Can the EITC and Unemployment Insurance Replace Lost Wages?

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INTRODUCTION

The COVID-19 pandemic has had a significant effect on all aspects of social, economic, and political life worldwide. In the United States, millions of people have tested positive for COVID-19, and over 200,000 people have died from the virus.¹ While Ohio’s governor and director of public health have been credited for their quick decision-making in response to the pandemic, Ohio’s communities still suffered, with well over 100,000 cases and thousands of COVID-19-related deaths statewide.²

Policymakers aiming to reduce the spread of COVID-19 were forced to make difficult tradeoffs between public health and the economy. On March 23, 2020, Governor Mike DeWine’s stay-at-home order started. This executive order mandated only essential businesses could remain open. Consequently, many Ohioans faced lay-offs or furloughs, filing over 1.6 million unemployment claims between March and August 2020—more than the last four years combined.³ Cuyahoga County was not immune to this economic downturn; unemployment increased by 19 percentage points in four months. Low-wage jobs in the Accommodation and Food Services industries were hit hardest,⁴ meaning the county’s most economically vulnerable residents were most likely to experience lost wages. After a phase-in of re-openings, the stay-at-home order ended on May 29th. Unemployment rates, while falling, remain above those in 2019.

In response to the pandemic’s economic impact, the federal government enacted landmark policy. The federal Coronavirus Aid, Relief, and Economic Security (CARES) Act aimed to reduce the financial burden and provide a safety net through the expansion of unemployment benefits, provision of stimulus payments to eligible Americans, and postponed loan payments, among other things. Most relevant to this analysis is an additional $600 per week of unemployment benefits available to individuals affected by COVID-19. These benefits were available between March 29th and July 25th, which includes nine of the ten weeks of Ohio’s stay-at-home order. This research brief provides insight into the effects of unemployment insurance (UI) benefits and the Earned Income Tax Credit (EITC) on wage replacement rates, as well as policy recommendations regarding UI and EITC in response to the COVID-19 pandemic. While we find UI and EITC benefits replaced the lost wages for most of the county’s economically vulnerable workers, we urge continued policy intervention to mitigate the consequences of the pandemic.

THE PANDEMIC IN CUYAHOGA COUNTY

Cuyahoga County accounts for almost 12% of Ohio’s total cases⁵ and has the highest number of COVID-19 related deaths in the state. Likewise, the county experienced an acute economic downturn due to the pandemic.

Unemployment increased from 3.6% in December 2019 to 22.9% in April 2020, with the biggest increase following the statewide stay-at-home order. Since April, Cuyahoga County’s unemployment rate has been decreasing, landing at 12.9% in July. While high-wage earners (those whose salaries exceed $60,000 per year) in Cuyahoga County experienced an increase in employment toward the end of the stay-at-home period, middle- and low-wage earners experienced employment decreases. For example, low-wage earners (making less than $27,000 per year) faced an 11.1% decrease in employment between January and July.

With much of the job loss affecting low-wage sectors in Cuyahoga County, the extra $600 per week in unemployment benefits from the CARES Act greatly assisted those who were likely experiencing financial hardship prior to the pandemic. In addition to UI, the EITC is a pre-existing policy aimed at providing financial assistance to families with low- and moderate-incomes.

**THE EARNED INCOME TAX CREDIT**

The federal Earned Income Tax Credit (EITC) is a tax credit given to working families based on their income and family size. The EITC decreases poverty and reduces inequality. In Ohio, 887,000 residents claimed the federal EITC in 2019, which totaled around $2.2 billion and averaged $2,470 per recipient.

The federal EITC is refundable, meaning if a recipient’s tax credit exceeds the amount of taxes they owe, they receive the difference in the form of a refund from the Internal Revenue Service (IRS).

