percent), Arkansas (10.0 percent), and Florida (10.4 percent). (The District of Columbia's share stands at 5.8 percent.) States with the highest shares of affected workers who work part time tend to be concentrated in the Northeast, led by Massachusetts (27.0 percent) and Connecticut (26.0 percent). They are followed by Minnesota (25.4 percent), New Hampshire (25.1 percent), and Maine (25.0 percent).

Family income

The family income of those who would be affected by a minimum-wage increase is generally low to moderate. As shown in **Figure H**, 70.7 percent of affected families have a total family income of less than $60,000, and nearly a quarter (23.6 percent) have total family income of less than $20,000. Among all U.S. families, the median family income in 2010 was $60,395 (according to data from the Current Population Survey).

The share of families affected by increasing the federal minimum wage to $9.80 with family income under $60,000 varies considerably by state, from about half (49.0 percent) in New Hampshire to more than four-fifths (83.1 percent) in Mississippi, as seen in **Figure I**.

Race/ethnicity of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)
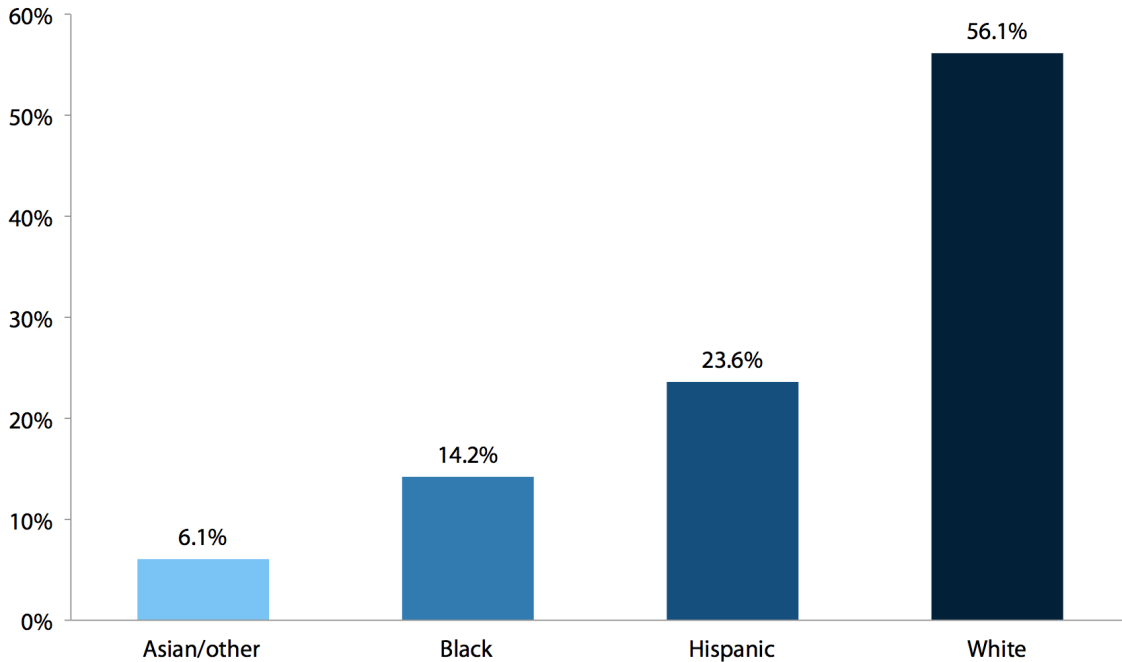
Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

Those who would be affected by increasing the minimum wage to $9.80 are vital contributors to their families' earnings. Nationally, the average affected worker earns roughly half (49.4 percent) of his or her family's total income, as shown in **Figure J**. This percentage varies from a low of 32.4 percent in Connecticut to a high of 59.5 percent in Mississippi.

Family composition

Nationally, over a quarter (28.0 percent) of those who would be affected by increasing the minimum wage to $9.80 are parents, while over a third (35.8 percent) are married (according to an analysis of Current Population Survey Outgoing Rotation Group microdata). Moreover, of the 76 million children in the United States, over a quarter (28.2 percent) have a parent who would benefit from the proposed federal minimum-wage increase. This percentage varies from 15.2 percent in Vermont (and 11.5 percent in the District of Columbia) to 39.5 percent in Texas, as shown in **Figure K**. Four other states where over a third of children have a parent who would benefit from the minimum-wage increase include Mississippi (36.7 percent), Oklahoma (35.6 percent), Georgia (33.9 percent), and Idaho (33.7 percent). Of the five states where more than a third of children have an affected parent, all but Idaho had child poverty rates of 25 percent or more in 2011 (Annie E. Casey Foundation 2012), highlighting the importance of boosting their family incomes by raising the minimum wage.

In short, a minimum-wage increase would boost the wages of a diverse multitude of American workers—and would thus have widespread economic benefits. The following section details the magnitude of these economic effects.

