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June 14, 2023

Gains From Expanded Child Tax Credit Outweigh Overstated Employment Worries

By George Fenton

Temporary provisions that expanded the Child Tax Credit and made the full credit available to families with the lowest incomes helped drive child poverty to a record low in 2021, underscoring that the nation's typically high child poverty rate is a policy choice.[1] The Child Tax Credit should be expanded, and most importantly, the full credit should be available to all children in low-income families. Opponents' misleading claims that an expanded credit would dramatically reduce the workforce contradict available real-world evidence.[2]

In any future tax package, policymakers should prioritize providing the same, full tax credit amount that higher-income families get to the 19 million children who are now excluded from the full credit because their families' incomes are too low.[3] That is more than 1 in 4 U.S. children, a group that is disproportionately Black, Latino, and American Indian and Alaska Native (AIAN) due to historical and ongoing racial discrimination that have led to people of color being overrepresented in low-paid work and having more limited economic opportunities. The benefits of a full credit to all families now missing out include immediate relief from hardship for those most in need, as well as decades-long gains in children's health, education, and earnings.

The recent Child Tax Credit expansion under the American Rescue Plan drove down child poverty and appears not to have meaningfully discouraged work among parents, numerous studies of real-world evidence suggest. Employment among both parents and non-parents rose by 1.7 percentage points in 2021, according to Bureau of Labor Statistics data. Researchers at the University of Michigan examined part- and full-time employment and labor force participation and found "no significant employment effects for any outcome" — with several other research teams reaching similar conclusions.

Canada also has a permanent "child allowance" that is much larger than even the temporarily expanded U.S. credit and is available to families with little or no earnings in a given year. And Canada continues to have a higher labor force participation rate overall and among women than the U.S., demonstrating that a generous child allowance can coexist with high employment. Careful research also finds "no evidence of a labor supply response" to Canada's recent expansion of child benefits.

Most studies forecasting the potential impacts of a permanent expansion in the U.S. predict relatively modest effects on employment as a share of the workforce, with more than 99 percent of working parents continuing to work. Expansion opponents often point to an outlier prediction from economists at the University of Chicago that a permanent expansion would lead more than a million parents to quit their jobs. But the Chicago study is far outside the consensus and relies on several implausible assumptions, including that an unrealistically high number of higher-income people would leave the workforce if the credit were expanded and that either both or neither parent in a dual-parent household would do so. In a thorough review of the Chicago study, Jack Landry of the Jain Family Institute concludes, "When subject to scrutiny, evidence predicting significant job loss is extremely thin."[4]

Most parents are unlikely to change their employment decisions in response to the credit. Some may choose to work less and spend more time with their children, which could be desirable, especially for parents who have young children or work long hours. Other parents, newly able to afford child care or transportation, may work more. The net effect on the labor force is uncertain but likely small, data from the U.S. and abroad suggests.

Most importantly, policymakers should recognize that, even if the expanded credit were to have a modest employment impact, the 19 million children currently left out of the full credit should still be the top priority. The clear evidence on the profound benefits of income support to children's well-being outweighs any small, speculated changes in parents' choices about employment.

Finally, there are other policies — notably expanding access to child care assistance — that can help more parents work.[5] Indeed, many countries with robust child allowances also do more to ensure that parents have access to affordable, quality child care. If the goal is to improve children's well-being and expand labor force participation among parents, investments in the Child Tax Credit and child care could be paired. This would be an effective way to address any potential employment concerns and would avoid needlessly consigning millions of children to poverty.

No Meaningful Employment Loss in 2021, Evidence Indicates

Taken together, evidence on the short-lived U.S. experiment with an expanded and fully refundable Child Tax Credit doesn't indicate that the credit meaningfully reduced employment. (Full refundability allows families with low or no income in a given year to receive the full credit.) Employment rates among both parents and non-parents increased by 1.7 percentage points in 2021, according to Bureau of Labor Statistics (BLS) data. This rapid employment growth, which partly reflects the ongoing economic rebound from the pandemic, demonstrates that a sizable and fully refundable Child Tax Credit is compatible with substantial employment gains.

Comparing credit-eligible parents to otherwise similar adults in 2021 (when the expanded credit was in place), researchers from the University of Michigan concluded: "We examined overall employment, full-time employment, part-time employment and general labor force participation and found no significant effects for any outcome…."[6] Teams at the Brookings Institution, Tax Policy Center, University of Chicago, Massachusetts Institute of Technology, University of California, Irvine, Columbia University, and elsewhere reached similar conclusions,[7] finding no evidence that the expanded credit caused parents to leave the labor force. (While one study found that among people who have not attended college, employment increased more slowly for parents than non-parents in mid-2021, the trends the paper points to appear to precede the first Child Tax Credit payments, and end well before the payments ended, and thus can't easily be attributed to those payments.)[8]

