Does the EITC reduce caregiving for aging parents?

Abstract

Families provide substantial care to older adults with functional limitations. Policies that incentivize work have the potential to reduce this valuable care. This study uses the Health and Retirement Study (HRS) and a simulated benefit approach to examine the consequences of increases in the generosity of the Earned Income Tax Credit (EITC), a work-contingent cash benefit, for the care that parents receive from their EITC-eligible daughters. We find that a $500 increase in EITC generosity reduces the care that parents age 65+ with functional limitations receive by 13-24 hours per month, and that this is due to a reduction in the likelihood of receiving intensive care. We assess the full effect of this reduction in caregiving by examining whether financial transfers increase as a substitute for care, whether other children or spouses fill the care gap, and whether paid caregiving increases. We find no evidence of increased financial transfers and that care gaps remain for older parents that are not filled by other children, spouses, or paid care providers. We conclude that an unintended consequence of the EITC is that the older parents of EITC recipients receive less care overall in response to increased EITC benefit generosity.

Introduction

Family members are the primary source of caregiving for older adults with care needs. Family care provided to adults with activity limitations is estimated to be worth $600 billion annually, which is similar to total spending on paid long-term services and supports (Reinhard et al. 2023). About 34 million U.S. adults provide care to someone 50 years or older (Burch et al. 2019) and 17.7 million provide care to an adult age 65+ with activity limitations (National Academies of Engineering, Science, and Medicine 2016).

In their working years, caregivers face trade-offs between family caregiving and paid work. Caregiving for older adults is negatively associated with women's labor force participation and positively associated with retirement (Van Houtven et al. 2013). The opportunity cost of caregiving increases when work incentives or requirements are embedded in social safety net programs that raise the return to work (He and McHenry 2016).

One of the largest work-contingent programs, the Earned Income Tax Credit (EITC), has the potential for important interactions with family care because of its size, its effects on labor supply, and its benefits structure. The EITC provides $60 billion in benefits to approximately 31 million households each year (Internal Revenue Service (IRS) 2024). The population eligible for substantial EITC benefits overlaps with those likely to provide care to parents: unmarried mothers of dependent children. A substantial number of caregivers for older adults have children at home. Burch et al. (2019) estimate that 7 million caregivers for adults age 50+ are working parents to children under 18. Research on caregiving shows that daughters, and unmarried daughters in particular, play a central role in providing care for parents (Fingerman and Birditt 2011; Grigoryeva 2017; Lee et al. 1993) and that daughters' care hours are more responsive to individual resources and constraints than sons' (Grigoryeva 2017). These features make the

EITC an interesting policy context in which to examine how work-contingent cash transfers impact the care that adult children provide to their parents.

Despite the well-documented, positive effects of the EITC on employment (e.g., Eissa and Liebman 1996; Meyer and Rosenbaum 2001; Nichols and Rothstein 2016; Schanzenbach and Strain 2021), we are only starting to understand how it impacts time spent on non-work activities, including caregiving. Only one other paper (Wiersma Strauss 2026), has examined its impact on care for adults. Wiersma Strauss (2026) uses the American Time Use Survey (ATUS) to examine how changes in the EITC affect time spent caring for adults, based on the perspective of the potential caregivers: unmarried, EITC-eligible mothers of dependent children. We build on this existing work by using data from the Health and Retirement Study (HRS), which allows us to focus on the perspective of older adults, including those with functional limitations. This is important, as it allows us to estimate the impact of the EITC on a population in need of care. Our work is also the first to examine whether any care reductions resulting from increased EITC generosity are compensated for by additional hours of care from other adult children, spouses, or paid caregivers. We leverage plausibly exogenous federal and state variation in EITC benefits between 1992 and 2014,[1] providing the first causal evidence of the impact of increased EITC generosity on the care received by EITC recipients' parents with care needs.

Our results suggest that increases in EITC generosity greatly reduce the chore help and help with functional limitations parents receive from their EITC-eligible daughters, especially parents aged 65 and older. These reductions in caregiving for older parents are driven by a six-percentage point reduction in the likelihood of receiving intensive care hours (40 or more hours per month) from one's EITC-eligible daughter, which translates into 13-24 fewer hours of

[1] We use the HRS in this analysis, which is not available until 1992.

monthly care. This is substantial, given that HRS respondent(s) age 65+ with care needs report receiving 12 monthly hours of functional limitations help from their unmarried daughter on average, while those who receive help receive an average of 88 monthly hours, suggesting that the increase in labor supply in response to EITC generosity is difficult to combine with being an intensive caregiver. We find no evidence that the decline in care that parents receive from their EITC-eligible daughters is compensated by increases in financial transfers or increases in caregiving from other adult children or spouses, but we do find some evidence of an increase in use of paid care. We conclude that older parents with EITC-eligible adult children receive less care as a function of increased EITC generosity and, to the extent that they compensate with paid care, this does not completely offset the decline in care that EITC-eligible daughters provide, nor is paid care funded by increased financial transfers from their adult children.

Since the end of the COVID-19 pandemic, policymakers have increasingly imposed work requirements across other social safety net programs. Our study illustrates that an important unintended consequence of work requirements is that recipients will have less time to provide care to their own parents, and that this care gap is unlikely to be fully compensated for by other adult children or paid help.

Background

Earned Income Tax Credit (EITC)

The EITC was implemented in 1975 as a tax credit to offset payroll taxes for low-income families. The benefit has a trapezoidal structure, where the credit increases with earnings up to a point, has a range of earnings over which the credit is constant, and then phases out as earnings increase further. In recent years, families with children with income up to about 225% of the federal poverty line were eligible for the EITC.

There have been several federal expansions to the EITC over the last several decades. It was expanded for families with multiple children in 1991 and expanded for families with three or more children in 2009 (Crandall-Hollick 2022). In 2022, federal EITC spending was about $64 billion, distributing an average benefit of $2,043 to 31 million families across the country (IRS, 2024).

In addition to the federal credit, most states have implemented their own EITCs. States began implementing EITCs in the late 1980s and some states have implemented credits as recently as 2022. As of this writing, 30 states, the District of Columbia, and Puerto Rico had their own EITCs, representing a wide range of geographic regions and political leanings across the country. Since most states structure their credits as a fixed percentage (ranging from 3 to over 100%) of the federal benefit, EITC-eligible families residing in states with EITCs are also usually eligible for the state benefit; any expansions to the federal benefit also impact state EITCs. Many states have also changed the value of their EITCs over time.

Using changes to the federal and state rules over time, we illustrate how average EITC benefits have changed between 1990 and 2014 in Appendix Figure B1. Over this period, the average benefit for unmarried women with children ranged from about $500 in 1990 to nearly $3,000 in 2014 in states with the most generous EITCs. We leverage this variation to examine how exogenous changes to EITC benefit generosity impact caregiving for parents.

Intergenerational Transfers and the EITC

A long line of empirical research on the EITC finds that expansions increased the employment of unmarried mothers (e.g., Eissa and Liebman 1996; Hoynes and Patel 2018; Meyer and Rosenbaum 2001; Nichols and Rothstein 2016; Schanzenbach and Strain 2021). A $1000 increase in average EITC benefits increases the probability that less-educated, unmarried

mothers work by between seven and nine percentage points (Pilkauskas and Michelmore 2019; Michelmore and Pilkauskas 2021). These increases in labor supply could lead to reductions in unpaid caregiving for adults (Carrino et al. 2023; Carmichael et al. 2010; He and McHenry 2016; Michaud et al. 2010).

The EITC may also affect caregiving through its impact on wages and income. Previous work indicates that children with higher opportunity cost of care provide less time help to parents (Carmichael et al. 2010; Couch et al. 1999; He and McHenry 2016; Mommaerts and Truskinovsky 2020). Increased income from the EITC could lead adult children to substitute paid care for unpaid care (Bakx et al. 2014) or money transfers for time transfers to their parents (Couch et al. 1999; Wang 2022). Upward financial transfers from adult children to parents are uncommon but increase with parent's age (Wiemers and Park 2021) so any effects of the EITC on upward financial transfers are likely experienced by older parents. Increases in income may also change time spent caregiving if income elasticities differ across activities. The income effect could theoretically lead to increases or decreases in care depending on the income elasticity of care relative to other activities (Bastian and Lochner 2022; Wiersma Strauss 2026).

Prior evidence suggests that the EITC affects time use beyond work. Bastian and Lochner (2022) show that a $1000 increase in maximum EITC benefits reduces the time unmarried, non-college educated mothers spend with their children by 2 hours per week and Wiersma Strauss (2026) estimates that a $500 increase in average EITC benefits reduces leisure time among unmarried, non-college educated mothers by 3-4 hours per week.

The EITC may also affect caregiving through its impact on living arrangements. Pilkauskas and Michelmore (2019) find that the EITC reduces multigenerational co-residence for unmarried mothers. If recipients leverage EITC benefits to live independently, we might expect

further reductions in care, as providing care is associated with both geographic proximity and co-residence (Crimmins and Ingegneri 1990; Soldo et al. 1990).

Finally, any reduction in caregiving by EITC recipients could be compensated for by other caregivers. While the primary EITC recipient population – unmarried mothers - play a central role in caregiving (Burch et al. 2019; Coward and Dwyer 1990; Fahle and McGarry 2018; Fuller-Thomson and Minkler 2001; Laditka and Laditka 2000; Perry-Jenkins and Gerstel 2020; Spitze and Logan 1990), other adult children or spouses may provide more care to compensate for any decrease in care that unmarried daughters provide their parents (Checkovich and Stern 2002; Lin and Wolf 2020; Pezzin et al. 2015). Increases in EITC generosity may also increase the use of paid care as a substitute for family caregiving. However, paid care often entails high out-of-pocket costs (Arora and Wolf 2018; Reinhard et al. 2023; Wang 2022) and most older adults prefer to "age in place" and may be resistant to certain paid care options (Kasper et al. 2019).

To date, only a few papers empirically examine the relationship between the EITC and time spent caring for family members. Most of these studies (Bastian and Lochner 2022; Michelmore et al. 2024; Michelmore and Pilkauskas 2021; Morrissey 2023) focus on childcare; for example, Bastian and Lochner (2022) find that increased EITC generosity reduced time that unmarried mothers spent with their children but did not decrease time spent on investment-related activities.

The only empirical evidence of the EITC's effects on caregiving for adults comes from Wiersma Strauss (2026) who uses ATUS to show that though the EITC increased the time younger unmarried mothers spent working, it did not reduce time spent assisting adults, and this time even increased in response to EITC generosity for 45-54-years-old unmarried mothers. The

results imply that an increase in labor supply does not necessarily lead to a reduction in time spent caring for parents.

This paper builds on this previous work in three important ways. First, since the ATUS does not have information on either number of living parents[2] or the care needs of respondent's family members, the effect of the EITC on care for adults with health limitations is not estimated in Wiersma Strauss (2026). Data from the HRS allows us to examine the impacts of the EITC on older adults with health limitations, which is a policy relevant population in need of care. Second, the HRS asks about care received over longer time horizons (from one month to two years) than the ATUS (which focuses on the last 24 hours) and thus captures a broader set of caregivers. [3] Finally, the HRS allows us to examine whether any care reductions resulting from increased EITC generosity are compensated for by additional hours of care from other adult children, spouses, or paid care and to estimate the cost of replacing the total hours of care lost. Understanding gaps in total care to parents with care needs due to the EITC is an important and unique policy contribution of this work.

Data and Measures

Data came from the HRS, a nationally representative survey of noninstitutionalized individuals ages 51 and older in the United States. The HRS started in 1992 with a cohort of individuals aged 51-61; additional cohorts have been continuously added to maintain a representative sample.[4] Surveys are conducted biennially and, in each wave, the HRS asks

[2] ATUS includes a household roster for each respondent, as well as information on who was with a respondent for each activity observed during their 24-hour time diary. This means that parents of ATUS respondents can only be identified (and without any accompanying information on care needs) if they either live with the ATUS respondent or were physically present with the ATUS respondent during the past 24 hours.
[3] For example, in the 2011-2019 ATUS, 17.1% of non-college educated, unmarried mothers report providing assistance to another adult because of a condition related to aging in the last three months but only 4.3% report doing so in the last 24 hours (Wiersma Strauss 2026).
[4] See https://hrs.isr.umich.edu/documentation/survey-design#accrual-diagram for more information.

respondents to report characteristics of each of their children including employment and marital status, educational attainment, and number of children. The HRS also includes information about the help that respondents (parents) receive with chores and for activity and functional limitations and about financial transfers that respondents give to and receive from each of their children. We use cleaned and harmonized data on respondent-adult child dyads provided by RAND in the Family File data, covering the 1992-2014 period (RAND HRS, 2014).[5] We also use restricted geographic data on the state of residence of HRS respondents covering the period 1992-2014 and the state of residence of each adult child available from 2004 onwards (HRS 2021a, 2021b). Though the HRS has some drawbacks that we discuss below, it is the only dataset that includes information on the time help that adult children give to their parents during the period when there were large expansions to the EITC.

Analytic Sample

In our main analysis, we link each HRS respondent to their adult children leveraging HRS information on three generations: the HRS respondent (G1), their adult children (G2), and their grandchildren (G3). As is typical in the EITC literature, we restrict the sample to dyads in which the child (G2) of the HRS respondent (G1) is female (N=198,798), unmarried (N=81,221), has least one child (G3; N=46,518), and has fewer than 16 years of schooling (N=38,852). These restrictions focus our analysis on a population most likely to benefit from the EITC.[6] We refer to these G2 children as unmarried daughters.

[5] Additional summary data is provided that contains information about all children of an HRS respondent.
[6] We make additional restrictions among HRS respondents to ensure that the sample does not include any HRS respondent who may themselves be eligible for the EITC. We drop all dyads linked to any HRS respondent who has a child under age 19 (N=1,465), or a child aged 19-24 who is reported as attending school (N=557), since both can be claimed as qualifying children for EITC purposes.

We limit the sample to dyads in which the unmarried daughters are aged 25-39. We exclude unmarried daughters younger than 25 years old (N=2,108) because many lack a parent old enough to be eligible for inclusion in the HRS. We exclude those 40 and older (N=20,758) because we cannot observe grandchild ages—a prerequisite for determining EITC eligibility—and based on analysis using the Panel Study of Income Dynamics (PSID), we determined that many women over 40 had at least one child over the age of 18. Overall, using the PSID, we estimate that our sample of unmarried daughters ages 25-39 represents 60% of all unmarried, non-college educated women with dependent children (see Appendix A).

When estimating the effect of the EITC on help with functional limitations (see next section), we focus on respondents who have care needs. Thirty-three percent of the parents in our sample need help with ADL, IADL, or money management needs (see Table 1, Panel B).

We aggregate the respondent-unmarried daughter dyad information up to the HRS respondent household level[7] to form our final sample of parent household–unmarried daughter dyads from 1992-2014 (weighted N=13,686).[8] We use this sample to examine whether EITC generosity reduces the care parents (G1) receive from their EITC eligible daughters (G2), as well as whether financial transfers from EITC eligible daughters (G2) to their parents (G1) compensate for any reductions in care. To examine the additional possible compensating effects of care from other family members and use of paid help for functional limitations, we aggregate

[7] The HRS employs an interview structure that helps to ensure alignment for couple responses to the HRS Questionnaire. Each member of the couple is a respondent but couples choose a "family respondent" and a "financial respondent" (one member of the couple can take on both roles if desired). Based on this choice, the member of the couple is asked finance and/or family-related questions related to both members of the couple (e.g., "did either you or your spouse/partner...?"), including providing information about the couple's children. The answers provided are assigned to both members of the couple. However, for some of our outcome measures (chore help and anything related to ADL, IADL or money-management help, see next "Measures" section for details) respondents are asked separately. In these cases, we aggregated these responses at the HRS respondent household level so that binary indicators take on a value of 1 if either member of the HRS respondent couple reports receiving this type of help from the unmarried daughter.