Educational attainment of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)
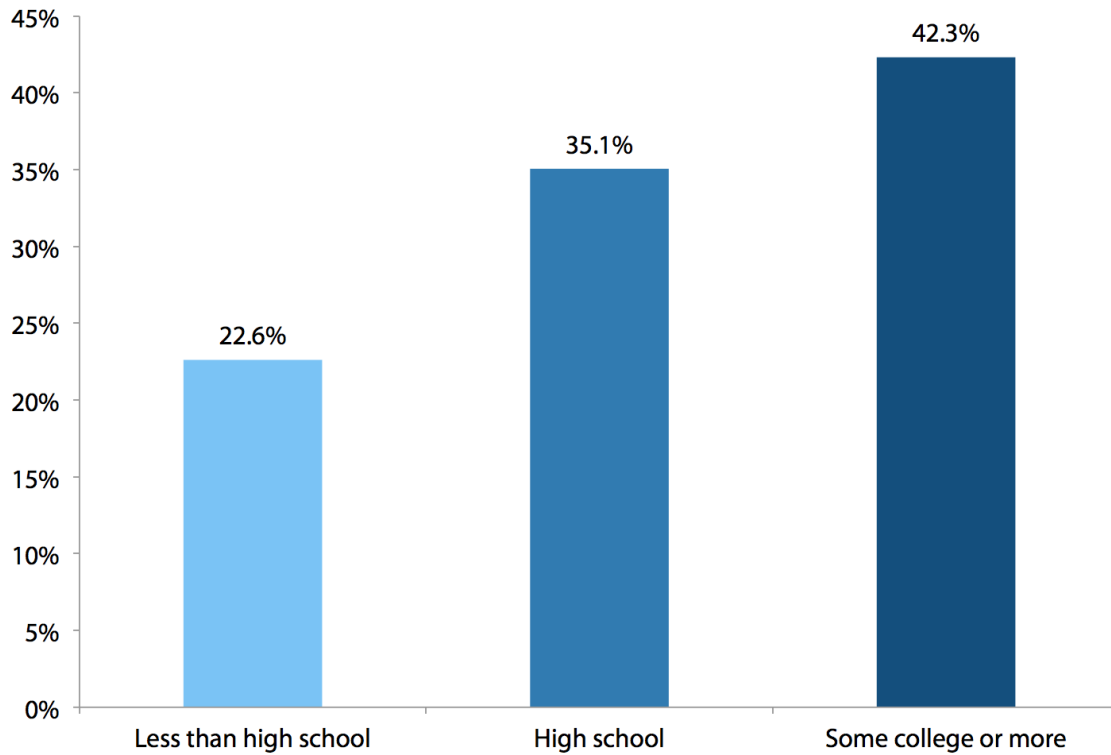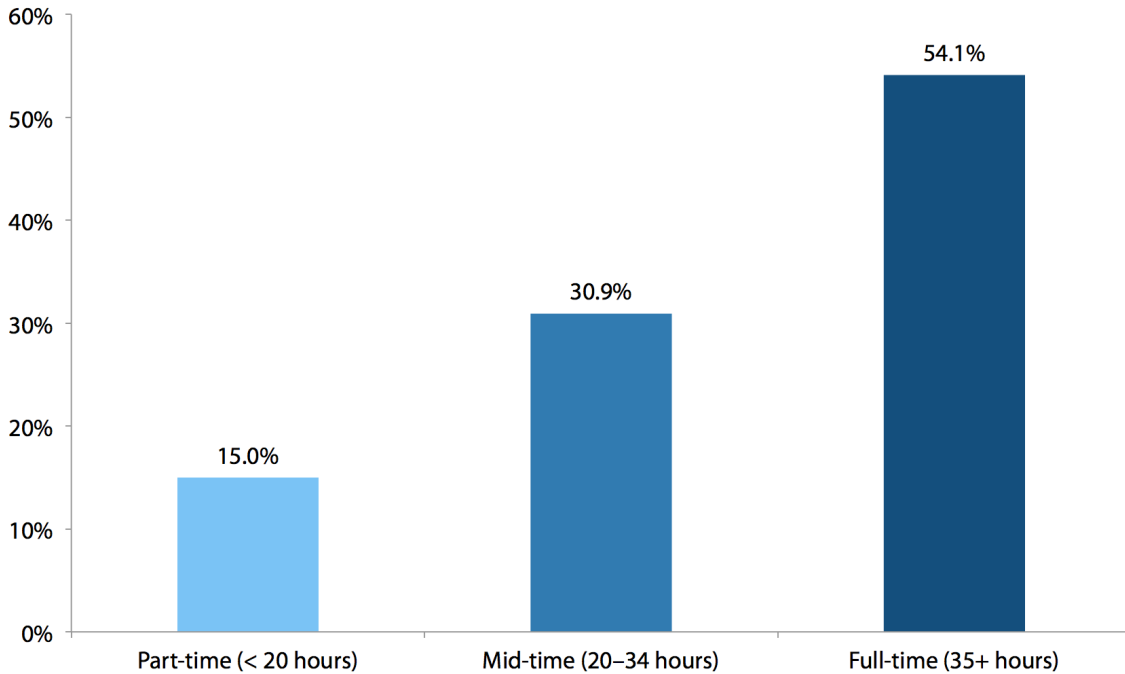

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

Raising the minimum wage as a tool for economic growth

The immediate benefits of a minimum-wage increase are in the boosted earnings of the lowest-paid workers, but its positive effects would far exceed this extra income. Recent research reveals that, despite skeptics' claims, raising the minimum wage does not cause job loss.[4] In fact, throughout the nation, minimum-wage increases would *create* jobs. Like unemployment insurance benefits or tax breaks for low- and middle-income workers, raising the minimum wage puts more money in the pockets of working families when they need it most, thereby augmenting their spending power. Economists generally recognize that low-wage workers are more likely than any other income group to spend any extra earnings immediately on previously unaffordable basic needs or services.

Increasing the federal minimum wage to $9.80 by July 1, 2014, would give an additional $39.7 billion over the phase-in period to directly and indirectly affected workers,[5] who would, in turn, spend those extra earnings. Indirectly affected workers—those earning close to, but still above, the proposed new minimum wage—would likely receive a boost in earnings due to the "spillover" effect (Shierholz 2009), giving them more to spend on necessities.

