The Anti-Poverty and Labor Supply Effects of Replacing a Child Tax Credit with a Child Allowance

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Preview of results

- BBB Act would have replaced the current CTC that encourages work with a somewhat larger child allowance that discourages work by not requiring earnings or a tax liability
- We estimate that the change to a child allowance would lead approximately 1.5 million working parents to exit employment
  - Others have assumed no employment effect
- The reduction in employment would eliminate a third of the poverty reduction and all of the deep poverty reduction.

Two major innovations of our paper

- Unlike previous research, we recognize the decrease in the return to work from eliminating the CTC
    - Some previous authors recognized the change in marginal incentives, not the inframarginal one
    - Previous poverty simulations assumed no change in employment
- Use Comprehensive Income Dataset (CID)
    - Links CPS ASEC to large set of tax records and administrative government program data
    - First time CID has been used to simulate the effects of proposed policies

Outline

- A frequently cited CNSTAT/NAS report "A Roadmap to Reducing Child Poverty" blundered but hasn't been corrected
- The report found negligible employment effect due to omission of the substitution effect in modelling the CTC
  - They incorporated the substitution effect when modeling changes to the EITC (which affects the same population in the same way; furthermore the changes to the EITC they considered were smaller than the CTC changes)
  - Their modeling approach consistently applied to all tax credits for low-income families leads to larger estimates than ours
- Our approach
- Our results on employment and poverty
- Other results, caveats, some big picture issues

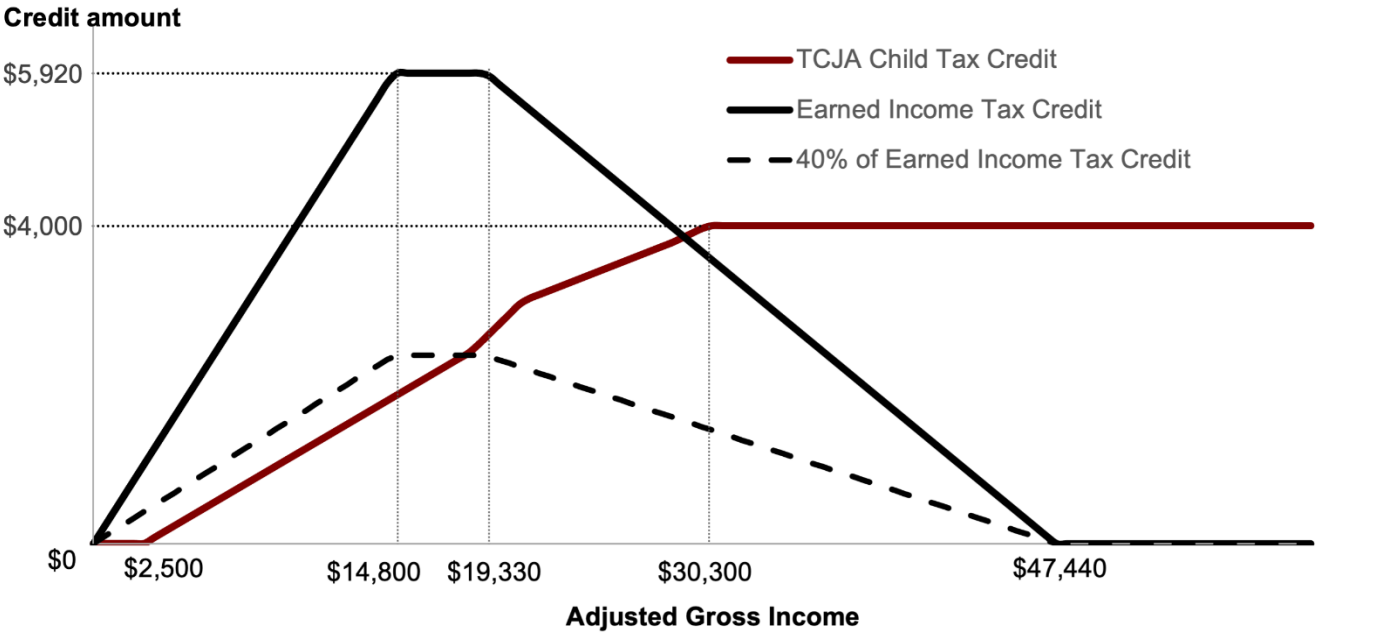
Consistently Applying CNSTAT/NAS Methods