[8] Weighted using the HRS household analysis weight, taken by RAND from the HRS Tracker file.

these dyads up to the parent household level with one observation per parent household in each year (N=10,923).[9]

Measures

EITC exposure

Following previous work (e.g., Pilkauskas and Michelmore 2019; Wiersma Strauss 2026), we employ a simulated benefit strategy to estimate the relationship between the EITC and caregiving. Rather than relying on an individual's own eligibility for the EITC, which is endogenous to private transfers, we take advantage of the rich federal and state variation in the EITC over time to simulate changes in generosity over time. This simulated benefit approach is also necessary because the HRS does not include sufficient detail on the income of unmarried daughters to determine individual EITC eligibility.[10]

To construct the simulated EITC, we use a sample of unmarried mothers aged 25-39 with fewer than 16 years of schooling from the CPS ASEC in 1990. To estimate tax liability in each of the tax years of interest (1991 through 2014), we use the Consumer Price Index (CPI) to inflate earnings in the 1990 CPS ASEC to their nominal value in each year. Using NBER's TAXSIM,[11] we calculate what federal income tax liability, including estimated federal EITC benefits, would be for each year based on this sample of households in 1990. We fix the sample and income distribution in 1990 to ensure that any changes in EITC generosity are due to changes in the policy, not changes in the income distribution. We then compute state EITC benefits using the national sample and each state's EITC laws in each year. Using a national

[9] Multiple dyads linked to an HRS respondent household during a survey year exist if a parent household has multiple unmarried daughters, as is the case for 27% of the parent household-unmarried daughter dyads in our sample.

[10] HRS respondents are asked to categorize the total income of each of their adult children (including his/her family) within various bracket ranges (e.g., "less than $35,000").

[11] See https://taxsim.nber.org/ for more information.

sample to calculate state EITC generosity, rather than the residents of each individual state, reduces concerns of endogeneity of state demographic characteristics to state EITC benefits. We collapse the data to the state-year-family size level and match to our HRS sample of unmarried daughters. For each individual in our sample, the simulated measure is the average federal and state EITC a family can expect to receive given the number of children living in the household (1, 2, or 3 or more), the state, and the year.

Primary Outcomes

The HRS includes measures of chore help and care related to functional limitations. To measure chore help, we created a binary indicator for whether the respondent(s) reported receiving any help with household chores, errands, or transportation from the unmarried daughter over the past two years (since the last HRS interview). This measure is available between 1996 and 2002 and may be unrelated to need.

To measure help related to functional limitations, we created three separate binary indicators for whether the respondent(s) reported receiving any help from the unmarried daughter with activities of daily living (ADLs) such as bathing, instrumental activities of daily living (IADLs) such as shopping, or money management tasks such as paying bills.[12] We also construct binary measures of whether the unmarried daughter is listed as a primary or secondary helper for these kind of tasks. We created two additional binary indicators. The first indicates whether the HRS respondent(s) reports receiving any help with ADL, IADL, *or* money management tasks during the past month. The second indicates whether the respondent reports receiving 40 or more

[12] ADL tasks asked about within the HRS are dressing, walking, bathing/showering, eating, getting in or out of bed, and using the toilet. IADL tasks asked about are preparing a hot meal, shopping for groceries, making phone calls, and taking medications. Examples of money-management related tasks provided to survey respondents during their interview are paying bills and keeping track of expenses.

hours of help with these tasks during the past month (what we refer to as "intensive" help).[13] Finally, we examine a continuous measure of the total hours of help with ADL, IADL, and money management tasks over the past month that the HRS respondent(s) reports receiving from the unmarried daughter.[14] We condition all measures of upward time transfers for ADL, IADL, and money management tasks on the need for help;[15] these measures are available from 1996 onwards.

Secondary Outcomes

To assess whether any changes in unmarried daughters' upward time transfers are potentially due to changes in proximity to one's parents, we created binary indicators for whether the HRS respondent parent(s) lives within 10 miles of the unmarried daughter, including those who are co-resident. We also examine a separate binary indicator for co-residence between the HRS respondent(s) and their unmarried daughter.

To examine possible compensating effects for any changes in unmarried daughters' caregiving, we look at financial transfers received from unmarried daughters, time help from all adult children, time help from spouses, and the use of paid help for functional limitations. We measure financial transfers from unmarried daughters using a binary indicator for whether the HRS respondent(s) reports receiving more than $500 over the past 2 years (since the last HRS

[13] The threshold of 40 hours was selected in accordance with the caregiving literature, which often defines intensive care as 1,000 hours or more over two years (Van Houtven et al. 2013), and corresponds to the 60th percentile of those who report non-zero total monthly hours of help.

[14] For coupled HRS respondent households, we construct the continuous measure of hours as the sum of hours of help provided in the past month by the unmarried daughter for both parents.

[15] To address any concern that conditioning on need in this way is endogenous to changes in EITC generosity, we examined whether a $500 increase in average EITC benefit generosity (see "Empirical Strategy" section) is associated with increases in HRS respondents reporting that they need ADL, IADL, or money management help (three separate regressions) and found no statistically significant association [results available upon request].

interview).[16] We also examine the continuous measure of the amount given (CPI-adjusted to real 2014 dollars). These measures are available for all survey years except 1992.

To examine time help received by our sample of HRS respondents from all their adult children, we create binary measures of financial transfers, chore help, and help with functional limitations equal to one if *any* adult child of the HRS respondent(s) provided this help. We also create two binary indicators for whether the HRS respondent(s) report receiving any or "intensive" (40 or more) hours of help with ADL, IADL, and money management tasks during the past month, taking into account the total hours that the HRS respondent(s) reports receiving from *all* their adult children.[17] We create continuous measures of the amount of financial transfers from all children by summing the money that the HRS respondent(s) report receiving from *all* their adult children.

To examine use of paid help for functional limitations, we make use of data from the HRS Core survey, where each respondent reports who helps them with ADL and IADL limitations.[18] From these measures, we create two binary measures of paid help conditioned on need: if the paid helper is associated with ADL (IADL) help, then the HRS respondent household is coded as receiving paid ADL (IADL) help. We use the same information to create an indicator

[16] This is how the HRS question is worded; we cannot observe whether unmarried daughters provided financial transfers of less than $500 over the past 2 years.
[17] In the case of hours from *all* adult children, this corresponds to the 52nd percentile of HRS Respondents in our sample that report non-zero total monthly hours of help (the median is 36 hours).
[18] We consider "paid helpers" to be those specified as "organizations", "employees of institutions", "paid helpers", or "professionals". These measures are available from 2002 onwards. For the 1996, 1998, and 2000 HRS surveys, a binary indicator is available for each specified helper that states whether they were paid. See Appendix Table C1, Panel A for a sensitivity analysis that only uses the sample from 2002 onwards to examine paid help, due to this change from the 1996-2000 period in how paid helpers were asked about and identified within the HRS survey. Appendix Table C1, Panel B includes an additional sensitivity analysis that assumes that anyone residing in a nursing home (0.75% of the parent household sample) that reports needing ADL or IADL help is receiving paid ADL or IADL help.

of spousal care for married respondents. We create two binary measures of spousal care equal to one if the respondent receives help from a spouse with ADL or IADL needs, respectively.

Control Variables

The control variables for the unmarried daughter (G2) include age (cubic), education (binary indicators for did not graduate high school, high school graduate, and some college), and race-ethnicity. For one specification we also examine a subsample of low-income unmarried daughters to try to isolate those more likely to be on the phase-in part of the EITC benefit schedule.[19] Because of bracketing of income in the questionnaire, unmarried daughters are considered low-income if they have income less than $25,000 in nominal dollars in 1992; less than $30,000 in nominal in 1994; and less than $35,000 in nominal dollars for all other survey years.[20] Controls for characteristics of the parent (G1) include average age (cubic), a binary indicator for whether the respondent is 65 or older;[21] sex, HRS cohort, self-reported health status, number of children, whether married/partnered, and whether the unmarried daughter (G2) in the dyad is a stepchild.[22] State-year controls include the state unemployment rate, the maximum

[19] This definition of low-income will still include some households beyond the phase-in range of the EITC benefit schedule, given that maximum benefits in 2014 went to unmarried parents of dependents making between $9,700-$17,850. See https://www.irs.gov/pub/irs-prior/p596--2014.pdf for more information.

[20] This income question is the report from parents (G1) about the income of their children (G2) which is measured in income brackets. It is available for all survey waves but skipped for re-interviewed households during 1998 and in alternating survey waves from 2006 onwards. We always use the lowest bracket but this changes in nominal terms over time as described. In 1994 the lowest bracket was $25,000 for parents (G1) in the original HRS cohort and $30,000 for those in other cohorts. We impute missing values using the following procedure: 1) fill in for those with the same reported status in the survey years directly preceding and following; 2) pull forward from the previous survey year; 3) fill in missing values for those never observed as low-income with zero; 4) fill in missing values for those always observed as low-income with one; 5) pull backward from the following survey year.

[21] In the case of a coupled HRS Respondent household, this indicator only takes on a value of 1 if both members of the couple are age 65 or older.

[22] In the case of a coupled HRS Respondent household, this variable takes on a value of one if the unmarried daughter is a stepchild of either HRS respondent.

welfare benefit for a family of three, the state minimum wage, state GDP, and a state-specific linear time trend.[23]

Empirical Strategy

We estimate the relationship between the EITC and care using models of the following form:

$$Y_{isct} = \beta_0 + \beta_1 EITC_{sct} + \beta_2 X_{isct} + \beta_3 Z_{isct} + \beta_4 \alpha_{st} + \delta_s + \gamma_t + \theta_c + \varepsilon_{isct} \quad (1)$$

where Y_{isct} represents the transfer outcome received from unmarried daughter *i,* living in state *s,* with number of children *c*, in year *t*. We model this as a function of EITC generosity, $EITC_{sct}$, which represents the one or two-year-lagged average benefit for an unmarried daughter residing in state *s,* with number of children *c,* at time *t*.[24] The coefficient of interest, β_1, represents how a $500 increase in the average EITC benefit impacts the outcome of interest, which is about a one standard deviation change in EITC generosity (see Table 1, Panel A). X_{isct} and Z_{isct} are vectors of demographic characteristics of the unmarried daughters and their parents described above and α_{st} represent the state-year level controls described above. These state-year contextual variables control for conditions that may be correlated with implementation and expansions of EITCs and also correlated with family care. The state-specific time trends control for further unaccounted-for policies or conditions that vary by state over time.

[23] Data on state-year contextual variables come from the University of Kentucky's Center for Poverty Research's National Welfare Data: http://ukcpr.org/resources/national-welfare-data.

[24] Our outcomes of interest are measured over differing time frames. For contemporaneous outcomes (question refers to the present day or past month), we lag $EITC_{sct}$ by one year. This estimates how one responds to the credit amount received during the survey year, since EITC benefits are received during tax time following a tax year (e.g., 2013 EITC benefits are received during early 2014). For other outcomes where the question refers to the past two years or time since last HRS interview, we lag $EITC_{sct}$ by two years. This means that, for example, a 2014 respondent will report on an outcome between 2012-2014, and we examine how that responds to their 2012 (simulated) benefits, which they would have received during the tax time months of early 2013.

State fixed effects (δ_s) control for state-level characteristics that may produce different levels of care and also correlate with state policy generosity. Because we only observe state of residence for the adult children beginning with the 2004 survey, we impute state of residence prior to 2004 using a combination of the state of the HRS respondent in cases where the adult child lives within 10 miles of their parent, and data from survey waves in which the state of residence for the adult child was explicitly coded.[25] Year fixed effects (γ_t) control for national events, such as recessions, that may be correlated with both benefit generosity and care. Number-of-child fixed effects (θ_c) control for any fixed differences in caregiving patterns according to the number of children in the household.

When examining outcomes at the parent (G1) household level (e.g., whether the parent receives time or financial help from any adult child, use of paid care, and spousal care), we estimate Equation (2) in which we aggregate outcomes (Y_{jsct}) and $EITC_{sct}$ as follows:

$$Y_{jsct} = \beta_0 + \beta_1 EITC_R_{sct} + \beta_2 Z_{jsct} + \beta_3 \alpha_{st} + \delta_s + \gamma_t + \theta_c + \varepsilon_{jsct}. \quad (2)$$

In this case Y_{jsct} represents the care help received by parent household j from all their adult children. If a respondent has multiple unmarried daughters and is thus linked to multiple parent household-unmarried daughter dyads during the same survey year, we sum the value of $EITC_{sct}$ across daughters (dyads) to create $EITC_R_{sct}$, which allows us to capture that parent households with multiple unmarried daughters are more exposed to EITC benefits. We drop the vector of unmarried daughter demographic characteristics (X_{isct}) and modify the vector of HRS respondent demographic characteristics (Z_{jsct}) to add controls for the number of unmarried daughters (as previously defined for our main analysis), the maximum number of grandchildren that a

[25] See Appendix B for a more detailed discussion of this imputation process. Appendix Table B1 also displays results for two alternative specifications, the first of which relies on only federal-level variation in EITC generosity, and the second of which limits imputation of state of residence to within one survey wave (two years), demonstrating that our results are robust to this imputation process. See Appendix Table B1 notes for details.

respondent's unmarried daughter has for EITC purposes (1, 2, or 3+), whether the respondent has a child that is a college graduate, the age of the respondent's oldest child, the respondent's total number of grandchildren (G3), and whether the respondent is covered by Medicaid (see Appendix Table C2 for summary statistics). δ_s and α_{st} use the state of residence of the HRS respondent household.

In both models, the final error term is clustered at the state level and assumed to be independent of $EITC_{sct}$, conditional on controlling for X_{isct}, Z_{isct}, α_{st}, and the fixed effects. Since our identifying variation comes from state and federal policy changes over time that vary by household size, we assume that there were no other policies or events that occurred at the same time as EITC expansions that disproportionately affected larger households. Controlling for state, year, and number of child fixed effects in our analysis, any threat to identification must occur at the intersection of these fixed effects.

This leaves open the possibility of bias stemming from the staggered rollout of state EITCs, since states adopt EITCs at different points in time, and early-adopters might be quite different from late-adopters (e.g., Goodman-Bacon 2021). The challenge in the EITC context is that we also have variation in the dosage of the treatment variable, which changes over time within states, and since the EITC has been in place since 1975, we have no untreated observations. We consider various specifications to test the sensitivity of our results to these assumptions and potential biases in the robustness checks section.

Federal EITC expansions allow us to check for the sensitivity of our results to staggered rollout and an examination of the parallel trends assumption underlying the causal interpretation of our results. The 2009 expansion is the first federal expansion that we can examine for all outcomes, which expanded benefits for households with at least three children, lending itself to a

test of parallel trends for families where the unmarried daughter (G2) had three or more children relative to those with fewer than three children. Appendix Figure C1 displays adjusted trends by number of EITC-eligible children for several key outcomes leading up to and after this major federal expansion. The trends are largely parallel in the years leading up to the 2009 federal expansion, offering support for the assumption underlying the model.

Results

Descriptive statistics

Descriptive statistics for our sample of unmarried daughters (G2) are provided in Panel A of Table 1, which also shows characteristics of a comparable nationally representative sample of unmarried mothers without a college degree aged 25-39 in the CPS ASEC over the same period.[26] Overall, the two samples of unmarried women are similar. The representativeness of the HRS ensures that at a minimum the HRS-based sample of unmarried daughters is nationally representative of less-educated unmarried women aged 25-39 with children who have a parent aged 51 and older who is living in the United States. This both corresponds to the majority of the EITC recipient population of interest, while also allowing us to estimate the effect of the EITC on those with living parents who might have care needs.

The parents in our sample (G1) (HRS respondents; see Table 1, Panel B) are about 60 years old and have about 4.5 children on average, and 46% report either fair or poor health for either themselves or their spouse/partner. Care needs are not trivial for this population: about 26%, 18%, and 8% report needing ADL, IADL, or money management help, respectively (33% of the sample has at least one of these needs). In comparison to the full HRS sample of parents of

[26] See Appendix Table A1 for an additional comparison to the 2013 PSID Rosters and Transfers Module. Using this data source, we can condition the comparison sample (of unmarried 25–39-year-old mothers without a college degree) on those that have at least one parent age 51 or older, in alignment with the HRS sampling frame. This additional comparison shows very similar differences between samples.

children between the ages of 25 and 39 (see the second column of Table 1, Panel B), the sample of HRS respondents with unmarried daughters is more disadvantaged on average.