Work hours of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

This projected rise in consumer spending is critical to any recovery, especially when weak consumer demand is one of the most significant factors holding back new hiring (Izzo 2011).[6] Though the stimulus from a minimum-wage increase is smaller than the boost created by, for example, unemployment insurance benefits, it is still substantial—and has the crucial advantage of not imposing significant costs on government.

Assessing the economic benefits of a minimum-wage increase

Showing that raising the minimum wage would be a tool for modest job creation requires an examination of the stimulative effects of minimum-wage increases. Because minimum-wage increases come from employers, we must construct a "minimum-wage increase multiplier" that takes into account the increase in compensation to low-wage workers and the decrease in corporate profits that both occur as a result of minimum-wage increases. Raising the minimum wage means shifting profits from an entity (the employer) that is much less likely to spend immediately to one (the low-wage worker) that is more likely to spend immediately. Thus, increasing the minimum wage stimulates demand for goods and services, leading employers in the broader economy to bring on new staff to keep up with this increased demand.

When economists analyze the net economic stimulus effect of policy proposals (e.g., tax rate changes that boost income for some and reduce it for others), they use a set of widely accepted fiscal multipliers to calculate the total increase in economic activity due to a particular increase in spending. In applying these multipliers, economists generally recog-

Share of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014) who work part time,* by state
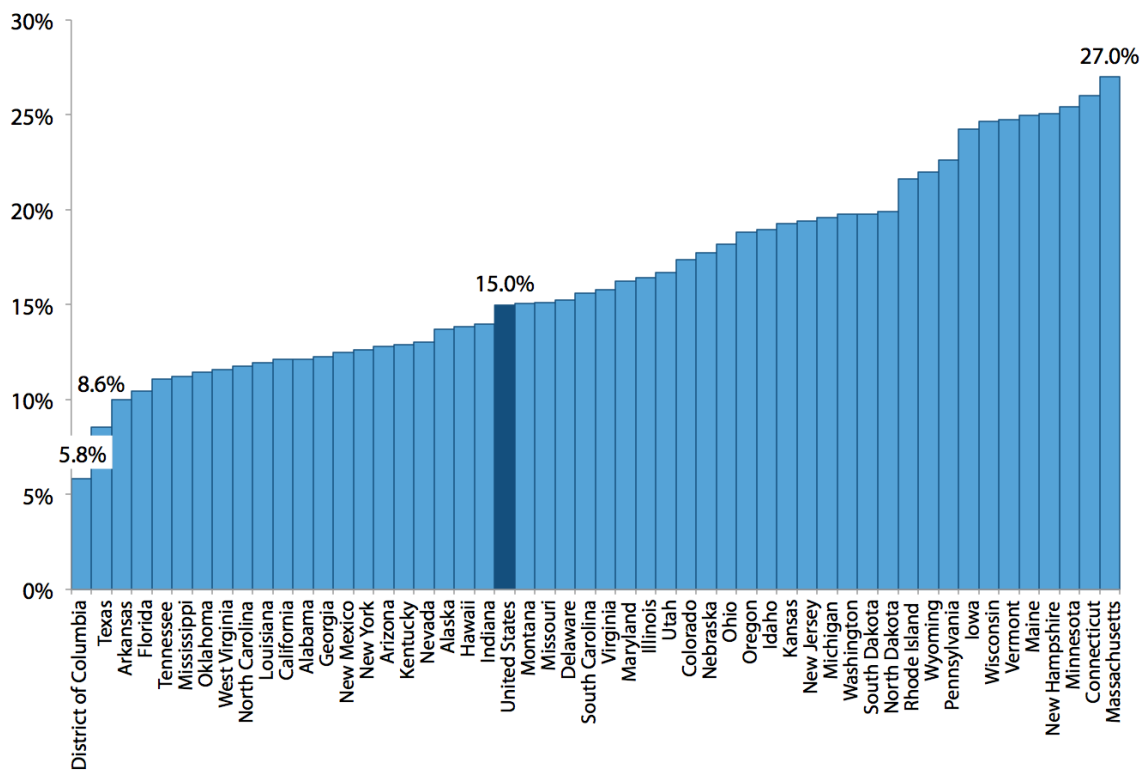
* Part-time workers are defined as those working less than 20 hours per week.
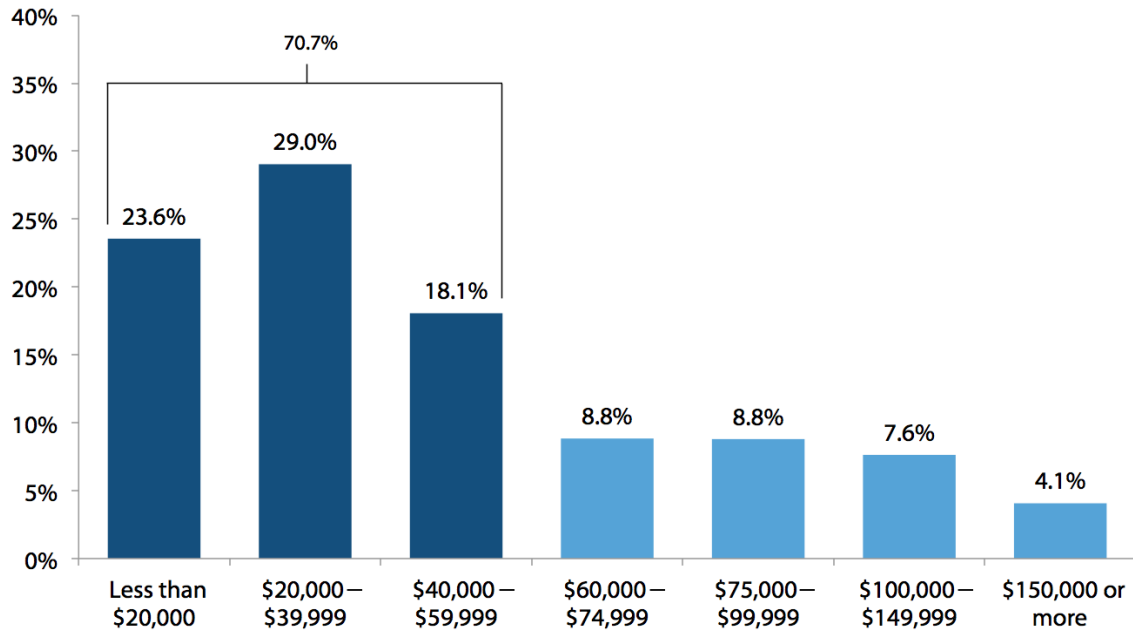
Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