One potential reason for the expanded credit's negligible impact on overall employment is that while some parents may choose to work less and spend more time with their children — an outcome that can improve well-being, particularly for parents with young children or working long hours — others may be newly able to afford child care or transportation that allows them to work or work *more*. Roughly the same number of parents said the expanded Child Tax Credit helped them work more as said it helped them work less, and just 1 percent said the credit helped them to work not at all, a survey from the American Enterprise Institute found.[9]

A survey from the Center for Law and Social Policy found that among parents with incomes below $75,000, one-quarter of recipients of the expanded Child Tax Credit payments said it helped them work or work more.[10] And economists at the Dallas Fed offered preliminary evidence suggesting that, "on net, the pandemic-era [Child Tax Credit] expansion did not discourage work and, in fact, helped some financially vulnerable families overcome hurdles to labor force participation."[11]

A permanently expanded credit may of course have different impacts than a temporary one. The small share of parents who may choose to work less or more in response to the credit may take time to fully understand and adapt to the policy. Still, the temporarily expanded credit provided a valuable opportunity to study the policy in a real-world setting, and the weight of the evidence is clear — the U.S.' first experiment with a fully refundable Child Tax Credit shows "no discernible negative effects on parental employment," as a literature review by Megan Curran of Columbia University concludes.[12]

Canada's Generous Child Allowance Has Had Little Impact on Work

Unlike the U.S., whose credit expansion was temporary, many other countries have permanent, generous child benefits (often called "child allowances"), which families qualify for regardless of the employment status of the parents.[13] In Canada, for example, families are eligible for a credit of about $5,500 per child under age 6 and $4,600 per child aged 6 to 17 (these amounts have been converted to U.S. dollars), including households with little or no earnings.[14]

In 2021, the expanded U.S. Child Tax Credit was $3,600 for kids under age 6 and $3,000 for kids aged 6 to 17. Under current law the credit's maximum is $2,000 per child; but its value phases in with earnings at 15 cents per dollar of earnings above $2,500, and the refundable portion of the credit (the amount a family can receive if their credit exceeds their income tax liability) is capped at $1,500 per child.

Even with a substantially larger credit with no minimum earnings requirement, Canada's overall labor force participation rate (65.5 percent) is higher than the U.S.' (62.6 percent).[15] Among prime-age women, the difference in employment rates is even starker — a 79.7 percent employment rate in Canada and 73.7 percent in the U.S. as of 2019, according to OECD data.[16] A raw cross-country comparison is far from conclusive, but it does demonstrate that a strong, universal child tax credit is compatible with strong employment.

Samuel Hammond and Robert Orr of the Niskanen Center, discussing a study by two Canadian economists on the introduction of Canada's child allowance in 2006 (when the credit was smaller), note that the credit "was universally available to all households with children, regardless of their income, and yet the sky didn't fall."[17]

The study found that the child allowance decreased labor force participation among married mothers by 1.4 percentage points (which the authors note is consistent with an earlier study), but *increased* participation among divorced mothers by 2.4 percentage points.[18] Among other groups, including mothers who never married, impacts were statistically and economically insignificant. The authors write that among those who work more, "additional funds may afford them greater opportunity to purchase higher-quality child-care services, enabling them to enter the labor market."[19]

A more recent study of Canada's 2015 and 2016 expansion and consolidation of its child benefits finds "no evidence of a labor supply response to either of the program reforms on either the extensive or intensive margins," meaning no impacts on either participation in the labor market or hours worked.[20]

The U.S. and Canadian situations and populations differ somewhat. The U.S. credit temporarily dropped its phase-in with earnings as part of the 2021 expansion; by contrast, Canada's recent child allowance reforms did not replace a credit tethered to work (the economic models below attempt to account for the role of the U.S. phase-in).[21] In addition, Canada offers paid leave, making it easier for parents to maintain connections with employers while supporting young children — a policy the U.S. could adopt to better support parents in the workforce. Still, as Hammond and Orr note, "Canada provides the best point of comparison to the U.S. given their cultural similarity and broadly comparable institutional environment."

In sum, Canada's experience is telling in part because studies found that the recent child allowance expansion did not have any obviously worrisome influence on employment rates. It is also notable that for years Canada has had a child allowance that does not have an earnings requirement and is much larger than even our own expanded credit was. And yet the country's labor force participation rates have remained well above our own, demonstrating that a generous child allowance can coexist with high employment.[22]

Economic Models Predict Modest Impacts; Chicago Study an Outlier

While research has not found any clear evidence of meaningful work loss from the temporary 2021 Child Tax Credit expansion or the Canadian child allowance, economists have turned to economic models to simulate how a permanently expanded credit in the U.S. might affect employment. These models are not new *evidence* so much as statistical predictions based on prior evidence about how labor force behavior shifted under earlier policies, notably the Earned Income Tax Credit (EITC).

