A New Tax System for Children and Families

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EXECUTIVE SUMMARY

Over the past 25 years, the tax system has operated as the nation's primary tool to deliver income support to families with low earnings and dependent children. This has been achieved through the expansion of several refundable tax credits, specifically the federal Earned Income Tax Credit (EITC) and Child Tax Credit (CTC). Refundable tax credits, described in this report, provide a cash refund to the filer greater than any amount paid or owed in taxes. Several states have also adopted supplemental EITCs and CTCs that mirror the federal EITC and CTC. These tax credits have helped fill gaps in the safety net following the erosion of traditional cash assistance following the 1996 welfare reform and the concurrent devolution of policy – including time limits and cash benefit generosity – from federal to state governments.

The tax system represents an opportunity to improve socioeconomic outcomes for families and their children. Tax policy affects racial and ethnic economic inequality which, in turn, can influence racial and ethnic health inequalities across many mortality and morbidity markers. Indeed, federal interventions like the tax system have at times counterbalanced racially subversive state and local public finance policies (Williams et al. 2021).

This report provides an overview of (1) socioeconomic and health inequalities across race and ethnicities, (2) the U.S. tax system and how it operates alongside traditional government support programs for families with low incomes; (3) the impact of refundable tax credits on economic insecurity and health outcomes among economically vulnerable populations, including Black and Hispanic households; (4) the changing and complex family arrangements affecting receipt of American families and how these patterns affect access to tax and safety net benefits; and (5) potential opportunities, challenges, and reforms to the tax system that could provide stronger protection against economic insecurity for children and families.

We focus these opportunities on strategies that could help ameliorate some of the causes of income, earnings, and wealth gaps across races and ethnicities, and in turn could potentially improve health outcomes. We conclude with suggestions for future research. Our main findings are:

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- **Tax policy must be understood in the context of dramatic cuts to direct cash support since the mid 1990s.** Over the past 30 years, receipt of traditional cash assistance – via Temporary Assistance for Needy Families and its predecessor, Aid to Families with Dependent Children – has plummeted from 68 percent to 21 percent among families in poverty, while refundable tax credits have emerged as the primary anti-poverty program for families with children.

- **Tax policy is economic policy. Just like other income supports, the tax system can shape health outcomes.** Empirical work shows that greater income assistance through refundable tax credits improves maternal and infant health. Moreover, this report documents a strong association between state tax policy that does little to boost the incomes of households with low incomes and diminished government economic assistance at the state level. In essence, advocates and policymakers concerned about health and social determinants of health can monitor state tax policy as an indicator of (dis)investments in health. We discuss regressive tax policy in section 2.

- **The upcoming 2025 tax reform discussions are an opportunity to highlight the benefits of redistribution through the tax system.** New public finance research (e.g. Aizer et al. 2022) emphasizes short and long run benefits from investing in children and families. These benefits include not only improvements for children and parents at the time of receipt, but lasting positive effects for children into adulthood and on subsequent generations. This evidence suggests that redistributive tax policy can be both equitable and efficient.

- **Refundable tax credits reduce poverty and racial income inequality, but not all low-income families fully benefit from current programs.** As a consequence of delivering more economic assistance through refundable tax credits, more income assistance is provided to families who live near the poverty line and less is provided to the lowest-income families, particularly those with no earned income. The year 2021 was a notable exception, when full refundability of the child tax credit enabled families with little or no taxable income to receive the full credit. Aside from 2021, partial refundability and a minimum earnings threshold means the CTC does less to reduce both socioeconomic and racial inequality, compared to the EITC.

- **State tax policies reflect (dis)Investment in children and families' health and well-being.** States have substantial autonomy to design and implement tax policies and income assistance programs. Strong regional patterns emerge with respect to policy choices and economic outcomes. For example, southern states are less likely to offer supplements to the refundable EITC or enact higher minimum wages. They are also less likely to support unionization, and they tend to have higher rates of poverty and unemployment (Logan, Hardy, and Parman 2021). This divergence illustrates that states have moved in substantially different directions with respect to tax and redistributive policy.

- **Using tax policy as redistributive policy has challenges and benefits.** A potential benefit of administering redistribution through the federal tax code is providing more consistent benefits across states in order to counteract state policies that offer little economic assistance. Providing assistance through the tax system may also minimize the harm that human services clients often face when dealing with social workers and officials who may steer families away from receiving assistance or who otherwise stigmatize clients. However, while the tax system may reduce some traditional administrative burdens, tax code complexity may create new barriers to receipt.

- **Dynamic and complex family structures present challenges for administering income assistance through the tax system.** The current mix of federal and state tax and transfer policy does not fully accommodate complex family structures and shared parenting arrangements. An increasing share of children are raised in households with adults who are not biological parents. Potential reforms include providing a benefit tied to a child that could be divided across the parents *or* allowing both parents to qualify for full benefits.

- **More research is needed on the role of the tax system in shaping economic well-being, particularly on topics related to the interaction of federal and state systems and long-run effects.** Most research to date examines federal and state tax policy in isolation, without considering how each of these systems might inform the other. In addition, we are now reaching a period where it is feasible to begin to examine the medium-term effects of the fully-refundable assistance through the tax code that was provided in the 2021 CTC and similar state initiatives.

1. Tax Policy and Racial Inequality: Policy Issues Among Families with Low Income

Section Highlights

- The tax system can increase some families' incomes and decrease income for others. This redistribution may affect health outcomes and can shape Black-White income and wealth gaps.
- Earnings inequality between Black and White Americans decreased after World War II, but has stagnated or increased since the 1980s.
- There is a positive relationship between income and health. This income-health gradient may differ across race and ethnicity.

a. Overview of the issues

Throughout the United States, inequities across a wide range of socio-economic and health outcomes are strongly correlated with investment or disinvestment in public infrastructure, including education, healthcare, recreational activities and access to parks, public safety, and anti-poverty programs. And, while such investments are generally framed as direct expenditures, the underlying capacity to deliver such resources is drawn from the nation's tax system. Our tax system is complex, consisting of an array of tax schedules at the federal, state, and local levels.

Families can be better or worse off economically after taxes are levied on their income and wealth. Some activities are taxed at different rates than others.This differential tax treatment varies across states and cities, reflecting the policy preferences of elected officials across all levels of government. Broadly speaking, the tax system discourages activities that policymakers broadly deem as undesirable, unproductive, or otherwise harmful (e.g. cigarette taxes, gasoline taxes). The tax system also encourages some activities by providing tax credits that lower the costs of these actions, such as the home mortgage interest deduction or subsidies for health insurance. Contemporary social and economic policy has increasingly leaned upon the U.S. tax system as a mechanism to deliver economic support to families with dependent children. These programs have grown in size and importance; today, the federal Earned Income Tax Credit
(EITC) and Child Tax Credit (CTC) are the largest cash transfers for families with lower levels of income. These programs make a meaningful effect on families' after-tax incomes. For example, in 2021, an expanded form of the CTC reduced child poverty to historic lows (Creamer et al. 2022).

The importance of the link between tax policy and racial inequality is motivated by Deaton (2003). Exposure to low incomes and economic insecurity is associated with a range of diminished outcomes. From a public health and epidemiological standpoint, such exposure may negatively affect health. Fiscal policy, of which tax policy is a large component, can then be understood as a tool to shape public health outcomes. In this spirit, this report provides a discussion of the role of the U.S. tax system, including the rising role and importance of refundable tax credits, as a mechanism for delivering economic assistance to families. It is also important to situate tax policy in the context of the evolution of the U.S.'s economic support programs since the 1970s.

Historical overview – racial economic inequality over time

In order to better understand how the tax system can shape economic inequality and subsequently, health inequities, it is important to describe economic inequality in the U.S. While we focus much of our discussion on earnings and income inequality across race and ethnicity, wealth inequality is even more pronounced (Derenoncourt et al. 2022). In other words, households may have gaps in their annual or monthly income streams, but the inability to draw upon a deeper store of assets – including cash savings or wealth accumulated through capital and housing markets – leaves many families acutely vulnerable to labor market fluctuations. As a result, policies that reduce income gaps may leave many of the gaps that are due to differences in wealth accumulation across race and ethnicity unresolved.

Tax policy plays a role in shaping economic inequalities. The system may improve economic well-being for some households, while worsening it for others. Brown (2021) and Gale (2021) have documented components of the tax system, including differential treatment of income sources, housing consumption choices, and family structure, that exacerbate racial economic inequality. Many of these tax policies affect households with higher levels of income than the focus population of this report.

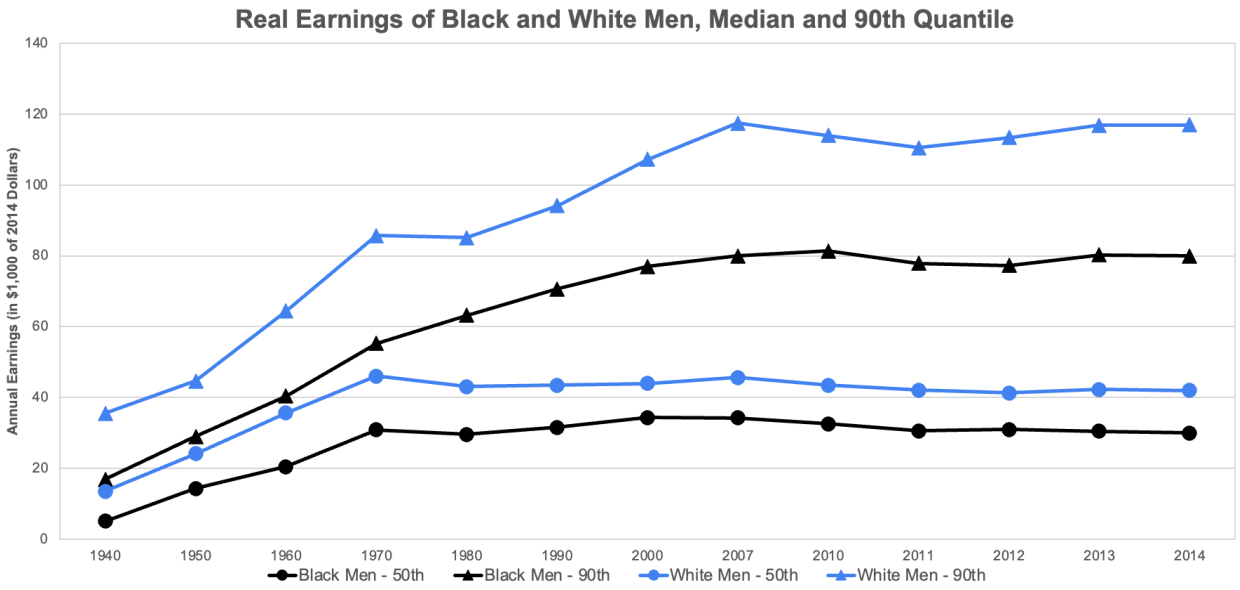
Black-White earnings gaps narrowed after World War II, in part due to more equitable educational opportunities, civil rights legislation, and improved labor standards (Derenoncourt et al. 2022, Bayer and Charles 2018, Derenoncourt and Montialoux 2021). However, these gaps stalled beginning in the 1970s. Figure 1 shows the inflation-adjusted earnings for Black and White men at the 50th and 90th percentile between 1940 and 2018. Since 1980, earnings gaps have persisted among middle-income men and widened among high-income men (Smith and Welch 1989; Bayer and Charles 2018). More recently, increased rates of incarceration among Black men and increases in the return to higher education have widened these income gaps (Derenoncourt et al. 2022, Bayer and Charles 2018).[2] Table 1 provides a tabulation of some factors that contributed to this early narrowing and later widening.

For women, Black female employment has historically been higher than White women. However, despite this stronger connection to the paid labor force, Black women tend to receive lower wages than White women.

The low incomes that many Black American families are routinely exposed to are associated with diminished socioeconomic outcomes that spill over to other dimensions, including lowered educational attainment and health status (Brooks-Gunn and Duncan 1997; Duncan et al. 2010). We return to the implications of these income gaps for health outcomes in Section 4. Moreover, these income gaps compound over time, contributing to even more pronounced disparities in wealth (Derenencourt et al. 2022, Darity and Mullen 2020).

[2] Income gaps in turn lead to greater wealth gaps (Derenoncourt et al. 2022). We focus this paper on income-related tax policies, but acknowledge that the tax treatment of accumulated assets also has the potential to affect health outcomes.

Figure 1: Black and White male earnings, median and 90th percentile



Source: Authors' tabulations based on Bayer and Charles (2018)

Table 1: Factors contributing to racial wealth gap narrowing and widening

Narrowing (1860-1980)	Widening (Since 1980)
● The White-to-Black per capita wealth ratio fell from 60-1 in the 1860s to 10-1 by 1920 and 7-1 by the 1950s. However, convergence has slowed significantly and even reversed since with the gap today only slightly lower at 6-1 (Derenoncourt et al. 2022). ● Increased educational equity following civil rights legislation (1960s) (Bayer and Charles 2018) ● Overall decrease in earnings and returns to education beginning in 1940s (Bayer and Charles 2018) ● Black educational attainment rose relative to White educational attainment and Black wage returns on education rose overall (Smith and Welch 1989) ● Expanded social safety net and improved labor standards boosted Black wealth accumulation (Derenoncourt et al. 2022).	● Convergence slowed down in the 1970s and has reversed since the 1980s with the White-to-Black per capita ratio only slightly lower today, at 6-1, than it was in the 1950s. ● Increasing rates of incarceration among Black men beginning in 1980 (Bayer and Charles 2018) ● Increased return on education amplifying racial gaps in educational attainment (Bayer and Charles 2018) ● Areas Black men predominantly worked in were hit especially hard by increased international competition (Smith and Welch 1989) ● Wealth accumulation through savings and capital gains has disproportionately benefited White Americans (Derenoncourt et al. 2022). ● Black households hold more wealth in housing vs equity compared to White households and stock equity has appreciated at a rate 5x higher than housing equity (Derenoncourt et al. 2022). ○ Stock equity appreciation has primarily benefited the wealthiest Americans, who are predominantly White, contributing to both the widening racial wealth gap and overall wealth inequality. ● Wealth is growing fastest for those in the top percent of the wealth distribution with those in the top 0.01% owning an estimated 36% of private wealth in 2021, because Black households are far less represented at the top end of the income distribution, this trend also leads to increases in the widening of the racial wealth gap (Derenoncourt et al. 2022).

b. Correlation between income and health

There is a well-established positive correlation between income and health. Children in lower-income families have worse self-reported health, greater prevalence of chronic conditions, and lower life expectancy (Case 2002, Case and Paxton 2002, Case et al. 2002, Chetty et al. 2016, Currie and Schwandt 2016). These patterns can be shaped in part by lower-income families having less access to health care (Chay and Greenstone 2000), greater stress (Mani et al. 2013), greater exposure to pollution (Alexander and Currie 2017, Currie 2011), riskier behaviors (Deaton 2003), or lower levels of healthcare comprehension (Deaton 2003). Conditions early in life and during the gestational environment are particularly important as initial disparities persist and compound over time (Barker 1990). Accordingly, the strength of this relationship increases as children enter adulthood, in part due to cumulative effects of chronic conditions (Almond and Currie 2011, Almond et al. 2018, Case et al. 2002) and can be passed to future generations (Currie 2011, Aizer and Currie 2014, East et al. 2023).

Focusing on children, Page (2024) overviews the wide body of research examining the relationship between providing economically-vulnerable families with additional income and the effects on children's outcomes. The evidence on this point is overwhelmingly positive for both physical and mental health, particularly for permanent programs (e.g.: not one-time transfers).

