A $15 minimum wage would have significant and direct effects on the federal budget

Report • By Ben Zipperer, David Cooper, and Josh Bivens • February 2, 2021
If the 2021 Raise the Wage Act were passed and the federal hourly minimum wage increased to $15 by 2025, we estimate that annual government expenditures on major public assistance programs would fall by between $13.4 billion and $31.0 billion.¹

- Earned income tax credit (EITC) and child tax credit (CTC) expenditures would decline by somewhere between $6.5 billion and $20.7 billion annually.
- Expenditures on the Supplemental Nutrition Assistance Program (SNAP) and other major government transfers would fall by between $5.2 billion and $10.3 billion annually.
- Reduced annual expenditures on SNAP alone would range from $3.3 billion to $5.4 billion.

We also estimate that the $15 federal minimum wage in 2025 would increase annual Federal Insurance Contributions Act (FICA) revenue by between $7.0 billion and $13.9 billion.

Economic background for these estimates

While there is often heated discussion about the effects of the minimum wage, there is a near consensus that minimum wage increases have raised the total earnings of low-wage workers.² In addition, simulations of the effects of a $15 hourly minimum wage by 2025 estimate that the policy would substantially raise the annual earnings of the low-wage workforce. In particular, EPI estimates that nearly 32 million workers would see higher earnings because of the 2021 Raise the Wage Act, which would raise the minimum wage in steps until it reaches $15 by 2025. Congressional Budget Office (CBO) analysis of similar legislation in 2019 also found that the policy would raise the earnings of 27 million low-wage workers.³

These large wage increases would disproportionately raise the incomes of families at the bottom of the income distribution and would meaningfully reduce the number of families in poverty. Jacobs, Perry, and MacGillvary (2021) concluded that in states without existing laws to raise the

Endnotes

1. Earned income tax credit (EITC) and child tax credit (CTC) expenditures would decline by somewhere between $6.5 billion and $20.7 billion annually.
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Table 1

### Reductions in government transfers and tax credits due to a national $15 minimum wage in 2025, billions (2021$)

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Major government transfers and tax credits</th>
<th>SNAP and other major transfers</th>
<th>EITC and CTC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dube 2019b and EPI 2021</strong></td>
<td>-$31.0</td>
<td>-$10.3</td>
<td>-$20.7</td>
</tr>
<tr>
<td><strong>Dube 2019b and CBO 2019</strong></td>
<td>-$15.5</td>
<td>-$5.2</td>
<td>-$10.3</td>
</tr>
<tr>
<td><strong>Cooper 2016 and EPI 2021</strong></td>
<td>-$13.4</td>
<td>-$7.0</td>
<td>-$6.5</td>
</tr>
</tbody>
</table>

Note: SNAP stands for Supplemental Nutrition Assistance Program; EITC stands for earned income tax credit; CTC stands for child tax credit.


To estimate the overall reduction in public assistance expenditures that would directly accompany an increase in the minimum wage, we used estimates of earnings increases due to a $15 minimum wage by 2025 and combined them with three sets of research studies that estimate program expenditure reductions after rising minimum wages and incomes. **Table 1** shows the resulting annual reduction in public assistance expenditures ranges from $13.4 billion to $31.0 billion.  

### Three estimates explained

To estimate the effect of the Raise the Wage Act on public spending, we rely on four research papers. The first, by Arindrajit Dube (2019b) is an estimate of the effect of a rise in the minimum wage on family incomes—inclusive of both labor earnings and government transfers (safety net and social insurance programs that provide resources to individuals and families with specific needs), including refundable tax credits. The second, by David Cooper (2016), estimates the incremental effect of a $1 increase in wages on the incidence and value of means-tested government assistance program expenditures received by workers. The third, by the Economic Policy Institute (EPI 2021), estimates the increase in labor earnings that would result from the Raise the Wage Act of 2021. The final, by CBO (2019), provides an estimate of the number of workers affected by an earlier version of the Raise the Wage Act from 2019.
Row 1: Combining Dube and EPI studies

The first row in Table 1 shows the estimate obtained by combining the results of Dube (2019b) and EPI (2021). In an analysis of all state and federal minimum wage increases between 1984 and 2013, Dube (2019b) estimated that every $1 of family income increase due to the boost to labor earnings spurred by the policy was partially offset by a $0.34 reduction in public assistance. Approximately two-thirds of the benefit reduction was due to reduced tax credits—the EITC and CTC—and the remaining one-third of the reduction came from reduced usage of SNAP, the National School Lunch Program, and housing subsidies.