nize a direct relationship between increased economic activity and job creation. This analysis assumes that a $115,000 increase in economic activity results in the creation of one new full-time-equivalent job in the current economy.[7]

Using these same standard fiscal multipliers to analyze the jobs impact of an increase in compensation of low-wage workers and decrease in corporate profits that result from a minimum-wage increase, we find that increasing the national minimum wage from $7.25 to $9.80 per hour by July 1, 2014, would result in a net increase in economic activity of approximately $25 billion over the phase-in period and over that period would generate approximately 100,000 new jobs (see Appendix for methodological details).[8] In fact, the hike in the federal minimum wage would create jobs in every state, as seen in **Appendix Table 1**. (Detailed state-level breakdowns of the demographics of workers who would be affected by the increase—and the degree to which the wages of various types of workers would rise—are available at http://www.epi.org/files/2012/minimumwagestateimpact.pdf.) Though the resulting employment impact is modest in the context of the millions of workers currently unemployed nationwide, creating tens of thousands of jobs would be a step in the right direction and would boost the economy.

Family income of workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014)

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

## The benefits of a minimum-wage increase in an economic downturn

Examining the positive effects of a minimum-wage increase leads to an overarching discussion of the economic case for increasing the earnings of the lowest-paid workers during an economic downturn. In the current economic climate, nearly everything is pushing against wage growth. With 3.4 unemployed workers for each job opening (Gould 2012), employers do not have to offer substantial wages to hire the workers they need, nor do they have to pay substantial wage increases to retain workers. Indeed, between 2009 (when the last minimum-wage increase took place) and 2011 (the most recent year for which data are available), nearly every state experienced wage erosion at the 20th percentile (according to an analysis of Current Population Survey data).

Even conservative economists suggest higher wages might help speed the recovery. American Enterprise Institute scholar Desmond Lachman, a former managing director at Salomon Smith Barney, told *The New York Times*, "Corporations are taking huge advantage of the slack in the labor market—they are in a very strong position and workers are in a very weak position. They are using that bargaining power to cut benefits and wages, and to shorten hours." According to Lachman, that strategy "very much jeopardizes our chances of experiencing a real recovery" (Powell 2011).

Furthermore, the national unemployment rate currently stands at 8.3 percent and is not expected to return to pre-recession levels for several years. Considering the past year's sluggish job growth rate, a minimum-wage increase that creates about 100,000 new jobs would help strengthen the recovery.

FIGURE I

Share of families affected by increasing the federal minimum wage to $9.80 (by July 1, 2014) with family income under $60,000, by state
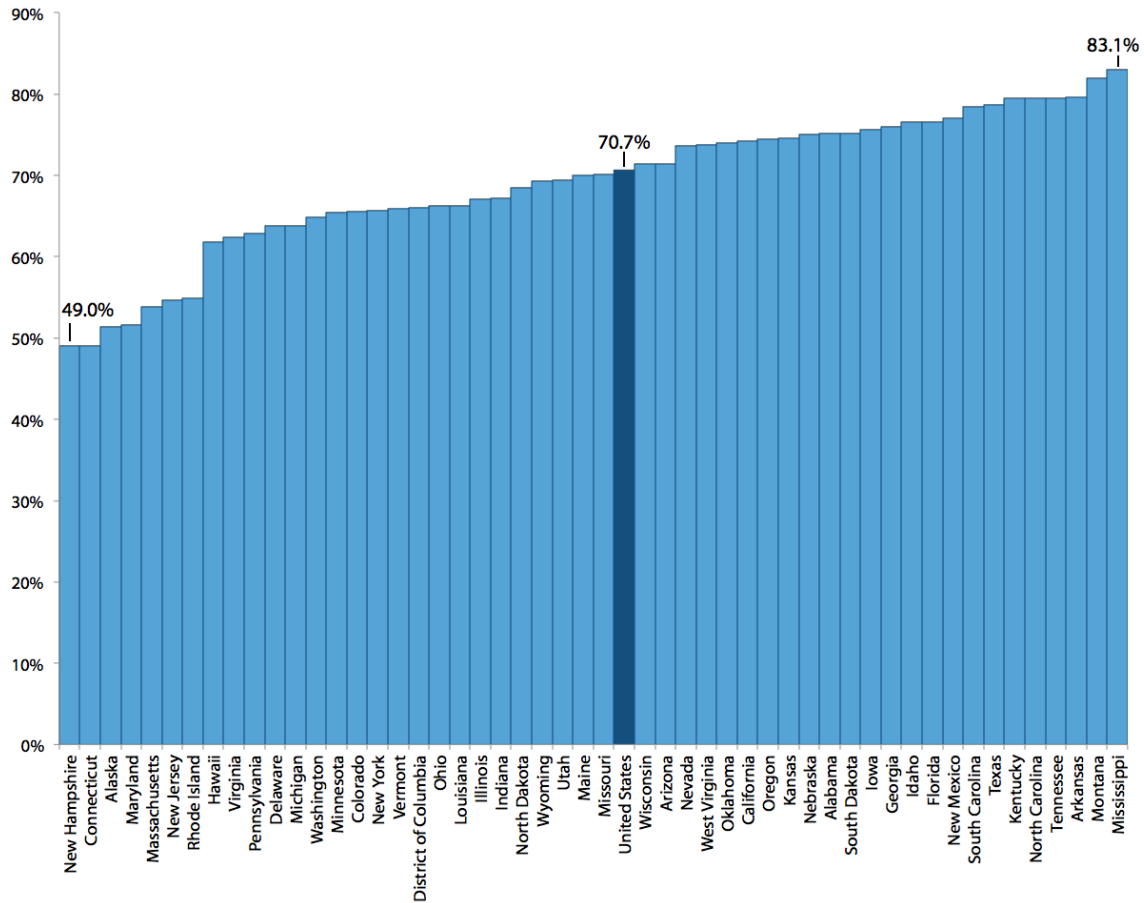
Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