EITC benefits consist of a phase-in period, a plateau of maximum benefits, and a phase-out period based on earned income, filing status (married or unmarried), and number of children (0, 1, 2, or 3+). In 2020, the phase-in credit rate for a single person with two children is 40%. This means for every earned dollar of income up to $14,800, this person would receive $0.40 in EITC benefits. Those who have earned income between $14,800 and $19,330 receive the maximum credit amount for their family size of $5,920. Those who make between $19,331 and $47,440 receive the EITC at a phase-out rate of 21.06%. This means that for each additional dollar a person makes over $19,331, their EITC benefits are reduced by $0.2106 until their earned income reaches $47,440, at which point they are ineligible to receive the EITC.

Unemployment insurance benefits do not count toward earned income when calculating EITC benefits; however, they are included in adjusted gross income (AGI) limits. If a person’s AGI is greater than the maximum earned income for their filing status and number of children, they are ineligible to receive the EITC.

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7 Ibid.
8 Ibid.
13 29 states, including Ohio, have their own EITC. Ohio’s EITC is not refundable, so while it represents a potential decrease in tax liability of working families, we do not include it in this analysis.
Can the EITC & Unemployment Insurance Replace Lost Wages?

Changes in EITC Benefits

We estimate the success of the EITC and UI benefits as protective forces against income loss during the COVID-19 pandemic by calculating wage replacement rates. The replacement rate is the percentage of total (no unemployment) earnings plus social safety net benefits. In other words, the replacement rate is:

\[
\left(\frac{\text{wages} + \text{EITC} + \text{UI benefits}}{\text{wages if they were employed the entire year} + \text{EITC}}\right) \times 100
\]

A higher replacement rate means the social safety net gets the person closer to what their wages would be if they were not unemployed, and a lower replacement rate means they are receiving a smaller percentage of what they would have earned if they were employed the entire year.

We assume the primary income earner was unemployed the entire duration of Ohio’s stay-at-home order and was eligible for UI. That means they lost ten weeks of income, received regular unemployment benefits (50% of income up to specific limits and subject to income minimums) for ten weeks, and collected the additional $600 per week in CARES Act benefits for nine weeks. For our wage calculations, we use Ohio’s minimum wage of $8.85 per hour for 40 hours per week, 52 weeks per year, the county mean weekly wage of $1,219, and the annual poverty rate wage for a family of three of $21,720. The Congressional Research Service provides the 2020 EITC rates.

Replacement Rates for Families of 3

Without any additional benefits, families of three (one adult and two children) would receive 80.8% of their income if they were unemployed during the entire stay-at-home period in Ohio. When including UI and EITC benefits, these families receive more than 98% of their full employment wages from UI and the EITC. Table 1 shows the previous wages, lost wages, UI and EITC benefits, and wage replacement rates for families making the minimum wage, wages at the poverty line, the mean county wage, and wages putting them at three places in the EITC benefits schedule: the start of the benefits plateau, the end of the benefits plateau, and the end of benefit eligibility.

<table>
<thead>
<tr>
<th>Description</th>
<th>Previous annual wage</th>
<th>Lost wages due to unemployment</th>
<th>UI+CARES Act benefits</th>
<th>EITC no unemployment</th>
<th>EITC with unemployment</th>
<th>Replacement rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum wage</td>
<td>$17,784</td>
<td>$3,420</td>
<td>$7,110</td>
<td>$5,920</td>
<td>$5,746</td>
<td>114.80%</td>
</tr>
<tr>
<td>Poverty line</td>
<td>$21,720</td>
<td>$4,177</td>
<td>$7,488</td>
<td>$5,417</td>
<td>$5,920</td>
<td>114.10%</td>
</tr>
<tr>
<td>County mean wage</td>
<td>$63,388</td>
<td>$12,190</td>
<td>$11,220</td>
<td>$0</td>
<td>$4,782</td>
<td>98.50%</td>
</tr>
<tr>
<td>Start EITC benefit plateau</td>
<td>$14,800</td>
<td>$2,846</td>
<td>$6,823</td>
<td>$5,920</td>
<td>$4,782</td>
<td>113.70%</td>
</tr>
<tr>
<td>End EITC benefit plateau</td>
<td>$19,330</td>
<td>$3,717</td>
<td>$7,259</td>
<td>$5,920</td>
<td>$5,920</td>
<td>114.00%</td>
</tr>
<tr>
<td>End EITC benefits</td>
<td>$47,440</td>
<td>$9,123</td>
<td>$9,962</td>
<td>$0</td>
<td>$0</td>
<td>101.80%</td>
</tr>
</tbody>
</table>