Since the tax system has the potential to redistribute resources – that is, increasing some families' incomes and decreasing income for others – it is plausible that the tax system also shapes health. At the same time, several studies have documented that the income-health gradient is – at the very least – more complex when examining the link and it may differ across race and ethnicity. We describe the empirical evidence directly examining this question in Section 4.

c. How health and income may vary by race and ethnicity

There are well-documented health disparities across race and ethnicity. Differences in where people live – including factors like the built environment, access to care, and pollution – play a role (Chandra 2009, Cullen et al. 2012, Geldsetzer et al. 2024). However, some health disparities are driven by longstanding racial gaps in access to and trust in the overall healthcare system, which can lead to worsened outcomes for pre-existing health conditions (Alsan and Wanamaker 2018).

There is also well-documented economic inequality between White relative to Black and Hispanic Americans. These income gaps would be expected to result in a group-specific health gradient, wherein mortality and morbidity among White individuals would lag that of Black and Hispanic individuals. While some evidence has suggested that Black individuals exhibit higher mortality than White individuals, Hispanic mortality is actually lower (Deaton 2003). Recent evidence by Kim et al. (2003) documents the presence of durable socioeconomic gaps in health across Black, White, and Hispanic respondents and find that Black respondents generally report relatively lower health outcomes across their race-specific socioeconomic spectrum and that

these socioeconomic differences in health are qualitatively small. This stands in contrast to their findings for White and Hispanic respondents, which show larger socioeconomic gaps in health outcomes.

Given the positive relationship between income and good health (Section 1.b) and the tax system's role in redistributing income to individuals and families with lower levels of income (Section 2.b), the tax system has a meaningful role in shaping these health outcomes. We overview the literature directly examining the relationship between the tax system and health outcomes in Section 3, but for intuition, there are several reasons this relationship may exist.

One mechanism by which the tax system can shape health outcomes is via lowering or raising the price of consuming healthcare. The tax system incentivizes behaviors deemed to be productive or useful for society (e.g. tax credits and subsidies to reduce the cost of homeownership), while also discouraging activities and behaviors considered to be harmful (e.g. taxes on cigarettes, gasoline, and alcohol). For instance, the U.S. tax system provides tax deductions to health insurance offered by employers and subsidies for insurance purchased through the Marketplaces. Such tax incentives play a role in shaping health outcomes, but are beyond the scope of this paper.

Another way that the tax system may affect health outcomes is by providing low-income families with more economic resources that they may spend on so-called "health capital," or health-promoting activities. Health capital may include healthier food consumption, additional exercise, lowered stress, and additional bandwidth to allow for more preventative health check-ups.

For example, existing research shows that although average food expenditures do not significantly increase around the time that tax refunds are received (Goodman-Bacon and McGranahan 2008), the EITC reduces food hardship among low-income recipients (Lenhart 2021). In addition, greater resources to spend on housing – whether rented or owned – in zip codes that are safer, more walkable, and with better access to public goods that promote health, such as parks and high-quality grocery stores.

In addition, some tax provisions, like the EITC, are only available to households with market earnings, and therefore encourage employment. If workers' firms offer health insurance, the tax system may indirectly increase access to employer-sponsored health insurance (Hoynes, MIller, and Simon 2015).

Finally, even if households do not spend additional resources on health-promoting behaviors, the reductions in stress that arise from less financial strain can reduce cognitive burdens and improve health (Mani et al. 2013, Schneiderman et al. 2005, Sturgeon et al. 2016). As documented by Mullainathan and Shafir (2013), economic uncertainty associated with exposure to low-income and poverty can lead to daily triaging and cycling between economic "emergencies" (e.g. unexpected car repairs, overdue installment payments) that then impede

the ability to make healthcare investments to reduce the costs and harm associated with otherwise preventable health events.

One example of how the tax system can lessen stress related to low and volatile incomes is refundable tax credits. Refundable credits provide cash – in some instances relatively generously as a share of family earnings and income – which provides economic protection for some households that experience year-to-year reductions in earnings or income (Bitler, Hoynes, and Kuka 2017; Hardy 2017). If a household experiences an economic shock that reduces their incomes to the bottom quartile of the income distribution, their tax liability will fall and they may instead qualify for refundable tax credits such as the EITC.

2. Overview of the U.S. Tax System

Section Highlights

- The U.S. tax system consists of federal, state, and local tax regimes. Each level of government may use deductions, credits, and loss offsets to encourage or discourage economic activity.
- Some states have increased the progressivity of their tax systems by replicating the federal refundable tax credits, including the EITC and, to a lesser degree so far, the CTC.
- The mid-1990s reforms to traditional welfare cash assistance programs substantially reduced monthly cash assistance for families facing economic hardship. Programs like the EITC have partially substituted for the loss of traditional welfare programs for families with earned income.
- The EITC and CTC currently exceed traditional cash assistance programs like TANF in both expenditures and the number of families served.
- Tax policies are assessed based on equity, efficiency, and fairness. Redistributive credits like the EITC may be favorable on both equity and efficiency grounds.
- With the exception of 2021, the federal EITC and CTC are only available to families with earned income.

The U.S. tax system is structured across multiple levels - federal, state, and local. While the tax system is primarily a vehicle to raise revenues for finance government operations, it also redistributes economic resources across families with different income levels and different characteristics. Within this system, taxes and subsidies work together to reshape the economic incentives facing individuals and households. Tax policy alters the after-tax prices that consumers face across sectors of the economy. Tax policy uses the price mechanism – by rendering specific activities more or less expensive – in order to discourage or encourage economic activity. This is implemented via design features of the U.S. tax system, including deductions, credits, and loss offsets for specific activities and investment decisions. Examples include tax policy that preferences home ownership over rental housing consumption via the home mortgage interest deduction, to higher sales taxes on the purchase of cigarettes than items like food or clothing with the goal of raising the net-price and discouraging consumption.

Thus, the objective of the tax system is not only to maximize revenue. Across a range of domains, including homeownership, childcare expenses, medical expenses, business creation, work participation, and family formation, the tax system creates incentives and disincentives to either encourage or discourage a wide range of behaviors and choices.

The nation's federal income tax system is progressive, meaning those with higher incomes generally pay a higher percentage of their income in taxes. The federal income tax achieves this progressivity by using graduated tax brackets. That is, taxpayers pay increasingly more for every $1 in earned income, currently between 10% and 37%. Several key features reinforce the progressive nature of the system.

The standard deduction shields a base income from taxation ($14,600 for single filers, $29,200 for married couples in 2024). Tax credits that specifically target lower and middle-income taxpayers, such as the EITC and CTC, discussed at length later in this report, provide significant support to working families. As income rises, certain deductions and credits phase out, ensuring higher earners do not benefit from tax breaks designed for lower-income taxpayers. The Alternative Minimum Tax serves as a backstop, ensuring wealthy taxpayers pay at least a minimum amount regardless of deductions or credits they might claim.

In contrast to a progressive system, a tax system is regressive if tax units (individuals or families) with higher incomes pay a smaller proportion of their income to taxes. Importantly, a tax policy can be regressive and still result in higher income households remitting a higher dollar level while paying a lower proportion of their income or rate. For example, if a family has $100 and pays $5 in retail sales taxes and shares the same consumption profile as a family with $200 – that also pays the same $5 on the same bundle of goods – the first family is subject to a higher tax rate of $5/$100, or 5 percent. The second family is subject to a tax rate of $5/$200, or 2.5 percent. Such regressive situations are found in situations like retail sales taxes, since households with lower income spend a greater share of their income.

In addition to income taxes, Americans pay several other forms of taxes, not discussed at length in this report. For example, workers also face a payroll tax (which funds Social Security and Medicare), starting at the first dollar of earnings. Although the tax is statutorily shared between employers and employees, workers face the entire tax burden of 12.4% for Social Security (up to an income cap) and 2.9% for Medicare (with no cap).

In addition to federal and payroll taxes, individuals also face state and local taxes. State income taxes vary dramatically, with 7 states having no income tax (e.g. Florida and Texas) and a few imposing a top marginal tax rate of at least 10 percent. Many state tax systems, particularly those without a state income tax, are overly reliant on retail sales taxes (e.g., retail sales taxes at the point of sale for gasoline, everyday household items, and groceries). Sales taxes tend to be highly regressive since, for any two individuals or households that consume the same good or service (say, groceries), the payee with higher income remits a lower *share* of their overall income on groceries. Many municipalities that rely on retail sales taxes may set lower rates on particular goods, such as clothing and groceries, to partially counteract this regressivity.

Some states have boosted the progressivity of their tax policies by replicating the federal tax credit programs, including the EITC and, to a lesser degree so far, the CTC. These supplements to the federal programs are substantial, and can contribute to meaningful reductions in poverty and inequality when paired with the federal programs. We provide greater detail on each of these efforts in Section 2.b.

Tax policies can be assessed on the broad dimensions of equity, efficiency, and fairness. These three broad criteria can lead to varying levels of complexity within the tax system (Slemrod and Bakija 2017). We discuss the principle of equity below, and note here that tax policy discussions often focus on so-called “equity-efficiency” tradeoffs associated with tax policy choices. Put simply, canonical public finance models posit that increased redistribution can come at the expense of reducing total size of the economy. Contemporary public finance models have expanded this simple set-up to incorporate shorter and longer-run effects. This new work shows that redistribution can yield previously under-explored benefits to the economy and society in the longer-term. Some policies may enhance efficiency *and* equity (e.g. Aizer et al. 2022).

a. Credits, deductions, and equity

The U.S. tax system uses credits and deductions to achieve both practical policy objectives and broader equity goals. Tax credits provide dollar-for-dollar reductions in tax liability and come in two primary forms. Refundable credits, such as the EITC and portions of the CTC, can result in payments to taxpayers even when they don't owe taxes. Non-refundable credits, like the Child and Dependent Care Credit, can only reduce tax liability to zero. These credits often serve specific policy objectives, from encouraging work to supporting families, promoting education, or incentivizing certain behaviors like energy efficiency.

Deductions function differently by reducing taxable income rather than directly cutting tax liability. The standard deduction is a fixed amount that reduces income subject to taxation for all taxpayers. In contrast, itemized deductions exclude specific expenses such as mortgage interest, charitable contributions, and state and local taxes within certain limits.

Two principles of equity are used for understanding the distributional effects of the tax system. Horizontal equity represents the principle that taxpayers with similar income and circumstances should face similar tax burdens. Consistent application of tax rates, deductions, and credits across similar situations promotes such equity. However, the different treatment of married and cohabiting couples represents the most salient violation of horizontal equity. Vertical equity relates to how the tax system treats people with different abilities to pay, underlying the progressive nature of the tax system. Progressive tax rates, phase-outs of tax benefits at higher income levels, and targeted credits for lower-income taxpayers promote vertical equity.

The system also addresses specific situations affecting tax filers' ability to pay, such as family size, medical expenses, education costs, and retirement savings. However, critics point out several challenges in achieving these equity goals. The system's complexity can make it difficult

for similar taxpayers to achieve similar outcomes. The interaction of multiple provisions sometimes creates unintended effects on equity, and there's often tension between equity goals and other objectives like economic efficiency. The different treatment of earned versus unearned income and the impact of state and local taxes further complicate overall equity considerations.

Understanding these concepts of credits, deductions, and equity principles provides context for evaluating current tax policy and proposed changes, particularly regarding their effects on fairness and ability to pay across different taxpayer situations. This understanding helps inform discussions about tax policy reforms and their potential impacts on various groups of taxpayers.

b. The emergence of tax policy as source of like-cash assistance

The modern U.S. federal income tax dates back to World War II. Over time, the system evolved to account for inflation (by indexing the tax brackets) and behavioral responses (for example, by reducing the top marginal rate from 90% in 1963 to 28% in 1986). However, the most fundamental change in the system has arguably been using the tax code for social policy objectives. Anti-poverty and economic security initiatives are increasingly run through the tax code. Over the past three decades, the EITC has become the largest cash transfer program for low-income families at the federal level.

Launched in 1975, the EITC was originally designed as a temporary tax provision. The EITC gained bipartisan support as a measure intending to curtail welfare caseloads while supporting low-income families and became a permanent fixture of the tax code (Crandall-Hollick 2022). Some reasons for this strong support are summarized in Table 2.

Table 2: Reasons for historical bipartisan support, EITC

Encourages Work and Reduces Welfare Dependency	**Conservative Viewpoint:** The EITC encourages low-income workers to participate in the labor market, which aligns with the conservative principle of promoting work over welfare dependency. By supplementing the wages of low-income workers, the EITC reduces their reliance on welfare and encourages more people to enter the workforce. The credit originated from Senator Russell Long's proposed "work bonus" plan to incentivize members of poor families to join the labor force and reduce welfare spending.
Reduces Poverty	**Liberal Viewpoint:** Liberals support the EITC because it reduces poverty, especially among families with children. By providing financial assistance, the EITC directly increases the income of low-wage workers, improving their standard of living. According to CBPP (2023), the EITC lifts 5-6 million people out of poverty annually and significantly reduces the depth of poverty for many more.
Economic Stimulus	**Bipartisan Consensus:** Both sides recognize the EITC's role in stimulating the economy. By increasing the disposable income of low-income workers, the EITC boosts consumer spending, thereby driving economic growth (CRS 2022). When the EITC was first implemented during the 1974 recession, it aimed to provide financial relief to families affected by rising food and energy prices.
Administrative Simplicity	**Conservative Viewpoint:** Some conservatives appreciate that the EITC is administered through the tax system, avoiding the need for additional bureaucratic structures. This aligns with their preference for limited government intervention. The IRS manages the EITC, which keeps administrative costs low and implementation straightforward.
Anti-Fraud Measures	**Bipartisan Consensus:** Over time, the EITC has introduced several anti-fraud measures to ensure accurate benefit distribution. Both sides agree on making sure the EITC reaches low-income workers while minimizing fraudulent claims. The IRS has implemented various compliance rules, such as requiring valid Social Security numbers and penalties for incorrect claims.
Flexibility and Expansion	**Liberal Viewpoint:** Liberals have supported expanding the EITC to cover more recipients, including childless workers and larger families, and adjusting the credit for inflation. These expansions ensure the EITC remains effective in addressing the evolving needs of low-income workers. Major expansions in 1990 and 1993 allowed families with more than two children to receive higher credits and introduced credits for childless workers.

Table 3: Empirical evidence on the EITC

Work	Most studies indicate that the EITC encourages people to work, particularly among single mothers. By increasing labor income, the EITC significantly boosts the labor participation rate of single mothers and reduces their frequency of entering and exiting the labor market. Research has shown that the EITC increases the number of months low-income single mothers work, further reducing poverty.
Earnings	The EITC not only directly increases the income of low-wage workers but can also benefit employers. Although employers might lower wages in response, overall, the EITC increases workers' net income and improves their financial situation. Early studies show that workers receive almost three-quarters of every dollar paid out in the EITC.
Poverty	The EITC significantly reduces poverty both by directly increasing income and by indirectly encouraging work. According to the CBPP, the EITC lifts 5.6 million people out of poverty annually, including about 3 million children. Additionally, the EITC reduces the depth of poverty for another 16.5 million people. Moreover, the indirect effect of the EITC on poverty reduction through increased labor participation is nearly 50% larger than its direct effect of increasing income.
Education	Research indicates that the EITC is associated with higher test scores, higher graduation rates, and increased college enrollment. The expansion of the EITC is linked to improved test scores among young students, who later show higher rates of high school graduation and college enrollment. Studies have found that high school seniors who received the maximum EITC in the spring were more likely to enroll in college the following fall.
Health	Research consistently finds that the EITC is associated with significant health improvements, particularly for children. Studies show that EITC reduces low birthweight rates and increases average birthweights (Hoynes, Miller, and Simon 2015; Wicks-Lim and Arno 2017). Similar benefits are observed in states with state-level EITCs (Wagenaar et al. 2019). These early health benefits extend into later years, with children in EITC-recipient families showing better health outcomes, including lower body mass index and improved self-reported health as young adults (Braga, Blavin, and Gangopadhyaya 2020). This is partly due to increased health insurance coverage during childhood. For adults, EITC is linked to improved health, such as reduced mortality rates and higher quality of life (Muennig et al. 2016). EITC also enhances mental health for mothers, attributed to higher incomes and increased employment (Gangopadhyaya, Blavin, Braga, and Gates 2020). These findings underscore the EITC's role in boosting health outcomes by providing financial resources that improve access to healthcare and living conditions.
Work	Most studies indicate that the EITC encourages people to work, particularly single mothers. By increasing labor income, the EITC significantly boosts the labor participation rate of single mothers and reduces their frequency of entering and exiting the labor market. Research has shown that the EITC increases the number of months low-income single mothers work, further reducing poverty.