Conclusion

The multiple positive effects that would result from a higher minimum wage are clear: It would boost the earnings of working families hardest hit by the Great Recession, spur economic growth, and create about 100,000 net new jobs. In an economic climate in which wage increases for the most vulnerable workers are scarce, raising the minimum wage to $9.80 by July 1, 2014, is an opportunity that America's working families cannot afford to lose.

Appendix: Methodology

An analysis of the stimulative impact of raising the minimum wage draws on the macroeconomic multipliers calculated by Moody's Analytics Chief Economist Mark Zandi (2011), which estimate the one-year dollar change in gross domestic product (GDP) for a given dollar reduction in federal tax revenue or increase in spending. Averaging the stimulus multipliers of the Earned Income Tax Credit (within the parameters of the American Recovery and Reinvestment Act, or

Average share of family income earned by workers affected by increasing the federal minimum wage to $9.80 (by July 1, 2014), by state
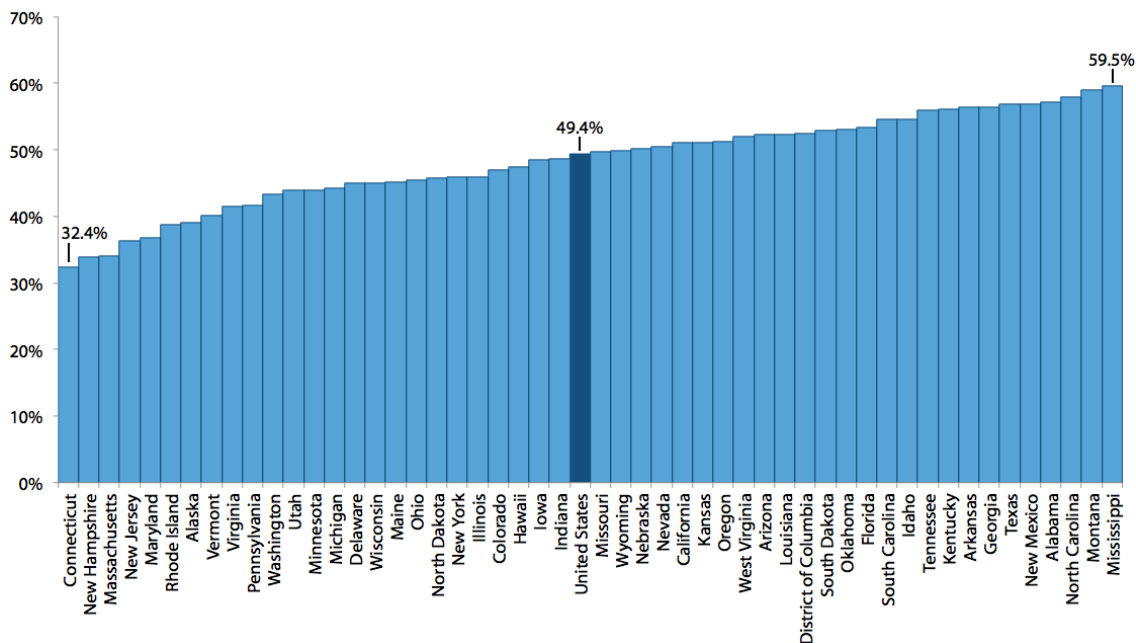
ARRA) and Making Work Pay (ARRA's refundable tax credit for working individuals and families) gives a reasonable fiscal stimulus multiplier for the spending increase due to the increase in compensation of low-wage workers. This value is 1.2, which means that a $1 increase in compensation to low-wage workers leads to a $1.20 increase in economic activity.

The calculation of the stimulative impact of the minimum wage, however, must also account for the offsetting shift from employers. We assume employers pass on some of the minimum-wage increase (somewhere between 20 percent and 50 percent) to consumers through increased prices. Thus, we calculate the offsetting multiplier effects as a weighted average of Zandi's across-the-board tax cut (1.04, as a proxy for increased prices) and a cut in the corporate tax rate (0.32).

