When a recession hits, the federal government usually responds with tax cuts and additional financial assistance, because automatic policies built into the law often prove inadequate and elected officials need and want to respond to the crisis. This brief compares the distributional and stimulus impacts of five fiscal policies aimed specifically at workers—three similar to policies applied during the Great Recession and two additional options: a temporary earned income tax credit expansion and a more progressive alternative to the expired Making Work Pay tax credit. Research today on such options can better prepare policymakers to react more effectively to tomorrow’s economic downturns.

Anti-recession or fiscal stimulus policies work mainly by pumping more money into the economy through lower taxes or higher government benefits—an often-expensive endeavor. Because federal debt as a share of GDP has grown to a higher peak than in any period besides the World War II era, and unlike that earlier peak is not scheduled (with war’s end) to decline, lawmakers’ options for responding to the next recession have become far more restricted. It is therefore imperative to glean which policies are most effective per dollar spent before the next economic crisis hits.

The five options examined in this brief target working adults, who bear the brunt of recessions through reduced employment and lower real wages.¹

- **Unemployment insurance (UI),** as in effect in the simulation year (2011). We use reported data on unemployment compensation received under both regular and extended benefits, rather than modeling some alternative compensation scheme.
- **Making Work Pay (MWP) tax credit**, a refundable income tax credit of 6.2 percent of wages with a maximum value of $400 for individual filers and $800 for married filers, as was in effect for tax years 2009 and 2010.

- **Payroll tax cut**, a 2 percentage-point Social Security payroll tax cut for employees, like the tax cut that was in effect from 2011 to 2012.

- **Modified Making Work Pay (MMWP) tax credit**, a refundable credit up to $1,000 per worker computed as 12.4 percent of wages (the combined employer plus employee Social Security tax rate), but made more progressive than MWP by phasing out at a 4 percent rate between $30,000 and $55,000 of earnings.

- **Expanded EITC**, a temporary 50 percent expansion of the maximum credit and phase-in rate of the earned income tax credit (EITC).

The first three options were enacted or in place during the last recession and recovery. The MMWP and the expanded EITC demonstrate two of many alternatives. Further specifications are laid out in table 1, and box 1 gives historical context for these policies.

Policies to improve worker conditions should be assessed based on three criteria:

- they should *provide income security* for those who have fewer resources on which to fall back during an economic hardship;

- they should *boost the economy*, which is closely related to how likely recipients will spend the additional money, thus helping to compensate for the economy-wide decline in consumer demand; and

- they should *incentivize work*, or at least discourage it as little as possible, so workers remain engaged in the labor force and the decline in employment is minimized.

This analysis uses the Tax Policy Center microsimulation model, which contains estimates for all households of earnings potentially eligible for the EITC, payroll taxes, unemployment compensation, and other items of income support, as well as the phasing out of these benefits. We simulate these policies individually for 2011—a year of high unemployment (8.9 percent) following the Great Recession. This allows us to better understand what policies might most effectively pump money into the economy and increase demand by targeting new money most effectively.²
BOX 1
Three Avenues for Delivering Worker Benefits

Unemployment Insurance
Unemployment insurance (UI) is a classic example of both automatic and discretionary fiscal policy during a recession. As unemployment increases, total benefits automatically increase as more people qualify for benefits. Congress also often extends or enhances benefits on a discretionary basis, typically for the longer-term unemployed who otherwise would run out of benefits after state time limits for benefits (usually 26 weeks) expire. During the Great Recession, lawmakers also temporarily exempted workers’ first $2,400 of unemployment compensation from the federal income tax for tax year 2009.

Payroll Taxes
In response to the Great Recession, lawmakers created additional economic stimulus for workers. Two such initiatives based benefits on workers’ Social Security earnings, though the payments were made out of general revenues so as not to reduce Social Security revenues: the Making Work Pay (MWP) tax credit and, later, a temporary payroll tax cut. The MWP was a refundable income tax credit of 6.2 percent of earned income (the employee share of the Social Security payroll tax) up to a maximum credit of $400 for individuals or $800 for married taxpayers. It was later replaced by a payroll tax holiday that effectively reduced the employee portion of the Old Age and Survivors Insurance tax from 6.2 percent to 4.2 percent for 2011 and, later, for 2012.