Table 2 summarizes the outcome measures used in our models for the sample of parent household - unmarried daughter dyads (Panel A), and the sample of parent households (Panel B). Given prior evidence on differences in care needs and the prevalence of upward transfers by parental age, we split both samples by the age of the HRS respondent. Beginning with the parent household – unmarried daughter dyads (Table 2, Panel A), time transfers are common, with 27% of parent households receiving help with household chores, errands, or transportation help from their unmarried daughter. Among parents that report needing help with functional limitations, 8% receive ADL care from their unmarried daughter; this increases to 17% and 10% for IADLs and money management, respectively. In about two-thirds of cases, the unmarried daughter is also identified as the parent's primary helper for these needs. Overall, about 11% of parents with functional limitations received more than zero hours of help over the past month from their unmarried daughter, and 5% received intensive help totaling 40 or more hours. This corresponds to about nine hours of help on average over the past month from unmarried daughters among all parents with functional limitations; among those who received more than zero hours of help, they received an average of 79 hours, or more than 3 full days a month, and 40% received intensive help (Table 2, Panel A). As expected, older parents with care needs are more likely to receive help with their functional limitations from their unmarried daughter and receive more hours of help than younger parents (about 12 hours versus about 8 hours on average, see Panel A of Table 2). Financial transfers to parents are a relatively rare phenomenon: only 3% of parents received $500 or more from their unmarried daughter during the past two years. Finally, living close to

one another is common, regardless of parental age, with over half of the sample of unmarried daughters living within 10 miles and 14% co-residing with their parent(s).

Aggregating help from all adult children (Table 2, Panel B), the prevalence of upward time transfers roughly doubles for ADL and IADL help and triples for money management help; older (65+) parents are more likely to receive each type of time help. Use of paid help remains rare across both age groups, with less than 7% of those over 65 receiving paid help.

Care from Unmarried Daughters of HRS Respondents

Table 3, Panel A shows the results for Equation (1). For the overall sample, we do not find evidence that the EITC impacts whether parents receive help from their unmarried daughters with chores, ADL help, IADL help, or money management, though all coefficients are negatively signed. However, our results suggest that greater EITC generosity reduces the likelihood that unmarried daughters are the primary IADL helper for their parents by about eight percentage points and increases the likelihood that they are instead secondary IADL helpers by a similar magnitude.

When we split the sample by parental age, we find evidence that the EITC leads to large reductions in care help from unmarried daughters to older parents, with little change in help received by younger parents. For parents age 65+, a $500 increase in average EITC benefits reduces the likelihood of receiving chore help from their unmarried daughter by nearly nine percentage points (33%). We also find that the effect of EITC generosity on being a primary vs. secondary IADL helper is driven entirely by older parents.

These reductions represent large declines relative to the dependent variable means shown in Table 2, Panel A. While the decreased likelihood of the unmarried daughter being a primary IADL helper is precisely estimated ($p<0.01$), the 95% confidence interval surrounding this point

estimate remains wide [−0.275, −0.067] given the small sample size of HRS respondent(s) age 65+ with care needs. We thus cannot rule out more muted declines in care help. However, the binary measures in Columns 8 and 9 of Table 3, Panel A show that these decreases are driven by declines in the probability of intensive care, with a six percentage point decrease in the likelihood of receiving 40 or more monthly hours of functional limitations help from one's unmarried daughter following a $500 increase in average EITC benefits. The results in Panel B of Table 3, which focus on the continuous measure of total monthly hours of help, are consistent with the results from these binary indicators. For parents age 65+, a $500 increase in average EITC benefits results in 24 fewer hours of help from unmarried daughters.

We also show in Table 3, Panel B that the magnitude of the point estimate for the total monthly hours measure in Column 1 is sensitive to outliers by winsorizing this measure at both the 95th and 90th percentiles of those that report non-zero total monthly hours of ADL/IADL/money management help from their unmarried daughter. While the effect of the EITC on total monthly hours remains statistically significant across these winsorized measures, the magnitude of the point estimate drops from 24 to 13 hours.[27] Overall, results indicate that the EITC substantially decreases care from unmarried daughters to the most vulnerable parents in our sample: older parents who receive intensive help with functional limitations.

Co-residence and Compensating Care

Co-residence

One possible mechanism through which the EITC may reduce family care is its effects on co-residence with and proximity to parents. Table 4, Panel A examines the effect of EITC

[27] The 95th percentile of those with non-zero total monthly hours corresponds to those receiving more than 360 hours of care from their unmarried daughter (more than 12 hours on average per day), while the 90th percentile corresponds to those receiving more than 240 hours (more than 8 hours on average per day).

generosity on co-residence and living arrangements for our sample of parent household - unmarried daughter dyads. We find no statistically significant relationship between EITC generosity and these measures of proximity, though our point estimates are generally negative.

Appendix Table C3 further examines the possible mechanism of co-residence with and proximity to parents among the sub-sample of parent household – unmarried daughter dyads with ADL, IADL or money management-related care needs (N=3,821, see Table 3). All point estimates are negative and greater in magnitude relative to the full sample results in Table 4 but still not statistically significant, with the exception of co-residing with a parent aged 65 or older, which is estimated to decrease by 13.2 percentage points (95% CI ranges from −0.271 to 0.007) in response to a $500 increase in average EITC benefits. This is the same group for which an increase in EITC generosity is estimated to substantially reduce care from unmarried daughters (see Table 3), suggesting that decreased co-residence with parents is one mechanism through which the EITC reduces family care and intensive caregiving in particular.

Compensating Care

The substantial decrease in care that older parents receive from their unmarried daughters following increases in EITC generosity might be concerning if the gap in care to parents is not accompanied by increases in financial transfers, care from another adult child or spouse, or paid care.

Table 4, Panel B shows the effect of EITC generosity on financial transfers from unmarried daughters to their parents. Overall, we do not find any evidence that the EITC increases financial transfers to parents. In fact, when we split the sample by parental age, we find that a $500 increase in average EITC benefits *reduces* the likelihood of providing any financial transfers to parents aged 65 or older by 1.6 percentage points. However, we find no statistically

significant decline in the amount of transfers that unmarried daughters provide their parents, so these extensive margin effects may be driven by those who were providing small transfers to their parents.[28][29]

To investigate whether other adult children step in to fill the care gap left by unmarried daughters, Table 5 presents results from estimating Equation (2). We find that there are no longer statistically significant reductions in the likelihood of receiving chore help for older (65+) parents, which suggests that other adult children may step in to provide this help. However, the results suggest that other adult children do *not* step in to help fill the gap in care for functional limitations left by unmarried EITC-eligible daughters. For parents aged 65 and older, we continue to find sharp, negative, statistically significant reductions in the probability that an adult child is a primary IADL helper (about 16 percentage points; 95% CI ranges from −0.284 to −0.026). In addition, older parents are about 13 percentage points less likely to have *any* of their adult children as an IADL helper (95% CI ranges from −0.276 to 0.018). Column 8 of Table 5 shows that these decreases in IADL help result in older parents of unmarried, EITC-eligible daughters being 12 percentage points (40%) less likely to receive *any* hours of functional limitations help during the past month from *any* of their adult children, while Column 9 shows that these older parents are also 8.5 percentage points less likely to receive intensive monthly

[28] There may be some concern that the real value of the nominal $500 threshold for reporting transfers presents a problem for our results, however, because EITC generosity is increasing over time and the real value of the $500 threshold is decreasing, this should bias our estimates upwards – i.e. in favor of finding an increase in transfers. Instead, we find the opposite.

[29] Panel B of Appendix Table C3 shows that the same results hold for parents age 65+ when examining these outcome measures among the sub-sample of parent household – unmarried daughter dyads with ADL, IADL or money management-related care needs. Parents younger than 65 years old with ADL, IADL or money management-related care needs are estimated to be 4.9 percentage points more likely ($p<0.05$) to receive a financial transfer from their unmarried daughter, and to receive about $114 more on average ($p<0.10$), following a $500 increase in average EITC benefits (see Panel B, Appendix Table C3). However, these increased financial transfers are not compensating for reductions in care, as an increase in EITC generosity was not estimated to reduce care from unmarried daughters for these younger parents (see Table 3).

help. This corresponds to a 57% decline in intensive help among HRS parent households age 65+ with care needs and 17% decline among HRS parent households age 65+ with care needs who report non-zero hours (see Table 2, Panel B). These results indicate that other children do not step in to help fill the gap in care help even if they do in chore help (which may be unrelated to functional limitations). We also do not find any evidence that upward financial transfers increase when looking at transfers from all adult children (see Appendix Table C4).

Finally, since neither upward financial transfers nor care from other adult children fill the care gap for older parents left by unmarried daughters, we examine whether use of paid care increases to compensate for the loss in care help from adult children (see Table 6). For the overall sample, a $500 increase in average EITC benefits is associated with a marginally statistically significant two percentage point decline in the likelihood of receiving paid ADL help and no change in the likelihood of receiving paid IADL help. This decrease in the likelihood of receiving paid ADL help is driven by older (65+) parents. However, older parents are also 7.5 percentage points more likely to use paid help for IADL needs (95% CI ranges from −0.007 to 0.157). This increase in paid help still leaves a sizeable care gap, given that these same older adults are 12.9 percentage points less likely to have IADL help from adult children (see Table 5). We conclude that while paid care appears to fill some of the care gap generated by the EITC, older parents of EITC-eligible daughters still receive less care overall from their adult children in response to increases in the EITC. Paid care also does not appear to be financed through transfers of money from adult children to their parents.

In addition to help from adult children and paid help, spouses are also an important potential source of care help for partnered adults. Appendix Table C5 limits the sample of parent households to partnered households (N=5,966) and re-estimates the results for receiving any or

intensive monthly hours of functional limitations help from all adult children and receiving paid ADL or IADL help. It also makes use of data from the HRS Core survey to examine whether, conditioned on need, a spouse provided ADL or IADL help.[30] We continue to find evidence that EITC generosity decreases the care that older, partnered parents receive from their adult children, and we do not find any evidence that spouses step in to help fill this gap in care help.

Robustness Checks

We test the robustness of our results in various ways. Appendix Table C6 shows that our results are not sensitive to empirical specification by testing various ways of specifying state and year trends. Additionally, in Appendix Table C7, we re-estimate the effect of EITC benefit generosity on the total monthly hours of functional limitations help received by HRS respondents (parents) from their unmarried daughters using Poisson pseudo-likelihood regression since the dependent variable has many zeros. Results are consistent.

In Appendix Table C8 we consider more substantive issues including threats to identification and changes in the source of variation that we use. First, we include a set of controls for two other social policies that also varied over the timeframe of our analysis: the Child Tax Credit (CTC) and Temporary Assistance for Needy Families (TANF).[31] We simulate CTC benefits in a similar manner as that used to create our $AvgEITC_{sct}$ treatment variable (see "Measures" section for details), with variation driven only by number of children (0-8) and year observed, since the CTC was primarily a federal-level policy during this time.

[30] Similar to the binary measure of paid ADL (IADL) help (see "Measures" section), we use survey information where each respondent that reports receiving any help with functional limitations must then specify their relationship(s) to those that help them.

[31] The CTC was introduced in 1998 as a modest $400 (per child under age 17) non-refundable tax credit. Since its introduction, it has been expanded on various occasions, providing $1000 (per child under age 17) in refundable benefits by 2014 when our sample period ends.

We additionally control for TANF because of concerns about the conflation of effects of the EITC with effects from the change from AFDC to TANF in the mid-1990s (Kleven 2024; Schanzenbach and Strain 2021), which substantially increased work requirements for welfare beneficiaries. The EITC expansion in 1994 happened around the same time that the AFDC program was replaced by the TANF program, first through state waiver programs and then nationally in 1996. We add controls at the state level for the post-welfare period and for the proportion of the state's poor that receive AFDC/TANF in each year. Our results are not sensitive to these additional controls suggesting that neither CTC expansions nor welfare reform drive our main findings.

In addition to the CTC and TANF, states also began implementing paid family leave (PFL) benefits and expanding access to Medicaid through the Affordable Care Act during the latter years of our sample period (2004-2014). Having access to PFL benefits lessens the trade-off between engaging in paid work and providing care (Arora and Wolf 2024), while expanded access to Medicaid could increase access to paid care and lessen needs for family care. We create a binary PFL indicator that takes on a value of one for unmarried daughters living in California from 2004 onwards, in New Jersey from 2009 onwards, and Rhode Island from 2014 (corresponds to 5.32% of the sample) and a binary Medicaid expansion indicator that takes on a value of one for unmarried daughters observed in 2014 living in states that had implemented the ACA Medicaid expansion (corresponds to 4.44% of the sample).[32] Our results are not sensitive to these additional controls (see Column 3 of Appendix Table C8).

Addressing concerns about using two-way fixed effects (TWFE) models in the context of staggered rollout of state EITCs (e.g., Goodman-Bacon 2021), in Columns (4) and (5) of

[32] See https://www.kff.org/status-of-state-medicaid-expansion-decisions/ for more information.

Appendix Table C8, we show two specifications where these issues are less likely to be relevant. First, we rely only on variation in federal EITC generosity where federal expansions took place in 1991, 1994, and 2009.[33] In this case the model identifies the "correct" comparison as long as the treatment effects per dollar do not vary across groups defined by the number of children (de Chaisemartin and D'Haultfoeuille 2023). We find that using only federal variation over the whole time period that we study does not affect our conclusions. Second, we conduct a traditional difference-in-differences analysis using the 2009 expansion of the EITC for three or more child households and our results are quite similar.

Appendix Table C9 uses two alternative samples to further test the robustness of our main results: the sub-sample of unmarried daughters defined as having low-income (N=9,065), and a placebo group. We would expect effects of caregiving driven by changes in labor supply to be largest among the low-income sub-sample who is largely on the phase-in part of the EITC benefits schedule. The results (Column 2 of Appendix Table C9) are mostly aligned with this expectation. In addition to larger decreases in the propensity of unmarried daughters to provide primary IADL care or any monthly hours of functional limitations help for their older parents, we also now estimate statistically significant decreases in the propensity of unmarried daughters to be the primary IADL helper for *younger* (less than 65 years old) parents, suggesting that reductions in care are more widespread amongst those whose return to work is positively affected by increases in EITC benefit generosity.[34]

[33] Treatment is not staggered in these cases as the variables are only available within the HRS as of 1996 and these variables are asked about contemporaneously, so we use a one-year lagged measure of $EITC_{sct}$. See "Empirical Strategy" section for more information.

[34] In interpreting these findings, we caution that our measure of low-income status of unmarried daughters (G2) is likely measured with considerable error, as it is reported by the HRS respondent (G1), rather than self-reported by unmarried daughters themselves and does not perfectly align with the phase-in portion of the EITC benefit schedule.

Finally, we conduct a placebo test by re-estimating our main results on a sample of married, college-educated daughters of HRS respondents (similar to our main sample, we restrict to married daughters between the ages of 25-39 year-old; N=9,235 person-years), who are unlikely to be eligible for substantial EITC benefits.[35] Only one estimated coefficient is statistically significant and many coefficients (Column 3 of Appendix Table C9) are in the opposite direction from our primary sample.

Discussion

Family care forms the backbone of the long-term care landscape for older adults in the United States (Reinhard et al. 2023). After spouses, adult children, particularly daughters, are the most common source of care for older adults with care needs (National Academies of Engineering, Science, and Medicine 2016). Our study examines how the competing demands of paid work and caregiving interact with one of the largest anti-poverty programs in the United States. We find that the EITC substantially decreases the care that parents age 65+ receive from their unmarried daughters. A $500 increase in EITC generosity reduces the likelihood of receiving chore help from an unmarried daughter by nine percentage points, having an unmarried daughter as a primary IADL helper by 17 percentage points, and receiving intensive care of 40 or more hours per month from an unmarried daughter by six percentage points. This results in parents age 65+ receiving 13-24 fewer hours of help with their functional limitations per month from an unmarried daughter. These effects are large and concentrated mostly among intensive caregivers.

