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UNCONDITIONAL CASH TRANSFERS FOR FAMILIES WITH CHILDREN IN THE U.S.: A SCOPING REVIEW

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ABSTRACT

Children represent the largest indirect beneficiaries of the U.S. social welfare system. Yet, many questions remain about the direct benefits of cash aid to children. The current understanding of the impacts of cash aid in the U.S. is drawn primarily from studies of in-kind benefits, tax credits, and conditional cash aid programs. A corresponding economics literature focuses on the labor supply responses of parents and the role of income, parenting skills, and early education as family investment mechanisms that reduce socioeconomic inequality in children's well-being. In contrast to the U.S., dozens of low-to middle-income nations use direct cash aid—conditional or unconditional—as a central policy strategy, with demonstrated positive effects across a host of economic and health measures and selected aspects of children's health and schooling. This paper reviews the economic research on U.S. safety net programs and cash aid to families with children and what existing studies reveal about its impacts on family investment mechanisms and children's outcomes. We specifically highlight gaps in understanding the impacts of unconditional cash aid on children. We then review nine contemporary unconditional cash transfer programs and discuss their promise and limitations in filling the U.S.-based economic evidence gap about the impact of cash aid on children's development.

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Since the 1990s, reforms to the U.S. social welfare system have increased cash assistance to the working poor while decreasing unconditional aid and tightening restrictions for families at the lowest end of the income distribution (Shaefer et al., 2020). Children represent the largest group of indirect beneficiaries of the U.S. social welfare system,[1] yet the United States provides less direct aid and income support to families with children as a share of GDP, and has a higher child poverty rate, than nearly all 37 OECD countries as of 2017 (Aizer et al., 2022; OECD, 2022). The social welfare and economic value of unconditioned cash transfers to U.S. families is gaining some traction (e.g., Gennetian & Magnuson, 2022; Hoynes & Rothstein, 2019; National Academies of Sciences, Engineering, and Medicine [NASEM], 2019); however, assessing the value and feasibility of cash transfer programs is challenging and hampered by disparate threads of the empirical literature. Challenges range from concerns over certain behavioral responses that might increase intergenerational poverty to questions of the applicability of evidence culled from non-U.S. settings or from studies examining family investment mechanisms such as parenting skills. This paper provides a review of these disparate threads from the economics literature and describes the state of unconditional cash transfer programs for families with children in the U.S., including a scoping review of nine contemporary programs and their promise and limitations in adding to the economic evidence base.

Dating back to Mirrlees (1971), the optimality of welfare programs has been measured by weighing the benefits of increased consumption against the costs of labor supply disincentives. Shifts away from unconditional cash aid since the 1990s have been motivated by propositions that failing to condition aid on work or other related human capital–generating behaviors could reduce labor supply and marriage in the medium to long term while generating undesirable fertility responses and directing spending toward unproductive or irresponsible goods and services in the short term. Other parallel lines of research posit that direct interventions impacting parenting behavior and children's skill formation are more effective than cash transfer programs in boosting children's development (Heckman & Mosso, 2014). As a result, the labor supply effects of antipoverty programs in the U.S., and the returns to direct parenting or early education interventions as an alternative or complement to cash transfers, have garnered much

[1] Children and the elderly are the two largest populations as beneficiaries of the U.S. social welfare system. Estimates from 2020 suggest that Social Security lifts 16 million people aged 65 or older above the poverty line (Romig, 2022). In contrast, in 2020 over 12 million children were residing below or near the federal poverty level (Creamer et al., 2022).

more attention among economists, whereas the benefits of cash aid programs for families and children have received relatively less attention (Aizer et al., 2022; Eissa & Hoynes, 2006; Moffitt, 1992).

Most of the evidence on the impacts of cash transfer programs—sometimes referred to as social protection[2]—on children and families derives from low- to middle-income nations. This research generally finds that cash transfers to families have minimal labor supply effects among parents (Banerjee et al., 2017) and favorable impacts on children's health (Fiszbein & Schady, 2009), mental health (Zaneva et al., 2022), and educational outcomes (Baird et al., 2014). This empirical literature also finds little evidence to support the contention that cash transfers increase expenditures on temptation goods, such as alcohol and tobacco (Evans & Popova, 2017). Bastagli et al. (2019) provide a comprehensive review of both conditional and unconditional cash transfer programs in 165 low- and middle-income countries from 2000 to 2015 and conclude, when reviewing effects pertaining to children and families, that cash transfers reduced child labor, increased school attendance (which is not always associated with improved learning), and increased decision-making power for mothers.