EPI (2021) provides an analysis of the 2021 Raise the Wage Act, finding that the total annual earnings of affected workers would rise by $91.1 billion. Assuming the Dube (2019b) offset of 34% due to a reduction in public benefits after increased labor earnings, these results imply a $31 billion reduction in benefits: $20.7 billion is due to reduced refundable tax credits (the EITC and CTC) and the rest is due to reduced spending on SNAP and other transfer programs.

Row 2: Combining Dube and CBO studies

Row 2 shows results from combining the Dube (2019b) estimates on public assistance offsets to increases in labor earnings with the CBO (2019) estimates on the labor earnings gain resulting from the Raise the Wage Act. CBO (2019) estimates that this act would raise labor earnings for the low-wage workforce by $45.4 billion on net. Applying the 34% offset due to a reduction in public assistance after the rise in labor earnings estimated by Dube (2019b) to the $45.4 billion increase in labor earnings estimated by CBO (2019) yields a decline in public spending of $15.5 billion. Of this decline, $10.3 billion stems from reduced refundable tax credits and $5.2 billion stems from reduced government transfers (SNAP and other major public transfers).

Row 3: Combining Cooper and EPI studies

Cooper (2016) found that a $1 increase in hourly wages for those in the bottom three-to-four wage deciles was associated with significantly reduced likelihood of receiving public assistance in the form of SNAP and other transfers, as well as tax credits like the EITC and CTC. Row 3 combines estimates from Cooper 2016 and EPI 2021 to yield an estimate of reduced public expenditures following an increase in the minimum wage to $15. EPI (2021) found that the Raise the Wage Act of 2021 would boost the wages of directly and indirectly affected workers by $2.64 and $0.69 per hour, on average. Combining these estimates with the results from Cooper 2016 shows that government expenditures on public assistance would fall by $13.4 billion, where that amount is split relatively evenly between reduced SNAP and other major public transfers and reduced EITC and CTC expenditures.

Mechanisms through which higher
Table 2

<table>
<thead>
<tr>
<th>Methodology</th>
<th>SNAP</th>
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</thead>
<tbody>
<tr>
<td>Cooper 2016 and EPI 2021</td>
<td>-$5.4</td>
</tr>
<tr>
<td>Reich and West 2015 and EPI 2021</td>
<td>-$3.3</td>
</tr>
</tbody>
</table>

Note: SNAP stands for Supplemental Nutrition Assistance Program.
Sources: Cooper 2016, EPI 2021, Reich and West 2015.

minimum wages reduce public spending have been validated

While the studies in Table 1 provide the best aggregate estimates of what to expect in terms of how much higher minimum wages would reduce public spending, other studies have validated the channels through which these reductions would occur. For example, both Cooper (2016) and a study by Reich and West (2015) find that hourly and minimum wage increases reduce SNAP expenditures. In 2019, total SNAP benefit expenditures were approximately $57.0 billion in 2021 dollars, and Reich and West (2015) estimate that SNAP expenditures fall by 1.9% for every 10% increase in the minimum wage. Table 2 shows that, using the Reich and West 2015 results and assuming there are no other changes in inflation-adjusted SNAP expenditures, a $15 minimum wage in 2025 will reduce SNAP expenditures by $3.3 billion.\(^9\) Combining the specific estimates for SNAP in Cooper 2016 with hourly wage increases due to the 2021 Raise the Wage Act yields a relatively similar estimate for SNAP annual expenditure reductions: $5.4 billion.

Other potential fiscal effects of a higher minimum wage

Although these estimates quantify some of the direct fiscal impacts of raising the federal minimum wage through public assistance programs, minimum wage increases affect government revenue and expenditures through additional channels.