NAS finding influenced policy debate on the change to a child allowance

- NAS simulated the labor supply and anti-poverty effects of a policy similar to the BBB child allowance
  - Replaced pre-existing CTC with child allowance of $3,000 per child
  - Did not recognize that eliminating the pre-existing CTC decreases the return to work
- NAS report has heavily influenced policy debate
  - Letter to Congressional leaders signed by 462 economists stated child allowance would have “minimal” or “negligible” employment effects citing the report
  - Other simulations cited by White House ignore employment effects relying on NAS report (Collyer et al. 2021)

NAS found substantial employment effects from 40% increase in EITC

Credit Amounts and Work Incentives of CTC, EITC, and 40% of EITC, Single Parent with Two Children, 2020



NAS found that 40% increase in EITC would bring 771,000 new single mothers into employment

Source: Internal Revenue Service, Congressional Research Service, Authors' calculations
Notes: CTC and EITC parameters are based on 2020 tax law (all dollar values expressed in 2020 nominal terms). All adjusted gross income is assumed to come from earned income, and the family is assumed to take the standard deduction and claim no other non-refundable tax credits.

NAS would have found large employment effects if it had modelled CTC consistently

0.056	Percentage point increase in employment per $1,000 increase in return to work	NAS 2019 p. 413
×		
$2.048	Mean decrease in return to work among single mothers due to child allowance, in thousands $	Our estimate
×		
10.14	Millions of single mothers who are non-disabled, not enrolled in school and have child under 18	NAS 2019 p. 488
+		
0.15	Millions of parents exiting workforce due to income effect	NAS 2019 p. 550
1.31*	**Millions of parents exiting workforce**	

Does not include substitution effect for single fathers and married couples

Our approach

Using the CID to address income misreporting in survey data

- Use 2017 CPS ASEC (2016 income year), updated to 2022
- Our measure of income is after taxes and transfers including non-medical in-kind transfers
- Link administrative data to correct for survey misreporting
  - **Market income**: 1040s, W-2s, DER; 1099-R
  - **Social insurance and means tested transfers**: OASDI (PHUS & MBR); HUD rental housing assistance (PIC/TRACS); SSI (SSR)
  - **Other**: Numident (to capture birthdates of children)
- All filers get the CTC, and assume 75 percent of non-filers in base results.
- Account for complex families
  - Individuals outside of family may claim survey children

Simulate extensive margin labor supply response

- Focus on work/nonwork decision; we don't account for hours changes so we understate the labor supply response
- Substitution effect is product of percent change in return to work and work participation elasticity for each worker
  - Change in return to work typically equal to pre-existing CTC benefit
  - Elasticity of 0.75 for single mother EITC recipients
    - See McClelland and Mok (2012); Gelber and Mitchell (2012); Nichols and Rothstein (2016); Goldin et al. (September 2021)
  - Elasticity of 0.25 for all other workers
    - See Chetty et al. (2012); CBO (2012); Penn Wharton Model
- Income effect is product of percent change in income and participation elasticity for each worker
  - We follow NAS, using elasticity of -0.085 for single mothers and -0.05 for all other workers; on low end, especially in long run