The minimum-wage (MW) multiplier is between:

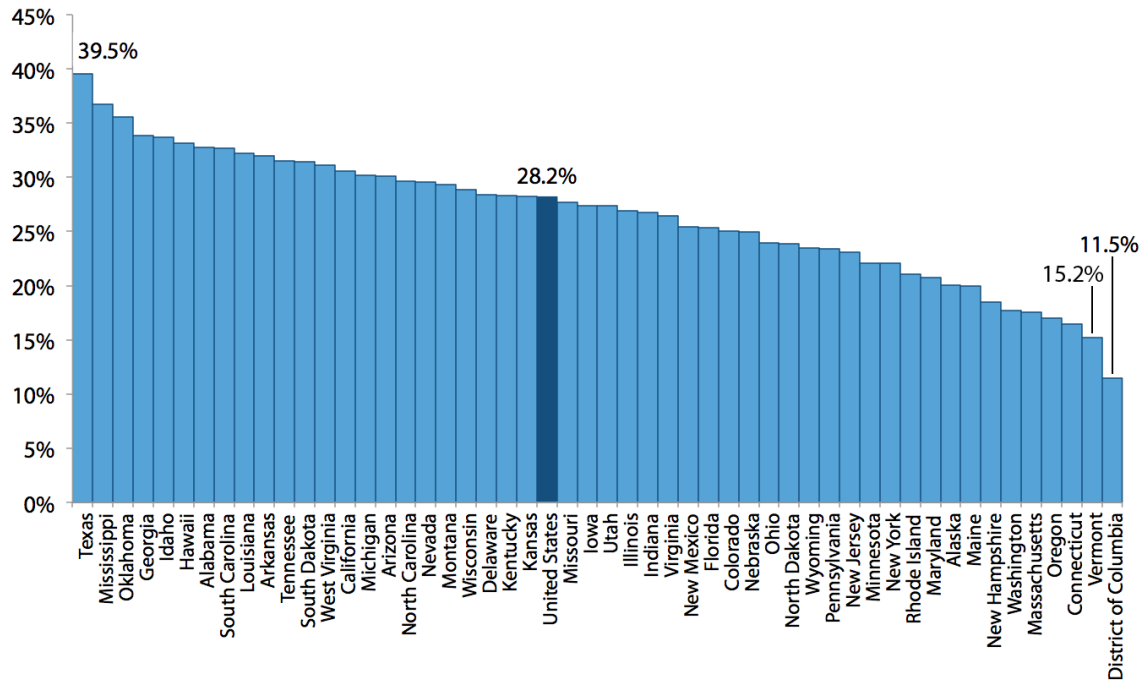1.2 MW consumer spending increase multiplier – [0.32 corporate tax rate cut*(1-0.5 price pass-through) + (1.04 across-the-board tax cut*0.5 price pass-through)] = 0.53

(representing the case where 50 percent of the minimum-wage increase is passed through to prices)

and

Share of children with a parent affected by increasing the federal minimum wage to $9.80 (by July 1, 2014), by state

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

1.2 MW consumer spending increase multiplier – [0.32 corporate tax rate cut*(1-0.2 price pass-through) + (1.04 across-the-board tax cut*0.2 price pass-through] = 0.74

(representing the case where 20 percent of the minimum-wage increase is passed through to prices).

Taking into account the fiscal stimulus multiplier range of the minimum-wage increase (0.53 to 0.74) and the increased wages ("wage bill increase") of directly affected workers, we can calculate the GDP impact of the proposal to increase the minimum wage to $9.80.

The GDP impact is between:

$39,677,170,000 total wage bill increase*0.53 minimum-wage multiplier (low) = $21,028,900,100 GDP impact (low)

and

$39,677,170,000 total wage bill increase*0.74 minimum-wage multiplier (high) = $29,361,105,800 GDP impact (high).

We use the general rule that it takes a GDP increase of $115,000 to create one full-time-equivalent (FTE) job. Then, calculating the impact of an increase in the federal minimum wage to $9.80 across three years, the number of FTE jobs created is between:

$21,028,900,100 GDP impact (low)/$115,000 GDP increase per FTE job = 182,860 FTE job years

and

$29,361,105,800 GDP impact (high)/$115,000 GDP increase per FTE job = 255,314 FTE job years.

Thus, we would say that approximately 220,000 FTE job years would be created.

Full-time-equivalent job measurements take into account both the increase in the number of payroll jobs and the increase in work hours for those who already had jobs by calculating the equivalent number of 40-hours-per-week jobs that would be created by the GDP boost. The figures above describe the job creation impact of the total increase in wages resulting from all three stages of the proposed increase in the minimum wage. **Appendix Table 2** shows the job years supported by each stage of the proposed increase.

As shown in the table, an increase in the federal minimum wage to $9.80 on July 1, 2014, would—in the year following its full implementation—result in 103,000 jobs (72,000 of which would be retained from year two, with the remainder created in year three). Over the course of the three yearly incremental increases, a conservative estimate of the total job years that would be created is approximately 218,000.

Endnotes

1. In each of these bills, the first incremental increase would take place three months after enactment of the bill. The calculations in this paper assume the first incremental increase occurring on July 1, 2012.

2. The phase-in period modeled for this report would commence upon enactment of the initial minimum-wage increase (assumed in this study to be July 1, 2012) and run through June 30, 2015, though there is no way to precisely allocate the distribution of the GDP impact and related job creation following each incremental increase in the minimum wage.

3. These data, and the data presented throughout this issue brief, include directly affected workers (those who would see their wages rise because the new minimum wage would exceed their current hourly pay) and indirectly affected workers (those who would receive a raise as employer pay scales are adjusted upward to reflect the higher minimum wage).

4. See the recent EPI paper *The benefits of raising Illinois' minimum wage: An increase would help working families and the state economy* (Hall and Gable 2012) for a description of the definitive studies on minimum-wage increases and the absence of disemployment effects.