Across all income groups making less than the county mean wage, the combination of the EITC and UI benefits (including the additional $600 per week from the CARES Act) leads to wage replacement rates over 100%, with families making minimum wage receiving the highest replacement rate. Even for those making the county mean wage, the replacement rate is 98.5%.

Whether EITC benefits would change between full employment and unemployment during the stay-at-home period varies by income. Those making the county mean wage, the end of the benefit plateau, and the end of EITC benefits receive the same EITC benefit as they would have if they had not become unemployed. Families at the poverty line receive a higher EITC than they would have if they were not unemployed, and families making the minimum wage and wages putting them at the start of the EITC benefit plateau receive lower EITC benefits than if they were employed the entire year. While their earned income would make those who earn the end of the EITC benefits schedule eligible for the EITC, their UI benefits increase their AGI such that they would not be eligible for the EITC. In other words, the EITC stays steady for those groups making the most money, increases for families at the poverty line, and decreases for those with the lowest wages. However, these decreases in EITC benefits are counteracted by increased UI benefits.

If the goal of these two social safety net programs is to mitigate the economic effects of the COVID-19 pandemic, they have succeeded, at least for families of three with incomes at or below the county mean.

**REPLACEMENT RATES FOR FAMILIES MAKING POVERTY LINE OR MINIMUM WAGES**

Next, we look at Cuyahoga County’s most economically vulnerable: those making the minimum wage or wages that put them at the poverty line for their filing status and income level. Figure 1 shows the income replacement rate by number of children (0, 1, 2, or 3), filing status (single or married), and income (poverty line for that family size or Ohio minimum wage).

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18 The EITC treats families with three or more children the same, but poverty line wages increase for each additional household member. Therefore, the minimum wage replacement rate for families with more than three children would be the same as families with three children, but the rates would change for families with more than three children making poverty line wages.
With one exception, the income replacement rate is over 100%, ranging from a high of 121% for married adults with no children making the minimum wage and a low of 110% for married families with two or three children making poverty line wages. The replacement rate is 82.6% for single individuals in poverty with no children because they make less than the minimum weekly wage required to receive UI benefits. The combination of UI (including the CARES Act bonus) and the EITC is a more effective wage replacement for smaller families than larger ones and for single rather than married families making poverty line wages. Across both income measures and filing statuses, families with zero children (except single people without kids and poverty line wages) or one child have higher replacement rates than families with two or three children. Among families that make poverty line wages, single filers have higher replacement rates than married filers, suggesting a marriage penalty for this income group. In contrast, for workers making the minimum wage, the replacement rates for single and married filers is the same across all family sizes, except for families with no children, where married filers have higher replacement rates than single filers. Together, these analyses suggest there is a penalty for larger families, and depending on wages, for being married.

The EITC works differently for families in these two income groups who face unemployment. For people making poverty line wages, their EITC benefits will be higher than if they were fully employed during the stay-at-home period because their lower earned income moves them to a different part of the benefits distribution. The exceptions are single and married filers with one child, who would receive the same EITC benefits (the maximum for their family type) whether or not they experience unemployment. In contrast, for families making the minimum wage, EITC benefits are the same with or without unemployment for single filers with zero or one children or married families with one child. EITC benefits are higher for married families with no children.

For the other groups—single or married filers with two or three children—their EITC benefits are lower if they are unemployed because they do not make enough to put them on the earnings plateau for the maximum tax credit. This is another indication of a penalty for larger families. Therefore, while UI and EITC help some of the lowest wage workers, this varies by family size and marital status.