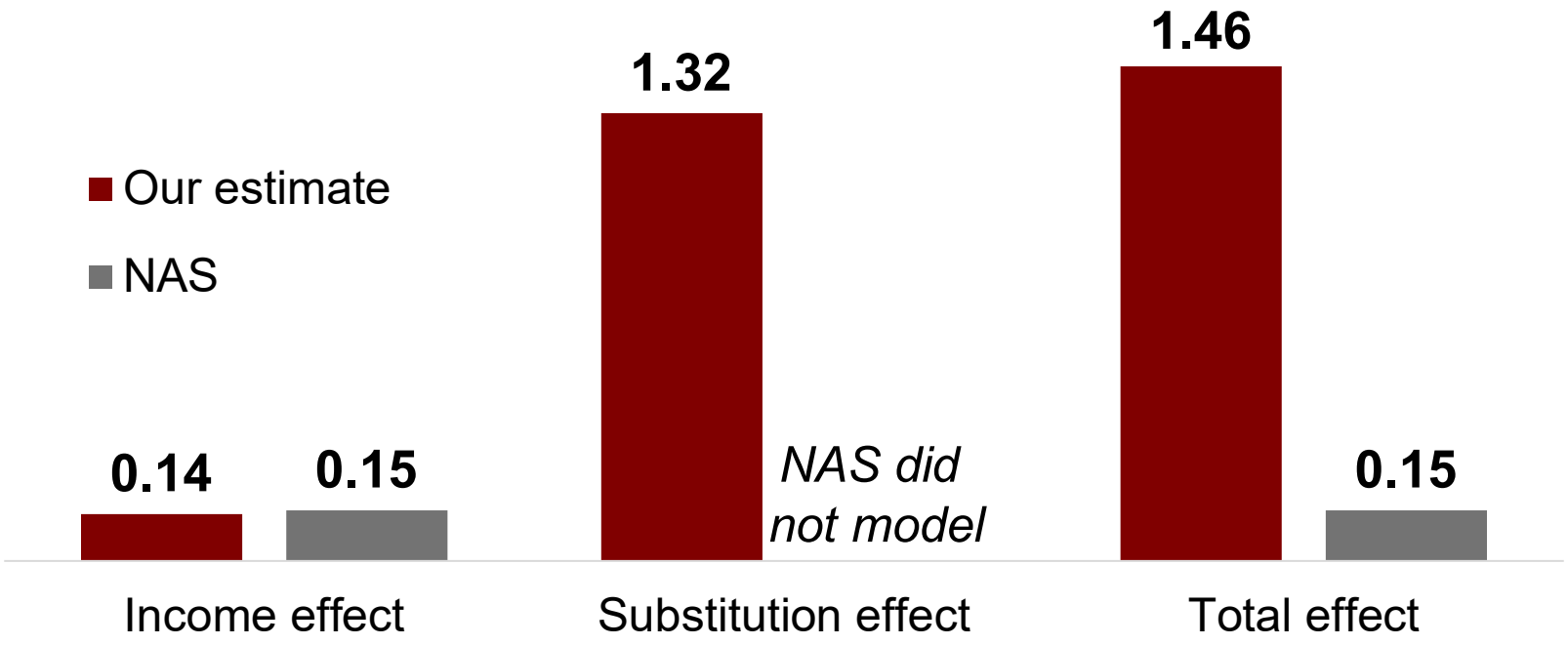
Details of anti-poverty effect simulations

- We use an after-tax income plus non-cash benefit definition of income and account for survey error in income, transfers and taxes
- Since accounting for income underreporting as well as taxes and in-kind transfers means many incomes are much higher we raise the thresholds (by 40 percent) to set the initial poverty rate at the 2018 SPM rate
- Simulate income after replacing CTC with child allowance and recalculate poverty
  - Replace pre-existing CTC with child allowance
  - Reduce earnings to zero for parents exiting employment
  - Recalculate tax liability, child allowance benefits, and transfer benefits due to elimination of earnings

Results

Child allowance would lead approximately 1.46 million parents to exit employment

Millions of parents exiting employment due to change to child allowance, income effect and substitution effect, our estimate and NAS estimate, 2022