The EITC has a unique structure where the credit amount increases with earned income up to a certain threshold (the "phase-in" range or 1st kink point), then plateaus at the credit's maximum value, and finally gradually decreases as income rises further (from the 2nd kink point or the "phase-out" range). This design, illustrated in Figure 2, provides an incentive ("work bonus" or subsidy) for families to enter the labor market, since families without earned income are ineligible for the credit. For families that are already working, however, the credit may incentivize them to reduce hours in order to qualify for a larger credit. We discuss the empirical work verifying these work incentives in Section 3.b.

A key feature of the EITC is its refundability, meaning eligible recipients can receive the full credit amount even if it exceeds their tax liability. This results in a significant tax refund for many low-income families that can help cover essential expenses or build savings. The credit amounts and thresholds vary with marital status and the number of children. The credit is particularly generous for families with children, though workers without qualifying children can receive a smaller credit. The structure of the EITC means that most benefits go to families in the lower portion of the income distribution, making it one of the most progressive elements of the tax code.

The credit expanded in generosity and reach with bipartisan support in the tax reform acts of 1986, 1990, 1993, and 2009, but the overall structure remained the same. Figure 2 shows the credit amount families were eligible to receive in 1984, 1988, 1991, 1997, and 2010 based on family composition. These reforms are summarized in Table 4.

Table 4: Legislative and policy history of the EITC (CRS 2022)

Year	Legislative Act	Description	Policy parameters
1975	**Tax Reduction Act of 1975 (P.L. 94-12)**	Temporary EITC introduced, to provide financial support to low-income working families with children, encouraging work and reducing welfare dependency. The rationale was to incentivize employment among low-income families by supplementing their earnings, thereby reducing their reliance on welfare programs.	Established tax credit up to $400, for families with incomes between $4,000 and $8,000
1978	**Revenue Act of 1978 (P.L. 95-600)**	Made the EITC permanent and increased the credit amount. This aimed to provide sustained financial support and further encourage labor market participation among low-income workers.	Raised maximum credit to $500
1986	**Tax Reform Act of 1986 (P.L. 99-514)**	Adjusted the credit amount and introduced annual inflation adjustments. This ensured that the credit would continue to provide meaningful financial support over time by keeping pace with inflation.	Increased the maximum credit to $800 and adjusted it for inflation.
1990	**Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508)**	Adjusted the credit amount based on family size. The rationale was to provide greater financial support to larger families, who have higher living expenses.	Higher credits for families with two or more children.
1993	**Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66)**	Expanded EITC eligibility to include low-income workers without children. This expansion aimed to broaden the support to more low-income workers, thereby further reducing poverty and encouraging work.	Established a new credit formula for childless workers and further increased the credit for families with children.
2001	**Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16)**	Reduced the marriage penalty. The rationale was to provide equitable treatment to married couples and ensure that they were not financially disadvantaged by the tax code.	Raised the income level at which the credit phases out for married couples.
2009	**American Recovery and Reinvestment Act of 2009 (P.L. 111-5)**	Expanded the EITC for families with three or more children and increased marriage penalty relief. This aimed to provide greater support to larger families and reduce the financial disincentive for marriage among low-income workers.	Raised the credit rate for families with three or more children to 45% and temporarily increased marriage penalty relief.
2017	**Tax Cuts and Jobs Act of 2017 (P.L. 115-97)**	Indirectly affected the future value of the EITC. The rationale was to control the growth of the EITC in response to inflation by changing the inflation index used for adjustments.	Changed the inflation index for EITC parameters from CPI-U to C-CPI-U, leading to slower growth in the monetary parameters of the EITC.

Most families receive the EITC as an annual lump-sum payment when they file their tax returns. This timing influences how families use the funds. Research finds that many families use their EITC refunds for large purchases, debt reduction, and investments in education or transportation that might be difficult to finance through regular income (Goodman-Bacon and McGranahan 2008). This pattern suggests the EITC may help families build assets and make investments that support long-term economic stability.

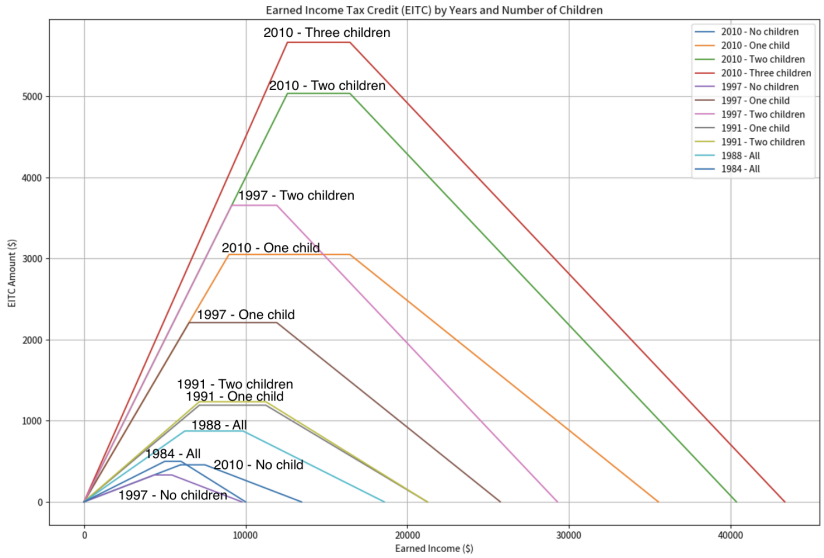
Although the EITC has dual benefits of supporting income and encouraging work, some limitations and challenges exist. The annual payment structure may make it difficult for families to smooth consumption throughout the year. The credit's complexity can lead to errors and prevent some eligible families from claiming it. The phase-out range can also create high marginal tax rates for some workers, potentially affecting work hours decisions.

Despite these challenges, the empirical evidence strongly suggests that the EITC successfully promotes work and family well-being. The credit's positive impacts appear to extend across multiple generations, affecting not only current recipients but also their children's long-term outcomes. This broad range of positive effects has contributed to the EITC's status as one of the most successful anti-poverty programs in the United States, garnering support across the political spectrum.

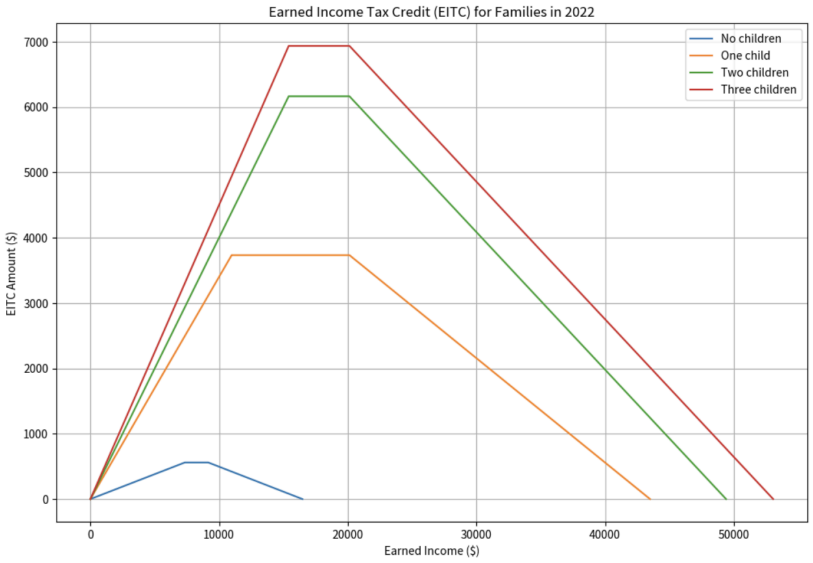
The research findings on the effectiveness of the EITC have important implications for policy design. They suggest that programs combining work incentives with substantial income support can be particularly effective at promoting both economic self-sufficiency and family well-being. These lessons continue to inform discussions about potential expansions or modifications to the EITC and the design of other social support programs.

Figure 2: EITC by years and number of children

Panel a: Historic EITC, 1984, 1988, 1997, 2010

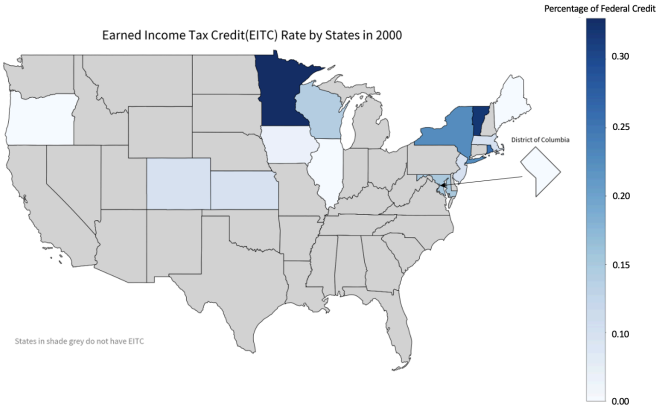


Panel b: EITC in 2022, by number of children (unmarried parents)

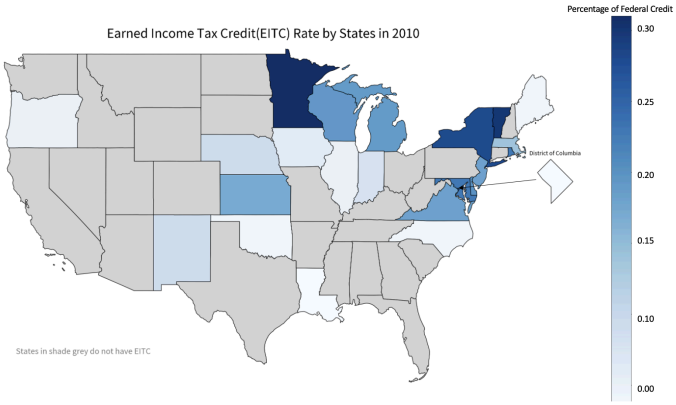


Source: Tax Policy Center

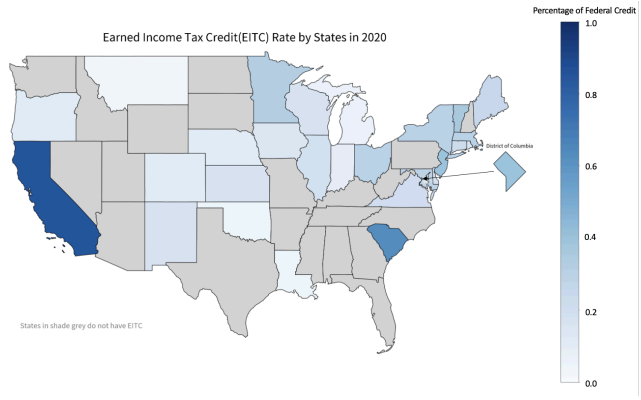
Figure 3: Supplemental EITC provisions by state, various years Panel a: 2000



Panel b: 2010



Panel c: 2020



Source: Tax Policy Center

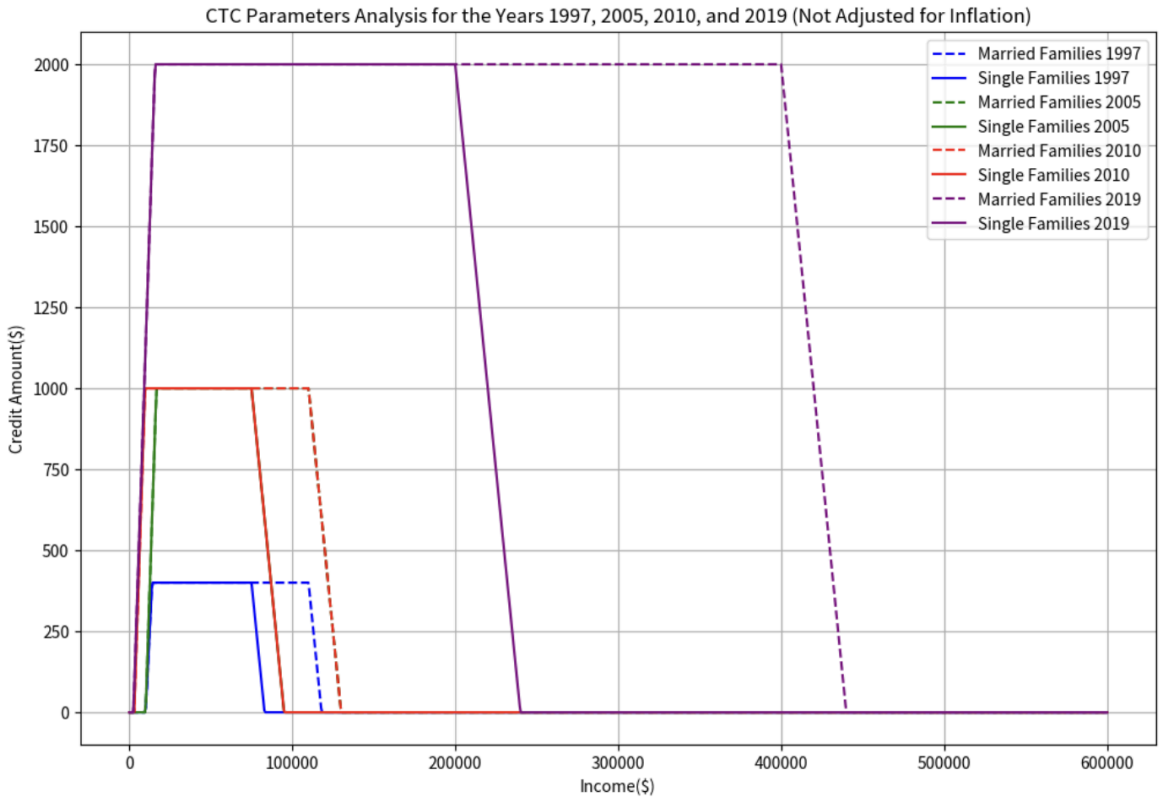
As a result of the growth in the EITC and the collapse of traditional cash welfare (Section 2.d), the EITC has emerged as the nation's primary tool to deliver income support for families with dependent children by the late 1990s. Building on these early federal efforts, more than half of states have since enacted their own supplements to the federal credit (Figure 3). The generosity of state credits varies across states, ranging from 3 percent of the federal EITC in Montana to 70 percent in the District of Columbia in 2023 (Tax Policy Center 2024b).

The Child Tax Credit (CTC) is another refundable tax credit targeted to families with children that complements the EITC, but operates somewhat differently.

Under current law, the CTC provides up to $2,000 per qualifying child under age 17. In order to receive any CTC, households must have earned income of at least $2,500 ($10,000 until 2009 and $3,000 between 2009 and 2018). The credit is only partially refundable, so the amount that families can receive in excess of their federal income tax liability is limited. Specifically, the refundable portion (called the Additional Child Tax Credit) is limited to 15 percent of their earnings, up to a maximum of $1,700 per child in 2024.

The credit begins to phase out at higher income levels, though these thresholds are considerably higher than those for the EITC. This structure means the CTC reaches a broader range of families across the income distribution while still providing significant benefits to lower-income households through its refundable portion. The current policy design of the CTC is illustrated in Figure 4.