The projections are sensitive to interpretations of the strength and relevance of earlier studies, but most analyses suggest that any negative employment effects of expanding the Child Tax Credit and making the full credit available to children in the lowest-income families would be modest as a share of the workforce. Moreover, over the longer run, improving economic security for such children has been found to have positive effects on educational attainment, adult health, and future labor force success (discussed further below).

There are at least seven studies that make predictions, using different data and models, of how a permanent continuation of the 2021 Rescue Plan expansion would affect parents' employment.[23] For context, note that there are roughly 166 million people in the U.S. labor force, and the size of the labor force can fluctuate by several hundred thousand people from month to the month.[24] The low-end prediction of the expanded credit's impact, from the conservative Tax Foundation, is a 38,000-person decline in full-time equivalent employment. The middle-range estimates are about 300,000 from the American Enterprise Institute and the Republican staff of the Ways and Means Committee, based on analysis from the Joint Committee on Taxation. This amounts to about one half of one percent of working parents. Two academic studies come in somewhat higher, at around 360,000-390,000 fewer people employed.

An outlier prediction from economists at the University of Chicago is that 1.5 million parents would exit the labor force. The Chicago prediction has received outsized attention from some commentators and lawmakers, but it is roughly five times larger than the middle-range estimate.[25]

In a research note, Rutgers economist Jacob Bastian lists six assumptions that explain the difference between his estimates (a roughly 360,000-person decline in employment) and the Chicago findings.[26] One is the Chicago model's unrealistic feature that either both parents in a household would stop working or neither would, ruling out real-world cases where a secondary earner stays home with young children or reduces their hours worked, perhaps for a short period of time, while a primary earner continues to work. Another is that model's implausibly large number of parents with middle and high incomes who would interrupt or end their careers in favor of a few thousand dollars in tax credits. Some 250,000 parents in households with more than $80,000 in annual earnings would leave the labor force in the Chicago model's estimate, according to Bastian, a phenomenon without precedent.

One limitation of the simulations is that none is based on direct evidence of tax credits causing substantial declines in employment. Instead, the models largely rely on an analogy to earlier EITC expansions that led to *increases* in employment; an untested assumption behind the predictions is that studies finding earlier EITC-driven gains in work are reliable guides to how much a Child Tax Credit expansion could *reduce* employment today (when the steep phase-in of the EITC remains in place).[27]

An advantage of the literatures from the temporarily expanded U.S. Child Tax Credit and from Canada is that they do not require this assumption, instead offering real-world tests of whether refundable child tax credits led to meaningful employment declines (they did not). While each body of evidence discussed here — the temporarily expanded U.S. credit, the Canadian child allowance, and the simulations — has different strengths and limitations, *none* offers reason to believe that a fully refundable Child Tax Credit in the U.S. will lead to large declines in work.[28]

Poverty Reductions and Long-Run Gains for Children Outweigh Employment Worries

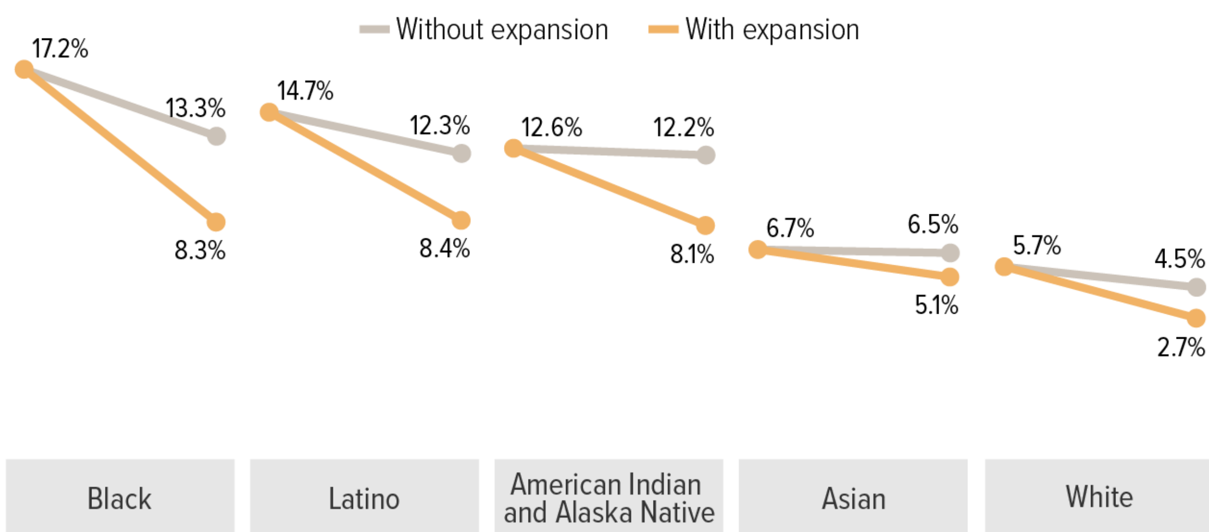
An estimated 19 million children in the lowest-income families — or more than 1 in 4 children under age 17 — are ineligible for the full Child Tax Credit under the current credit design.[29] Many families struggle with low income due to forces beyond their control. Historical and ongoing racial discrimination, for example, leave many people of color overrepresented in low-paid work and facing limited economic opportunities. Roughly 46 percent of Black children, 39 percent of AIAN children, 37 percent of Latino children, 17 percent of white children, and 15 percent of Asian children currently cannot receive the full credit because their families' incomes are too low.[30]