By basing the credit and the cut essentially on the same tax base as applied to Social Security payroll taxes, these policies extended recession-related tax benefits to households with incomes too low to owe federal income tax and benefit from income tax reductions alone. Most workers did benefit from these two tax cuts, though the benefits were either capped or phased out at high-income levels for a minority of taxpayers. These policies could be quickly and fairly precisely reflected in tax withholding soon after enactment; the number of taxpayers having to reconcile at tax-filing time the credit received during the year with the credit eventually allowed was mostly limited to those with more than one job or those with high incomes.

Earned Income Tax Credit
The earned income tax credit (EITC), first enacted in 1975 under President Ford and expanded under every president through Obama, is now the largest cash support program targeted to low-income households. The EITC phases in as earnings increase up to a modest level. That the EITC was designed partly as a welfare alternative, particularly to the former Aid to Families with Dependent Children (AFDC), helps explain why even today the program is most generous to households with children and provides little to single workers. In contrast to AFDC and some other welfare programs, the highest level of EITC benefits is paid to workers with modest earnings, not to those with no earnings at all.

There is some evidence that the EITC encouraged work among some groups (especially single parents) better than traditional welfare (Maag 2015). To date, a temporary EITC expansion for low- and moderate-income workers hasn’t been tried as an anti-recession policy.

\* Single taxpayers making more than $95,000 and joint filers making more than $190,000 were ineligible for the MWP credit. The payroll tax cut applied up to maximum taxable Social Security taxable wage: $106,800 in 2011 and $110,100 in 2012. When Congress extended the payroll tax holiday into 2012, it imposed but quickly reversed an $18,350 cap on wages eligible for the cut. These policies were introduced in the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5); Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (Pub. L. No. 111-312); Temporary Payroll Tax Cut Continuation Act of 2011 (Pub. L. No. 112-78); and Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. No. 112–96).
<table>
<thead>
<tr>
<th>Fiscal Policies for Workers during Recessions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unemployment Insurance (UI) compensation</strong></td>
</tr>
<tr>
<td>▪ As reported under the laws in effect in 2011</td>
</tr>
<tr>
<td>▪ Includes some discretionary expansions through extended benefits</td>
</tr>
<tr>
<td><strong>Making Work Pay (MWP)</strong></td>
</tr>
<tr>
<td>▪ Phase-in rate: 6.2 percent on wage and salary income</td>
</tr>
<tr>
<td>▪ Maximum credit: $400/worker</td>
</tr>
<tr>
<td>▪ Phase-out rate: 2 percent between $75,000 and $95,000</td>
</tr>
<tr>
<td><strong>Payroll tax cut</strong></td>
</tr>
<tr>
<td>▪ 2 percentage-point employee payroll tax cut</td>
</tr>
<tr>
<td>▪ On OASDI covered wages (maximum earnings subject to Social Security tax = $106,800 in 2011; $128,400 for 2018)</td>
</tr>
<tr>
<td><strong>Modified Making Work Pay (MMWP)</strong></td>
</tr>
<tr>
<td>▪ Phase-in rate: 12.4 percent on wage and salary income</td>
</tr>
<tr>
<td>▪ Maximum credit: $1,000/worker</td>
</tr>
<tr>
<td>▪ Phase-out rate: 4 percent between $30,000 and $55,000</td>
</tr>
<tr>
<td><strong>Expanded earned income tax credit (EITC)</strong></td>
</tr>
<tr>
<td>▪ 50 percent increase in phase-in rate over current law</td>
</tr>
<tr>
<td>▪ 50 percent increase in maximum credit over current law</td>
</tr>
<tr>
<td>▪ No change in phase-out rate</td>
</tr>
</tbody>
</table>

**Note:** Our simulation of UI, MWP, and the payroll tax cut approximate but do not attempt to replicate the fiscal policies in place for workers during or in response to the Great Recession.