Most directly, because the minimum wage increases labor earnings, the 2021 Raise the Wage Act would increase FICA tax revenue from employer-side and employee-side contributions. Applying the total FICA rate of 15.3% to the labor earnings effect estimates of EPI 2021 and CBO 2019 implies that a $15 minimum wage in 2025 would increase annual FICA revenues from affected workers by $7.0 billion to $13.9 billion. Additionally, research by Borgschulte and Cho (2019) and Hampton and Totty (2020) provides evidence that higher minimum wages cause people nearing retirement age to work longer and delay receipt of Social Security benefits, thus positively affecting federal income and payroll tax revenues.
There are also likely many other ways in which a higher minimum wage could have fiscal effects. For example, there is also a growing body of research, summarized in Leigh, Leigh, and Du (2018), showing positive public health effects from higher minimum wages—such as lower incidence of smoking (Du and Leigh 2015), lower obesity (Kim and Leigh 2010), lower teen birth rates (Bullinger 2017), lower alcohol-related traffic fatalities (Adams, Blackburn, and Cotti 2012), lower suicide rates (Dow et al. 2020), and higher infant birth weight (Bhatia 2014)—all of which have implications for health care spending in Medicaid, Medicare, and Veterans Affairs. A healthier public also has higher long-run potential labor earnings, which implies stronger long-term income and payroll tax revenues.

**Conclusion: Fiscal effects of the Raise the Wage Act are direct and significant**

Several studies with different methodologies consistently point toward economically meaningful fiscal effects of the minimum wage. For example, the high-end estimates of over $30 billion in annual public assistance expenditure reductions are substantially larger than the total amount the federal government spent on its Housing Choice Voucher program for low-income families. The effects of a $15 minimum wage by 2025 would clearly and strongly show up within the 10-year budget window that is the basis for most fiscal debates.

**Endnotes**

1. The vast majority of expenditures in the public assistance programs discussed throughout this brief are federally funded. Thus, the impacts described would be largely at the federal level. However, some federally funded assistance programs are administered by states, and some states provide supplemental benefits on top of federal programs. Consequently, a higher federal minimum wage would have budgetary impacts in many states as well.

2. Most of the research on the minimum wage that has focused on the overall low-wage workforce or directly affected workers has found estimates that imply the earnings effect of the minimum wage is positive. For reviews, see the results for “overall low wage workers” in Chart 4.B of Dube 2019a. See also the results for “directly affected workers” in Figure 12 of Neumark and Shirley 2021.

3. See EPI 2021. Preliminary results from that analysis are currently available in a recently released fact sheet (EPI and NELP 2021). Also see CBO 2019.

4. The estimated annual reductions due to a $15 minimum wage in 2025 mean that government expenditures on public assistance programs (including “transfers” such as SNAP and tax expenditures such as the EITC) are expected to be somewhere between $13.4 billion and $31.0 billion lower each year in 2025 and later years than they would have been in the absence of a $15 minimum wage.

5. For underlying estimates of the earnings increase due to a $15 minimum wage in 2025, we used EPI 2021. Preliminary results from that analysis are currently available in a fact sheet (EPI and NELP
We also used CBO 2019. For estimates of government transfer and tax credit effects, we used Cooper 2016, Dube 2019b, and Reich and West 2015.

6. EPI (2021) found that if directly and indirectly affected workers worked year-round, the increase in earnings due to a $15 minimum wage by 2025 would be $106.8 billion. Accounting for the fact that many affected workers normally work less than 52 weeks per year reduces the earnings increase to $91.1 billion.

7. CBO 2019, p. 15, estimates that the annual income increase for the affected workforce would be about $44 billion: $64 billion in income increases due to higher hourly wages offset by $20 billion in income losses due to job losses. In projected 2021 dollars, the net increase would be $45.4 billion.

8. Directly affected workers are those who would otherwise earn less than $15 per hour in 2025. Indirectly affected workers are those who would earn slightly above $15 per hour in 2025, and who would likely get a raise as employers adjust pay scales to preserve some internal hierarchy. Directly affected workers ($2.64 per hour increase) would otherwise have projected hourly wages of less than $15 in 2025, and indirectly affected workers ($0.69 per hour increase) would already be earning just above $15 per hour. Hourly wage increases in dollar terms were not available from the CBO 2019 analysis.

9. Using already scheduled state and local minimum wages, EPI (2021) finds that the employment-weighted average minimum wage in 2025 would be $11.53. As a result, the 2021 Raise the Wage Act would raise the effective minimum wage by 30.1% to $15 in 2025.

10. FY 2019 appropriations for Housing Choice Vouchers were $20.3 billion. See Rice 2019.

References