In 2021 the now-expired Rescue Plan's Child Tax Credit expansion provided the same benefit to children in families with little or no earnings as most middle- and upper-income families received. This improved conditions for children of all races and ethnicities and narrowed differences in poverty rates between them. (See Figure 1.)

FIGURE 1

Child Tax Credit Expansion Drove Child Poverty Sharply Downward in 2021 Across Racial & Ethnic Groups

Child poverty rates, 2020 to 2021



Note: Figures use the federal government's Supplemental Poverty Measure (SPM). American Indian and Alaska Native (AIAN) children may be AIAN alone or in combination with other races and ethnicities; Latino (short for Latino, Hispanic, or Spanish origin) may be of any race; Black and white refer to children of that race alone and not Latino; and, Asian refers to children of that race regardless of Latino ethnicity.

Source: U.S. Census Bureau figures published September 13, 2022; additional analysis of the Census Bureau's March 2022 Current Population Survey by CBPP

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Census data released in September 2022 are the clearest evidence to date of the temporarily expanded credit's success. Without the expansion (but with other relief measures in place), the child poverty rate would have dropped from 9.7 percent in 2020 to 8.1 percent in 2021, according to these data. But with the American Rescue Plan's Child Tax Credit expansion, the rate fell to 5.2 percent, keeping some 2.1 million additional children out of poverty.[31]

In addition to short-run relief from hardship, income support can bring long-run gains in children's health, education, and earnings, a mounting body of research finds. (See Figure 2.) For instance, a study released last year, titled "Investing in Infants: the Lasting Effects of Cash Transfers to New Families," finds that infants in families who receive more support from child-related tax benefits go on to have higher test scores, high school graduation rates, and earnings into young adulthood.[32] Based on prior literature, the authors also note that even temporary aid to low-income families can help them avoid extreme levels of "short-term stress with long-term ramifications" from threats such as eviction and food insecurity.

Other studies of childhood income assistance have similarly found short- and long-term gains for infant health, elementary school performance, positive social behavior, and, years later, greater school completion, improved health status in young adulthood, and higher earnings.[33]

FIGURE 2

Child Tax Credit Expansion Projected to Provide Important Gains for Children and Society

- Lower neo-natal mortality
- Greater health and longevity for children and parents
- Higher future earnings of child beneficiaries
- Lower costs of protecting children from abuse & neglect
- Greater safety from reductions in crime
- Increased future tax payments by child beneficiaries
- Reduced expenditures on children's and parents' health care costs

Source: Irwin Garfinkel et al., "The Benefits and Costs of a U.S. Child Allowance," NBER Working Paper No. 29854, 2022

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Child Care and Paid Leave Are Effective Tools to Support Working Parents

The U.S.' under-investment in child care and its lack of national paid leave (unique among OECD countries) points to another reality: it is very difficult for parents to balance work and family obligations in this country. Cornell economists Francine Blau and Lawrence Kahn estimate that the lack of these "family-friendly" policies accounts for about one-third of the shortfall in U.S. women's labor force participation relative to other OECD countries.[34]

If policymakers want to increase labor force participation among parents, the answer isn't to needlessly consign millions of children to poverty because a more robust Child Tax Credit *might* have a modest negative employment impact. Instead, it is to take steps to support working parents that other countries have long taken, like investing in child care and providing paid leave.[35]

In sum, the bulk of evidence suggests that employment effects of expanding the Child Tax Credit are uncertain but likely small or even negligible on net. Concerns about employment may be addressed through policies such as child care assistance and paid leave that would further lower child poverty and help working parents. And employment considerations from income support policies like an improved Child Tax Credit must in any event be weighed against the extensive and credible evidence of these policies' lasting benefits, including for children's health, education, and future labor market success.

[1] Sharon Parrot, "In Pandemic's Second Year, Government Policies Helped Drive Child Poverty Rate to a Record Low, Cut Uninsured Rate, New Census Data Show," CBPP, September 13, 2022, https://www.cbpp.org/press/statements/in-pandemics-second-year-government-policies-helped-drive-child-poverty-rate-to-a.