Figure 4: CTC parameters by marital status, various years



Since the CTC is only partially refundable and requires that families have earnings above a threshold in order to receive any payments, nearly all children from families in the top half of the income distribution receive the full credit. However, children in the bottom three deciles of the income distribution receive only a partial credit (Goldin and Michelmore 2022). Since Black and Hispanic children are more likely to live in low-income families, these children also benefit less from the CTC in its current form. Whereas three-quarters of White children are eligible to receive the full CTC amount, only about half of Black and Hispanic children are (Goldin and Michelmore 2022). By recent estimates, making the credit fully refundable – or allowing families to receive the full credit amount regardless of income – would nearly eliminate this gap (Goldin and Michelmore 2022).

The structure of the credit under current law, as described above, has been in place since 2018. In 2021, however, Congress enacted a one-year temporary CTC expansion under the American Rescue Plan Act. This expansion provides a unique policy experiment where the 2021 CTC was: expanded in generosity (to $3,000 per child ages 6-17 and $3,600 for children under 6); made fully refundable so that families with no earnings received the full credit amount of $3,000-$3,600 even if they did not have earned income; and paid on a monthly basis from July 2021 through December 2021. Due to the full refundability, this expansion reduced income inequality between low-income Black and White and Hispanic and White families (Hardy and Hokayem 2024).

Like the EITC, states have built upon the federal credit and introduced their own CTCs. As of December 2023, 15 states have implemented a CTC, 10 of which are fully refundable (Tax Policy Center 2024a). Some states, such as California, Colorado, and Vermont limit these credits to families with very young children; older children are ineligible for the payments (Tax Policy Center 2024a). Since these state credits are relatively new, there is not a robust literature on their effects. Early evidence, however, indicates that California's young child tax credit did not significantly reduce maternal employment or earned income (Goldin et al. 2024).

c. The original safety net: Cash-based assistance

Historically, the federal income tax was designed to only raise revenue to finance wars. At the outset of the founding of the United States, government support programs, or "public relief," was provided by local governments and funded via local property taxation (Ziliak 2016; Ziliak and Hannon 2006). A mix of public, private charity, and religious institutions generally provided support for the poor. The Great Depression placed substantial pressure on local and state governments to maintain such programming, and the early 20th century represented the first instance of major federal governmental actions through the Social Security Act of 1935 (Ziliak 2016). These experiences led to the federal government taking a role in providing income assistance to low-income families. However, this assistance was administered by government agencies, not the tax system. The role of the tax system in providing a safety net, in contrast, is a relatively recent phenomenon, beginning in the late 20th century.

As summarized in Hardy, Krause, and Ziliak (2024), the U.S. system of government support programs consists of (1) means-tested anti-poverty economic security programs and (2) social insurance programs. Social insurance programs are fairly universal, with receipt conditioned on the risk associated with job loss (unemployment insurance) and economic insecurity due to old-age (Social Security) or disability status (Supplemental Security Income). Eligibility for means-tested programs is generally tied to family composition (e.g. families with dependent children) and household income and assets. For non-disabled, non-elderly families, assistance is typically limited to the nation's means-tested programs. Today, the means-tested programs providing cash or near-cash assistance include the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF). Medicaid provides health insurance for individuals and families with low levels of income. Conceptually, health insurance has a non-zero cash value, but some households will not capture the monetary value in any given time period if they do not utilize health care–and health insurance cannot be liquidated or traded for other consumption goods. These programs have experienced significant changes over the past 40 years, with welfare reforms that reduced the generosity of cash assistance for families with low-income.

d. The demise of cash assistance

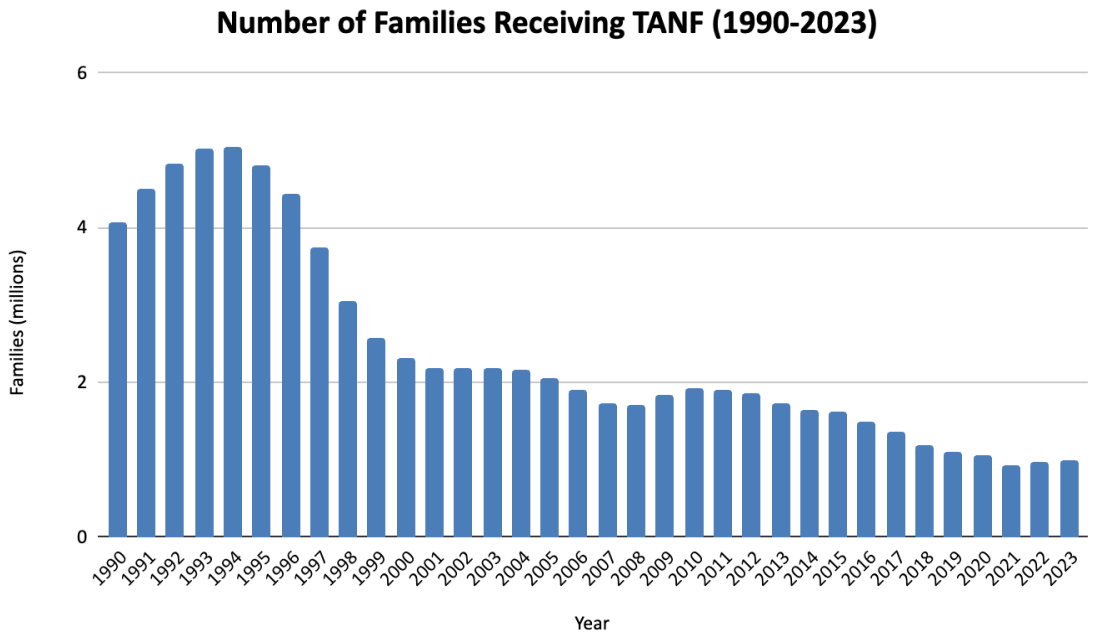
The traditional means-tested cash assistance program is the Temporary Assistance to Needy Families (TANF, formerly known as Aid to Families with Dependent Children, AFDC) program.

This program provides a monthly benefit to low-income households with children, with the benefit amount phasing out for each dollar in earned income. In the mid-1990s, this program supported 68 percent of families living in poverty; today it supports 21 percent (CBPP 2022).

TANF underwent large changes as a result of the 1996 Personal Responsibility Work Opportunities and Reconciliation Act ("welfare reform", or PRWORA). This legislation imposed work requirements, stricter sanctions on recipients, and time limits on participation. In addition, it restructured the program from a matching grant to states to a lump-sum federal block grant. This change in the funding structure meant that states had additional incentives to reduce their expenditures and accordingly, the number of families receiving assistance. Some states also supplanted state expenditures using resources from the TANF block grant. Moreover, the amount that states received was set in nominal terms, so over time, the value of federal support has diminished.

Importantly, the mid-1990s reforms substantially reduced monthly cash assistance for families facing economic hardship. In addition, the number of families receiving TANF plummeted (Figure 5). Evidence demonstrates that the most restrictive TANF cash regimes disproportionately restricted benefits for Black families (Bitler and Hoynes 2016; Hardy, Samudra, and Davis 2019; Parolin 2021), and Black families were also more likely to be "sanctioned" by caseworkers, leading to lower benefits (Fording, Soss, and Schram 2011).

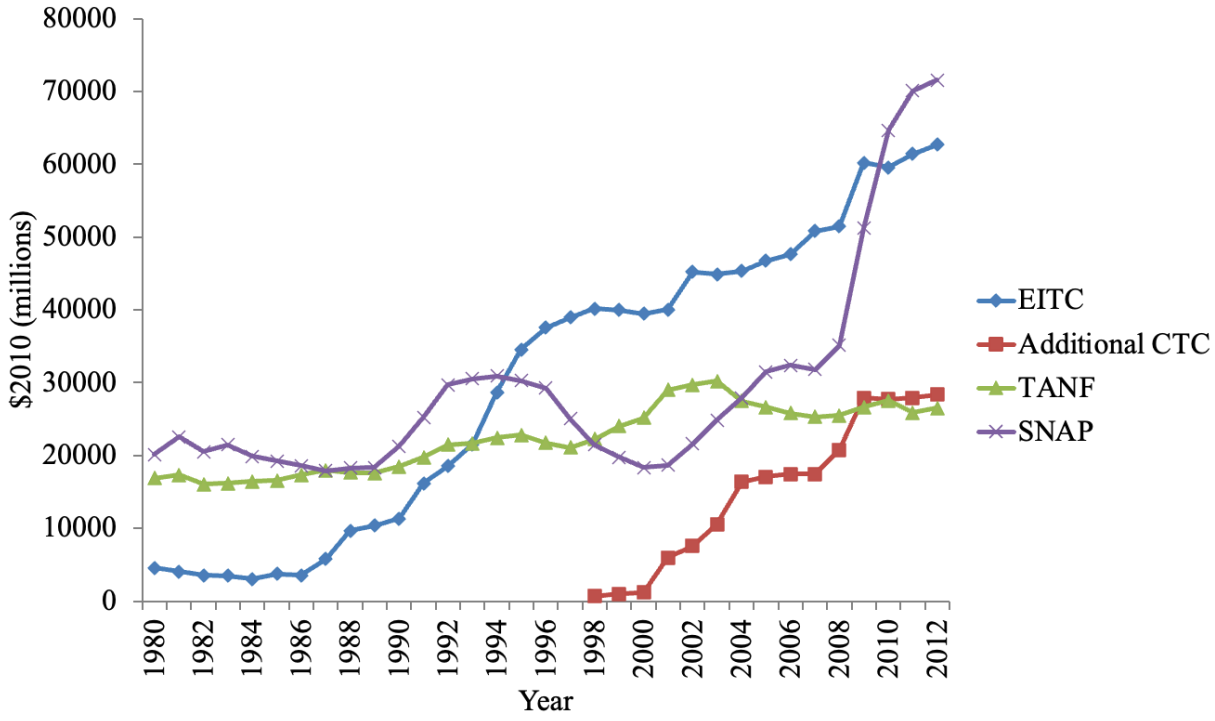
Figure 5: Number of families receiving AFDC/TANF



Source: Congressional Research Service(CRS) "The Temporary Assistance for Needy Families (TANF) Block Grant: Responses to Frequently Asked Questions" Appendix A1

It is within this broader context that expansions to refundable tax credits such as the EITC and the CTC are best understood. Today, the EITC has replaced TANF as the largest government support policy providing cash assistance for non-disabled, non-elderly people with low incomes in the aftermath of welfare reform. Drawing from Hardy, Smeeding, and Ziliak (2018), Figure 6 shows that EITC expenditures have exceeded traditional cash welfare since the early 1990s, and more recently, the refundable component of the CTC also exceeds TANF expenditures. Appendix Table 1 provides an outline of the legislative and policy history of contemporary U.S. welfare policies and reforms.

Figure 6: Trends in U.S. refundable tax credits and welfare expenditures (1980–2012)



Source: Hardy, Smeeding, and Ziliak (2018)

e. Where are we today?

The demise of cash welfare and rise of tax-based assistance contingent on earned income has resulted in a work-based safety net of government supports that provides assistance to working parents with low incomes, but that largely excludes families without dependent children and families living in deep poverty with no ($0) earnings or very low earnings (Hoynes and Schanzenbach 2018; Shaefer et al. 2015).

In addition, administering income support through tax credits has some implementation challenges. Complexity in qualifying rules and calculations can lead to eligible families missing out on benefits or making claiming errors. The credits' structures can create high marginal tax rates as they phase out, potentially affecting work decisions. Additionally, annual payment

through tax refunds means families must wait to receive benefits, though recent experiments with periodic payments during the pandemic (e.g., monthly payments of the 2021 CTC) provided insights into alternative delivery methods.

Accordingly, the tax system has evolved from its original objective to raise revenue into a system that supports family income. Section 4 illustrates how the tax system can shape economic inequalities.

3. Health Outcomes and the Role of the Tax System: Assessing the Economic Evidence

Section Highlights

- There are large health gaps across race and ethnicity that exceed gaps by income.
- The EITC is associated with improvements in health outcomes for parents and children.
- Preliminary evidence suggests that the expanded 2021 CTC improved infant and child health outcomes.
- More work is needed to better understand how refundable tax credits shape health outcomes.

As discussed in Section 1, there is a strong positive correlation between income and health. Given that incomes among Black households tend to be lower than for White Americans, it is perhaps unsurprising that health outcomes tend to be worse for Black individuals.

However, differences in income cannot fully account for differences in health outcomes between Black and White Americans. Recent data from the state of California shows that differences in health outcomes by race are greater than those by socioeconomic status and that infant and maternal health among the highest-income Black families is lower than health of the lowest-income White families (Kennedy-Moutlon et al. 2023). Other studies have documented the role of discrimination by medical providers and distrust of the medical community partly stemming from the Tuskegee syphilis study (Alsan and Wanamaker 2018, Eli et al. 2023, Hoffman 2003, Goyal et al. 2015). These patterns suggest that while increased income can help narrow gaps in health outcomes, complementary policies may also be essential to close these long-standing inequities.

Aggregate associations between higher income and improved health outcomes mask important differences across race. For example, there is a weaker link between higher income and some measurable health outcomes for adult Black Americans. For example, Ogden (2010) reports higher levels of obesity for Black and Mexican-American men moving *up* the income distribution. This absence of a consistent income gradient, wherein health outcomes improve as income rises across some measures of health, highlights the complexity of the income-health relationship.

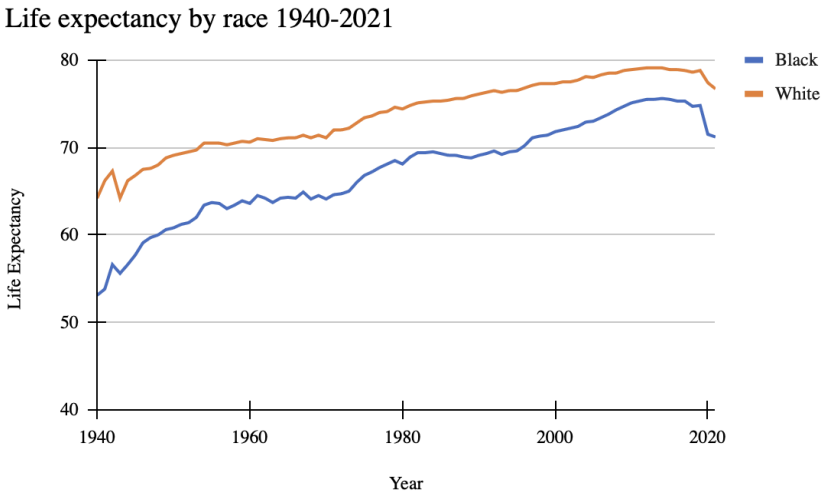
Further complicating the relationship between income and health, Ruhm (2005, 2008) notes evidence that the unemployment-health relationship is theoretically unclear. On the one hand, higher levels of income may confer upon workers some form of buffer or protection against negative health events. On the other hand, fewer opportunities for leisure and health-promoting activities when working may contribute to worsened health outcomes. In addition, higher levels of income may coincide with additional responsibilities, less time for healthy activities, and perhaps higher levels of stress. Given the vast differences in work conditions across industries and occupations, it is plausible that some workers experience worsened health outcomes as their incomes rise and others experience improvements.

a. Historical overview: Trends over time

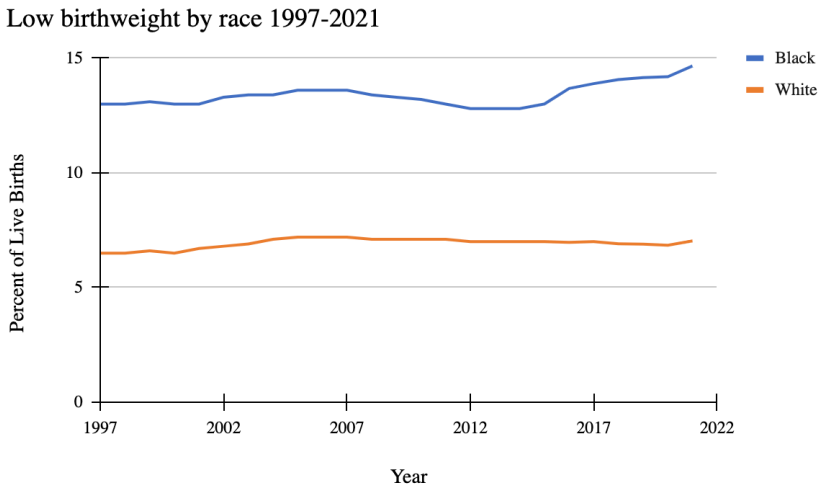
There are substantial differences in health outcomes by race and ethnicity. For example, life expectancy among Black Americans is 5.6 years less than among non-Hispanic white Americans (Hill and Artiga 2023) and Black maternal mortality is 2.6 times higher (Hoyert 2023).