[35] We exclude from this placebo sample those with a sibling included in our main sample (N=757 person-years) to further limit the possibility that this placebo group is affected by changes in EITC benefit generosity either directly or indirectly.

These declines are not fully offset by increases in financial transfers, time transfers from other adult children or spouses, or paid care. We conclude that these effects are likely a result of the EITC increasing labor supply on the extensive margin (Chetty et al. 2013; Meyer 2002; Nichols and Rothstein, 2016; Saez 2010) and reducing multigenerational coresidence (Pilkauskas and Michelmore 2019), both of which result in fewer unmarried daughters providing intensive caregiving. We thus conclude that the most vulnerable parents in our sample - older parents receiving intensive help with functional limitations - receive less care from children in response to increased EITC generosity.

While it is difficult to assess the total societal costs associated with the decline in care due to the EITC, we can provide a back-of-the-envelope calculation of the individual cost of replacing this lost time. Aggregating the 13-24 hour per month loss in care to the annual level implies a 156-288 hour decline in annual hours of care that parents aged 65 and older with at least one functional limitation receive from their unmarried daughter. Under a very conservative estimate that it would cost $10 per hour to hire someone to replace this time, a $500 increase in EITC benefit generosity would yield a $1,560-$2,880 annual increase in costs to older parents.[36]

Even with this modest estimate of the replacement cost of care, the cost is one to two times the average size of the EITC benefit for the unmarried daughters in our sample (see Table 1, Panel A). On the other hand, unmarried daughters may also benefit from reducing the care they provide to their parents. Caregiving is associated with higher levels of depression and lower levels of physical health and subjective well-being, particularly for women (Pinquart and Sorensen 2006) and "sandwiched" caregivers (Do et al. 2014; Lei et al. 2023). However, any positive health effects of reducing care will be tempered because having a parent who requires

[36] We use a relatively low hourly wage estimate since our results are largely driven by declines in IADL help, which is generally cheaper to replace than ADL help.

care is associated with adverse mental health consequences for adult children, even among non-caregivers (Amirkhanyan and Wolf 2006).

Just as the benefits and costs of EITC expansions accrue to different generations, we also note that they are funded by different sources. EITC benefits are paid for by a combination of federal and state resources and are somewhat offset by increases in tax revenues and reductions in the cost of other government transfer programs (Bastian and Jones 2021), while the costs of caring for older adults falls on families as well as on states and the federal government, in the form of Medicaid spending on long-term services and supports.

Our findings also have implications for the broader EITC literature. The positive effects of the EITC on children's health (Baughman and Duchovny 2016; Braga et al. 2020; Hoynes et al. 2015), education, (e.g. Bastian and Michelmore 2018; Dahl and Lochner 2012) and financial outcomes (Jones and Michelmore 2018; Shaefer et al. 2013) may need to be balanced somewhat by its negative effect on caregiving for older generations.

This study has limitations. First, the HRS lacks detailed and self-reported earnings and employment data for the unmarried daughters in our sample. We are thus limited in our ability to examine heterogeneity across the EITC benefit schedule, across which the theoretical predictions of the EITC on employment and time use differ. Second, the lack of data on consumption, health, and well-being of the unmarried daughter (G2) and grandchild generation (G3) in the HRS does not allow us to trace the implications of reductions in caregiving for older parents (G1) on the health and well-being of unmarried daughters and their children. We also do not examine the effects of the reductions in care on the health and well-being of the parent generation (G1). Future work could use measures of well-being in the HRS and other datasets to better understand the EITC's effects on health and well-being for caregivers and recipients.

Our study adds to the literature that finds that poor mothers face trade-offs between labor supply and provision of care. We find that the EITC creates a potential conflict between the earnings of the adult child generation and well-being of older generations. This conflict is important to consider as policymakers increasingly tie different parts of the U.S. social safety net to recipients' labor supply, while also facing the challenges of an aging population and the prominent and rising role of healthcare costs in the national budget, both of which increase the need for family care.

References

Amirkhanyan, A., & Wolf, D. A. (2006). Parent care and the stress process: findings from panel data. *The Journals of Gerontology: Series B*, *61*(5), S248–S255. https://doi.org/10.1093/geronb/61.5.S248

Arora, K., & Wolf, D. A. (2024). Paid leave mandates and care for older parents. *The Milbank Quarterly*, *102*(3), 732–764.

Arora, K., & Wolf, D. A. (2018). Does Paid Family Leave reduce nursing home use? The California experience. *Journal of Policy Analysis and Management*, *37*(1), 38–62. https://doi.org/10.1002/pam.22038

Bakx, P., de Meijer, C., Schut, F., van Doorslaer, E. (2014). Going formal or informal, who cares? The influence of public long-term care insurance. *Health Economics,* 24(6), 631-643.

Bastian, J. and Jones, M.R. (2021). Do EITC expansions pay for themselves? Effects on tax revenue and government transfers. *Journal of Public Economics, 196*(104355). https://doi.org/10.1016/j.jpubeco.2020.104355

Bastian, J. and Lochner, L. (2022). The Earned Income Tax Credit and maternal time use: more time working and less time with kids? *Journal of Labor Economics*, *40*(3), 573–611. https://doi.org/10.1086/717729

Bastian, J., & Michelmore, K. (2018). The long-term impact of the earned income tax credit on children's education and employment outcomes. *Journal of Labor Economics*, *36*(4), 1127–1163. https://doi.org/10.1086/697477

Baughman, R. A., & Duchovny, N. (2016). State earned income tax credits and the production of child health: Insurance coverage, utilization, and health status. *National Tax Journal*,

69(1), 103–132. https://doi.org/10.17310/ntj.2016.1.04

Braga, B., Blavin, F. and Gangopadhyaya, A., 2020. The long-term effects of childhood exposure to the earned income tax credit on health outcomes. *Journal of Public Economics*, *190*, 104249.

Burch, K. A., Dugan, A. G., & Barnes-Farrell, J. L. (2019). Understanding what eldercare means for employees and organizations: A review and recommendations for future research. *Work, Aging and Retirement*, *5*(1), 44–72. https://doi.org/10.1093/workar/way011

Carmichael, F., Charles, S., & Hulme, C. (2010). Who will care? Employment participation and willingness to supply informal care. *Journal of Health Economics*, *29*(1), 182–190. https://doi.org/10.1016/j.jhealeco.2009.11.003

Carrino, L., Nafilyan, V., & Avendano, M. (2023). Should I care or should I work? The impact of work on informal care. *Journal of Policy Analysis and Management, 42*(2), 424-455. https://doi.org/10.1002/pam.22457

Checkovich, T.J., & Stern, S. (2002). Shared Caregiving Responsibilities of Adult Siblings with Elderly Parents. *The Journal of Human Resources, 37*(3), 441-478. https://www.jstor.org/stable/3069678

Chetty, R., Guren, A., Manoli, D., & Weber, A. (2013). Does Indivisible Labor Explain the Difference between Micro and Macro Elasticities? A Meta-Analysis of Extensive Margin Elasticities. *NBER Macroeconomics Annual, 27*, 1–56. https://doi.org/10.1086/669170

Couch, K. A., Daly, M. C., & Wolf, D. A. (1999). Time? Money? Both? The Allocation of Resources to Older Parents. *Demography, 36*(2), 219-232. https://doi.org/10.2307/2648110

Coward, R. T., & Dwyer, J. W. (1990). The association of gender, sibling composition, and patters of parent care by adult children. *Research on Aging, 12*(2), 158-181. https://doi.org/10.1177/0164027590122002

Crandall-Hollick, M. (2022, April 28). *The Earned Income Tax Credit (EITC): Legislative History*. Washington, D.C.: Congressional Research Service. https://sgp.fas.org/crs/misc/R44825.pdf

Crimmins, E. M., & Ingegneri, D. G. (1990). Interaction and living arrangements of older parents and their children. *Research on Aging, 12*(1), 3-35. http://doi.org/10.1177/0164027590121001

de Chaisemartin, C., & D'Haultfoeuille, X. (2023). Two-way fixed effects and differences-in-differences with heterogenous treatment effects: a survey. *Econometrics Journal, 26*, C1-C30. https://doi.org/10.1093/ectj/utac017

Dahl, G.B., and Lochner, L. (2012). The impact of family income on child achievement: evidence from the Earned Income Tax Credit. *American Economic Review, 102*(5), 1927–56.

Do, E. K., Cohen, S. A., Brown, M. J. (2014). Socioeconomic and demographic factors modify the association between informal caregiving and health in the Sandwich Generation, *BMC Public Health*, 14:362.

Eissa, N. & Liebman, J.B. (1996). Labor supply response to the earned income tax credit. *The Quarterly Journal of Economics*, *111*(2), 605-637. https://doi.org/10.2307/2946689

Fahle, S., & McGarry, K. (2018). Women working longer: labor market implications of providing family care. In C. Goldin & L. F. Katz (Eds.), *Women Working Longer:*

Increased Employment at Older Ages (pp. 157–181). Chicago, IL: University of Chicago Press.

Fingerman, K. L., & Birditt, K. S. (2011). Relationships between adults and their aging parents. In K. Warner Schaie & S. L. Willis (Eds.), *Handbook of Psychology of Aging (Seventh Edition)* (Chapter 14). Elsevier.

Fuller-Thomson, E., & Minkler, M. (2001). American grandparents providing extensive child care to their grandchildren prevalence and profile. *The Gerontologist, 41*(2), 201-209. https://doi.org/10.1093/geront/41.2.201

Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of Econometrics*, *225*(2), 254–277. https://doi.org/10.1016/j.jeconom.2021.03.014

Grigoryeva A. (2017). Own gender, sibling's gender, parent's gender. American Sociological Review, 82(1), 116–146.

Health and Retirement Study (2021a). Cross-Wave Geographic Information (Detail) [1992-2020] - v9.0 restricted dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009740). Ann Arbor, MI.

Health and Retirement Study (2021b). Child Zip Codes v9.0 restricted dataset. Produced and distributed by the University of Michigan with funding from the National Institute on Aging (grant number NIA U01AG009740). Ann Arbor, MI.

He, D., & McHenry, P. (2016). Does formal employment reduce informal caregiving? *Health Economics*, *25*, 829–843. https://doi.org/10.1002/hec.3185

Hoynes, H., Miller, D. and Simon, D. (2015). Income, the earned income tax credit, and infant health. *American Economic Journal: Economic Policy*, *7*(1), 172-211.

Hoynes, H., and Patel, A. (2018). Effective policy for reducing poverty and inequality? The Earned Income Tax Credit and the distribution of income. *Journal of Human Resources*, *53*(4), 859-890. https://doi.org/10.3368/jhr.53.4.1115-7494R1

Internal Revenue Service (2024, 8 January). *Statistics for Tax Returns with the Earned Income Tax Credit (EITC)*. https://www.eitc.irs.gov/eitc-central/statistics-for-tax-returns-with-eitc/statistics-for-tax-returns-with-the-earned-income

Jones, L.E., and Michelmore, K. (2018). The impact of the Earned Income Tax Credit on household finances. *Journal of Policy Analysis and Management 37*(3), 521-545.

Kasper, J.D., Wolff, J.L., & Skehan, M. (2019). Care arrangements of older adults: what they prefer, what they have, and implications for quality of life. *The Gerontologist, 59*(5), 845-855. Doi: 10.1093/geront/gny127.

Kleven, H. (2024). The EITC and the extensive margin: A reappraisal. *Journal of Public Economics, 236*, 105135. https://doi.org/10.1016/j.jpubeco.2024.105135

Laditka, J. N., & Laditka, S. B. (2000). Aging children and their older parents: the coming generation of caregiving. *Journal of Women & Aging, 12*(1), 189-204. https://doi.org/10.1300/J074v12n01_12

Lee, G.R., Dwyer, J. W., Coward, R. T. (1993). Gender differences in parent care: demographic factors and same-gender preferences. *Journal of Gerontology,* 48(1):S9-16.

Lei, L., Leggett, A. N. & Maust, D. T. (2023). A national profile of sandwich generation caregivers providing care to both older adults and children. *Journal of the American Geriatric Society*, 71(3): 799-809. doi:10.1111/jgs.18138

Lin, I., & Wolf, D.A. (2020). Division of parent care among adult children. *The Journals of Gerontology: Series B, 75*(10), 2230-2239. https://doi.org/10.1093/geronb/gbz162

Meyer, B.D. (2002). Labor supply at the extensive and intensive margins: the eitc, welfare, and hours worked. *American Economic Review, 92*(2), 373-379.

Meyer, B.D., & Rosenbaum, D.T. (2001). Welfare, the earned income tax credit, and the Labor Supply of Single Mothers. *Quarterly Journal of Economics*, *116*(3), 1063–1114. https://www.jstor.org/stable/2696426

Michaud, P-C., Heitmueller, A., & Nazarov, Z. (2010). A dynamic analysis of informal care and employment in England. *Labour Economics, 17*, 455-65.

Michelmore, K., Wiersma Strauss, A., & Wiemers, E. (2024). Does the EITC crowd out financial assistance from parents? *Manuscript submitted for publication.*

Michelmore, K., & Pilkauskas, N. (2021). Tots and teens: how does child's age influence maternal labor supply and child care response to the earned income tax credit? *Journal of Labor Economics 39*(4), 895-929. https://doi.org/10.1086/711383

Mommaerts, C., & Truskinovsky, Y. (2020). The cyclicality of informal care. *Journal of Health Economics*, *71*, 102306. https://doi.org/10.1016/j.jhealeco.2020.102306

Morrissey, T. (2023). The Earned Income Tax Credit and short-term changes in parents' time investments in children. *Journal of Family and Economic Issues, 44*, 412-433. https://doi.org/10.1007/s10834-022-09830-7

National Academies of Sciences, Engineering, and Medicine. 2016. *Families caring for an aging America*. Washington, DC: The National Academies Press. doi: 10.17226/23606.

Nichols, A., & Rothstein, J. (2016). The Earned Income Tax Credit. In R.A. Moffit (Ed). *Economics of Means-Tested Transfer Programs in the United States, Volume 1* (pp. 137-218). University of Chicago Press.

Perry-Jenkins, M., & Gerstel, N. (2020). Work and family in the second decade of the 21st century. *Journal of Marriage and Family, 82*(1), 420–453. https://doi.org/10.1111/jomf.12636

Pezzin, L.E., Pollak, R.A., & Schone, B.S. (2015). Bargaining power, parental caregiving, and intergenerational coresidence. *The Journals of Gerontology: Series B, 70*(6), 969-980. https://doi.org/10.1093/geronb/gbu079

Pilkauskas, N., & Michelmore, K. (2019). The effect of the Earned Income Tax Credit on housing and living arrangements. *Demography*, *56*, 1303–1326. https://doi.org/10.1007/s13524-019-00791-5

Pinquart, M. & Sörensen, S. (2006). Gender differences in caregiver stressors, social resources, and health: an updated meta-analysis. *The Journals of Gerontology: Series B*, *61*(1), P33–P45. https://doi.org/10.1093/geronb/61.1.P33

RAND HRS Family File (2014). Produced by the RAND Center for the Study of Aging, with funding from the National Institute on Aging and the Social Security Administration. Santa Monica, CA.

Reinhard, S.C., Caldera, S., Houser, A., Choula, R., & Evans, M. (2023, March). *Valuing the Invaluable 2023 Update: Strengthening Supports for Family Caregivers*. Washington, DC: AARP Public Policy Institute. March 8, 2023. https://doi.org/10.26419/ppi.00082.006

Saez, E. (2010). Do taxpayers bunch at kink points? *American Economic Journal: Economic Policy*, 180–212. http://www.aeaweb.org/articles.php?doi=10.1257/pol.2.3.180

Shaefer, H.L., Song, X. and Williams Shanks, T.R., 2013. Do single mothers in the United States use the Earned Income Tax Credit to reduce unsecured debt?. *Review of Economics of the Household*, *11*, pp.659-680.