**IMPLICATIONS FOR CUYAHOGA COUNTY**

The analyses in Table 1 and Figure 1 indicate that for many individuals and families who were unemployed during Ohio’s stay-at-home order, UI and EITC benefits are sufficient to replace their lost wages. Workers in the bottom wage quartile saw employment decreases in Cuyahoga County of up to 36.4% during that period, relative to January 2020 employment rates. However, for those earning higher incomes, such as the county mean of $1,219 per week, replacement rates begin to fall below 100%. While we do not estimate replacement rates for higher incomes, replacement rates will be inversely proportional to wages because those with higher incomes are subject to limits on UI benefits and ineligibility for the EITC. In this sense, the social safety net did its job—unemployment was highest for low wage workers, and the safety net benefits yield a higher replacement rate for these economically vulnerable groups.

These outcomes were made possible by the $600 per week CARES Act UI benefit. As those benefits expired, replacement rates dropped, raising concerns that people with low incomes who are still unemployed will face increasingly uncertain financial outlooks.

**POLICY RECOMMENDATIONS**

Our analyses indicate that for nearly all income groups and family types we studied, the combination of UI benefits, the CARES Act UI benefits supplement, and the

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EITC act as protective forces against COVID-19 related unemployment and wage loss.\textsuperscript{20} In particular, these social safety net programs provide high-income replacement rates for some of the county’s most economically vulnerable: those making poverty line wages and the minimum wage.

Wage replacement rates vary across family sizes and types, suggesting an avenue for policy improvement. For families making poverty line wages, replacement rates are higher for single individuals than married couples, representing a marriage penalty. This leads to our first policy recommendation:

**Policy Recommendation 1**: Expand UI and EITC benefits for married couples with the lowest wage ranges to remove the marriage penalty.

Across these populations with low wages, the replacement rates are higher for families with zero children or one child than those with two or three children. Recognizing that the COVID-19 pandemic has had a particularly burdensome influence on families with children as working parents have to balance wage-earning and childcare when traditional childcare is limited, we recommend:

**Policy Recommendation 2**: Increase UI and EITC benefits for families with two or more children.

The higher an individual’s initial wages, the lower their replacement rate. While the replacement rate for a single individual with two children making minimum wage ($17,784 annually) is 114.8% and someone at the end of EITC benefits ($47,440 annually) is 101.8%, the replacement rate for someone making the Cuyahoga County mean wage ($63,388 annually) is 98.5%. The social safety net is meant to help the most vulnerable, but in extraordinary circumstances like the COVID-19 pandemic, families with higher incomes are also struggling. In recognition of this, we recommend:

**Policy Recommendation 3**: Expand the EITC to higher income and AGI levels.

Finally, for some families, the loss of earned income due to unemployment means they will be receiving lower EITC refunds than they would have if they did not become unemployed. We join the Center on Budget and Policy Priorities\textsuperscript{21} in recommending:

**Policy Recommendation 4**: Allow tax filers to use either their 2019 or 2020 earned income when calculating their EITC.

There is precedence for this in cases of natural disasters such as hurricanes. The COVID-19 pandemic has had a devastating effect on Cuyahoga County families through no fault of their own; they should receive similar tax accommodations.

**CONCLUSION**

While the COVID-19 pandemic has led to high unemployment rates and economic stress for Cuyahoga County families, the combination of Unemployment Insurance, an additional $600 per week in UI benefits from the CARES Act, and the Earned Income Tax Credit mitigated some of the lost wages during Ohio’s stay-at-home order, particularly for those with wages below the county mean. However, the CARES Act bonus benefits terminated at the end of July, even though the economic consequences of the pandemic continue. Therefore, we urge caution in interpreting these results. Many Cuyahoga County families are struggling. Innovative, sustained, and substantial policy interventions are needed to counteract the negative effects of the COVID-19 pandemic in our region.

\textsuperscript{20} We do not include the CARES Act stimulus payments in our calculation of replacement rates because those were provided regardless of employment status to eligible individuals.