5. The increased wages are the annual amount of increased wages for directly and indirectly affected workers, assuming they work 52 weeks per year.

6. In a recent poll of 53 economists by *The Wall Street Journal*, the majority (65 percent) cited a lack of demand as the main reason for a lack of new hiring by employers (Izzo 2011).

7. In a paper on the methodology used to estimate the jobs impact of various policy changes, the Economic Policy Institute's Josh Bivens found that $115,000 in additional economic activity results in the creation of one new full-time-equivalent job (Bivens 2011).

8. Jobs created as a result of increased GDP are measured in job years. (One full-time job held for one year is one job year. Two full-year part-time jobs equaling a total of 40 hours a week, 52 weeks a year equal one job year. Two half-year full-time jobs equal one job year.) In each subsequent year of minimum-wage increase, there would be a net increase in the number of jobs created. In the first year, approximately 43,000 jobs would be created. In the second year, new jobs would be created and the jobs created in year one would be sustained, totaling approximately 72,000. In the third year, new jobs would be created and the jobs from years one and two would be sustained, totaling about 103,000 full-time-equivalent jobs. This number is the best approximation of how many net new jobs would result from the economic impact of increasing the minimum wage to $9.80. The sum of jobs that would be created in years one, two, and three brings a multi-year total of 218,000 job years.

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Estimated effects of proposed federal minimum-wage increase, fully phased-in, by state

State	Total estim-ated workers[1]	Directly affected[2]	Indirectly affected[3]	Total affected	Increased wages for directly and indirectly affected[4]	GDP impact[5]	Jobs impact: full-time employment[6]
United States	127,361,000	19,485,000	8,869,000	28,354,000	$39,677,170,000	$25,115,649,000	103,000
Alabama	1,814,000	329,000	163,000	492,000	741,320,000	469,255,000	1,800
Alaska	310,000	30,000	17,000	47,000	65,320,000	41,348,000	200
Arizona	2,539,000	387,000	188,000	575,000	749,860,000	474,661,000	1,800
Arkansas	1,135,000	235,000	106,000	341,000	581,256,000	367,935,000	1,500
California	14,154,000	2,101,000	1,043,000	3,143,000	3,835,584,000	2,427,925,000	11,300
Colorado	2,220,000	305,000	115,000	420,000	614,186,000	388,780,000	1,700
Connecticut	1,564,000	153,000	79,000	232,000	227,773,000	144,180,000	700
Delaware	377,000	49,000	29,000	78,000	93,422,000	59,136,000	200
District of Columbia	286,000	20,000	11,000	31,000	44,420,000	28,118,000	100
Florida	7,403,000	1,006,000	511,000	1,517,000	2,213,016,000	1,400,839,000	5,600
Georgia	3,948,000	665,000	310,000	975,000	1,435,400,000	908,608,000	3,500
Hawaii	534,000	72,000	35,000	107,000	158,410,000	100,274,000	400
Idaho	603,000	122,000	50,000	172,000	283,467,000	179,435,000	800
Illinois	5,506,000	830,000	408,000	1,238,000	1,384,249,000	876,230,000	4,500
Indiana	2,732,000	436,000	196,000	632,000	901,528,000	570,668,000	2,100
Iowa	1,412,000	225,000	107,000	332,000	419,100,000	265,291,000	1,000
Kansas	1,289,000	215,000	79,000	294,000	442,106,000	279,853,000	1,100
Kentucky	1,707,000	296,000	135,000	431,000	606,246,000	383,753,000	1,400
Louisiana	1,744,000	307,000	145,000	451,000	691,678,000	437,832,000	1,700
Maine	565,000	76,000	41,000	117,000	131,752,000	83,399,000	400
Maryland	2,594,000	278,000	153,000	431,000	595,142,000	376,725,000	1,500
Massachusetts	2,935,000	318,000	145,000	463,000	544,842,000	344,885,000	1,700
Michigan	3,911,000	684,000	280,000	964,000	1,441,669,000	912,576,000	3,700
Minnesota	2,495,000	315,000	149,000	464,000	601,748,000	380,906,000	1,600
Mississippi	1,099,000	232,000	84,000	316,000	570,414,000	361,072,000	1,300
Missouri	2,582,000	420,000	170,000	590,000	868,093,000	549,503,000	2,100
Montana	383,000	61,000	33,000	94,000	130,685,000	82,724,000	300
Nebraska	843,000	132,000	57,000	189,000	243,729,000	154,280,000	600
Nevada	1,069,000	161,000	82,000	243,000	279,947,000	177,206,000	800
New Hampshire	628,000	69,000	40,000	109,000	125,902,000	79,696,000	300
New Jersey	3,884,000	486,000	229,000	715,000	953,031,000	603,269,000	2,300
New Mexico	737,000	99,000	41,000	140,000	197,557,000	125,054,000	500
New York	8,054,000	977,000	509,000	1,486,000	1,984,433,000	1,256,146,000	4,700
North Carolina	3,657,000	646,000	269,000	915,000	1,339,022,000	847,601,000	3,400
North Dakota	323,000	47,000	22,000	69,000	94,870,000	60,052,000	200