Figure 7: Racial disparities in U.S.: Life expectancy & low birthweight (1940–2021)

Panel a: Life expectancy at birth



Panel b: Birthweight < 2500g



Source: Centers for Disease Control and Prevention, National Center for Health Statistics.

The interactions between health and economic inequalities are complex and bi-directional. For example, poor health can limit individuals' ability to fully participate in the formal labor market or hold some occupations (Hokayem and Ziliak 2014). At the same time, low incomes can impede people's ability to access health care or make other investments in their health. Another mechanism can arise indirectly: families that face financial stress or hardships are more likely to have substantial cognitive loads, which can impede decision-making (Mani et al. 2013). This in turn can affect individual and family-level investments in health. These relationships suggest that policies that improve economic well-being, including programs that provide families with additional resources through the tax system, also have the potential to shape health outcomes.

While income, wealth, and health gaps between Black and White Americans have been well-documented, there is less information on how differences in economic well-being translate into differences in health outcomes, and the role of the federal income tax system as a mediating factor. Below, we summarize the connections between income, wealth, and health disparities, focusing on how the federal income tax system leads to disparate effects across racial and ethnic groups.

b. What we know about the tax system and health

We focus the discussion between tax policy and health on refundable tax credits, the CTC and EITC. Understanding these credits is crucial for tax policy discussions, as they represent significant federal investments in supporting low-income families through the tax system. The design of these credits balances multiple policy goals: poverty reduction, work incentives, and administrative feasibility. Ongoing debates about potential reforms often focus on credit amounts, phase-out ranges, refundability provisions, and payment timing, all while considering both the benefits to recipients and costs to the federal budget. Overall, a large literature shows that the EITC has significantly increased labor force participation among unmarried parents and improved broader family well-being across multiple dimensions (Table 3).

Regarding work promotion, the EITC's design explicitly incentivizes labor force participation, particularly among single parents. The credit's phase-in structure means that initial earnings increase the credit value, creating a clear financial incentive to enter the workforce. Research has shown substantial positive effects on employment, especially for unmarried mothers. The increase in labor force attachment effect is particularly pronounced at the extensive margin (the decision to work rather than not work) rather than the intensive margin (the number of hours worked among those already employed).

However, the effects of work incentives are more nuanced for secondary earners in married couples. The EITC's phase-out range can create disincentives for these workers, as additional earnings might reduce the family's credit. Some research has found small negative effects on labor force participation among married women, though the positive impacts on primary earners and single parents generally outweigh these effects (Eissa and Hoynes 2006).

The EITC's impact on family well-being extends beyond employment effects and immediate financial support (see Nichols and Rothstein 2016 and Hoynes 2019 for overviews). Income support provided by the EITC has been linked to improvements in numerous measures of child well-being. Research has documented positive effects on children's educational outcomes, including test scores, high school graduation rates, and college enrollment. These effects appear to operate through multiple channels, including increased family resources and parental employment. In addition, a body of work shows that the credits can have beneficial health effects for recipient families. Moreover, the credits have been found to reduce poverty rates significantly, particularly among children, and have garnered bipartisan support as effective anti-poverty tools that encourage work.

Much of the recent research evidence on the EITC and government support program benefits are part of a new public finance literature that focuses on downstream and long-term effects of well-being on a broad array of measures. These effects are not limited to employment, economic security, or short-term costs to the government. This expanded focus is in contrast to canonical public finance and labor economics approaches, which primarily focused on the fiscal and behavioral costs associated with redistribution.

c. Top-line findings on health

Many studies examining the effect of the EITC and health leverage the fact that otherwise-similar families are eligible for different credit amounts depending on the number of children in the household and the state where they live, and that credit amounts have changed over time due to federal and state reforms. This basic "difference-in-differences" approach has been used to examine how additional tax-based assistance affects parental and child health.

For example, Evans and Garthwaite (2014) find that more generous EITC benefits improve mothers' self-reported health and reduce the prevalence of risky biomarkers (medical tests that are associated with cardiovascular disease, metabolic disorders, and inflammation). Other work uses the timing of when families typically file taxes and find mixed results in the months surrounding refund receipt (February through April) relative to other months in the year, suggesting that any improvements in health may take time to materialize, may not become immediately apparent, or may be best measured over longer time horizons (Collin et al. 2020, Hamad et al. 2018, Hamad & Niedzwiecki 2019).

When families receive the EITC, children also benefit in multiple ways that contribute to greater economic mobility. Several studies document that higher EITC payments improve infant health, measured by a lower prevalence of low birthweight, fewer preterm births, and higher Apgar scores (a composite measure of health at birth) (Hoynes, Miller, and Simon 2015, Markowitz et al. 2017, Strully et al. 2010). For example, Hoynes, Miller, and Simon 2015 find that an additional $1,000 in the EITC (in 2009 dollars) reduces low birthweight by 2-3 percent, in part due to greater prenatal care and less smoking during pregnancy. This effect is more than four times larger for Black families than non-Hispanic White families, pointing to the EITC as a possible lever to reduce racial health gaps (see also Batra et al. 2022). Relatedly, Ruffini (2024) finds benefits on infant health of a similar size when assessing the 2021 CTC expansion. In the pandemic setting, the benefits of additional resources through the tax system (the expanded CTC and stimulus payments) were most pronounced among families that had likely experienced the most unexpected and severe effects of the pandemic, but relatively more advantaged families that received the payments also saw some benefits.

For older children, the EITC also improves health, measured by a better home environment and fewer behavioral problems (Hamad and Rehkopf 2016), as well as parental-reported physical health (Baughman and Duchovny 2016).

A largely open question is how the effectiveness of the EITC (and more recently, the CTC) as a tool for improving economic and health outcomes has evolved over time. Specifically, most of the literature focuses on a large expansion that occurred during the 1990s and coincided with a strong labor market and economy. Recent work suggests that this period may not generalize to other settings (Kleven 2024). At the same time, greater knowledge of the EITC over time (Chetty et al. 2013) suggests the possibility that families might be more responsive to the incentives conferred by the tax system. This is not a critique unique to the tax system; instead, the relationship between additional family resources and health is necessarily context-specific and can have different effects in different policy environments (Page 2024).

There is a small but growing literature examining the effect of recent, temporary changes to the tax system during the COVID-19 pandemic. One large change during this period was an expansion of the CTC that increased the generosity of the credit, made it fully refundable (so that families with no earnings or low earnings received the full amount), and provided families with monthly (rather than annual) payments. This expansion improved infant health, measured by fewer babies being born of low birthweight or prematurely (Ruffini 2024), reduced food hardship (Parolin et al. 2021), and improved families' ability to afford housing (Pilkauskas et al. 2024), without substantially reducing aggregate employment (Strain and Schanzenbach 2024).

4. Tax Policy and Inequality Across Race and Space

Section Highlights

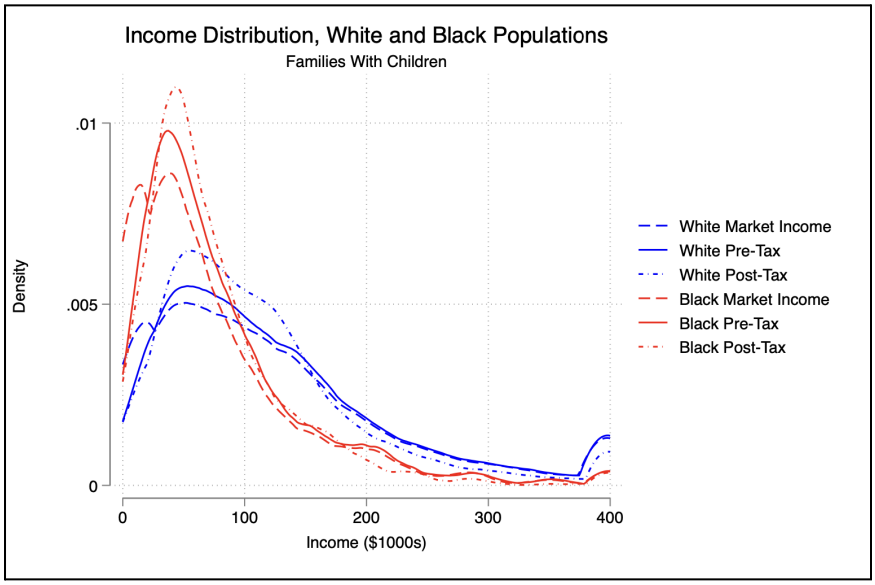
- The tax and transfer system redistributes income across income and race.
- The EITC reduces overall Black-White income inequality.
- The CTC does not typically reduce Black-White inequality. An exception to this pattern was the 2021 expansion, which made the credit fully refundable.
- Progressive state tax policies are strongly correlated with generous state redistributive and anti-poverty policies.

As discussed in Section 1, there are sizable Black-White income and wealth gaps. Similarly, Hispanic individuals also tend to have lower incomes than non-Hispanic White populations. The tax system is a potentially powerful tool to shape these patterns due to its role in both taxing and redistributing resources (Section 2).

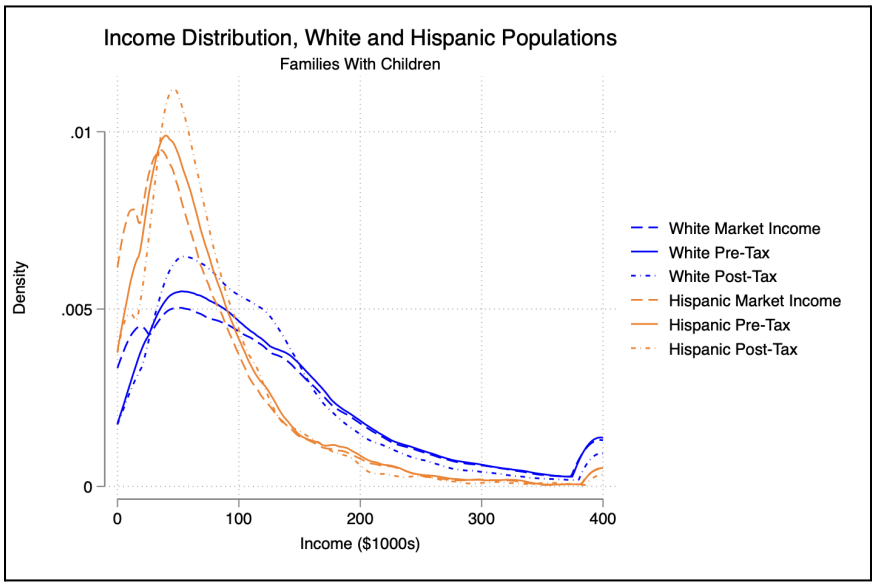
In order to describe the role of the tax system in shaping income inequality, Figure 8 plots the income distribution for non-Hispanic White, Black (panel a), and Hispanic (panel b) families with children before taxes and transfers (dashed line); after transfer payments (like SNAP and TANF) but before taxes (solid line); and after taxes and transfers (dotted line). For all groups, income assistance programs like SNAP and TANF increase family income, shown by shifting each line to the right. This effect is largest for the lowest-income families. In contrast, while the tax system increases income among those with relatively moderate earnings (earning less than $150,000 a year) and decreases income among the highest-income families (those earning more than $200,000), it has almost no effect on the incomes of the very lowest-income families. As

discussed in Section 2, part of the reason for this limited impact is that, although the tax system as a whole is progressive, many of the provisions that provide the largest benefit to families – such as the EITC and CTC – are conditional on having positive earnings (and in the case of the CTC, earnings above a given threshold). Families without earned income do not receive these payments and those with the lowest incomes receive only a small amount.

Figure 8: Distribution of income before and after taxes and transfers, by race and ethnicity
Panel a: Non-Hispanic Black and White families



Panel b: Hispanic and Non-Hispanic White families



Source: Authors' calculations based on Current Population Survey Annual Social and Economic Supplement.
Notes: "Market income" defined as self-reported income before taxes and transfers. "Pre-tax income" defined as market income plus the fungible value of SNAP, TANF, SSDI, SSI, and Social Security income. "Post-tax income" defined as pre-tax income minus tax liabilities, as calculated by TAXSIM.

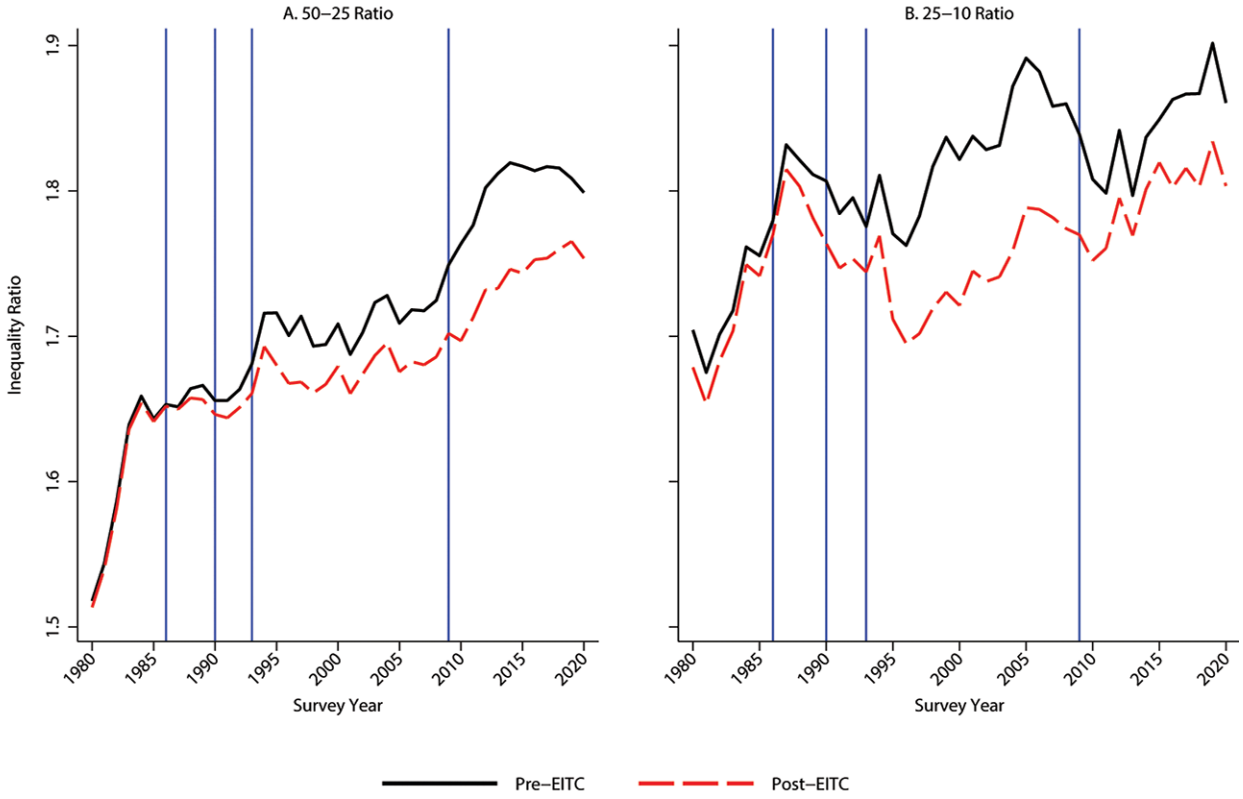
Based on the relationship between income and health, these income patterns support the findings outlined in Section 3 that increased tax credits through the EITC (and more recently, the CTC) could improve health. However, it is important to note that these studies do not isolate

findings for the families that do not have any market earnings and are unable to receive the credits.

a. Impacts of the EITC on Black-White inequality

As previously discussed, the EITC is both a tool to reduce poverty and a system to promote labor force participation. The credit rewards work and supplements wages; adults without taxable income receive no subsidy, yet the credit provides a generous "maximum" benefit at relatively low levels of earnings. This means that how the EITC shapes inequality is not immediately clear.