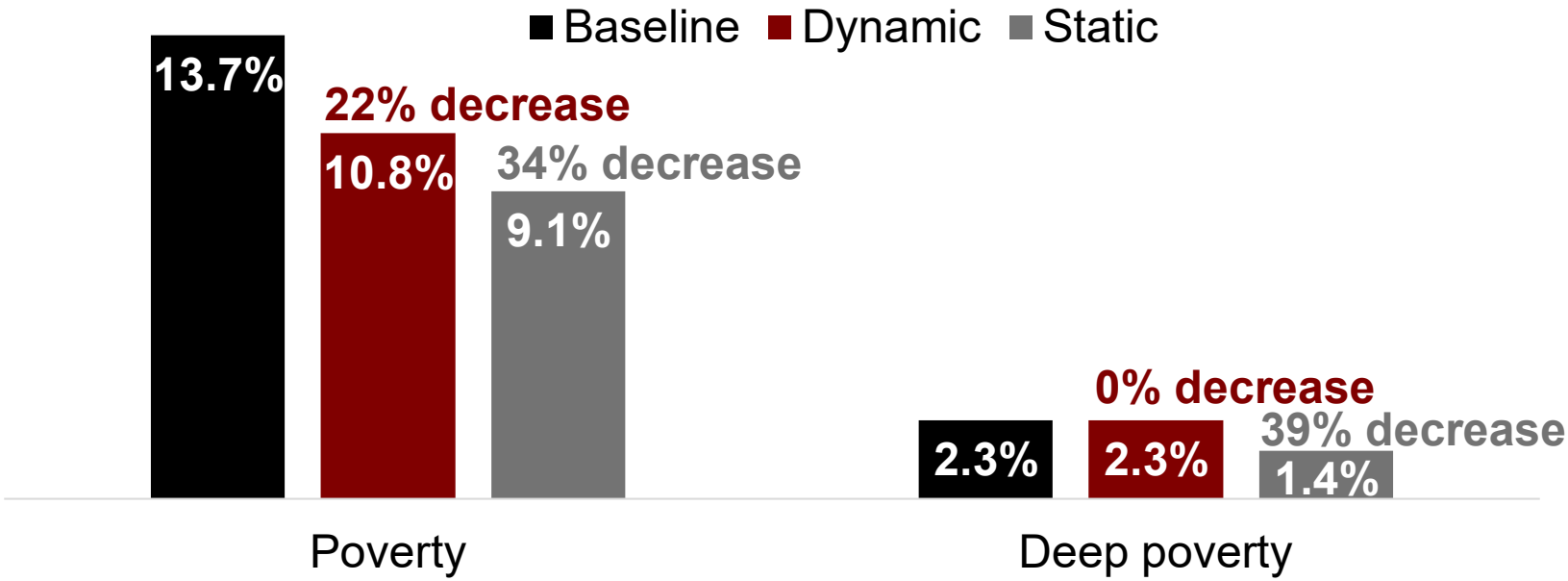


Source: 2017 CPS ASEC (adjusted to 2022 levels using changes in prices and benefits) linked to administrative IRS and program records, TAXSIM, NAS (2019)

Notes: Estimates are based on simulations of the American Families Plan CTC for 2022. Our sample consists of all individuals in PIKed and non-whole imputed families, with survey weights adjusted for non-PIKing and whole imputes using inverse probability weighting. The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release, authorization number: CBDRB-FY2021-CES005-028.

Decrease in employment mutes child allowance's child poverty effect

Child poverty rate and deep child poverty rate, baseline, static simulation of change to child allowance, and dynamic simulation of change to child allowance, 2022