### Comparison of Policies

The benefits available by earnings level are shown in figure 1 for all policies except UI, for which benefits depend on other factors like state program rules, previous earnings, and how long a worker is unemployed. Upward sloping lines reflect benefits that phase in as earnings increase, whereas downward sloping lines indicate that benefits are phased out over the relevant income range. A flat line means the benefit level remains constant over a range of income. Note that most policies apply to individual workers, not households. The EITC is an exception: the benefits are largely household based.

How do these five policies compare based on the three performance-based criteria described above?
Income Security

Because it is designed to replace a portion of lost income for workers who lose their jobs, unemployment compensation grants the largest average benefit for recipients (figure 2). Average annual benefits in the different quintiles of household income range between about $4,700 to $6,400, with the second and middle household income groups (those with household incomes between the 20th and 60th percentiles of the income distribution) receiving the largest average benefit. The enhanced EITC and MMWP credits, which phase in quickly and have high maximum credit amounts, offer the second and third largest benefits for the bottom three quintiles. The regular MWP’s relatively low cap and the payroll tax cut’s slow (two percent) phase-in offer smaller average benefits.

Who benefits under each policy? UI benefits the smallest number of households: only about 13 million workers (table 2). The expanded EITC concentrates benefits on low-income households with children, as it does under current law; about 31 million households would receive the enhanced benefit. The remaining three policies are more universal and benefit a greater number of workers. The MMWP’s smaller phase-out range means it reaches slightly fewer workers than the MWP or payroll tax cut.
FIGURE 2
Average Simulated Benefits for Beneficiary Households Only by Income Quintile
2011 dollars

Notes: Quintiles are defined by expanded cash income (described at http://www.taxpolicycenter.org/TaxModel/income.cfm) adjusted for household size. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. The income percentile classes used in this figure are based on the income distribution for the entire population and contain an equal number of people, not tax units. The 2011 quintile breaks are (in 2017 dollars) bottom, less than $15,700; second, $15,700–29,600; middle, $29,600–50,000; fourth, $50,000–83,000; and top, more than $83,000.

TABLE 2
Number of Beneficiaries, Average Benefit, and Total Cost of Simulated Policies

<table>
<thead>
<tr>
<th>Policy</th>
<th>Beneficiaries (millions of workers)</th>
<th>Average benefit ($)</th>
<th>Policy cost ($ billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Insurance</td>
<td>13</td>
<td>$5,858</td>
<td>$78</td>
</tr>
<tr>
<td>Making Work Pay tax credit</td>
<td>111</td>
<td>$501</td>
<td>$58</td>
</tr>
<tr>
<td>Payroll tax cut</td>
<td>121</td>
<td>$896</td>
<td>$108</td>
</tr>
<tr>
<td>Modified Making Work Pay tax credit</td>
<td>92</td>
<td>$996</td>
<td>$99</td>
</tr>
<tr>
<td>Expanded earned income tax credit*</td>
<td>31</td>
<td>$1,468</td>
<td>$48</td>
</tr>
</tbody>
</table>

Notes: Benefits and costs are in 2011 dollars. Total policy cost does not exactly equal number of beneficiaries multiplied by the average benefit because of interactions in the tax code and modeling.

*Average benefit counts only the benefit above current law.
Progressivity. Figure 3 lays out the share of benefits received by workers at different earnings levels, ranged from the poorest fifth to the richest fifth of the population. It provides information on which type of policy might be most effective, per dollar of expenditure, at protecting the vulnerable. Keep in mind that the policies modeled here could be scaled up or down proportionately to achieve the same total benefit paid.

**FIGURE 3**

*Distribution of Simulated Benefits by Income Quintile*

Notes: Quintiles are defined by expanded cash income (described at [http://www.taxpolicycenter.org/TaxModel/income.cfm](http://www.taxpolicycenter.org/TaxModel/income.cfm)) adjusted for household size. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. The income percentile classes used in this figure are based on the income distribution for the entire population and contain an equal number of people, not tax units. The 2011 quintile breaks are (in 2017 dollars) bottom, less than $15,700; second, $15,700–29,600; middle, $29,600–50,000; fourth, $50,000–83,000; and top, more than $83,000.

The expanded EITC extends the largest share of benefits to low- and middle-income earners. More than 75 percent of benefits are garnered by the two lowest quintiles and almost none by the two highest quintiles. By phasing out more quickly than other programs, the temporary EITC excludes more of those with higher earnings.