Figure 9: Changes in Black-White Inequality ratios (50-25 and 25-10) before and after the EITC



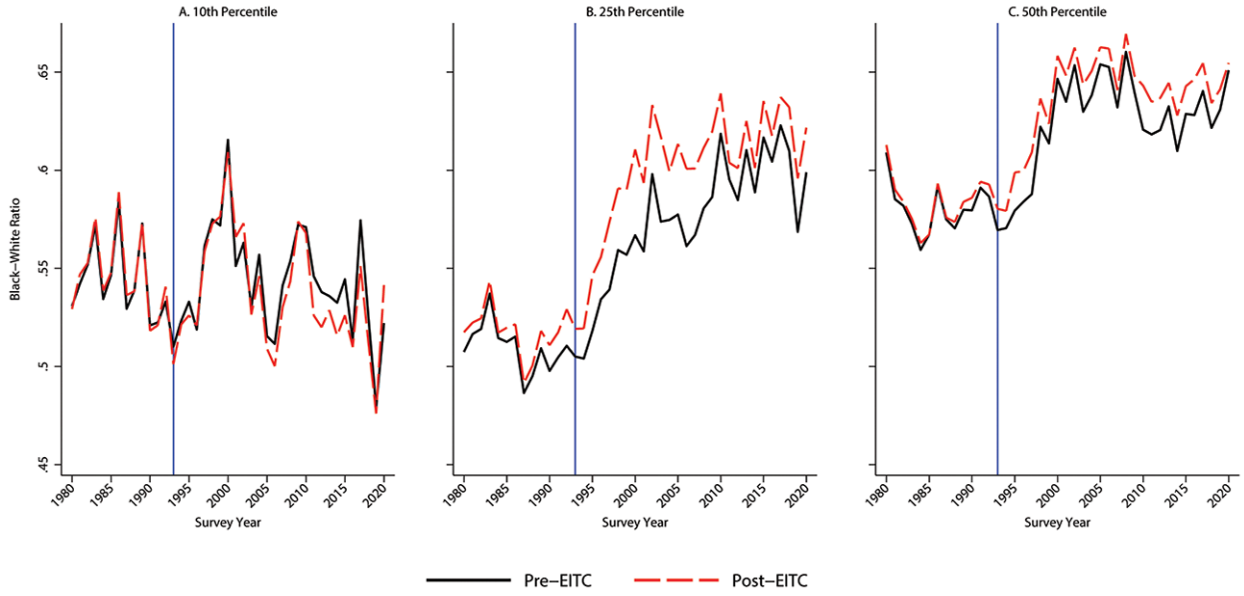
Source: Hardy, Hokayem, and Ziliak (2022)

For example, it is possible that the EITC could reduce racial inequality by providing a relatively stronger incentive for Black adults to enter into and maintain work participation. And if Black workers receive systematically lower earnings and wages than their White counterparts, the credit could operate to further narrow these gaps. Finally, if take-up in the EITC is higher among Blacks relative to Whites, there could be an inequality reducing impact via this mechanism as well. Recent research from Hardy, Hokayem, and Ziliak (2022) investigates these potential patterns in detail.

First, looking at the left panel of Figure 9, the EITC reduces inequality between the middle of the income distribution and the 25th percentile at an increasing rate over time, by approximately 10 percent by 2015. Major policy reforms that expanded the EITC, including the Tax Reform Act of 1986 and the Omnibus Budget Reconciliation Act of 1993 summarized in Table 4, are also associated with inequality reductions lower in the income distribution – that is, between the 25th percentile and the 10th percentiles of the income distribution (Figure 9, right panel).

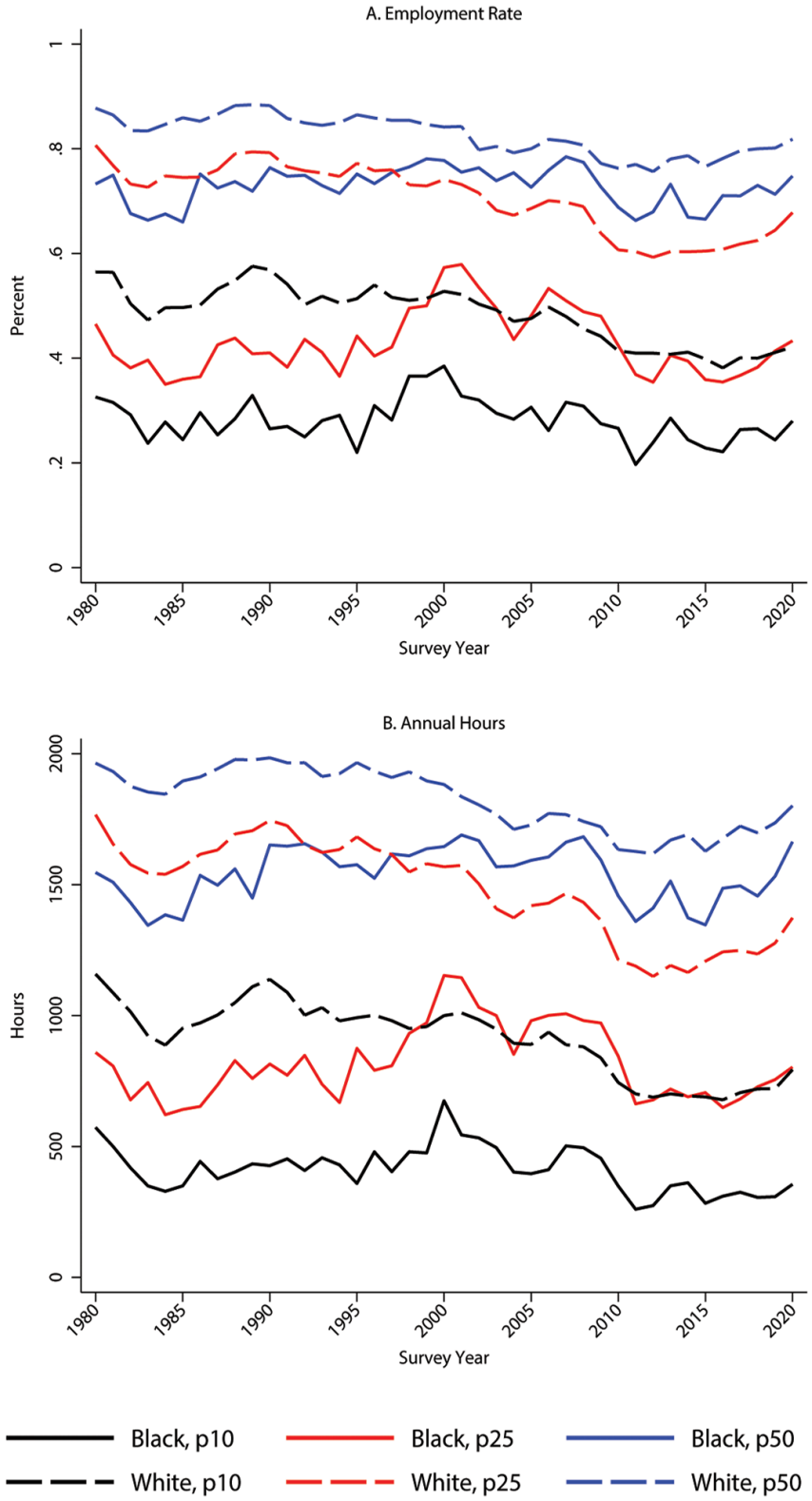
The racial inequality reducing impacts of the EITC are summarized in Figure 10 (below). We compare Black and White households at the 10th, 25th, and 50th percentiles of their race-specific income distributions. Accounting for the EITC, there are a few important stylized facts. First, there is virtually no racial inequality reduction between Black and White households at the 10th percentile. If anything, the credit may even slightly worsen racial inequality. The EITC does reduce Black-White income inequality at the 25th and 50th percentiles of the income distribution. At the 25th percentile, the credit reduces Black-White income inequality by about 10 percent around the time of the 1993 tax reforms, before falling to a roughly 5 percent inequality reduction on an annual basis thereafter.

Figure 10: Changes in Black-White inequality ratios (10th, 25th, and 50th percentiles) before and after the EITC



Source: Hardy, Hokayem, and Ziliak (2022)

Figure 11: Employment rates and annual hours of work by race of household heads



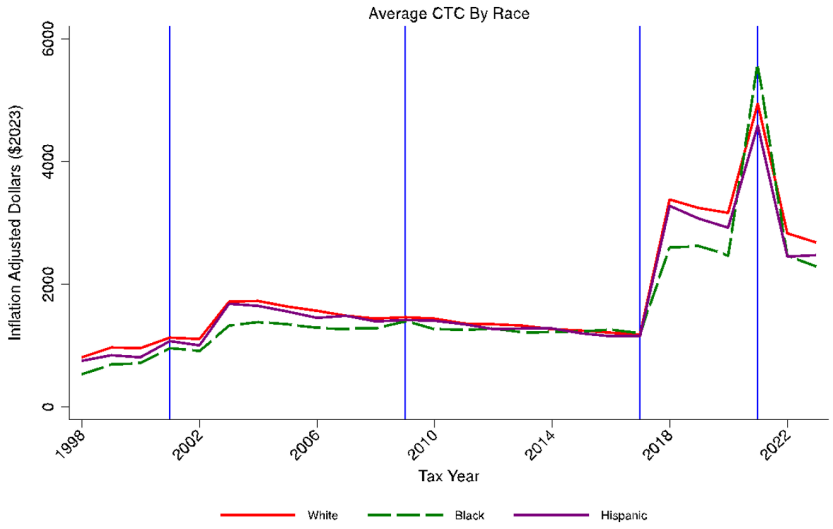
Source: Hardy, Hokayem, and Ziliak (2022)

At median race-specific earnings, a larger proportion of Black households, as compared to White households, are eligible for the EITC, which helps to drive this result. This reflects longstanding lower employment rates and hours worked among Black heads of household (Figure 11). Overall, the EITC lowers racial inequality between Black and White households by 5-10 percent over the 40 year period spanning 1980-2020. Some of this reduction is simply a direct transfer to lower-income households, but it also reflects the impacts of incentivizing work and drawing a larger share of Black families into the labor force.

b. Impacts of the CTC on Black-White inequality

A similar exercise can be conducted for the CTC, as presented in Hardy and Hokayem (2023; 2024). The 2017 and 2021 reforms increased the average credit received, shown in Figure 12. The 2017 policy changes doubled the credit to $2,000 per child while extending the phase out of the credit to $400,000 for married couples filing jointly and $200,000 for head of household or single individuals. The 2021 expansion increased the credit to $3,600 for young children and $3,000 for children between 6 and 17 years old. Distinct from other years, the 2021 credit was fully refundable, meaning that filers with no taxable income or earnings received the maximum credit. Finally, half of the credit was paid monthly between July and December of 2021. Figure 12 shows that Black families tended to receive slightly lower CTC payments in the late 1990s and 2000s relative to White and Hispanic families. The pattern is exacerbated following the 2017 policy expansions, but then reversed in 2021, such that Black families received slightly more from the CTC as a result of the 2021 reforms, including full refundability.

Figure 12: Average CTC payment, by race and ethnicity

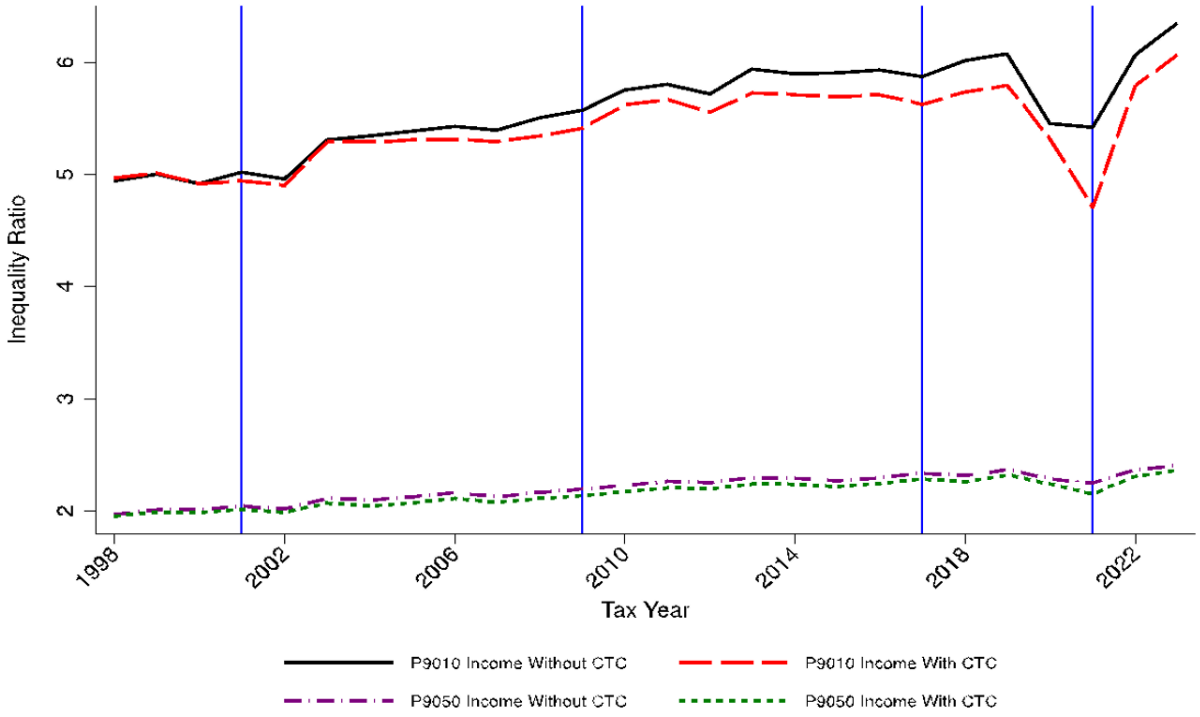


Source: Hardy and Hokayem (2024)

As shown in Figure 13, overall inequality, as measured by the ratio of incomes at the 90th percentile of the income distribution relative to incomes at the 10th percentile of the income

distribution (the 90-10 ratio), fell after accounting for the CTC. The CTC appears to reduce 90-10 inequality more over time beginning in the early 2000s. No such trend in inequality reduction occurs at the top end of the income distribution (e.g.: the ratio of incomes at the 90th vs. 50th percentile).

