October 27, 2021

Marcia McNutt, President, National Academy of Sciences  
Michael Hout, DBASSE Chair  
Brian Harris-Kojetin, CNSTAT Director  
Robert M. Groves, CNSTAT Chair  
National Academies of Sciences, Engineering, and Medicine  
Washington, DC  

Dear Drs. McNutt, Hout, Harris-Kojetin, and Groves,

We believe it is essential to provide nonpartisan, evidence-based information for the country as the National Academies of Sciences, Engineering, and Medicine do. In that light, we write to formally bring to your attention a consequential error in the 2019 National Academy of Sciences (NAS) report, “A Roadmap to Reducing Child Poverty” (National Academies of Sciences, Engineering, and Medicine 2019, hereafter "Roadmap"). This error was brought to light in a recently released working paper (Corinth et al. 2021). The conclusions in Roadmap that turn out to be in error have been stressed in academic discussions, Presidential statements, federal legislation and political advocacy. We respectfully request that NAS correct the public record to ensure that policymakers, researchers and the public are informed by the most accurate possible evidence.

By ignoring the employment effect of eliminating the existing Child Tax Credit (CTC) that rewards work, Roadmap drew faulty conclusions when simulating the employment and poverty effects of a proposed child allowance. Thus, Roadmap entirely omitted what economists call the substitution effect, a fundamental part of examining the effects of a tax change. Roadmap accounted for this generally accepted effect on employment when simulating other policies including other tax credits that have similar employment incentives and affect similar populations as the CTC change. If Roadmap had modeled the child allowance in a consistent and generally accepted way, it would have found large employment effects, ten times the minimal effects that it reported and emphasized. As a result, it would have found much smaller poverty reduction effects as well.

It is especially important for NAS to correct the public record on this error given the major influence of the report. Roadmap has been presented to congressional leaders, presented in academic conferences and think tanks, and shared widely in the media. Its modeling of a child allowance helped shape the temporary CTC expansion in the American Rescue Plan Act as well as the proposed American Families Plan. Citing
Roadmap as evidence, a group of over 400 economists signed a letter to Congressional leaders stating that making the temporary CTC expansion permanent would dramatically reduce child poverty with “minimal work reduction” (Economist Letter 2021). Studies emphasized by the White House in support of the CTC expansion neglected to model employment reductions because of the Roadmap finding of minimal work reduction (Collyer et al. 2021; White House 2021).

In light of the clear error in Roadmap, the importance of the error for Roadmap’s findings, and the report’s influence on the policy debate, we recommend that NAS correct the public record on this matter. We make this recommendation in the context of our deep respect and appreciation for the NAS mission to provide independent and expert advice on some of the most important questions facing society.

Respectfully,

Kevin Corinth  
Executive Director

Bruce D. Meyer  
Founder and McCormick Foundation Professor
Technical Addendum

In this addendum, we describe in more detail the error made by Roadmap in its modeling of a child allowance. Roadmap’s error can be seen in its modelling assumptions and results described in Appendix D, Section 5-9 (pp. 430-432) and Appendix F (pp. 541-550; 581-592).

Roadmap fails to recognize that the elimination of the current CTC (and Additional CTC) would decrease the return to work. The report states: “In its simplest form, a universal child allowance with no phase-out simply provides additional income to each family with children in receipt of a benefit,” which it goes on to note corresponds to an income effect (Roadmap, p. 431). It appears that Roadmap may have confused this simple form of a child allowance with a child allowance that replaces a tax credit that rewards work, which is what the report explicitly states it is simulating (p. 430). As a result, Roadmap only models the income effect, due to the increase in benefits, in reducing employment. In fact, there is a strong substitution effect as the baseline CTC under the Tax Cuts and Jobs Act (TCJA) provides a reward to work of $2,000 per child for most working parents.¹ Parents without any tax liability can still receive a partial credit of up to $1,400 per child, but they must have earnings to receive it. Eliminating the CTC’s work reward and replacing it with a child allowance that does not depend on earnings would therefore decrease the return to work. Corinth et al. (2021) estimate that eliminating the TCJA CTC would decrease the return to work by 62% as much as hypothetically eliminating the Earned Income Tax Credit (EITC) for working parents with earnings below $50,000, and 88% as much for working parents with earnings below $100,000. Economists almost universally acknowledge the strong labor supply effects of the EITC. Thus, eliminating the TCJA CTC should lead to substantial exit from employment.

In fact, in a separate simulation of a 40% increase in EITC benefits, Roadmap assumes that a $1,000 increase in EITC benefits increases the employment rate of single mothers by 5.6 percentage points, as estimated by Hoynes and Patel (2018). Corinth and Meyer (2021) point out that this employment responsiveness assumption used in the NAS report is even stronger than that typically referenced as the consensus estimate in the EITC literature and stronger than the responsiveness assumed by Corinth et al. (2021) in their own simulation. The Roadmap assumption leads the report to predict that a 40% increase in EITC benefits would bring 771,000 new single mothers into employment. Assuming linearity and symmetry, this implies that eliminating the EITC would lead 1.9 million single mothers to exit employment.² Given that the TCJA CTC work incentives are somewhat weaker but nonetheless comparable

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¹ In its child allowance simulation, Roadmap models two baseline scenarios—the CTC prior to TCJA when the maximum benefit was $1,000 per child, and the CTC under TCJA law when the maximum benefit was $2,000 per child. Roadmap does not recognize the decrease in the return to work from elimination of the existing CTC under either scenario.

² If anything, one would expect a proportionately larger effect of the reduction in incentives given that there is likely a diminishing return to incentives that increase the desirability of employment.
to those of the EITC (as described above), it follows that Roadmap would find substantial employment reductions from the replacement of the CTC with a child allowance—if it recognized the weakening of work incentives and applied the same estimate of responsiveness to employment that it applies to expansion of the EITC.

A recent working paper helps to quantify the importance of Roadmap’s error for its findings. Corinth et al. (2021) recognizes that replacing the pre-existing CTC with a child allowance would decrease the return to work, and they pointed out that Roadmap failed to recognize this in their simulation.\(^3\) Accounting for the change in work incentives, Corinth et al. (2021) estimate that 1.46 million working parents would exit employment due to a proposed expansion of the CTC under the American Families Plan (which is similar to the policy simulated by NAS), almost ten times the magnitude of the NAS estimate of 0.15 million workers (Corinth et al. 2021). The vast majority of the employment response (1.32 million workers) is a result of the change in the return to work, while 0.14 million workers would exit due to the income effect. Corinth et al. (2021) estimate that this reduction in employment would substantially weaken the policy’s effect on child poverty, cutting the overall child poverty effect by more than a third and completely eliminating the policy’s deep child poverty effect.

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\(^3\) Winship (2021) and Goldin, Maag, and Michelmore (2021) recognize that the intensive margin incentive to work additional hours are affected by workers on the phase-in of the pre-existing CTC. However, they do not recognize the change in extensive margin incentives, which has been found to be the much more important margin in the literature on labor supply responses to the Earned Income Tax Credit (see Nichols and Rothstein 2016).
References