Spitze, G. & Logan, J. R. (1990). Sons, daughters, and intergenerational social support. *Journal of Marriage and Family, 52*(2), 420-430. https://www.jstor.org/stable/353036

Soldo, B. J., Wolf, D. A., & Agree, E. M. (1990). Family, households, and care arrangements of frail older women: A structural analysis. *Journal of Gerontology, 45*(6), S238-S249. https://doi.org/10.1093/geronj/45.6.s238

Schanzenbach, D.W., & Strain, M.R. (2021). Employment effects of the Earned Income Tax Credit: Taking the long view. *Tax Policy and the Economy*, *35*, 87-129. https://doi.org/10.1086/713494

Van Houtven, C. H., Coe, N. B., & Skira, M. M. (2013). The effect of informal care on work and wages. *Journal of health economics*, *32*(1), 240-252. https://doi.org/10.1016/j.jhealeco.2012.10.006

Wang, J. (2022). Hire or care: the effects of aging parents on household labor supply. *Review of Economics of the Household*, *20*(3), 921–954. https://doi.org/10.1007/s11150-021-09571-w

Wiemers, E. E., & Park, S. A. (2021). Intergenerational transfers of time and money over the life course. In K. F. Ferraro & D. Carr (Eds). *Handbook of Aging and the Social Sciences, 9th ed* (pp. 201-220). Elsevier.

Wiersma Strauss, A. (2026). The earned income tax credit (EITC) and time spent helping and caring for adults. *Review of Economics of the Household, 24*, 233-267. https://doi.org/10.1007/s11150-024-09731-8

Table 1. Summary Statistics

Panel A. Parent Household -Unmarried Daughter Dyads

	HRS Sample		Sample Comparison with CPS ASEC 1992-2014 [b]	
Variable	Mean	SD	Mean	SD
Age	33.00	4.03	32.01	4.27
Birth Year	1971	7.84	1971	8.08
Education				
Did Not Graduate High School	17%		20%	
HS Graduate	51%		41%	
Some College	32%		39%	
Number of Children	1.95	0.81	1.87	0.79
1	36%		38%	
2	33%		36%	
3+	31%		26%	
Race-Ethnicity [a]				
Non-Hispanic White	58%		45%	
Non-Hispanic Black	27%		32%	
Hispanic	11%		18%	
Other	3%		4%	
More than one race-ethnicity	2%		-	
Low-income	70%		91%	
Average EITC Benefit Eligibility (lagged)	$1,614	454.72	$1,541	529.16
Federal	$1,547	401.46	$1,480	482.59
State	$67	148.54	$61	141.83
Observations	13,686		70,169	

Panel B. Parent Households

	HRS Sample		Sample Comparison with Full HRS [c]	
Variable	**Mean**	**SD**	**Mean**	**SD**
Sex				
Female Respondent	87%		89%	
Only Male Respondent	13%		11%	
Age	60.26	6.44	59.87	6.31
Age 65 or older (all*)	18%		16%	
Race-Ethnicity				
Non-Hispanic White	60%		74%	
Non-Hispanic Black	24%		12%	
Hispanic	11%		9%	
Other	3%		2%	
More than one race-ethnicity	2%		3%	
Number of Children	4.48	2.15	4.12	2.05
Stepchild	15%		14%	
Married/Partnered	56%		68%	
Fair or Poor Self-reported Health	46%		34%	
Functional Limitations [e]				
Needs Help with ADL / IADL / Money Management	33%		21%	
Needs Help with ADL	26%		16%	
Needs Help with IADL	18%		11%	
Needs Help with Money Management	8%		5%	
Observations	10,923 [d]		158,157	

Source: HRS RAND Family File (1992-2014), HRS RAND Longitudinal File (1992-2020), Current Population Survey Annual Social and Economic Supplement (CPS ASEC) 1992-2014.

Notes: Both samples restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. Race-Ethnicity binary indicators provide our best guess of the race-ethnicity of each individual, based on aggregating HRS information on parental race-ethnicity for each unique child ID (see text, "Descriptive Statistics" section, for details). All Panel B measures, except for those denoted by "(all*)", are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. In the case that the HRS Respondent is married or partnered, measures denoted by "(all*)" only take on a value of 1 if applicable for both members of the couple. All dollars are real CPI-adjusted 2014 dollars. All means are weighted using the HRS household analysis weight, taken by RAND from the HRS Tracker file.

[a] Race-Ethnicity binary indicators provide our best guess of the race-ethnicity of each individual, based on aggregating HRS information on parental race-ethnicity for each unique child ID (see text, "Descriptive Statistics" section, for details)..

[b] CPS ASEC sample restricted to unmarried women with less than a Bachelor's degree with at least one child under the age of 19 residing in the household. Note that some college is defined as taking any college coursework, not necessarily attaining an Associate's degree.

[c] Instead of limiting to those parent household-adult child dyads that include an unmarried daughter aged 25-39 with less than 16 years of education and at least one child, this "full" comparison sample is comprised by limiting only to those dyads that include an adult child aged 25-39.

[d] The number of observations for the sample of HRS Respondents (Parents of Unmarried Daughters) is lower than for the sample of unmarried daughters, because some HRS Respondents have multiple unmarried daughters that fit our sample restrictions (see text, "Analytic Sample" section, for details).

[e] These measures are only available from 1996 onwards (N=8,857).

Table 2. Summary Statistics – Transfer Outcomes

Panel A. Parent Household-Unmarried Daughter Dyads

	Full Sample (N=13,686)	**Average Age of HRS Respondent(s) <65 (N=10,976)**	**Average Age of HRS Respondent(s) 65+ (N=2,710)**	
Variable	Mean [SD]	Mean [SD]	Mean [SD]	Observations – Full Sample
Caregiving				
Chore help (0/1)	27%	27%	27%	4,779
ADL help (Primary helper) (0/1)	8% (5%)	8% (4%)	10% (7%)	3,023
IADL help (Primary helper) (0/1)	17% (11%)	17% (11%)	19% (11%)	2,166
Money management help (0/1)	10%	9%	12%	980
Any monthly hours, ADL/IADL/money management help (0/1)	11%	11%	14%	3,838
Intensive monthly hours, ADL/IADL/money management help (Non-zero monthly hours) (0/1)	5% (40%)	4% (39%)	6% (43%)	3,838
Total monthly hours, ADL/IADL/money management help	8.91 [52.91]	7.92 [50.23]	12.28 [61.05]	3,838
Total non-zero monthly hours, ADL/IADL/money management help	78.97 [138.95]	75.40 [137.77]	88.09 [141.96]	519
Proximity				
Live within 10 miles of parent(s), including co-resident	53%	53%	53%	13,591
Co-resident with parent(s)	14%	14%	14%	13,686
Financial				
Received more than $500 (0/1)	3%	3%	2%	12,453
Amount of money received	$64.81 [674.34]	$69.03 [707.20]	$48.89 [532.24]	12,453

Panel B. Parent Households

	Full Sample (N=10,923)	**Average Age of HRS Respondent(s) <65 (N=8,611)**	**Average Age of HRS Respondent(s) 65+ (N=2,312)**	
Variable	Mean [SD]	Mean [SD]	Mean [SD]	Observations – Full Sample
Needs Help with ADL / IADL / Money Management	33%	32%	37%	8,857
Needs Help with ADL	26%	26%	29%	8,857
Needs Help with IADL	18%	18%	22%	8,857
Needs Help with Money	8%	8%	10%	8,857
Caregiving				
Chore help from at least one adult	44%	43%	48%	3,848
ADL help from at least one adult child (Primary helper) (0/1)	17% (12%)	16% (11%)	20% (16%)	2,441
IADL help from at least one adult child (Primary helper) (0/1)	36% (26%)	34% (25%)	41% (29%)	1,722
Money management help from at least one adult child (0/1)	30%	26%	41%	781

Any monthly hours from all adult children, ADL/IADL/money management help (0/1)	25%	23%	30%	3,078
Intensive monthly hours from all adult children, ADL/IADL/money management help (Non-zero monthly hours) (0/1)	12% (46%)	10% (44%)	15% (51%)	3,078
Financial				
Received more than $500 (0/1)	7%	7%	8%	9,979
Amount of money received	$268.72 [1,948.77]	$226.35 [1,334.88]	$245.01 [1,436.55]	9,979
Received paid ADL help (0/1)	3.5%	2.7%	5.8%	2,441
Received paid IADL help (0/1)	4.4%	3.5%	6.7%	1,722

Source: HRS RAND Family File (1992-2014); HRS Core Survey (1992-2014).

Notes: Numbers in brackets are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars.

Table 3. Effect of Average EITC Generosity on Caregiving Received from and Proximity to Unmarried Daughters

Panel A. Caregiving Binary Variables - Parent HH-Unmarried Daughter Dyads

		Chore help[c] (1)	ADL help (0/1)[b] (2)	Primary ADL helper (0/1)[b] (3)	Secondary ADL helper (0/1)[b] (4)	IADL help (0/1)[b] (5)	Primary IADL helper (0/1)[b] (6)	Secondary IADL helper (0/1)[b] (7)	Money management help (0/1)[b] (8)	Any monthly hours (0/1)[b] (9)	Intensive monthly hours (0/1)[b] (10)
Full Sample	Average EITC Benefits	-0.043	-0.006	0.016	-0.022	-0.004	-0.081†	0.077†	-0.087	-0.052	-0.009
		(0.031)	(0.047)	(0.028)	(0.025)	(0.061)	(0.045)	(0.039)	(0.061)	(0.040)	(0.028)
	R^2	0.130	0.119	0.115	0.062	0.172	0.175	0.100	0.200	0.100	0.088
<65 years old [a]	Average EITC Benefits	-0.026	0.018	0.038	-0.020	-0.026	-0.058	0.032	-0.116	-0.046	0.013
		(0.035)	(0.049)	(0.036)	(0.022)	(0.065)	(0.057)	(0.049)	(0.076)	(0.039)	(0.034)
	Observations	*3,504*		*2,173*			*1,514*		*667*	*2,767*	
65+ years old [a]	Average EITC Benefits	-0.087†	-0.084	-0.041	-0.043	0.004	-0.171**	0.175	0.036	-0.052	-0.059†
		(0.050)	(0.057)	(0.047)	(0.050)	(0.143)	(0.053)	(0.116)	(0.158)	(0.064)	(0.032)
	Observations	*1,250*		*837*			*644*		*304*	*1,054*	

Panel B. Caregiving Total Monthly Hours - Parent HH-Unmarried Daughter Dyads

		Total monthly hours[b] (1)	Total monthly hours (winsorized at 95th percentile of +hours)[b] (2)	Total monthly hours (winsorized at 90th percentile of +hours)[b] (3)
Full Sample	Average EITC Benefits	-3.43	-2.03	-1.49
		(8.97)	(6.39)	(5.38)
<65 years old [a]	Average EITC Benefits	5.19	4.07	3.31
		(12.28)	(8.13)	(6.61)
	Observations		*2,767*	
65+ years old [a]	Average EITC Benefits	-24.43*	-16.68*	-12.89*
		(9.97)	(7.47)	(6.37)
	Observations		*1,054*	

† p<0.1, * p<0.05, ** p<0.01

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are the average federal and state EITC benefits the adult child of an HRS respondent receives, based on year, state, marital status, and number of children. All specifications include the full set of controls (see text) and are weighted using HRS household analysis sampling weights with robust standard errors clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[c] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table 4. Effect of Average EITC Generosity on Proximity and Money Transfers - Parent HH-Unmarried Daughter Dyads

Panel A. Proximity - Parent HH-Unmarried Daughter Dyads

		Live within 10 miles (0/1)[b] (1)	Co-resident (0/1)[b] (2)
Full Sample	Average EITC Benefits	-0.024	-0.005
		(0.019)	(0.014)
	R^2	0.108	0.088
<65 years old [a]	Average EITC Benefits	-0.025	0.000
		(0.020)	(0.016)
	Observations	*10,522*	*10,590*
65+ years old [a]	Average EITC Benefits	0.029	-0.032
		(0.051)	(0.026)
	Observations	*3,037*	*3,064*

Panel B. Money Transfers - Parent HH-Unmarried Daughter Dyads

		Received more than $500[c] (0/1) (1)	Amount received ($)[c] (2)
Full Sample	Average EITC Benefits	-0.002	-1.29
		(0.007)	(40.50)
	R^2	0.046	0.026
<65 years old [a]	Average EITC Benefits	0.004	5.16
		(0.008)	(49.32)
	Observations	*9,370*	
65+ years old [a]	Average EITC Benefits	-0.016*	-19.70
		(0.007)	(19.46)
	Observations	*3,051*	

* $p<0.05$

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[c] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table 5. Effect of Average EITC Generosity on Caregiving Received from All Adult Children (Parent Households)

		Chore help [c] (1)	ADL help (0/1) [b] (2)	Primary ADL helper (0/1) [b] (3)	Secondary ADL helper (0/1) [b] (4)	IADL help (0/1) [b] (5)	Primary IADL helper (0/1) [b] (6)	Secondary IADL helper (0/1) [b] (7)	Money management help (0/1) [b] (8)	Any monthly hours (0/1) [b] (9)	Intensive monthly hours (0/1) [b] (10)
Full Sample	Average EITC Benefits	-0.022	0.002	0.007	0.002	0.010	0.015	0.005	0.028	-0.011	-0.021
		(0.020)	(0.025)	(0.026)	(0.010)	(0.037)	(0.032)	(0.024)	(0.053)	(0.024)	(0.014)
	R^2	0.155	0.173	0.194	0.087	0.267	0.307	0.151	0.431	0.193	0.165
<65 years old [a]	Average EITC Benefits	-0.021	0.004	0.007	0.010	0.026	0.040	0.008	0.024	0.007	-0.011
		(0.019)	(0.028)	(0.028)	(0.012)	(0.040)	(0.035)	(0.023)	(0.061)	(0.027)	(0.014)
Observations		*2,759*		*1,686*			*1,155*		*510*	*2,135*	
65+ years old [a]	Average EITC Benefits	-0.019	-0.066	-0.066	-0.039	-0.129†	-0.155*	-0.056	-0.039	-0.120*	-0.085**
		(0.036)	(0.045)	(0.046)	(0.036)	(0.075)	(0.066)	(0.083)	(0.130)	(0.054)	(0.028)
Observations		*1,073*		*743*			*557*		*263*	*927*	

† p<0.1, * p<0.05, ** p<0.01

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[c] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table 6. Effect of Average EITC Generosity on Paid Help (Parent Households)

		Received paid ADL help (0/1) [b] (1)	Received paid IADL help (0/1) [b] (2)
Full Sample	Average EITC Benefits	-0.020†	0.010
		(0.010)	(0.016)
	Observations	*2,429*	*1,712*
<65 years old [a]	Average EITC Benefits	-0.011	-0.018
		(0.011)	(0.012)
	Observations	*1,686*	*1,155*
65+ years old [a]	Average EITC Benefits	-0.042*	0.075†
		(0.015)	(0.042)
	Observations	*743*	*557*

† p<0.1, * p<0.05

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

APPENDIX A: Sample Representativeness Comparisons

The HRS is a nationally representative sample of American adults over the age of 50. Our analysis focuses on transfers of time and money between these adults and EITC eligible adult children. All of the adult children in our sample are the child of an adult age 51+. As is typical in the EITC literature, we restrict our sample of adult children to those who are unmarried mothers of dependent children without a four-year college degree (who we refer to as unmarried daughters). We further restrict the sample of unmarried daughters to those ages 25 – 39 to make our estimates population representative. In what follows, we explore the implications of this restriction using comparisons to the Panel Study of Income Dynamics – the premier dataset for studying intergenerational ties in the United States.

To better analyze the age distribution of the parents of unmarried mothers without college degrees, we used the Panel Study of Income Dynamic's (PSID) 2013 Rosters and Transfers (R&T) Module. The PSID is a nationally representative household survey that has followed households and their offspring since 1968. While parent and child records can always be linked within and across study waves, the 2013 R&T module is ideal for this analysis, as it specifies the age of the parents (biological, adoptive) of all head of household individuals (and their spouses if applicable) in the PSID sample.