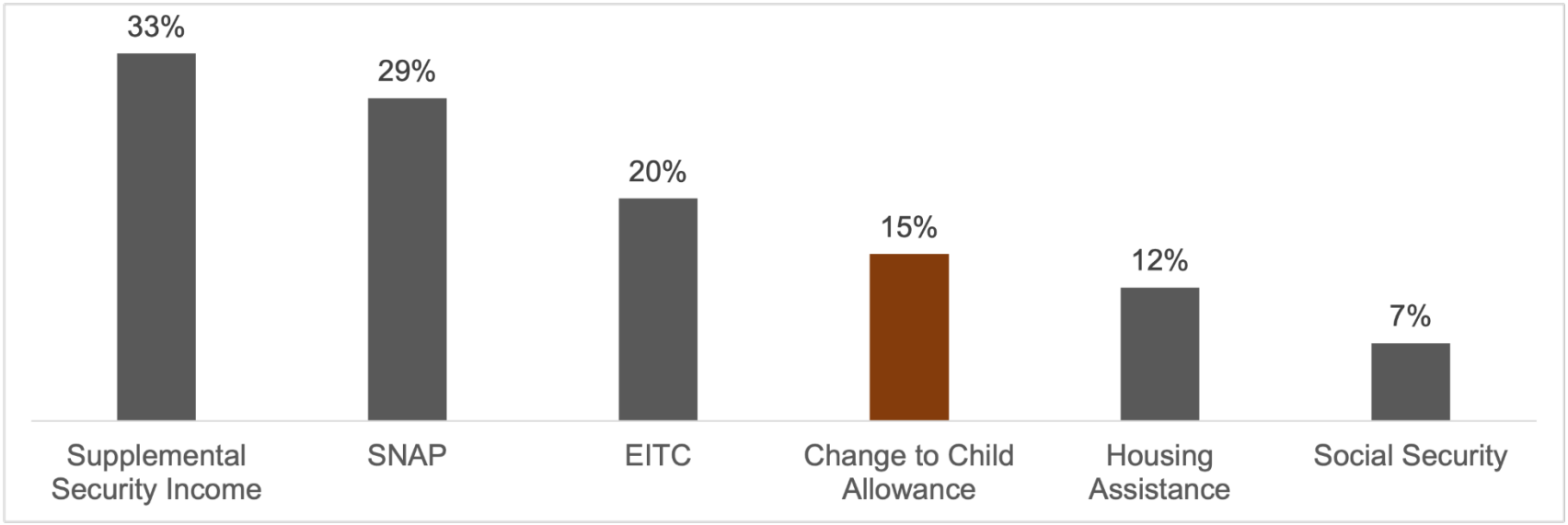
Source: 2017 CPS ASEC (adjusted to 2022 levels using changes in prices and benefits) linked to administrative IRS and program records, TAXSIM

Notes: Dynamic and static estimates are based on simulations of the American Families Plan CTC for 2022 We adjust tax liabilities and SNAP benefits for workers exiting the labor force in dynamic simulation. Our sample consists of all individuals in PIKed and non-whole imputed families, with survey weights adjusted for non-PIKing and whole imputes using inverse probability weighting. The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release, authorization number: CBDRB-FY2021-CES005-028.

Further Results

Change to child allowance would be less targeted to bottom than most means tested programs

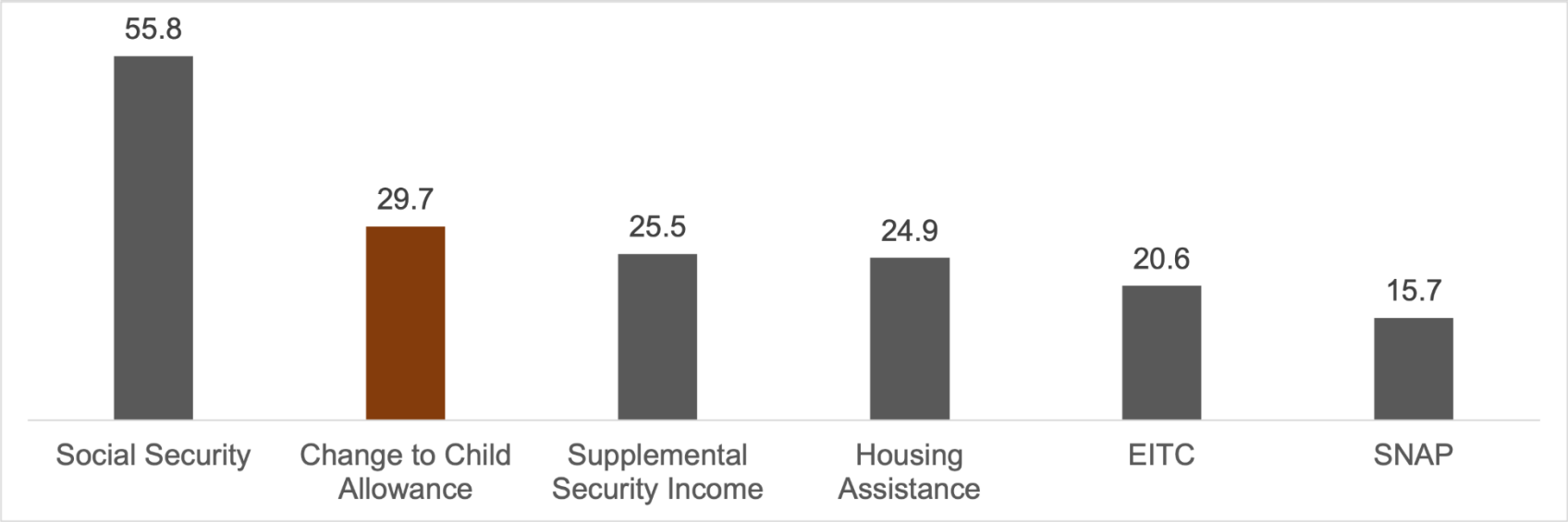
Share of program dollars received by families in bottom decile of annual income distribution, by program, 2022 (static simulation)