By contrast, the payroll tax cut extends the largest share of benefits (and the highest average benefit) to the highest earning quintile.

Lying distributionally between these two efforts rest the Making Work Pay credit and the modified Making Work Pay credit. The modified version is designed to both be larger and phase out sooner, thus
giving a more progressive distribution and greater stimulus per dollar spent. About 43 percent of benefits in the MWP credit went to those in the top two quintiles, contrasted with about 20 percent had the modified credit been enacted instead.

So far we have skipped discussing the distribution of unemployment insurance benefits. Because most unemployed people are unemployed for only part of the year, and many have spouses who work, it should not be surprising that many benefits still end up going to those in higher earning classes. It is the second-least progressive of the five policies examined here. However, as a type of insurance policy against a fall in earnings, it should not be expected to fulfill the same income security goals as other programs.

The MMWP and expanded EITC are the only options in which the bottom quintile receives at least a proportionate share (20 percent or more) of the total benefits.

**Stimulus**

How much money does each policy distribute in total to beneficiaries? The broad-based payroll tax cut and simulated MMWP credit each provide roughly $100 billion for the simulated year. Because the simulation year (2011) experienced high unemployment and expanded benefits were in effect, UI also provides a large amount of support ($78 billion).

In other simulated years with lower unemployment rates (not shown), UI declines considerably more than the other programs because of a lower unemployment rate and the lack of expanded benefits. The three payroll tax–based benefits, on the other hand, generally grow in an expanded economy because of increases in employment, wages, and prices. If tax-based benefits are meant to provide temporary stimulus, they would need to expire either through a set time limit or through a specified economic measure, such as restored GDP growth.

In general, resource-constrained households are more likely than higher-earning households to increase consumption in response to an increase in income from almost any source, thereby increasing the stimulus effect. To the extent this pattern holds during recession, this also means that in bang per buck, the relative stimulative effect of each policy will maintain the same ranking as for progressivity. For instance, the across-the-board payroll tax cut, because it is the least progressive of the policies, will also provide the least demand-side stimulus per dollar spent.

**Work Incentives**

All the payroll options and the scaled EITC programs avoid the disincentive to work that prevails within the unemployment compensation program. Congress places limits on weeks of unemployment benefits largely over concern over its negative employment effects. Although the other programs generally avoid that disincentive—the high price UI places on any work whatsoever—they still create only small work incentives for some households and some marginal disincentive over income ranges where benefits phase out.
Since taxes equal only a modest portion of income for most households, and the tax incentives modeled here usually make up only a portion of tax otherwise owed (the EITC is an exception), the MWP, MMWP, and payroll tax cut would likely have limited, though positive, work incentive effects.

For instance, the payroll tax cut provides incentives to the most workers but generally adds only about 2 percent to net earnings. The expanded EITC provides a much higher increase in earnings for those in the phase-in and flat ranges, but the extension of the phaseout range to higher earnings creates some disincentives there. The MMWP, as structured here, offers the highest rate of credit per dollar of additional earnings over the phase in range, but then has a negative marginal effect on work effort in the phase out range where it adds to the income and payroll tax rates on marginal dollars earned.

The temporary nature of the fiscal initiatives modeled here also complicates the discussion about incentives. Workers still employed during a recession may be less likely to worry about short-run changes in taxes or benefits given their concerns about keeping their jobs. Those in the workforce when receiving benefits, as under most options examined here, often do not have short-run opportunities to ratchet work hours up or down, much less temporarily, as a response to a temporary incentive.

Unemployment compensation stands out with the largest and most distinct disincentive, since it remains available only while staying unemployed. Evidence points to unemployed workers delaying work while receiving benefits, though they also gain an extended opportunity for searching for higher-paying work; the negative work incentive for these workers combined with the positive stimulus effect for the economy leads some researchers to conclude that unemployment compensation benefits may have limited macroeconomic effect.  

Other Observations

In addition to considering the magnitude and distribution of stimulus policies, lawmakers must address implementation questions about when and how benefits are delivered.