[2] For instance, Rep. Jason Smith, chair of the House Ways and Means Committee, has cited Bureau of Labor Statistics (BLS) data to argue that the American Rescue Plan's temporarily expanded Child Tax Credit demonstrated the "disaster of eliminating work requirements." But the apparent early 2022 uptick in labor force growth that Rep. Smith cites is due to a technical population-size adjustment that BLS makes to the data every January based on updated Census data. Every ten years this adjustment incorporates the latest decennial census results, which generally increases the estimated size of the labor force. As a result, 1.5 million of the published 1.7 million-person increase in the labor force Smith highlights reflects this population-size adjustment rather than a change in actual labor force participation since December 2021. BLS specifically warns users every January about the effects of new population controls in the household survey used to estimate household-based statistics like employment, unemployment, and labor force participation: "Data users are cautioned that these annual population adjustments can affect the comparability of household data series over time." See Jason Smith, "For America's economy to work, we need a working-class agenda," February 9, 2023, https://waysandmeans.house.gov/chairman-smith-op-ed-for-americas-economy-to-work-we-need-a-working-class-agenda/. Lindsey McPherson, "Balanced budget takes back seat to paring spending to '22 levels at GOP retreat," Roll Call, March 20, 2023, https://rollcall.com/2023/03/20/balanced-budget-takes-back-seat-to-paring-spending-to-22-levels-at-gop-retreat/. "Employment Situation News Release," Bureau of Labor Statistics, February 3, 2023, https://www.bls.gov/news.release/archives/empsit_02032023.htm.

[3] Kris Cox *et al.*, "Top Tax Priority: Expanding the Child Tax Credit in Upcoming Economic Legislation," CBPP, June 7, 2023, https://www.cbpp.org/research/federal-tax/top-tax-priority-expanding-the-child-tax-credit-in-upcoming-economic.

[4] Jack Landry, "The Expanded Child Tax Credit and Parental Employment: Tenuous Evidence Points to Work Disincentives," Jain Family Institute, February 1, 2022, https://www.jainfamilyinstitute.org/news/the-expanded-child-tax-credit-and-parental-employment-tenuous-evidence-points-to-work-disincentives/.

[5] "The preponderance of empirical evidence suggests that childcare and preschool programs have a positive impact on maternal labor force participation," Economic Report of the President, March 2023, pp. 204-205, https://www.whitehouse.gov/wp-content/uploads/2023/03/ERP-2023.pdf.

[6] Natasha Pilkauskas *et al.*, "The Effects of Income on the Economic Wellbeing of Families With Low Incomes: Evidence from the 2021 Expanded Child Tax Credit," National Bureau of Economic Research (NBER) Working Paper 30522, October 2022, https://www.nber.org/system/files/working_papers/w30533/w30533.pdf.

[7] Elizabeth Ananat *et al.*, "Effects of the Expanded Child Tax Credit On Employment Outcomes: Evidence From Real-World Data From April to December 2021,"NBER Working Paper 29823, March 2022, https://www.nber.org/system/files/working_papers/w29823/w29823.pdf; Leah Hamiliton *et al.*, "The impacts of the 2021 expanded child tax credit on family employment nutrition, and financial well-being: Findings from the Social Policy Institute's Child Tax Credit Panel (Wave 2)," Brookings Institution, https://www.brookings.edu/wp-content/uploads/2022/04/Child-Tax-Credit-Report-Final_Updated.pdf; "Michael Karpman *et al.*, Child Tax Credit Recipients Experienced a Larger Decline in Food Insecurity and a Similar Change in Employment as Nonrecipients Between 2020 and 2021," Tax Policy Center, May 9, 2022, https://www.taxpolicycenter.org/publications/child-tax-credit-recipients-experienced-larger-decline-food-insecurity-and-similar; Ben Lourie *et al.*, "Effects of the 2021 Expanded Child Tax Credit," University of California, Irvine, April 4, 2022, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3990385; Brandon Enriquez *et al.*, "The Short-Term Labor Supply Response to the Expanded Child Tax Credit," NBER Working Paper 31110, April 2023, https://www.nber.org/system/files/working_papers/w31110/w31110.pdf.

[8] It is unlikely that immediate and sophisticated anticipation and understanding of the new Child Tax Credit legislation among working parents account for trends in employment before the new payments began. Also, unlike several of the other studies of employment in this period, this study includes no regression analysis on employment that controls for demographic and economic factors that could contribute to employment trends. Moreover, the paper cautions, "Because there were many other policy changes that disproportionately affected families with children during this period, it is

difficult to determine the extent of the behavioral response to the [advance Child Tax Credit.]" To a degree, this is true of each of the studies on the employment response to the 2021 Child Tax Credit, but research attempting to isolate the role of the credit finds no evidence that it discouraged work. Jeehoon Han, Bruce Meyer, and James Sullivan, "Real-Time Poverty, Material Well-Being, and the Child Tax Credit," NBER Working Paper 30371, August 2022, https://www.nber.org/system/files/working_papers/w30371/w30371.pdf.

[9] Angela Rachidi, "New Survey Data Raises Questions About the Expanded Child Tax Credit," American Enterprise Institute, October 18, 2021, https://www.aei.org/poverty-studies/new-survey-data-raises-questions-about-the-expanded-child-tax-credit/.