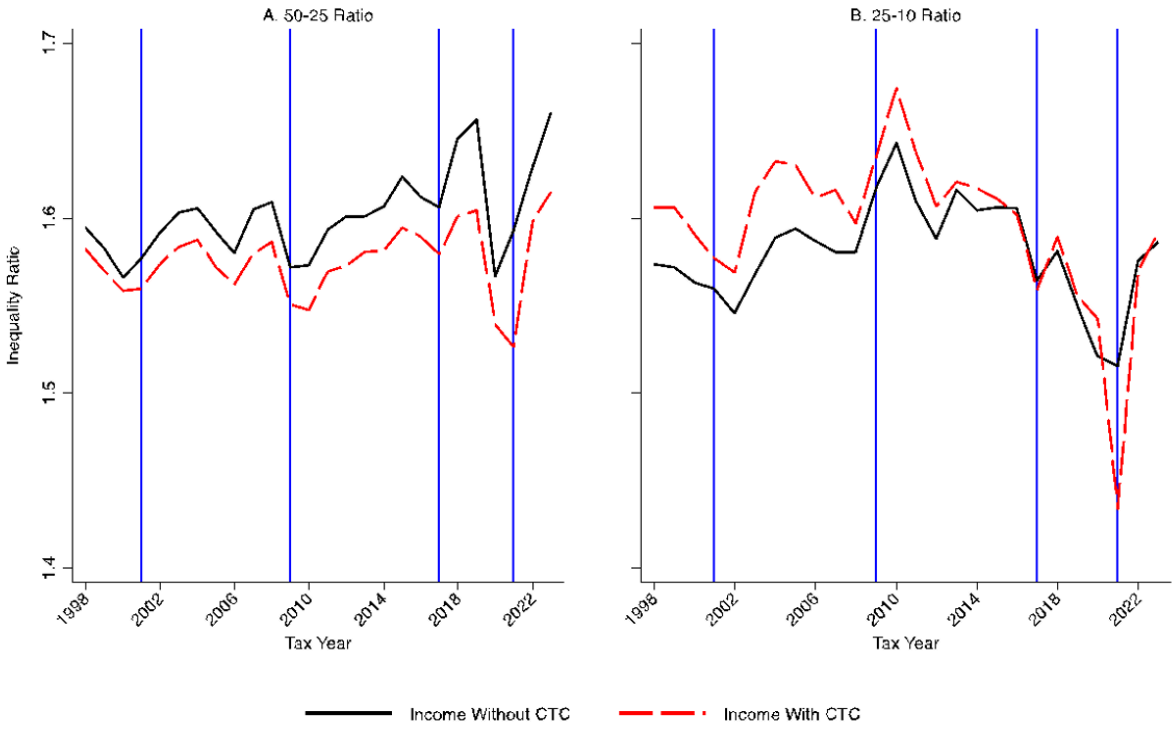
Figure 13: Inequality ratios before and after the CTC



Source: Hardy and Hokayem (2024)

An important reversal of these trends in inequality occurs when focusing at the very bottom of the income distribution. Figure 14 shows the ratio of incomes at the 50th percentile of the income distribution to incomes around the 25th percentile ("50-25 ratio", left panel), and the ratio of incomes at the 25th percentile relative to those at the 10th percentile ("25-10 ratio", right panel). Most years, the CTC reduces the 50-25 ratio, but *increases* the 25-10 ratio. However, the 2021 expansion reversed the 25-10 ratio: in that year, the CTC reduced income inequality at the very low end of the income distribution.

Figure 14: Inequality at the low end of the income distribution, before and after the CTC

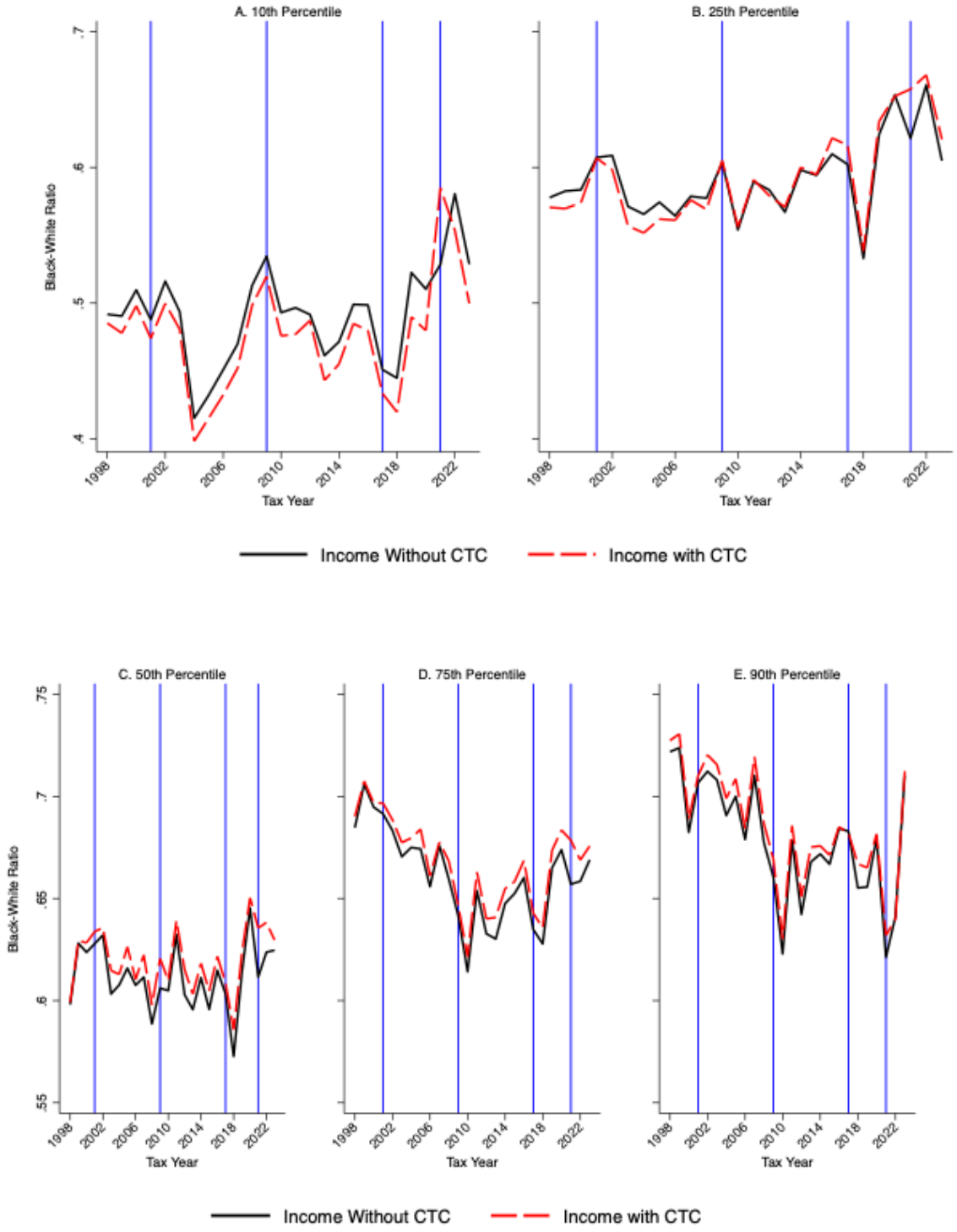


Source: Hardy and Hokayem (2024)

These patterns show that CTC has historically operated as middle and upper income tax relief, offering less inequality reduction at the very *bottom* of the income distribution. With the exception of 2021, these results are consistent with the policy design, which does not allow for receipt until the filer has a minimum threshold of labor income and is only partially refundable for families with low incomes. Outside of 2021, the CTC excludes parents with very little or no earnings. To receive the CTC, current tax rules require positive taxable earnings, with the refundable credit value equal to 15 cents for every dollar earned above $2,500, capped at $1,700 in the form of a refundable credit and $2,000 overall. The current credit phases out at 5 cents per dollar earned above $200,000 for unmarried parents, and at 5 cents per dollar earned above $400,000 for married parents.

As discussed in Section 1, there are differences in income across racial and ethnic groups. Accordingly, we expect each component of the tax system to influence these gaps. Following the pattern of Figure 14, Figure 15 shows that Black-White inequality in the bottom is actually slightly *higher* after accounting for the CTC (red dotted line) at the 10th (top left panel) and 25th (top right panel) percentiles of Black and White household income distribution. In contrast to the lack of inequality reduction at the very low end of the income distribution, however, Black-White inequality is slightly reduced by the CTC at the 50th (bottom left panel), 75th (bottom middle panel), and 90th (bottom right panel) percentiles of the income distribution.

Figure 15: Impact of the CTC on Black-White income inequality across the income distribution



Source: Hardy and Hokayem (2024)

c. Inequality across space: Tax policy and implications for well-being

State tax policies are strongly correlated with a range of economic and policy outcomes. Specifically, states can be broadly categorized with respect to the overall progressivity or regressivity of their tax codes. Factors that influence the progressivity of a state's tax system include having a supplemental EITC or CTC for filers with low incomes. At the same time, there is wide variation in the generosity of state safety nets, including access to programs like SNAP, TANF, and Medicaid (Ganong and Liebman 2018, Fox et al. 2023, Hardy et al. 2019). It is reasonable to expect there to be correlations between the progressivity of a state's tax system and its income support programs more generally. Indeed, strong regional associations emerge with respect to policy choices and economic outcomes; southern states, for example, are less likely to offer supplements to the refundable EITC or enact higher minimum wages. They are also less likely to support unionization, and they tend to have higher rates of poverty and unemployment (Logan, Hardy, and Parman 2021).

In order to provide new empirical evidence on the relationship between state tax progressivity and the broader safety net, we conduct a series of tabulations to examine the relationship between tax policy and a series of other safety net programs. We measure state tax progressivity as defined by the Institute on Taxation and Economic Policy (ITEP) and include information on other safety net programs from the Kaiser Family Foundation, the University of Kentucky Center for Poverty Research, and Fox et al. (2023). We find that state-level tax policy choices are not only direct investments or disinvestments in human services, but also that these choices can be interpreted as proxies for a state's commitment to broader investments in government safety net supports–which directly shape social and economic determinants of health outcomes. That is, states with more progressive tax systems also tend to have more generous income support programs.

First, as shown in Table 5, states that have adopted a supplemental EITC are also more likely to have expanded Medicaid eligibility to low-income non-elderly adults.

Table 5: State EITC and Medicaid expansion status, 2023

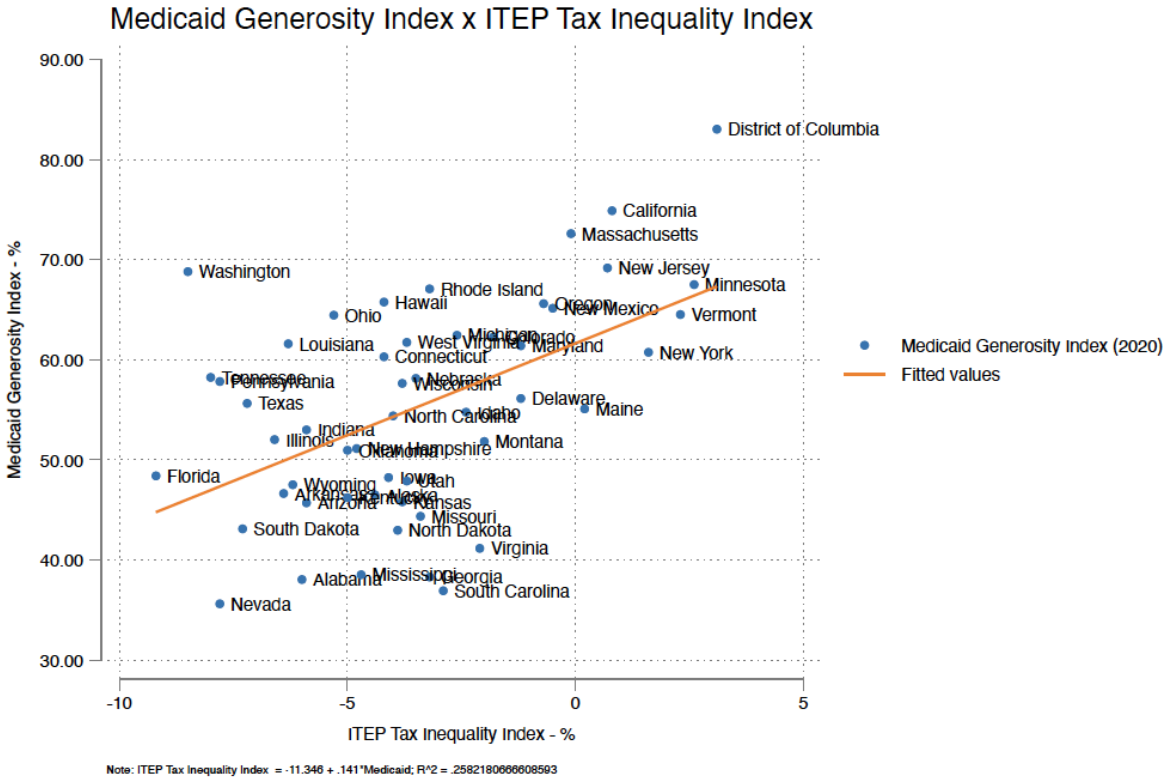
	State EITC (columns)	
Medicaid expansion (rows)	**Yes**	**No**
Yes	7 (70%)	3 (30%)
No	12 (29.27%)	29 (70%)

Sources: Kaiser Family Foundation and University of Kentucky.
Notes: Parenthesis denote the share of states in each Medicaid expansion category for each EITC category.

Second, we turn to a broader measure of tax policy progressivity and safety net access. The ITEP Tax Inequality Index provides a ranking of states based upon the extent to which the tax system effectively redistributes resources towards or away from households with lower levels of income. The ranking of states is ordered from most regressive (1) to least regressive (51). As an example to help understand how states move up or down the inequality index, New Mexico improved its relative ranking from 17 to 43 between 2015 and 2024 by introducing a refundable EITC, a refundable CTC, and a fully refundable child and dependent care tax credit. Over the same period, Wisconsin's ranking fell from 37 to 27 because the state increased taxes for the lowest-income 20% of the population and abolished taxes on estates and inheritances.

Apart from state taxes, Medicaid is another safety net program in which states have substantial flexibility in setting eligibility, covered services, and ease of access (Fox et al. 2023). Less generous Medicaid states have more stringent asset and income rules, are less likely to rely on other programs (e.g., SNAP) to determine eligibility, have long waiting periods, and/or short recertification periods (Fox et al. 2023). Figure 16 reveals a strong positive relationship between state tax policy progressivity and Medicaid generosity. Specifically, states ranked as relatively more progressive are more likely to exhibit higher levels of Medicaid generosity. Since expanded Medicaid coverage is associated with a wide range of improved health and household financial outcomes (e.g. Gallagher et al. 2019) and the EITC is associated with improvements in health for both mothers and children, these policy regimes (low/high Medicaid and state tax progressivity) are likely to amplify each other. In addition, the substantial flexibility that states have in both tax policy and safety net design underscores the importance of a robust *federal* tax system at supporting the livelihoods of the lowest-income residents.

Figure 16: Relationship between state tax policy progressivity and Medicaid generosity



Notes: Tax inequality measured by ITEP ranking (2022). Medicaid generosity index measured as in Fox et al. (2023).

5. The Role of Changing and Complex Family Arrangements in Assessing Tax Policy

Section Highlights

- An increasing share of children in the U.S. will live apart from one biological parent for at least part of their childhood.
- The design of the tax system and the government safety net falsely assume that children live *permanently* with one or both parents. Instead, shared parenting has increased, and many children in non-traditional households spend time with both parents throughout the calendar year.