We first explore the younger age limit of 25. Using the parent unit records within the R&T module, we merged the 1968 ID and person numbers of all head of households ("heads") and their spouses and coresident partners (if applicable) to their PSID individual file records. This allowed us to limit the R&T head of household and spouse/partner sample to females without four-year college degrees between the ages of 19-39. We further limited the spouse/partner sample to partners, excluding legal wives. The only relevant group missing from this final R&T sample are those that live in someone else's household (such as their parents). To include this group, we keep all unmarried[1] females that are not heads or spouses/partners in the PSID Individual File. We limit this group to those aged 19-39 without four-year college degrees. We link this group to their fathers and mothers (birth and adoptive) using the PSID Parent Identification File (PID).[2] We then keep those that have the same family ID number as at least one of their parents, as this indicates that they live in their parent's house, and retain information on the age of their parents. Adding this group to the final R&T sample results in 1,660 total observations.[3] For this final group, we once again link to the PID to identify those that are mothers.[4] Keeping only those that are mothers results in 1,130 total observations. This final sample corresponds to our sample of interest (unmarried

[1] The PSID marital pairs indicator counts as married those that are permanently cohabitating. While it would be ideal to keep permanent cohabitators that are not "heads" or spouses of "heads" in our sample, they are thus unfortunately excluded from this analysis.

[2] First, we link the sample of unmarried females aged 19-39 and without four-year college degrees that are not "heads" or spouses of "heads" from the PSID Individual File to the PID, treating this sample as children. The PID then tells us the 1968 IDs and person numbers of everyone's father and mother (birth and adoptive). Linking back to the PSID Individual file based on these parent IDs allows us to identify each parent's PSID family identification number and age.

[3] This final number of observations is reached after dropping observations that have no information on any parent age (N=38).

[4] First, we link the sample to the PID, treating this sample as birth mothers. We create an indicator equal to one if the record successfully merged. Next, we link the sample to the PID, treating this sample as adoptive mothers. If the record successfully merged, the previous indicator also takes on a value of one.

mothers aged 19-39 without a four-year college degree) and we weight all statistics with 2013 individual cross-section weights.

We find that in the PSID, 74.5% of the final sample has at least one parent aged 51 or older. This means that, by using the HRS sample, we are missing about 25.5% of our sample of interest (unmarried mothers aged 19-39 without a four-year college degree) due to their having younger parents (none over the age of 50). 61.9% of those without a parent over the age of 50 are less than 25 years old; about 59% of those between the ages of 19-24 are not estimated to have a parent over the age of 50. We thus exclude those under the age of 25 from our HRS analysis. The remainder of those without a parent over the age of 50 are mainly between the ages of 25 and 29: about 28% of this age group in the PSID are not estimated to have a parent over the age of 50. Once the PSID sample is limited to those 30 and older, only about 4% do not have a parent over the age of 50.[5] Thus, while our results for those aged 30-39 can be viewed as nationally representative, results for those aged 25-29 are only nationally representative for the subset of this age group that has a parent aged 50 or older (about 72%). Overall, we estimate using the PSID that our results can be viewed as nationally representative for the 87% of our sample (unmarried mothers aged 25-39 without a four-year college degree) that have a parent over age 50.[6]

We also use the PSID to confirm our upper limitation of the sample at 39 years old. We keep all women in the 2013 individual file and identify the number of dependent, household children (of "heads" and partners, see above) that correspond to each family identification number. We then keep only "heads" and partners and those ages 40-45 with less than 16 years of education. We merge this sample with the R&T module information to exclude those without living parents (9% of sample), who would not appear in the HRS sample. We also drop those who never gave birth to a child. The resulting dataset (N=182) provides us with information on both the number of children ever born and the number of dependent, household children that correspond to each woman. A weighted cross-tab of these variables reveals that about one-third (36%) of this sample of unmarried mothers does not have any child under age 18 in their household. In addition, for the majority of the sample, their number of children is greater than their number of dependents. Since the HRS does not contain information about the age of grandchildren, simply using the provided information on number of children for this age group of unmarried daughters would cause us to overestimate average EITC benefit generosity, as most of these unmarried daughters have at least one child that is no longer a dependent for EITC purposes. In contrast, for the oldest group in our HRS sample (aged 35-39), only 16% is estimated to no longer have any child under age 18 in their household. In addition, for most of those aged 35-39, their number of children matches their number of dependents. When considering the age range of our full HRS sample of unmarried daughters (25-39 years-old), we find that only 9% are not estimated to have any child under age 18 in their household, and, once again, for most of age range, the number of children matches the number of dependents.

In terms of overall sample representativeness, we find using the PSID that women ages 25-39 make up 58% of all unmarried, non-college educated women with dependent children and 61% of all unmarried non-college educated women with dependent children ages 19-49. So, our sample

[5] About 6% of those between the ages of 30-34 are not estimated to have a parent over the age of 50.
[6] For unmarried mothers without a four-year college degree of all ages (19+), we estimate using the PSID that 82% have a parent over age 50.

covers approximately 60% of the sample used in most papers in the EITC literature (unmarried, non-college educated, mothers of dependent children in the age range of 19-49).

Table A1. Sample Comparison with PSID 2013

	All	**Those with at least one parent age 51 or older**
Age	31.12	31.71
Number of kids (1,2,3+)	1.85	1.84
Education		
No high school diploma	0.13	0.13
High school graduate	0.46	0.43
Some college	0.41	0.44
Employment / Income		
Employed	0.64	0.64
Low-income (<$35,000)	0.87	0.85
Race		
Non-Hispanic White	0.42	0.44
Non-Hispanic Black	0.29	0.28
Hispanic	0.22	0.21
Other	0.01	0.01
Number of Observations	736	617

Source: Panel Study of Income Dynamics (PSID) 2013, including information from the Rosters and Transfers (RT) Module.

Notes: This year of the PSID data was selected as it is the only year the RT module was conducted, which provides easily accessible information on the age of respondent's parents. Sample restricted to unmarried women (including those that are not PSID heads of household or partners of a head of household) with less than 16 years of education and at least one child under the age of 18 residing in the household. Low-income indicator calculated using nominal dollars. Race categories do not sum to one because information is missing for some of the non-heads/non-partners of "heads". Results are weighted using 2013 individual cross-sectional weights.

APPENDIX B: State of Residence Imputation Process

Within the restricted HRS geo-coded data, information on the state of residence of the children of HRS Respondents was not fully collected until 2004. Prior to 2004, we have information on the HRS Respondents' state of residence, as well as whether the Respondent lives within 10 miles of each of their children. As of 2004, if an HRS Respondent does not report living within 10 miles of their child, they are asked for that child's state of residence (otherwise, the HRS Respondent's state of residence is assumed). To utilize variation in state EITC benefits prior to 2004, it is thus necessary to impute state of residence information for sample members observed prior to 2004.

Child state of residence information for those living more than 10 miles from their parents (2004 onwards) covers 19.1% of all [unweighted] 13,958 person-year observations. Those that are recorded as living within 10 miles of their parents comprise an additional 53.6% of the sample. For the remaining 27.3% of the sample (those that neither live within 10 miles of their parents nor have reported information on their state of residence in that year), we can impute state of residence in four ways:

1. Use information on state of residence that was provided by a parent in a different household and recorded during the same survey wave. This option is only possible for those that have parents who are separated and live in different households.
2. Assign the state of residence of their parent (HRS respondent).
3. "Pull forward" information on state of residence recorded in prior survey waves.
4. "Pull backward" information on state of residence recorded in subsequent survey waves.

We begin with the first method, which allows us to fill in state information for 0.16% of all 13,958 person-year observations.[7]

To decide between the remaining three methods, we first evaluate the error rates associated with each. For method #2, we evaluate how many HRS respondents that do not live within 10 miles of their adult child live in the same state as their adult child by using all sample person-years between 2004 and 2014. This is the full set of years for which we have reported information by HRS Respondents on their children's state of residence. We keep all records that do not have missing information for either respondent or child state of residence (N=2,520) and create an indicator equal to one if these states are the same. We find that 64.60% live in the same state as their parent (HRS respondent). Assigning the state of the HRS respondent (Imputation Method #2) would thus have an estimated error rate of 35.40%.

To simulate the error rate of "pulling forward" versus "pulling back" (Imputations Methods #3 and 4, respectively), we use all records[8] of the female children of HRS respondents between 2004-2014. This is the full set of years for which we have reported information by HRS respondents on their children's state of residence. To simulate the error rate of "pulling forward" 10 years, we keep all person-year records of individuals observed in 2014 and 2004 that do not have missing information on their state of residence in either year. We attach variables to these 2014 records

[7] These observations correspond to individuals that are recorded as living within 10 miles of one parent, but not the other, with the parents living in separate households. We thus only allow this imputation to occur if the state of residence of the two parents (each HRS Respondent) is the same.

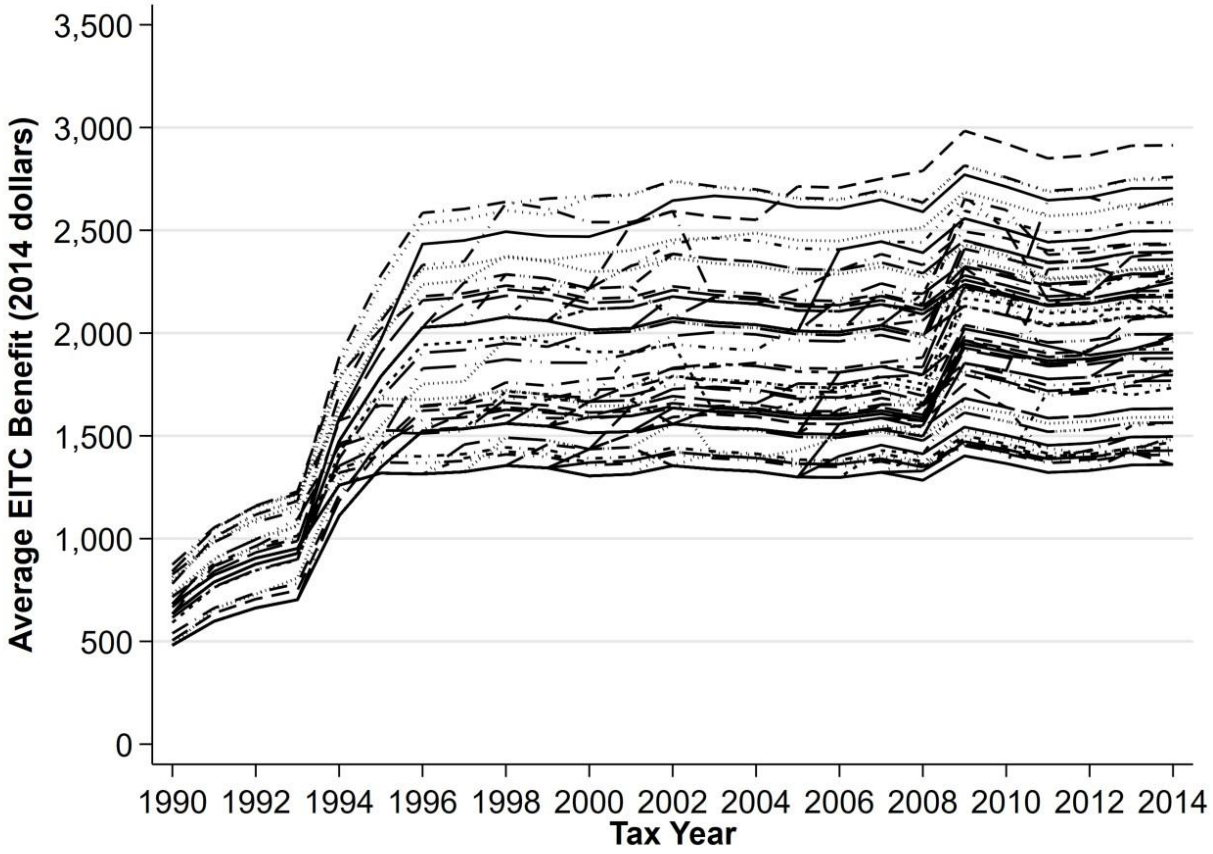
[8] This includes records when the individual was married, had obtained a college education, was younger than 19, or older than 39, even though these records will eventually be excluded from our final regression analysis sample of person-years.

that specify the individual's state of residence in 2014 and 2004. Then, we limit to those that match our sample of interest: aged 25-39, unmarried, less than 16 years of education, has at least one child. We also drop those that are recorded as living within 10 miles of their parents, since, as explained above, we already impute parent state of residence for these individuals. For those that remain, we create a dummy variable equal to 1 if 2014 state of residence does not match 2004 state of residence. This is our estimation of the error rate generated by this imputation process. We repeat this process for "pulling forward" 8, 6, 4, and 2 years, as well as "pulling backward" 2, 4, 6, 8, and 10 years. "Pulling forward" is associated with somewhat higher error rates than "pulling backward" the same amount of years; however, both imputation methods are estimated to be less prone to error than assigning the state of the HRS respondent (Imputation Method #2). For example, "pulling backward" two years has an estimated error rate of 4.82%, while "pulling forward" two years has an estimated error rate of 7.37%. Pulling back/forward less years generally results in lower estimated error rates.

We thus proceed with imputing child's state of residence by first exhausting all possible "pulling backward" imputations of state of residence before "pulling forward". "Pulling backward" allows us to fill in state information for 20.7% of all 13,958 person-year observations. The majority are filled in by "pulling backward" only 2-4 years. State of residence information for an additional 1.4% of all observations is then imputed by "pulling forward". Once again, the majority of these are filled in by "pulling forward" only 2-4 years.

Overall then, in addition to the 19.1% of all 13,958 person-year observations that have recorded child state of residence information for those living more than 10 miles away from their parent(s), an additional 53.6% live within 10 miles of their parents and are thus assumed to live in the same state as the HRS respondent; an additional 0.16% have state of residence information imputed that was provided by a parent in a different household and recorded during the same survey wave (divorced/separated parents living in the same state); an additional 20.7% have state of residence imputed via "pulling backward" information on state of residence recorded in subsequent survey waves; and an additional 1.4% have state of residence imputed via "pulling forward" information on state of residence recorded in prior survey waves. This leaves about 5% of the sample that still has missing state of residence information. For this remainder, we assign the state of the HRS respondent (Imputation Method #4), which, as noted previously, is associated with the highest estimated error rate. After doing so, only 6 observations need to be dropped from the sample due to missing state of residence information [final unweighted N=13,958 person-years].

Figure B1. Federal and State EITC Policy Variation during sample period



Source: Current Population Survey Annual Social and Economic Supplement (CPS ASEC) 1990.
Notes: Variation in federal and state simulated Earned Income Tax Credit (EITC), by number of children residing in the household. CPS ASEC 1990 survey and National Bureau of Economic Research's TAXSIM program. Sample restricted to unmarried women aged 25-39 with less than a Bachelor's degree with at least one child under the age of 19 residing in the household. Average household state and federal EITC benefits from 1990 to 2014 in 2014 dollars. Each line represents a separate state and number of children (1, 2, or 3+) combination; federal benefits only by number of children are also represented. See description of simulated EITC in the text for more details.