[10] Center for Law and Social Policy, "Key Findings from National Child Tax Credit Survey: CTC Monthly Payments Are Helping Improve Family Well-Being," November 2021, https://www.clasp.org/publications/report/brief/key-findings-national-child-tax-credit-survey-ctc-monthly-payments-are/.

[11] This research, as summarized in a February Dallas Fed blog post, is preliminary and suggestive, with a more rigorous paper to follow. Jason Saving and Xiaohan Zhang, "Did the Expanded Child Tax Credit Enable Parents in Financially Vulnerable Households to Work During the Pandemic?" Federal Reserve Bank of Dallas Communities Blog, February 28, 2023, https://www.dallasfed.org/cd/communities/2023/2301#:~:text=Our%20results%20provide%20preliminary%20evidence,hurdles%20to%20labor%20force%20participation.

[12] Megan A. Curran, "Research Roundup of the Expanded Child Tax Credit: One Year On," Center on Poverty and Social Policy at Columbia University, November 15, 2022, https://static1.squarespace.com/static/610831a16c95260dbd68934a/t/63732dd8efcf0e5c76aea26e/1668492763484/Child-Tax-Credit-Research-Roundup-One-Year-On-CPSP-2022.pdf.

[13] UNICEF and ODI, "Universal child benefits: policy issues and options," June 2020, https://www.unicef.org/media/70416/file/Universal-child-benefits-Briefing-2020.pdf. The credit in Canada does phase out for families with high incomes.

[14] Employment and Social Development Canada, "Families across Canada will see increase in Canada Child Benefit," July 20, 2022, https://www.canada.ca/en/employment-social-development/news/2022/07/families-across-canada-will-see-increase-in-canada-child-benefit.html. Canadian dollars are converted to U.S. dollars using the Organisation for Economic Co-operation and Development (OECD) purchasing power parity figures for individual consumption, available at https://www.oecd.org/sdd/prices-ppp/purchasingpowerparitiespppsdata.htm.

[15] Rates are as of May 2023.

[16] These figures come from the OECD's "short-term labour market statistics" data: https://stats.oecd.org/. Prime-age refers to women aged 25-54. The differences in employment rates among prime-age women between the U.S. and Canada are broadly similar in subsequent years, including 2021, when the expanded Child Tax Credit was in place in the U.S.

[17] Samuel Hammond and Robert Orr, "Report: The Conservative Case for a Child Allowance," Niskanen Center, February 4, 2021, https://www.niskanencenter.org/report-the-conservative-case-for-a-child-allowance/.

[18] Kourtney Koebel and Tammy Schirle, "The Differential Impact of Universal Child Benefits on the Labour Supply of Married and Single Mothers," Canadian Public Policy/Analyse de Politiques, 2016, https://doi.org/10.3138/cpp.2015-049; Tammy Schirle, "The effect of universal child benefits on labour supply," *Canadian Journal of Economics/Revue Canadienne d'Economique*, 2015, https://www.jstor.org/stable/43818218.

[19] For further evidence from other countries on how income support can help low-income parents work, see Abhijit Banerjee *et al.*, "Does Poverty Change Labor Supply? Evidence from Multiple Income Effects and 115,579 Bags," NBER Working Paper 27314, June 2020, https://www.nber.org/papers/w27314; Maryke Dessing, "Labor supply, the family and poverty: the S-shaped labor supply curve," *Journal of Economic Behavior & Organization*, Vol. 49, No. 4, December 2002, https://www.sciencedirect.com/science/article/abs/pii/S0167268102000112; Diego Vera-Cossio, "Dependence or constraints? Cash transfers and labor supply," *Economic Development and Cultural Change*, Vol. 70, No. 4, 2022, https://ideas.repec.org/a/ucp/ecdecc/doi10.1086-714010.html.

[20] Michael Baker, Derek Messacar, and Mark Stabile, "The Effects of Child Tax Benefits on Poverty and Labor Supply: Evidence from the Canada Child Benefit and Universal Child Care Benefit," NBER Working Paper 28556, March 2021, https://www.nber.org/papers/w28556.

[21] When the amount of a program's benefits is tied to the amount of earnings, economists call one type of the resulting work incentives "substitution effects." Canada's recent credit expansions do not involve substitution effects, while the U.S. elimination of its current Child Tax Credit phase-in would. For a discussion of the work incentive effects of the Child Tax Credit's phase-in, see Martin Sullivan, "Would the Expanded Child Tax Credit be Bad for the Economy?" *Tax Notes*, December 12, 2022, https://www.taxnotes.com/tax-notes-today-federal/benefits-and-pensions/would-expanded-child-tax-credit-be-bad-economy/2022/12/12/7ffxq. Sullivan also cites a working paper by Treasury Department economist Kyle Lippold that concludes that because of the phase-in structure, "tax credits promoting employment for low-income workers continue to have strong labor supply effects." (See Kyle Lippold, "The Effects of the Child Tax Credit on Labor Supply," U.S. Department of Treasury, November 2019, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3543751). For a critique of the Lippold study and a thorough examination of the evidence and economics on the Child Tax Credit and employment, see Landry, *op. cit.*.