State	Total estim-ated workers[1]	Directly affected[2]	Indirectly affected[3]	Total affected	Increased wages for directly and indirectly affected[4]	GDP impact[5]	Jobs impact: full-time employment[6]
Ohio	4,899,000	914,000	313,000	1,227,000	1,860,895,000	1,177,947,000	4,700
Oklahoma	1,483,000	258,000	114,000	372,000	572,160,000	362,177,000	1,400
Oregon	1,601,000	221,000	112,000	333,000	311,175,000	196,974,000	1,700
Pennsylvania	5,447,000	809,000	333,000	1,142,000	1,589,574,000	1,006,200,000	3,900
Rhode Island	462,000	66,000	29,000	95,000	119,861,000	75,872,000	300
South Carolina	1,758,000	314,000	154,000	468,000	685,264,000	433,772,000	1,700
South Dakota	366,000	61,000	30,000	92,000	119,148,000	75,421,000	300
Tennessee	2,544,000	454,000	222,000	677,000	970,623,000	614,404,000	2,400
Texas	10,395,000	2,030,000	770,000	2,801,000	4,880,567,000	3,089,399,000	11,500
Utah	1,163,000	188,000	93,000	281,000	412,094,000	260,855,000	1,000
Vermont	296,000	32,000	24,000	56,000	52,815,000	33,432,000	200
Virginia	3,616,000	512,000	239,000	751,000	1,100,846,000	696,835,000	2,700
Washington	2,780,000	256,000	171,000	427,000	308,647,000	195,374,000	1,700
West Virginia	684,000	141,000	41,000	182,000	316,897,000	200,595,000	800
Wisconsin	2,576,000	409,000	176,000	585,000	718,462,000	454,786,000	1,800
Wyoming	255,000	33,000	16,000	50,000	66,969,000	42,391,000	200

1. Total estimated workers is estimated from the CPS respondents for whom either a valid hourly wage is reported or one can be imputed from weekly earnings and average weekly hours. Consequently, this estimate tends to understate the size of the full state workforce.

2. Directly affected workers will see their wages rise, as the new minimum-wage rate will exceed their current hourly pay.

3. Indirectly affected workers currently have a wage rate just above the new minimum wage (between the new minimum wage, and the new minimum wage plus the dollar amount of the increase in the 2012 minimum wage). They will receive a raise as employer pay scales are adjusted upward to reflect the new minimum wage.

4. Increased wages: total amount of increased wages for directly and indirectly affected workers, assuming they work 52 weeks a year

5. GDP impact figures utilize a national model to estimate the GDP impact of workers' increased earnings. Thus, the total state stimulus may be lower than this amount because workers in each state will not necessarily spend all of their increased earnings in-state. However, we can assume that most of the increased earnings will be spent in-state, and thus most of the jobs created will be in-state. Figures are three-year totals.

6. The increased economic activity from these additional wages adds not just jobs but also hours for people who already have jobs (work hours for people with jobs also dropped in the downturn). Full-time employment takes that into account by essentially taking the number of total hours added (including both hours from new jobs and more hours for people who already have jobs) and dividing by 40, to get full-time-equivalent jobs added. Jobs numbers are job years following the third-year increase. Figures assume full-time employment requires $115,000 in additional GDP.

Notes: Figures may not sum to total due to rounding. Job impact estimation methods can be found in Hall and Gable (2012) and Bivens (2011).

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata

Effects of proposed federal minimum-wage increase, 2012–2015

	Size of increase	Total estimated workers[1]	Directly affected[2]	Indirectly affected[3]	Total affected	Total affected as % of workers	Increased wages for directly and indirectly affected[4]	Average individual increase in annual income	GDP impact[5]	Jobs impact: full-time employment[6]	Three-year total: job years
Three-stage increase to $9.80/hour, modeled for July 2012, July 2013, July 2014											
2012: $8.10	$0.85	124,925,000	9,445,000	3,244,000	12,689,000	10.2%	$7,879,829,000	$620	$4,987,932,000	43,000	
2013: $8.95	$0.85	126,137,000	13,902,000	6,291,000	20,193,000	16.0%	$13,080,697,000	$650	$8,280,081,000	72,000	
2014: $9.80	$0.85	127,361,000	19,485,000	8,869,000	28,354,000	22.3%	$18,716,644,000	$660	$11,847,636,000	103,000	
			Multi-year total:		28,354,000		$39,677,170,000		$25,115,649,000		218,000

1. Total estimated workers is estimated from the CPS respondents for whom either a valid hourly wage is reported or one can be imputed from weekly earnings and average weekly hours. Consequently, this estimate tends to understate the size of the full workforce.

2. Directly affected workers will see their wages rise, as the new minimum-wage rate will exceed their current hourly pay.

3. Indirectly affected workers currently have a wage rate just above the new minimum wage (between the new minimum wage, and the new minimum wage plus the dollar amount of the increase in the 2012 minimum wage). They will receive a raise as employer pay scales are adjusted upward to reflect the new minimum wage.

4. Increased wages: annual amount of increased wages for directly and indirectly affected workers, assuming they work 52 weeks a year

5. GDP and job impact figures estimate the GDP impact of workers' increased earnings after controlling for the reduction in corporate profits.

6. The increased economic activity from these additional wages adds not just jobs but also hours for people who already have jobs (work hours for people with jobs also dropped in the downturn). Full-time employment takes that into account by essentially taking the number of total hours added (including both hours from new jobs and more hours for people who already have jobs) and dividing by 40, to get full-time-equivalent jobs added. Jobs numbers assume full-time employment requires $115,000 in additional GDP. Jobs impact total is in job years.

Notes: Annual population growth: 0.79% (U.S. projected average annual rate from 2000 to 2020, according to Census). Wage growth: 1.19% in year one (2011 average of bottom 20th-percentile wage in the United States), 2.80% in years two and three (five-year average from 2002 to 2006, using CPS-ORG). Job impact estimation methods can be found in Hall and Gable (2012) and Bivens (2011).

Source: Authors' analysis of Harkin/Miller proposal using Current Population Survey Outgoing Rotation Group microdata