Table B1. State Imputation Robustness Checks – Alternative Specifications

	Main Specification	**Federal AvgEITC Variation Only**	**Limited State Imputation Sample [c]**
	Average EITC Benefits (500s) (1)	Average Federal EITC Benefits (500s) (2)	Average EITC Benefits (500s) (3)
AVERAGE AGE OF HRS RESPONDENT(S) <65			
Chore help (0/1) [a]	**-0.0263**	-0.0428	0.0043
	(0.0352)	(0.0366)	(0.1034)
ADL help (0/1) [b]	**0.0178**	-0.0117	0.0318
	(0.0491)	(0.0415)	(0.0659)
IADL help (0/1) [b]	**-0.0262**	-0.0990	-0.0066
	(0.0654)	(0.0758)	(0.0744)
Primary IADL helper (0/1) [b]	**-0.0583**	-0.0592	-0.0610
	(0.0569)	(0.0671)	(0.0614)
Secondary IADL helper (0/1) [b]	**0.0321**	-0.0398	0.0544
	(0.0485)	(0.0499)	(0.0558)
Money management help (0/1) [b]	**-0.1163**	-0.1681	-0.1285
	(0.0760)	(0.1077)	(0.0849)
Any monthly hours (0/1)[b]	**-0.0457**	-0.0920*	-0.0438
	(0.0390)	(0.0398)	(0.0411)
Intensive monthly hours (0/1)[b]	**0.0132**	0.0464	0.0120
	(0.0340)	(0.0335)	(0.0368)
Total monthly hours – functional help [b]	**5.1922**	4.1945	4.5603
	(12.2791)	(7.6325)	(13.8683)
Live within 10 miles (0/1) [b]	**-0.0253**	-0.0430†	0.0062
	(0.0197)	(0.0222)	(0.0177)
Co-resident (0/1) [b]	**0.0004**	0.0003	0.0269
	(0.0160)	(0.0202)	(0.0192)
Received more than $500 (0/1) [a]	**0.0040**	0.0003	0.0056
	(0.0076)	(0.0085)	(0.0098)
Amount received [a]	**5.1601**	26.5243	11.2026
	(49.3186)	(64.5405)	(58.0384)
AVERAGE AGE OF HRS RESPONDENT(S) 65+			
Chore help (0/1) [a]	**-0.0873†**	-0.0285	-0.6491
	(0.0501)	(0.0762)	(0.6849)
ADL help (0/1) [b]	**-0.0841**	-0.0817	-0.0646
	(0.0571)	(0.1307)	(0.0608)
IADL help (0/1) [b]	**0.0044**	0.0410	0.0185
	(0.1425)	(0.1870)	(0.1554)
Primary IADL helper (0/1) [b]	**-0.1705****	-0.2170*	-0.1910**
	(0.0527)	(0.0882)	(0.0560)
Secondary IADL helper (0/1) [b]	**0.1749**	0.2580	0.2095
	(0.1165)	(0.1684)	(0.1308)
Money management help (0/1) [b]	**0.0360**	0.1914	0.0560
	(0.1580)	(0.2370)	(0.2302)
Any monthly hours (0/1)[b]	**-0.0522**	-0.0835	-0.0331
	(0.0636)	(0.1176)	(0.0743)
Intensive monthly hours (0/1)[b]	**-0.0592†**	-0.1498*	-0.0539
	(0.0320)	(0.0648)	(0.0374)

Total monthly hours – functional help [b]	**-24.4337*** **(9.9719)**	-42.4273** (13.1278)	-26.9078* (12.3388)
Live within 10 miles (0/1) [b]	**0.0286** **(0.0510)**	0.0485 (0.0589)	0.0374 (0.0537)
Co-resident (0/1) [b]	**-0.0316** **(0.0261)**	-0.0289 (0.0444)	-0.0266 (0.0298)
Received more than $500 (0/1) [a]	**-0.0157*** **(0.0073)**	-0.0100 (0.0105)	-0.0099 (0.0067)
Amount received [a]	**-19.6992** **(19.4624)**	-35.5370† (19.8977)	-10.5234 (23.3129)

† p<0.1, * p<0.05, ** p<0.01

Source: HRS RAND Family File (1992-2014).

Notes: Standard errors in parentheses. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls including a cubic in unmarried daughters age, her educational attainment, race-ethnicity, and number of children, state unemployment rate, state maximum welfare benefit, state minimum wage, state GDP, a state-specific linear time trends, state fixed effects, and year fixed effects plus additional indicated controls. Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

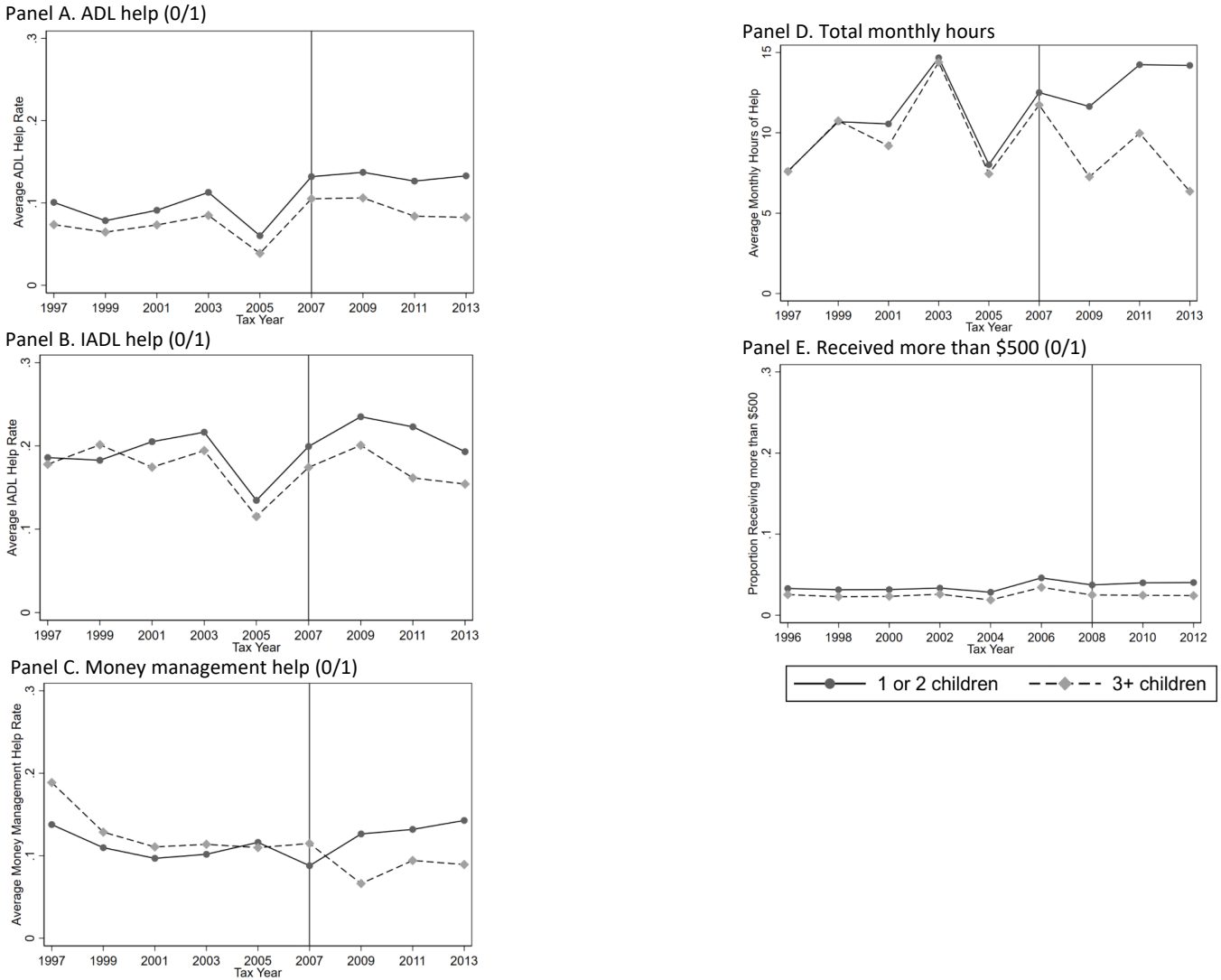
[a] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[c] This sub-sample (N=11,340) is limited to those that live within 10 miles of their parent(s), live further than 10 miles from their parent(s) but have state of residence information recorded (observed 2004 onwards), or have state of residence information "pulled back" or "pulled forward" within two years to fill in missing information. See Appendix B text for more information.

APPENDIX C: Additional Tables, Figures, and Robustness Checks

Figure C1. Adjusted Caregiving and Money Transfer Trends by Number of EITC-eligible Children, Unmarried Daughter-Parent HH Dyads



Source: HRS RAND Family File (1992-2014).

Notes: Adjusted trends display predicted caregiving/provision of money transfers by tax year and number of EITC-eligible children, based on a weighted (HRS household analysis sampling weights) OLS regression that controls for lagged or double-lagged average federal EITC benefit generosity as well as all the independent variables included in the paper's main empirical specification (see "Empirical Strategy" section for details). Vertical line indicates the last pre-treatment year in the sample prior to the 2009 federal EITC expansion. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All outcome measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple.

Table C1. Robustness Checks: Effect of Average EITC Generosity on Paid Help (Parent Households)

Panel A. Limit Sample to 2002 Onwards

		Received paid ADL help [b] (0/1) (1)	Received paid IADL help [b] (0/1) (2)
Full Sample	**Average EITC Benefits**	-0.011	0.012
		(0.012)	(0.019)
	Observations	*1,680*	*1,195*
<65 years old [a]	**Average EITC Benefits**	0.004	-0.017
		(0.011)	(0.015)
	Observations	*1,186*	*823*
65+ years old [a]	**Average EITC Benefits**	-0.039	0.117
		(0.029)	(0.073)
	Observations	*494*	*372*

Panel B. Include Nursing Home Care [c]

		Received paid ADL help [b] (0/1) (1)	Received paid IADL help [b] (0/1) (2)
Full Sample	**Average EITC Benefits**	-0.020†	-0.003
		(0.010)	(0.017)
	Observations	*2,429*	*1,712*
<65 years old [a]	**Average EITC Benefits**	-0.001	-0.020
		(0.001)	(0.013)
	Observations	*1,686*	*1,155*
65+ years old [a]	**Average EITC Benefits**	-0.043**	0.053
		(0.016)	(0.039)
	Observations	*743*	*557*

† p<0.1, ** p<0.01

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the Respondent state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[C] These alternative versions of the paid ADL and IADL help measures assume that anyone residing in a nursing home (0.75% of the parent household sample) that reports needing ADL or IADL help is receiving paid ADL or IADL help.

Table C2. Summary Statistics – Parent Households

Variable	Mean	SD
Average EITC Benefit Eligibility (lagged)	$1,905.05	931.69
Number of Adult Children	4.48	2.02
Number of Daughters	2.65	2.43
Number of Sons	1.85	1.49
Number of Unmarried Daughters*	1.18	0.48
Has Stepchild*	34%	
Age of Oldest Adult Child*	39.49	6.84
Has Adult Child with College Degree*	31%	
Total Number of Grandchildren*	8.06	6.01
Max Number of Grandchildren for EITC purposes*	2.00	0.82
Covered by Medicaid during past two years*	16%	
Currently covered by Medicaid*	14%	
Observations[a]	10,923	

Source: HRS RAND Family File (1992-2014), HRS RAND Longitudinal File (1992-2020).

Notes: Sample restricted to HRS Respondent(s) that have at least one unmarried daughter aged 25-39 with less than 16 years of education and at least one child of her own. All dollars are real CPI-adjusted 2014 dollars. All means are weighted using the HRS household analysis weight, taken by RAND from the HRS Tracker file.

* Denotes that this variable is included as a control within the modified vector Z_{jsct} for the HRS Respondent Level Analysis. To control for Medicaid coverage, the "Currently covered by Medicaid" variable is used for all outcomes except chore help, for which "Covered by Medicaid during past two years" is utilized so as to align with the time period covered by the outcome variable.

[a] Sample size is smaller (N=8,855) for the "Covered by Medicaid during past two years" indicator, as this question was not included in the 1992 or 1994 HRS survey waves.

Table C3. Effect of Average EITC Generosity on Proximity and Money Transfers - Parent HH-Unmarried Daughter Dyads with Care Needs

Panel A. Proximity

		Live within 10 miles (0/1)[b] (1)	Co-resident (0/1)[b] (2)
Full Sample	Average EITC Benefits	-0.097	-0.051
		(0.099)	(0.045)
	R^2	0.156	0.121
<65 years old [a]	Average EITC Benefits	-0.094	-0.033
		(0.100)	(0.047)
	Observations	*2,749*	*2,767*
65+ years old [a]	Average EITC Benefits	-0.082	-0.132†
		(0.147)	(0.071)
	Observations	*1,045*	*1,054*

Panel B. Money Transfers

		Received more than $500[c] (0/1)	Amount received ($)[c] (2)
Full Sample	Average EITC Benefits	0.022	79.68†
		(0.015)	(47.20)
	R^2	0.063	0.034
<65 years old [a]	Average EITC Benefits	0.049*	113.84†
		(0.018)	(65.12)
	Observations	*2,767*	
65+ years old [a]	Average EITC Benefits	-0.040†	-51.65
		(0.020)	(39.86)
	Observations	*1,054*	

† p<0.10, * p<0.05

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child and the parent needs help with an ADL, IADL, or Money Management-related functional limitation (see Table 2, Panel B). All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[c] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table C4. Effect of Average EITC Generosity on Money Transfers – Parent Households

		Received more than $500[b] (0/1) (1)	Amount received ($)[b] (2)
Full Sample	Average EITC Benefits	-0.005	27.88
		(0.007)	(44.51)
	R^2	0.061	0.036
<65 years old [a]	Average EITC Benefits	-0.001	49.36
		(0.007)	(47.47)
	Observations	*7,299*	
65+ years old [a]	Average EITC Benefits	-0.016	-67.69
		(0.014)	(54.26)
	Observations	*2,648*	

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table C5. Effect of Average EITC Generosity on Functional Limitations Help from Adult Children, Spouses, and Paid Helpers (Partnered Parent Households)

		Any monthly hours (0/1) [b] (1)	Intensive monthly hours (0/1) [b] (2)	Received spousal ADL help (0/1) [b] (3)	Received spousal IADL help (0/1) [b] (4)	Received paid ADL help (0/1) [b] (5)	Received paid IADL help (0/1) [b] (6)
Full Sample	Average EITC	-0.020	-0.004	0.030	-0.046	-0.008	0.008
	Benefits	(0.030)	(0.010)	(0.035)	(0.047)	(0.008)	(0.010)
	Observations	*1,689*		*1,312*	*943*	*1,312*	*943*
<65 years old [a]	Average EITC	-0.005	-0.001	0.046	-0.029	0.002	-0.001
	Benefits	(0.032)	(0.014)	(0.033)	(0.046)	(0.003)	(0.010)
	Observations	*1,199*		*931*	*638*	*931*	*638*
65+ years old [a]	Average EITC	-0.113*	-0.028	-0.125	0.045	-0.016	0.034
	Benefits	(0.053)	(0.026)	(0.089)	(0.069)	(0.032)	(0.032)
	Observations	*490*		*381*	*305*	*381*	*305*

* $p<0.05$

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the HRS respondent is partnered and the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

Table C6. Estimates Robust to Various Sets of Controls: Unmarried Daughter-Parent HH Dyads