**Timeliness and delivery.** The EITC is paid out mainly at tax-filing time and therefore might not reach recipients when they most need it. Previous attempts to disburse the EITC in regular and periodic increments through adjusting employer withholding met with low take-up. For a temporary incentive, that problem can be met partly by basing an expanded EITC partly or wholly on previous year’s earnings—for example, paying an additional credit in a 2020 or late-2019 recession based on total 2019 earnings. This adjustment, if it could be made timely, would be among the most progressive and quickly stimulative of the policies.

One could also consider basing some of the other incentives partly on past rather than current work, such as on payroll taxes paid to date during the year. This approach to eligibility would have little effect on incentives, positive or negative, to the extent the extra income was considered a windfall.  

Very progressive tax credits on future earnings that phase out quickly end up creating very different average rates for most beneficiaries and are complicated to disburse through withholding. This
holds especially if their value is tied to multiple earners in a household or earners whose employment is seasonal or otherwise uneven. For most workers, the MWP credit was simply a flat percentage of earnings that could be paid out as that money was earned, though there were still some complications because of the phaseout (TIGTA 2009). The more direct and universal payroll tax cut was more easily implemented through withholding, but as a consequence it was weaker on all three effectiveness criteria examined above. Unemployment benefits for eligible workers are paid weekly.

Social insurance. Unemployment compensation is an insurance system to which employers contribute and workers pay indirectly through lower compensation. Unemployed workers covered by UI might therefore have a legitimate claim for some benefits, regardless of other household income or assets. This argument applies less for expanded unemployment compensation or tax exemption of unemployment benefits, both of which would likely be paid largely by future taxes on other workers. Moreover, the value of tax exemption increases in value arbitrarily along with the annual income of a spouse or the worker from periods of employment.

Conclusion

Fiscal policy toward workers can be designed to work more effectively than policies enacted during the last recession. By focusing more on low- and middle-income people, alternatives can help those with greater needs and provide greater stimulus while still providing positive or at least fewer negative incentives for work. When, as in the Great Recession, Congress’s concern for workers extends beyond the unemployed, or when it hits a limit on extensions or expansions of unemployment compensation and welfare transfers because of concerns about work disincentives, many other worker-based fiscal options remain open to legislators.

Given that policies tend to repeat over time, it is highly likely that in any future recession legislators will look to actions taken in the Great Recession and debate whether they should be replicated or reformed to meet the new needs. Here we have only begun what we hope will be a broader investigation and debate over alternative fiscal policies toward workers. Not only do the policies examined here deserve further attention, but the parameters we have chosen for various alternatives are only suggestive of the many possibilities.
Notes

1 We do not contrast these worker-centered policies with other anti-recession policies such as temporary investment incentives, more universal tax cuts, and expansions of welfare programs. Though a separate topic worth exploring, our focus here on workers is motivated partly by the likelihood that the types of worker-based policies adopted in the last recession be repeated in the future but with limited examination of their relative efficacy.

2 Estimates for 2014 and 2016 are available from the authors. Average benefits and benefit distribution differ only slightly between years. The cost and average benefit of unemployment insurance is much higher 2011 because of higher unemployment and expanded UI benefits.

3 Unemployment compensation typically replaces around half of earnings before unemployment up to a maximum allowed benefit, with an average weekly benefit of about $300. Normal benefits are available for up to 26 weeks in many states (Shaw and Stone 2011). However, nine states currently provide fewer than 26 weeks of benefits.

4 To classify earners by earnings class, we adjust their earnings by the square root of family size.

5 However, one could design an EITC to include single workers and secondary earners in a household who currently receive a disproportionately low share of total benefits (Carasso et al. 2008).

6 In economics jargon, lower-income consumers have a higher propensity to consume when they face more binding budget constraints, and their higher spending increases the fiscal multiplier of the stimulus policy. However, the propensity to consume out of an additional dollar has been estimated to be lower than the average propensity to consume at each income level. See Hobijn and Nussbacher (2015).

7 See Karabarbounis and Chodorow-Reich (2016) for a further discussion of this debate.

8 Technically, the additional income from a subsidy can affect behavior even when the individual perceives no change in net tax rate going forward.

References


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