Source: 2017 CPS ASEC (adjusted to 2022 levels using changes in prices and benefits) linked to administrative IRS and program records, TAXSIM.
Notes: This figure shows shares of total program dollars received by each decile of annual family income (after taxes/non-medical in-kind transfers and including the American Families Plan (AFP) CTC). SNAP estimates are calculated using the subset of states for which administrative SNAP data are available. We drop non-PIKed and whole imputed families in the CPS, adjusting survey weights using inverse probability weighting. The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release, authorization number: CBDRB-FY2021-CES005-028.

Change to child allowance would cost more to lift children out of poverty

Thousands of dollars spent on families with children per child lifted out of poverty, by program, 2022 (static simulation)



Source: 2017 CPS ASEC (adjusted to 2022 levels using changes in prices and benefits) linked to administrative IRS and program records, TAXSIM

Notes: Our sample consists of all individuals in PIKed and non-whole imputed families, with survey weights adjusted for non-PIKing and whole imputes using inverse probability weighting. To estimate the cost per individual lifted out of poverty, we divide program spending on families with children by the number of children added to poverty if the program were removed. The Census Bureau has reviewed this data product for unauthorized disclosure of confidential information and has approved the disclosure avoidance practices applied to this release, authorization number: CBDRB-FY2021-CES005-024 and CBDRBFY2021-CES005-028.

Comparison of CID-based Results to Results Using Survey Data Only (No Behavioral Responses)

- Correction for underreporting of survey income and broadening of income measure leads to CID poverty thresholds being 40% higher than official thresholds
  - Despite doing so, baseline level of deep child poverty is 2.3% using CID
- In contrast to static survey-only results, static CID-based results find:
  - Smaller differences between the change to a child allowance and existing programs in preventing poverty
  - Greater targeting of existing tax credits to families at the bottom of the income distribution
- Results reflect the ability of the CID to more accurately measure all sources of income, including tax credits

Caveats

- Hours not accounted for; would be reduction in hours due to elimination of marginal phase-in incentives
- Simplified decisions of married couples; both not work or both work
  - Only a small share of the overall number of families that see their earnings fall are married couples
  - Would more plausibly have more families see a smaller fall as one worker dropped out and fewer see family earnings fall to zero

Robustness

- Different elasticities
  - Using substitution elasticity of 0.5 (rather than 0.75) for single mothers leads to labor supply reduction of 1.25 million parents, *ceteris paribus*
  - Using substitution elasticity of 0.05 (rather than 0.25) for all other workers leads to labor supply reduction of 0.92 million parents, *ceteris paribus*
- Ignoring any effects on higher income parents
  - 89% (1.30 million) of parents leaving labor force have taxable earnings below $100k
  - 72% (1.05 million) of parents leaving labor force have taxable earnings below $50k

Discussion

Big picture and related work

- A child allowance would roughly reverse welfare reform
  - Cash assistance much more widely available than under AFDC
  - Eliminates work incentive comparable to 90s EITC increase
- Series of papers by Meyer and Sullivan (most recently Han, Meyer and Sullivan 2021) say that welfare reform increased resources of single mothers
  - Single mothers' consumption increased in absolute terms, especially at the very bottom
  - Single mothers' consumption increased relative to sensible comparison groups like single childless women and married mothers
  - Housing characteristics show a similar pattern of improvement
- Decline in poverty confirmed using linked survey and admin income data from 1995-2016 (Corinth et al. 2022)
- Decline in share of children with one parent