	(1)	(2)	(3)	(4)	(5)
AVERAGE AGE OF HRS RESPONDENT(S) <65					
Chore help (0/1) [b]	-0.0255	-0.0179	**-0.0263**	-0.0389	-0.0418
	(0.0341)	(0.0375)	**(0.0352)**	(0.0343)	(0.0349)
ADL help (0/1) [a]	0.0410	0.0423	**0.0178**	0.0222	0.0502
	(0.0373)	(0.0354)	**(0.0491)**	(0.0506)	(0.0573)
IADL help (0/1) [a]	-0.0370	-0.0383	**-0.0262**	0.0121	-0.0408
	(0.0509)	(0.0509)	**(0.0654)**	(0.0727)	(0.0881)
Primary IADL helper (0/1) [a]	-0.0939*	-0.0939**	**-0.0583**	-0.0463	-0.0527
	(0.0350)	(0.0345)	**(0.0569)**	(0.0611)	(0.0778)
Secondary IADL helper (0/1) [a]	0.0569	0.0556	**0.0321**	0.0584	0.0118
	(0.0366)	(0.0371)	**(0.0485)**	(0.0436)	(0.0576)
Money management help (0/1) [a]	-0.1330*	-0.1434*	**-0.1163**	-0.1407†	-0.0863
	(0.0630)	(0.0615)	**(0.0760)**	(0.0700)	(0.1085)
Any monthly hours (0/1) [a]	-0.0398	-0.0401	**-0.0457**	-0.0399	-0.0520
	(0.0351)	(0.0330)	**(0.0390)**	(0.0394)	(0.0514)
Intensive monthly hours (0/1) [a]	-0.0024	-0.0027	**0.0132**	0.0228	0.0304
	(0.0295)	(0.0286)	**(0.0340)**	(0.0347)	(0.0417)
Total monthly hours – functional help [a]	-1.8034	-2.1986	**5.1922**	6.0460	7.7314
	(11.5845)	(11.4202)	**(12.2791)**	(12.1125)	(12.8659)
Live within 10 miles (0/1) [a]	-0.0429*	-0.0418*	**-0.0253**	-0.0289	-0.0346†
	(0.0169)	(0.0172)	**(0.0197)**	(0.0198)	(0.0204)
Co-resident (0/1) [a]	-0.0054	-0.0056	**0.0004**	-0.0006	0.0076
	(0.0140)	(0.0146)	**(0.0160)**	(0.0163)	(0.0184)
Received more than $500 (0/1) [b]	-0.0052	-0.0051	**0.0040**	0.0049	0.0026
	(0.0081)	(0.0078)	**(0.0076)**	(0.0077)	(0.0089)
Amount received [b]	-45.1243	-41.5568	**5.1601**	13.6689	28.4144
	(50.7258)	(46.5674)	**(49.3186)**	(55.4113)	(61.2121)
AVERAGE AGE OF HRS RESPONDENT(S) 65+					
Chore help (0/1) [b]	-0.0863†	-0.1029*	**-0.0873†**	-0.0969†	-0.0807
	(0.0436)	(0.0427)	**(0.0501)**	(0.0504)	(0.0540)
ADL help (0/1) [a]	-0.0571	-0.0427	**-0.0841**	-0.1100†	-0.1272
	(0.0479)	(0.0484)	**(0.0571)**	(0.0620)	(0.1070)
IADL help (0/1) [a]	0.0573	0.0484	**0.0044**	0.0554	0.1308
	(0.0976)	(0.1063)	**(0.1425)**	(0.2017)	(0.2277)
Primary IADL helper (0/1) [a]	-0.1054*	-0.1098*	**-0.1705****	-0.1939**	-0.1323
	(0.0449)	(0.0476)	**(0.0527)**	(0.0639)	(0.1027)
Secondary IADL helper (0/1) [a]	0.1627†	0.1582†	**0.1749**	0.2492	0.2631
	(0.0809)	(0.0799)	**(0.1165)**	(0.1584)	(0.1738)
Money management help (0/1) [a]	-0.0600	-0.0221	**0.0360**	0.0094	0.1447
	(0.0987)	(0.1150)	**(0.1580)**	(0.2022)	(0.3514)
Any monthly hours (0/1) [a]	0.0066	0.0070	**-0.0522**	-0.0445	-0.0197
	(0.0612)	(0.0634)	**(0.0636)**	(0.0931)	(0.1180)
Intensive monthly hours (0/1) [a]	-0.0406†	-0.0410†	**-0.0592†**	-0.0850†	-0.0982†
	(0.0235)	(0.0239)	**(0.0320)**	(0.0454)	(0.0556)
Total monthly hours – functional help [a]	-17.6151*	-17.9197*	**-24.4337***	-28.5183*	-24.3902*
	(7.2880)	(7.0796)	**(9.9719)**	(12.3599)	(10.3686)
Live within 10 miles (0/1) [a]	0.0206	0.0230	**0.0286**	0.0119	0.0084
	(0.0491)	(0.0484)	**(0.0510)**	(0.0553)	(0.0634)
Co-resident (0/1) [a]	-0.0275	-0.0274	**-0.0316**	-0.0269	-0.0258
	(0.0268)	(0.0261)	**(0.0261)**	(0.0290)	(0.0397)
Received more than $500 (0/1) [b]	-0.0228***	-0.0227***	**-0.0157***	-0.0166*	-0.0237†
	(0.0063)	(0.0062)	**(0.0073)**	(0.0081)	(0.0123)
Amount received [b]	-40.0790**	-41.6314**	**-19.6992**	-21.9995	-56.4307*
	(13.8913)	(13.3098)	**(19.4624)**	(19.4117)	(22.7863)
Controls					

Demographic Controls	X	X	**X**	X	X
State, Year FEs	X	X	**X**	X	X
State-Year Economic / Policy Conditions		X	**X**	X	
Linear State Time Trend			**X**	X	
Quadratic State Time Trend				X	
State x Year FEs					X

† p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

[b] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table C7. Effect of Average EITC Generosity on Total Monthly Hours of Functional Limitations Help - Parent HH-Unmarried Daughter Dyads, Non-Linear (PPMLHDFE) Models; Average Marginal Effects

		Total monthly hours[b] (1)	**Total monthly hours (winsorized at 95th percentile of +hours)[b] (2)**	**Total monthly hours (winsorized at 90th percentile of +hours)[b] (3)**
Full Sample	Average EITC	-6.08	-3.02	-2.27
	Benefits	(6.73)	(5.61)	(4.95)
<65 years old [a]	Average EITC	-0.31	1.30	1.25
	Benefits	(6.67)	(5.40)	(4.66)
65+ years old [a]	Average EITC	-41.52*	-31.84*	-26.84†
	Benefits	(19.52)	(16.03)	(14.21)

† p<0.1, * p<0.05

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, we construct the continuous measure of hours as the sum of hours of help provided in the past month by the unmarried daughter for both parents. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] These sub-samples are created based on the average age of the HRS Respondent household. For partnered/married HRS Respondent households this is equal to the sum of family respondent and spouse/partner ages divided by two.

[b] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

Table C8. Robustness Checks – Alternative Specifications: Unmarried Daughter-Parent HH Dyads

	Main Specification	**Main Specification with TANF and CTC controls**	**Main Specification with TANF, CTC, PFL, and Medicaid controls**	**Federal AvgEITC Variation Only**	**2x2 Difference in Differences**
	Average EITC Benefits (500s) (1)	Average EITC Benefits (500s) (2)	Average EITC Benefits (500s) (3)	Average Federal EITC Benefits (500s) (4)	Post 2009 x 3+ Children (5)
			AVERAGE AGE OF HRS RESPONDENT(S) <65		
Chore help (0/1) [a]	**-0.0263**	-0.0274	-0.0275	-0.0428	-
	(0.0352)	(0.0353)	(0.0354)	(0.0366)	
ADL help (0/1) [b]	**0.0178**	0.0069	0.0076	-0.0117	-0.0099
	(0.0491)	(0.0535)	(0.0525)	(0.0415)	(0.0285)
IADL help (0/1) [b]	**-0.0262**	-0.0185	-0.0194	-0.0990	-0.0609
	(0.0654)	(0.0669)	(0.0675)	(0.0758)	(0.0483)
Primary IADL helper (0/1) [b]	**-0.0583**	-0.0580	-0.0578	-0.0592	-0.0379
	(0.0569)	(0.0568)	(0.0569)	(0.0671)	(0.0405)
Secondary IADL helper (0/1) [b]	**0.0321**	0.0395	0.0384	-0.0398	-0.0230
	(0.0485)	(0.0484)	(0.0492)	(0.0499)	(0.0289)
Money management help (0/1) [b]	**-0.1163**	-0.1116	-0.1049	-0.1681	-0.1000†
	(0.0760)	(0.0772)	(0.0751)	(0.1077)	(0.0566)
Any monthly hours (0/1) [b]	**-0.0457**	-0.0483	-0.0487	-0.0920*	-0.0609*
	(0.0390)	(0.0395)	(0.0397)	(0.0398)	(0.0267)
Intensive monthly hours (0/1) [b]	**0.0132**	0.0137	0.0138	0.0464	0.0250
	(0.0340)	(0.0357)	(0.0358)	(0.0335)	(0.0200)
Total monthly hours – functional help [b]	**5.1922**	4.5417	4.6146	4.1945	1.5986
	(12.2791)	(12.2404)	(12.2954)	(7.6325)	(4.4990)
Live within 10 miles (0/1) [b]	**-0.0253**	-0.0329	-0.0327	-0.0430†	-0.0271
	(0.0197)	(0.0203)	(0.0205)	(0.0222)	(0.0344)
Co-resident (0/1) [b]	**0.0004**	-0.0081	-0.0081	0.0003	0.0376
	(0.0160)	(0.0156)	(0.0155)	(0.0202)	(0.0239)
Received more than $500 (0/1)[a]	**0.0040**	0.0044	0.0051	0.0003	0.0104
	(0.0076)	(0.0074)	(0.0075)	(0.0085)	(0.0139)
Amount received [a]	**5.1601**	7.8018	8.9043	26.5243	18.7930
	(49.3186)	(52.0651)	(53.0288)	(64.5405)	(53.8627)
			AVERAGE AGE OF HRS RESPONDENT(S) 65+		
Chore help (0/1) [a]	**-0.0873†**	-0.0813	-0.0824	-0.0285	-
	(0.0501)	(0.0504)	(0.0588)	(0.0762)	

ADL help (0/1) [b]	**-0.0841**	-0.0801	-0.0824	-0.0817	-0.0715
	(0.0571)	(0.0589)	(0.0588)	(0.1307)	(0.0870)
IADL help (0/1) [b]	**0.0044**	0.0251	0.0388	0.0410	-0.0297
	(0.1425)	(0.1488)	(0.1546)	(0.1870)	(0.0702)
Primary IADL helper (0/1) [b]	**-0.1705****	-0.1598*	-0.1532*	-0.2170*	-0.1391*
	(0.0527)	(0.0593)	(0.0640)	(0.0882)	(0.0547)
Secondary IADL helper (0/1) [b]	**0.1749**	0.1848	0.1920	0.2580	0.1095*
	(0.1165)	(0.1145)	(0.1187)	(0.1684)	(0.0534)
Money management help (0/1) [b]	**0.0360**	0.0165	0.0206	0.1914	0.0662
	(0.1580)	(0.1549)	(0.1518)	(0.2370)	(0.1848)
Any monthly hours (0/1) [b]	**-0.0522**	-0.0420	-0.0423	-0.0835	-0.0712
	(0.0636)	(0.0674)	(0.0678)	(0.1176)	(0.0572)
Intensive monthly hours (0/1) [b]	**-0.0592†**	-0.0483†	-0.0481	-0.1498*	-0.1129*
	(0.0320)	(0.0287)	(0.0286)	(0.0648)	(0.0444)
Total monthly hours – functional help[b]	**-24.4337***	-22.1993*	-22.2660*	-42.4273**	-31.1154**
	(9.9719)	(9.4291)	(9.3642)	(13.1278)	(10.3632)
Live within 10 miles (0/1) [b]	**0.0286**	0.0321	0.0300	0.0485	0.0048
	(0.0510)	(0.0467)	(0.0467)	(0.0589)	(0.0642)
Co-resident (0/1) [b]	**-0.0316**	-0.0321	-0.0313	-0.0289	-0.0302
	(0.0261)	(0.0227)	(0.0228)	(0.0444)	(0.0481)
Received more than $500 (0/1)[a]	**-0.0157***	-0.0131†	-0.0144†	-0.0100	-0.0179
	(0.0073)	(0.0076)	(0.0080)	(0.0105)	(0.0200)
Amount received [a]	**-19.6992**	-16.9325	-19.9091	-35.5370†	-29.7501
	(19.4624)	(21.6357)	(21.8496)	(19.8977)	(39.4513)

† p<0.1, * p<0.05, ** p<0.01

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].

Table C9. Robustness Checks – Alternative Samples: Daughter-Parent HH Dyads

	Main Specification: Unmarried Daughter-Parent HH Dyads	**Low-Income Sample: Unmarried Daughter-Parent HH Dyads**	**Placebo Sample: Married Daughter-Parent HH Dyads**
	Average EITC Benefits (500s)	Average EITC Benefits (500s)	Average EITC Benefits (500s)
	(1)	(2)	(3)
		AVERAGE AGE OF HRS RESPONDENT(S) <65	
Chore help (0/1) [a]	**-0.0263**	0.0183	-0.1059***
	(0.0352)	(0.0504)	(0.0212)
ADL help (0/1) [b]	**0.0178**	0.0177	0.0092
	(0.0491)	(0.0725)	(0.0329)
IADL help (0/1) [b]	**-0.0262**	-0.0379	-0.1042
	(0.0654)	(0.0735)	(0.1268)
Primary IADL helper (0/1) [b]	**-0.0583**	-0.1517*	-0.1277
	(0.0569)	(0.0621)	(0.0796)
Secondary IADL helper (0/1) [b]	**0.0321**	0.1138†	0.0235
	(0.0485)	(0.0606)	(0.0703)
Money management help (0/1) [b]	**-0.1163**	-0.0221	0.3914
	(0.0760)	(0.1028)	(0.3238)
Any monthly hours (0/1) [b]	**-0.0457**	-0.0575	-0.0461
	(0.0390)	(0.0543)	(0.0476)
Intensive monthly hours (0/1) [b]	**0.0132**	-0.0253	-0.0364
	(0.0340)	(0.0448)	(0.0297)
Total monthly hours – functional help [b]	**5.1922**	0.8165	-2.4030
	(12.2791)	(16.1297)	(2.0363)
Live within 10 miles (0/1) [b]	**-0.0253**	-0.0256	-0.0070
	(0.0197)	(0.0259)	(0.0482)
Co-resident (0/1) [b]	**0.0004**	-0.0167	-0.0004
	(0.0160)	(0.0141)	(0.0069)
Received more than $500 (0/1) [a]	**0.0040**	0.0054	0.0047
	(0.0076)	(0.0078)	(0.0051)
Amount received [a]	**5.1601**	-3.9934	52.8480
	(49.3186)	(48.0277)	(45.8836)
		AVERAGE AGE OF HRS RESPONDENT(S) 65+	
Chore help (0/1) [a]	**-0.0873†**	-0.0907	-0.0877
	(0.0501)	(0.0674)	(0.0798)
ADL help (0/1) [b]	**-0.0841**	-0.0545	-0.0315

	(0.0571)	(0.1039)	(0.0409)
IADL help (0/1) [b]	**0.0044**	-0.1010	-0.0052
	(0.1425)	(0.1679)	(0.1453)
Primary IADL helper (0/1) [b]	**-0.1705****	-0.2542*	0.0770
	(0.0527)	(0.1078)	(0.0916)
Secondary IADL helper (0/1) [b]	**0.1749**	0.1533	-0.0821
	(0.1165)	(0.1495)	(0.1036)
Money management help (0/1) [b]	**0.0360**	-0.0054	-0.0347
	(0.1580)	(0.3404)	(0.3093)
Any monthly hours (0/1) [b]	**-0.0522**	-0.1254†	0.0138
	(0.0636)	(0.0686)	(0.0755)
Intensive monthly hours (0/1) [b]	**-0.0592†**	-0.0781	0.0167
	(0.0320)	(0.0480)	(0.0282)
Total monthly hours – functional help [b]	**-24.4337***	-16.4354	2.4924
	(9.9719)	(9.9719)	(2.6623)
Live within 10 miles (0/1) [b]	**0.0286**	-0.0015	0.0656
	(0.0510)	(0.0752)	(0.0445)
Co-resident (0/1) [b]	**-0.0316**	-0.0807*	0.0201
	(0.0261)	(0.0325)	(0.0146)
Received more than $500 (0/1) [a]	**-0.0157***	-0.0233**	0.0003
	(0.0073)	(0.0086)	(0.0123)
Amount received [a]	**-19.6992**	-48.9229**	29.4715
	(19.4624)	(16.0129)	(57.8680)

† p<0.1, * p<0.05, ** p<0.01, *** p<0.001

Source: HRS RAND Family File (1992-2014).

Notes: Numbers in parentheses are standard errors. Sample restricted to parent household-unmarried daughter dyads in which the unmarried daughter is aged 25-39 with less than 16 years of education and has at least one child. All measures are aggregated at the HRS Respondent household level, meaning that, in the case that a HRS Respondent is married or partnered, binary indicators take on a value of 1 if applicable for either member of the couple. All dollars are real CPI-adjusted 2014 dollars. EITC benefits calculated using TAXSIM. "Average EITC Benefits" are defined as the average federal and state EITC benefits the adult child of an HRS respondent receives, based on the year, state, marital status, and their number of children. All specifications include the full set of controls (see text). Regressions are weighted using HRS household analysis sampling weights and robust standard errors are clustered at the state level. Each cell corresponds to a separate regression.

[a] The regressions for these dependent variables use a double lagged measure of "Average EITC Benefits" [see text for more information].

[b] The regressions for these dependent variables use a lagged measure of "Average EITC Benefits" [see text for more information].