Some features of the tax system are misaligned with the day-to-day living conditions faced by many families with dependent children. Most children in the United States will spend at least part of their childhood living apart from at least one biological parent (Andersson et al. 2017) and children of color are disproportionately likely to live apart from at least one of their biological parents. However, the tax and transfer system typically presumes that children live with both biological parents in the same household, or primarily with one biological parent. The mismatch between the complex and dynamic structure of many vulnerable families and the assumptions

embedded in the tax and transfer system undercuts the effectiveness of the overall system of government support for many children who could benefit most, including children of color and those in immigrant, LGBTQIA+, and multigenerational households.

Over the last 50 years, the living situation of American children has become more diverse and dynamic. In 1968, 85 percent of children lived with two parents; in 2020 the figure had fallen to 70 percent, and most children will spend at least some part of their childhood living apart from at least one biological parent (U.S. Census Bureau, 2021; Andersson et al. 2017). In part this reflects increases in divorce, and that almost 40 percent of children are now born to unmarried parents (Federal Interagency Forum, 2023). While most children not living with two parents are reported to live with their mothers (21 percent of all children), a growing share are reported to live with their fathers (5 percent of all children; U.S. Census Bureau, 2021).

Data limitations restrict our ability to recognize and accommodate the diversity of children's living situations. In addition to sometimes moving from one primary residence to another, many children spend some time with both parents. Most data sources reflect reports from just one parent—i.e., when parents live apart, it is rare for both parents to be interviewed and contribute information on the allocation of the child's time across households. Thus, there are measurement challenges in determining how often, and to what extent, children spend time with each parent when those parents live apart. The primary nationally representative source of information for understanding complex families is from the Census Bureau's Current Population Survey Child Support Supplement (the CPS-CSS), which asks questions only of parents claiming to live with the children for most of the time. Additional information is available for select samples (e.g., Future of Families/Fragile Families data, surveys and court records from Wisconsin).

Shared parenting has increased, in part reflecting changes in social norms and law and policy privileging arrangements in which children spend time with both parents (DiFonzo, 2014). Wisconsin data, for example, suggest that formal shared custody has increased dramatically among divorced families, accounting for the majority of cases by the early 2010s (Costanzo and Reilly, 2024; Cancian, Meyer, Brown and Cook, 2014). National data from the CPS-CSS suggests that by 2010-14, just over a third of divorces resulted in formal shared custody (Meyer, Carlson, and Ul Alam, 2022).

A related issue for families with parents who do not live together, is how legal arrangements and actual time and resource contributions are related. Again, data are limited. Among divorced parents, there may be differences between formal custody arrangements and actual time and resource allocations. Moreover, parents who are never married have substantially less access to institutional supports for establishing formal shared custody arrangements. New research, initiated as part of this project, compares CPS-CSS reports of legal shared custody and reports of each parent's time with the child (Cancian, Costanzo, and Meyer, 2024). The results show substantial deviations between formal and observed custody. Of particular relevance for this project, we document remarkable similarity in divorced and nonmarital father's time with children (mothers who have primary custody report that 23 percent of divorced fathers and 21 percent of nonmarital fathers engage in informal shared parenting) despite significant differences in legal

custody (20 percent of divorced fathers, and only 6 percent of never married fathers have legal shared custody). It is noteworthy that the discrepancy between formal and informal shared custody for divorced and non-marital couples is greatest for Black mothers: divorced Black mothers are 3.4 times as likely to report formal shared physical custody, even while reporting modestly *lower* rates of shared parenting, relative to never married Black mothers.

a. Family structure and the tax and transfer system

The tax and transfer system typically responds to differences in household composition related to the number (and age) of children, and the presence of one or both biological or adoptive parents. Some policies vary with marital status while others do not. However, policies typically presume that children live stably in a fixed household, with either one or both parents—not sometimes with one parent, and sometimes with the other. When parents live apart, one "primary" parent may claim the child; the other parent typically will either have no access to benefits tied to parental status or will have much less generous access.

As discussed extensively in this report, the primary cash income supports for low-income families are EITCs and CTCs. For the EITC, only the parent with whom the child spends the majority of time may claim the child. Only New York and Washington, DC offer an EITC for the noncustodial (i.e., the secondary) parent; this supplemental state EITC is relatively modest and available only to noncustodial parents who have a formal child support order which is paid in full (Michelmore & Pilkauskas, 2022; State of New York, 2024; Waxman & Hinh, 2023). CTC policy is similar, but some noncustodial parents may be eligible to claim a child if the custodial parent agrees (Department of Treasury, 2024). And, one state, California, offers a modest "joint custody head of household" credit for a parent who has the child less than half the time but pays more than half the child's expenses—a credit that is in addition to (rather than a transfer of) the CTC received by the parent with whom the child spends more time.

Other income support programs are also either limited to families with children (e.g. TANF and WIC), or have higher benefits for families with children (e.g. SNAP). When parents live apart, a child may only qualify one or the other parent, even if the child spends significant time with both. In particular, for SNAP, a child may only be included in the food assistance unit where the child eats the most meals (see Hall & Nchako, 2023 for state eligibility). For TANF, one parent is typically eligible for benefits based on the parent with whom the child usually lives (though in some states based on formal physical custody) (Administration for Children and Families, 2024).

While subsidized housing is not an entitlement and a minority of income-eligible families benefit (Gartland, 2023), it is an important resource for those families who receive it. The estimated average value of the effective subsidy provided to housing voucher holders is about $8,000 per year (Ellen, 2020). As with other benefits discussed above, for a given child, only one parent can qualify for federal housing benefits (U.S. Department of Housing and Urban Development, 2024).

States typically adjust child support orders based on formal agreements for shared parenting. For example, parents with similar incomes will typically not owe child support if they have equal

shared custody. However, as noted above, there is a discrepancy between formal shared custody agreements and reported patterns of shared parenting. Nonmarital fathers are particularly likely to spend significant time with their children in the absence of a formal agreement—and, therefore, not qualify for a reduction in ordered support, let alone other supportive benefits (Cancian, Costanzo and Meyer, 2024). Black fathers are particularly likely to face this inconsistency, given a higher proportion of nonmarital births, and (as noted above) high rates of observed shared parenting in the absence of formal shared custody.

Table 6 summarizes the availability of tax and transfer benefits for two-parent married couple families, divorced families with equal shared custody (50/50), and families with no formal shared custody.

Table 6: Tax and transfer provisions for various family types

	Married two-parent family		Joint custody 50/50		No formal shared custody	
BENEFITS	**Parent1**	**Parent2**	**Parent 1**	**Parent 2**	**Parent1**	**Parent2**
EITC	Yes	Yes	Yes	No	Yes	No
CTC	Yes	Yes	Yes	No	Yes	No
SNAP	Yes	Yes	Yes	No	Yes	No
TANF	Yes (with some restrictions)	Yes (with some restrictions)	Yes	No	Yes	No

Source: Adapted from Cancian and Costanzo, 2024.

Altogether, the safety net does not fully account for all of the diverse and dynamic settings in which families live. Similarly, the tax system does not fully account for differences in living arrangements, and may at times exacerbate these gaps in households with shared parenting. The disconnect between contemporary patterns of family structure and current policy create a number of challenges and highlights the importance of developing new approaches. We offer several recommendations in Section 6.

6. Conclusion

There is considerable variation in how refundable tax credits affect economic insecurity and racial inequality. The EITC consistently reduces racial and economic inequality, while the CTC redistributes resources towards middle income families. The exception to this pattern is the expanded CTC in 2021, when the CTC was akin to a child allowance and yielded historic reductions in child poverty across race and ethnicity.

The tax system has great potential as a mechanism for reshaping economic security — a key social determinant of health. Tax credits targeted towards families with children have reduced poverty and inequality, and reforms to improve the design and implementation of these credits can further the overall objective of promoting economic security. The real and perceived

complexities of the tax system are a barrier to entry for many families. Yet, as described by Herd and Moynihan (2023), the federal tax system may reduce "administrative burdens" some families face. If a family typically files taxes with the IRS, then claiming benefits like the EITC or CTC requires less time and learning costs than a traditional safety net program, and can operate akin to an auto-enrollment. Some of these families may also otherwise experience stigma for seeking out government supports that, in turn, discourages take-up of benefits. Thus, the tax system can allow families to avoid such interactions. On the other hand, a large proportion of families with low incomes are not required to file federal income taxes. For many families with low income that do not typically file, initiatives like the expanded 2021 CTC were relatively difficult to access (Herd and Moynihan 2023). Despite its limitations, the tax system has emerged as a powerful vehicle to shape families' incomes, health, and well-being.

The tax system, especially at the federal level, offers support for families with low-incomes, especially those residing in states with less progressive tax systems and more restrictive income support programs. Related to this point, there is a strong association between poverty, race, tax policy, and redistributive policy, driven by many of the southern states. The redistributive power of the tax system can help to interrupt some of the large, economic resource-based determinants of health that negatively shape health outcomes. This could have especially important consequences among many Black families and economically disadvantaged families more generally. Ultimately, with tax credits like the EITC and the 2021 CTC that boost economic resources, households can move further up the income ladder and, as a result, potentially move further up the health gradient.

There are substantial opportunities to improve the tax system in order to reduce racial and ethnic health inequities. Based on the evidence we have presented, we offer several concrete recommendations for how the federal tax system could further reduce inequalities and improve health, as well as several directions for future research.

- **Make the CTC fully refundable.** As shown by the experience of the 2021 CTC, fully refundable tax credits that enable families to receive the full credit amount, even without earned income, reduced child poverty to historic lows. Importantly, other features of the current system of government supports impose substantial work incentives that offset the work disincentives of making tax credits like the CTC fully refundable. And, the potential multi-generational impacts of reducing exposure to child poverty could yield large, albeit difficult-to-calculate efficiency gains for the U.S.

- **Provide more frequent (e.g., monthly) payments of refundable tax credits.** The monthly payments offered through 2021 expanded CTC allowed families to improve their within-year economic security and provided a more continuous buffer to protect against income volatility and expense volatility associated with unanticipated transportation and living expenses. Many of the day-to-day choices facing households are impeded by the bandwidth consequences of economic insecurity. It is also plausible that with reduced financial stress, families' health outcomes can improve (Mullainathan and Shafir 2013).

- **Explore opportunities to deliver assistance through the Social Security Administration (SSA).** Some of the challenges associated with delivering economic assistance via a difficult-to-navigate tax system are potentially mitigated by delivering tax credits like the CTC and EITC via direct expenditure programs. For example, the 2021 expanded CTC was designed to mimic a child allowance, and could be delivered via the SSA. Child allowances through the SSA may reduce barriers to participation based upon the complexity of the tax system. There may be important political rationales for avoiding such a policy change that supersede reducing the costs of complexities associated with navigating the tax system, costs that likely reduced receipt of the 2021 expanded CTC. Concerns from families with low income associated with interactions with the tax system, including risks of audits, may potentially further reduce participation. This may be especially true for mixed status families, particularly those where one or more adult parents are resident non-citizens.

- **Reform the tax system to address family complexity and shared parenting.** With rare exception, tax and transfer policies do not accommodate shared parenting. Options for policy realignment include at least two general strategies. First, policies that provide a benefit tied to a child could be divided across the two parents. Alternatively, rather than simply allowing parents to split existing benefits, policy could allow for both parents to qualify for full benefits for a single shared child. Benefit levels could simply correspond to the given parent's situation (e.g., earnings, number of other children), or adjustments could be made for joint resources. In either case, more work is needed to consider the implications of alternative reforms. The optimum design of shared parenting options must consider how best to allocate scarce resources while minimizing administrative burdens and unintended inequities across children across different living situations. Given substantial differences in living situations across income, racial and ethnic groups, these reforms have the potential to contribute to more equitable outcomes for children and families.

Directions for future research

Q: How are federal policy changes amplified or muted by state level policy interactions? For example, it could be that families residing in states with very weak safety net support systems yield the largest benefits from expansive policy reforms.

Q: What are the long-run impacts of the 2021 expanded CTC? Many of the then-very young children residing in families who received the expanded 2021 CTC are beginning to enter school. More generally, sufficient time has lapsed in order to examine the medium-term effects of receiving these income transfers on children and their families.

Q: What are the long-run impacts of refundable tax credits on health outcomes? A sizable literature, summarized in Section 3, shows that the EITC and 2021 CTC expansion improved maternal and child health. Yet there is no research focusing on the effects of cumulative access

to the EITC over many decades or how the greater income provided by this credit may affect longer-term health conditions, including chronic illness or mortality.

Q: What is the relationship between state tax policy and state-level health outcomes, economic outcomes, and policy choices? More work can be conducted to better understand the link between state tax policy and other outcomes. This work can focus both on present-day outcomes, as well as the relationship between historical (dis)investments through the tax system and subsequent economic, health, and social outcomes.

Q: What are the impacts of innovative state-level CTC expansions? Several states across the nation have enacted CTCs modeled off of the 2021 expanded CTC. For example, beginning in 2025, Minnesota will provide a $1,750 per child payment, half of which will be available as monthly payments. In other states, state CTCs are only available to families with very young children. How have such innovative state expansions changed economic conditions and health outcomes for children and families in affected states?

Q: How can the safety net and tax system better account for complex living arrangements and shared parenting? The optimum design of shared parenting options must consider how best to allocate scarce resources while minimizing administrative burdens and unintended inequities across children in different living situations. Yet few policies provide options that account for all shared parenting situations, and research on these efforts is even more limited. How do policies that account for shared parenting responsibilities affect both parents and their children?

Q: To what extent do workers receive the full value of the EITC and CTC in the form of higher net wages (wages plus tax credits), and to what extent do employers respond to these credits by paying lower wages? Existing work shows that the EITC increases labor force participation among unmarried parents and boosts incomes. However, firms may also benefit by being able to offer lower wages ("pre-tax earnings") if workers know they will receive a tax refund. While there is limited evidence on the so-called "incidence" of refundable tax credits, new administrative and longitudinal data sources make exploring this question important grounds for future research.

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Appendix Table 1: History of cash assistance

Public Assistance			
1996	**Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA, P.L. 104-193)**	End AFDC and create TANF as a broad-purpose block grant to address child poverty and economic disadvantage.	AFDC replaced by TANF; states given flexibility in using funds.
1997	**Balanced Budget Act of 1997 (P.L. 105-33)**	Amend TANF to raise the cap on counting education as work, establish Welfare-to-Work (WTW) grants.	Increased funding and support for education and job training.
1998	**Transportation Act for the 21st Century (P.L. 105-178)**	Use TANF funds for reverse commuter grants.	Expanded TANF funds for transportation needs.
2002	**Job Creation and Worker Assistance Act (P.L. 107-147)**	Extend TANF supplemental grants and contingency funds.	Continued support for states facing economic challenges.
2005	**Deficit Reduction Act (DRA, P.L. 109-171)**	Extend TANF funding, eliminate performance bonuses, establish competitive grants for healthy marriage and responsible fatherhood initiatives, revise work standards.	Long-term extension and policy changes in work standards and family support programs.
2009	**American Recovery and Reinvestment Act (ARRA, P.L. 111-5)**	Address economic recession impacts, provide additional funding through TANF Emergency Contingency Fund.	Increased support for basic assistance, emergency aid, and subsidized employment during the recession.
2017	**Consolidated Appropriations Act (P.L. 115-31)**	Extend TANF funding and finance related research	Continued funding and research on effective TANF programs
2021	**American Rescue Plan Act (P.L. 117-2)**	Establish a temporary fund to address the economic effects of the COVID-19 pandemic.	Provided $1 billion for nonrecurrent, short-term benefits to needy families
2023	**Fiscal Responsibility Act (P.L. 118-5)**	Revise TANF work standards, allow HHS to conduct performance system pilots.	Updated work standards and experimental performance systems in select states
2024	**Consolidated Appropriations Act (P.L. 118-42)**	Extend TANF funding.	Continued funding through September 30, 2024

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