[22] Note that Canada also has a separate program called the Canada Worker Benefit (CWB), which is conditional on employment. Like the Earned Income Tax Credit (EITC) in the U.S., the CWB is a refundable credit designed to support workers with low incomes. If the U.S. Child Tax Credit became fully refundable, U.S. and Canadian policy would share the broad features of having one credit that is conditional on employment and another (the child benefit) that is not. While there are differences between the U.S. and Canadian economies, populations, and policies, it is notable that Canada has not seen meaningful employment declines under this system.

[23] Garrett Watson and Alex Durante, "Difficult Trade-Offs Make Policy Consensus on Child Tax Credit Elusive," Tax Foundation, November 10, 2022, https://taxfoundation.org/child-tax-credit-reform/; National Academies of Sciences, Engineering, and Medicine, *A Roadmap to Reducing Child Poverty,* National Academies Press, 2019, https://www.nap.edu/catalog/25246/a-roadmap-to-reducing-child-poverty; Alex Brill, "Macroeconomics of the Child Tax Credit," American Enterprise Institute, November 10, 2022, https://www.aei.org/economics/macroeconomics-of-the-child-tax-credit/; Joint Committee on Taxation, "Macroeconomic Analysis of a Permanent Child Tax Credit Expansion," October 2022, https://waysandmeans.house.gov/wp-content/uploads/2022/11/117-1113.pdf; House Ways and Means Committee GOP, "Tax Scorekeeper Confirms Democrats Partisan Child Tax Credit Policy Costs Taxpayers $1.4 Trillion, Reduces Economic Growth & Removes Workers," Press Release, November 2, 2022, https://waysandmeans.house.gov/tax-scorekeeper-confirms-democrats-partisan-child-tax-credit-policy-costs-taxpayers-1-4-trillion-reduces-economic-growth-removes-workers/; Jacob Goldin, Elaine Maag, and Katherine Michelmore, "Estimating the Net Fiscal Cost of a Child Tax Credit Expansion," NBER Working Paper 29342, February 2022, https://www.nber.org/papers/w29342; Jacob Bastian, "How Would a Permanent 2021 Child Tax Credit Affect Poverty and Employment," Working paper, April 23, 2023, https://drive.google.com/file/d/1H5iNZZO_YFRIDz-3Tip4C-BpnD85bUjH/view; Kevin Corinth *et al.*, "The Anti-Poverty, Targeting, and Labor Supply Effects of the Proposed Child Tax Credit Expansion," Becker-Friedman Institute Working Paper, October 7, 2021, https://bfi.uchicago.edu/working-paper/2021-115/.

Note: The Tax Foundation and American Enterprise Institute predictions use macroeconomic models and are for full-time equivalent employment. Republican members of the House Ways and Means Committee published a press release stating that, "Based off analysis from the nonpartisan Joint Committee on Taxation (JCT)," the expanded Child Tax Credit would "[s]ideline 300,000 workers"; the JCT report itself estimated a 0.2 percent decline in what it calls effective labor supply, which Ways and Means Republicans translated into the 300,000-person decline in employment. The correct jobs number is likely somewhere higher. The National Academies of Sciences (NAS) *Roadmap* report omitted substitution effects from its analysis on the grounds that those effects are likely to be small in the context of the U.S. Child Tax Credit expansion; see discussion in Glenn Kessler, "The battle over Biden's child tax credit and its impact on poverty and workers," *Washington Post,* November 8, 2021, https://www.washingtonpost.com/politics/2021/11/08/battle-over-bidens-child-tax-credit-its-impact-poverty-workers/. The NAS report also models a slightly different policy than the Rescue Plan credit. The Rescue Plan had a larger maximum credit amount, $3,6000, for young children than the flat $3,000 policy the NAS modeled.

[24] See Civilian Labor Force Level (series CLF160V) from the Federal Reserve Economic Data, https://fred.stlouisfed.org/series/CLF16OV.

[25] House of Representatives Ways and Means Committee Republicans, "Debunking Democrat Myths About the Child Tax Credit," December 13, 2021, https://waysandmeans.house.gov/debunking-dems-myths-about-their-child-tax-credit/.

[26] Jacob Bastian, "Predicting the Employment Effects of a Permanent 2020-to-2021 CTC Change: Comparing Bastian (2022), Corinth, Meyer, Stadnicki, and Wu (2021), and Corinth and Meyer (2021)," Rutgers University, November 23, 2022, https://drive.google.com/file/d/1Aa8XfhJEmSHcCRWs2TyK42OrvkQCDJpK/view. An earlier version of Bastian's study predicted that about 411,000 parents would exit the labor force. His revised range is 354,000-367,000.

[27] This is because the models use labor supply elasticities to summarize how people's employment decisions respond to changes in the return to work, and the relevant elasticities are drawn in large part from the EITC literature.

[28] Some researchers and commentators also contend that a refundable Child Tax Credit would effectively reverse changes to economic assistance programs in the 1990s (so-called "welfare reform") and undo subsequent employment gains. See Testimony of Bruce Meyer before the Senate Finance Committee, June 14, 2023, https://www.finance.senate.gov/imo/media/doc/Bruce%20Meyer%20-%20Senate%20Finance%20CTC%20Testimony%201.11.pdf.

But the Child Tax Credit has important design differences from the Aid to Families with Dependent Children (AFDC) program. In that program, as families' earnings rose from very low levels, cash benefits would fall, often quickly. But a fully refundable Child Tax Credit is a fixed benefit that does not decline as earnings rise (until earnings reach very high levels). People who take work for low or moderate pay, or who increase their work hours, would retain the full credit. In this sense, a refundable Child Tax Credit is meaningfully different from earlier AFDC cash benefits.

1990s experiments on economic assistance programs did show the effectiveness of providing child care assistance and other supports to working families. They also showed the downside of rigid work rules. One negative result of the work rules widely adopted in these programs was an increase in children's deep poverty rates, documented in numerous pilot projects.

Moreover, today the substantial EITC phase-in remains in place, and continues to add to the incentive to work. Jason Furman, former chair of President Obama's Council of Economic Advisors, explains that with or without a refundable Child Tax Credit, "The U.S. has and would continue to have among the strongest work incentives for parents of any country in the world. The earned-income tax credit would continue to provide an additional $6,000 for parents of children — but only if they work." Jason Furman, "Democrats Can Tweak Their Child Allowance to Help Families More," *Wall Street Journal*, December 17, 2021, https://www.wsj.com/articles/democrats-can-tweak-their-child-allowance-tax-credit-poverty-build-back-better-inflation-work-requirement-11639772566.

[29] Cox *et al.*, *op. cit.*

[30] *Ibid.*

[31] Chuck Marr *et al.*, "Policymakers Should Expand Child Tax Credit in Year-End Legislation to Fight Child Poverty," CBPP, October 20, 2022, https://www.cbpp.org/research/federal-tax/policymakers-should-expand-child-tax-credit-in-year-end-legislation-to-fight.

[32] Andrew Barr, Jonathan Eggleston, and Alexander A. Smith, "Investing in Infants: the Lasting Effects of Cash Transfers to New Families," *Quarterly Journal of Economics*, Vol. 137, No. 4, April 20, 2022, https://doi.org/10.1093/qje/qjac023.

[33] Martha Bailey *et al.*, "Is the Social Safety Net a Long-Term Investment? Large-Scale Evidence from the Food Stamps Program," Goldman School of Public Policy, April 2020, https://gspp.berkeley.edu/assets/uploads/research/pdf/w26942.pdf ; National Academies of Sciences, *op. cit.*; Greg Duncan, Pamela Morris, and Chris Rodrigues, "Does Money Really Matter? Estimating Impacts of Family Income on Young Children's Achievement with Data from Random-Assignment Experiments," *Developmental Psychology*, Vol. 47, No. 5, 2011; Chloe N. East, "The Effect of Food Stamps on Children's Health: Evidence from Immigrants' Changing

Eligibility," *Journal of Human Resources*, September 5, 2018; earlier version at http://www.chloeneast.com/uploads/8/9/9/7/8997263/east_jmp.pdf.

[34] Francine Blau and Lawrence Kahn, "Female Labor Supply: Why Is the United States Falling Behind?" *American Economic Review*, Vol. 103, No. 3, May 2013, https://www.aeaweb.org/articles?id=10.1257/aer.103.3.251.

[35] For reviews of evidence on child care markets and policy in the United States, see Chris Herbst, "Child Care in the United States: Markets, Policy, and Evidence," IZA DP No. 15547, September 2022, https://www.iza.org/publications/dp/15547/child-care-in-the-united-states-markets-policy-and-evidence; and Economic Report of the President, *op. cit.* Herbst notes that "a child care subsidy would be expected to increase maternal employment, given that it lowers the fixed costs associated with work, thereby increasing the net (financial) returns to such activity." Results from a recent randomized controlled trial in Germany show that an intervention increasing the enrollment of lower socioeconomic status families in child care led to a 9 percentage point increase in full-time employment and a 22 percent increase in earnings among mothers. See Henning Hermes *et al.*, "Early Child Care and Labor Supply of Lower-SES Mothers: A Randomized Controlled Trial," CESifo Working Paper No. 10178, December 2022, https://www.cesifo.org/en/publications/2022/working-paper/early-child-care-and-labor-supply-lower-ses-mothers-randomized.