The U.S. context differs in a number of ways that limit extrapolation from the relatively robust empirical literature on cash transfer programs in low- to middle-income nations. First, the U.S. has a complex network of social assistance programs that constitute the social safety net, meaning eligible recipients of unconditional cash transfers are likely to be eligible for and/or receiving a variety of other sources of cash and in-kind aid. Earnings also constitute the largest portion of household income even among very low-income individuals or households in the U.S. (Bitler & Hoynes, 2010; Bollinger et al., 2009), whereas in low- and middle-income countries, cash transfer programs are typically the primary source of income assistance for the poor and constitute a large portion of household income (Fiszbein & Schady, 2009). Additionally, the impacts of cash transfer programs in low- and middle-income nations may be limited by weak public infrastructure and low reliability and quality of public goods and institutions, such as

[2] Social protection encompasses many of the tenets of safety net programs as applied in the U.S. but is also broader in its implication of the state or nation's role in preserving and protecting health and economic welfare of its citizens and residents. UNICEF defines "social protection" as "[t]he set of public and private policies and programmes aimed at preventing, reducing and eliminating economic and social vulnerabilities to poverty and deprivation." This definition includes, but is not limited to, cash transfer programs (UNICEF 2016). World Bank research on social protection in low- to middle-income nations can be found here: https://www.worldbank.org/en/topic/socialprotection.

education and health care (Banerjee et al., 2022). The U.S., in comparison, has different challenges related to equitable access (Herd & Moynihan, 2018), given the increasing orientation toward compliance and fraud prevention rather than preventing poverty (Internal Revenue Service, 2021), and quality of public goods (see, for example, Deming & Figlio, 2016, on public school quality and accountability).

This scoping review focuses specifically on the impacts of unconditional cash transfer programs on low-income families with children in the U.S., as compared with a much larger and broader empirical literature examining the impacts of poverty reduction or income enhancement. This broader literature includes studies of conditional social welfare and tax policies impacting families (reviewed in Almond et al., 2018; Moffitt, 2016) and unconditional basic income and cash transfer programs not targeted toward families (reviewed in Hoynes & Rothstein, 2019; Neighly et al., 2022). While higher net household income is the hypothesized key mechanism driving the impacts of cash aid, unconditional cash transfer programs may or may not generate responses equivalent to those of the positive income shocks identified in the literature. Because of potential behavioral responses to cash transfer programs, such as reduced labor supply and labor force participation, unconditional cash aid does not necessarily lead to contemporaneous income increases (even if such behavioral responses might still contribute positively to children's well-being). Furthermore, notable gaps remain in the literature about the causal impacts of poverty reduction during the earliest years of children's development.

After setting the context and reviewing existing empirical literature, we focus on nine unconditional cash transfer programs in the U.S. that are targeted toward families with children. We begin by providing an overview of the income support policy landscape in the United States. Then, we review existing evidence on the impacts of cash transfers on families with children in the United States, followed by relevant evidence from other high-income countries. We then discuss existing theories regarding the mechanisms through which income—as induced by policy—impacts child development, and we present a scoping review of unconditional cash transfer programs in the United States with a focus on nine current programs, setting the stage for synthesizing findings and lessons as they emerge. We conclude with the value of such cash transfer programs and posit areas in which future research is warranted.

1. Cash and in-kind aid in the U.S.

Families with low income in the U.S. are eligible to receive a variety of in-kind and direct income support (Moffitt & Ziliak, 2019; NASEM, 2019). Since the 1960's and President Johnson's economic agenda on U.S. poverty, safety net programs in the United States are means-tested, requiring income validation processes to determine eligibility (Danziger, 2010; Gordon, 2018). Federal agencies, such as the U.S. Department of Agriculture, Department of Health and Human Services, and Department of Housing and Urban Development, along with their state and local equivalents, are charged with fiscal authority and delivery of in-kind benefits supporting basic needs such as food, housing, and health care.[3] In addition to in-kind aid, two wide-reaching systems deliver cash assistance to low-income individuals and households: social security targeted to the elderly (McGarry, 2002) and refunds delivered through the tax system to low earners. Additionally, Temporary Assistance for Needy Families (TANF) is a joint federal and state program that provides a combination of cash and in-kind benefits to low-income families with children. TANF, often used synonymously with the term "welfare," is the successor to Aid to Families with Dependent Children (AFDC). While AFDC benefits were largely unconditional for low-income mothers, the transition to TANF with the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) devolved authority to individual states and imposed a series of education- and work-related requirements (Ziliak, 2016).

Tax credits distributed through the tax system are the largest source of cash aid to low-income families in the U.S. (Nichols & Rothstein, 2016; Schanzenbach & Strain, 2021) and have the largest impacts on reducing child poverty (Bitler et al., 2020). Tax credits act as a vehicle for providing funds to a broad swath of the population, and eligibility for the refunds is easy to verify. Additionally, tax credits have the advantage of being politically popular relative to other welfare programs due to their targeting of income-eligible individuals who are working (Shaefer et al., 2020). But, as the COVID-19 stimulus payments in the spring of 2020 illustrated, tax credits can bypass people with incomes too low to require tax filing (Nichols & Rothstein, 2016). Recent policy changes have begun to address the exclusion of families with very low income from tax credit eligibility by broadening eligibility. In 2021, the American Rescue Plan increased the Earned Income Tax Credit (EITC) amount available to childless workers and broadened the

[3] See Moffitt (2016) for a review of the literature on means-tested transfer programs in the United States. In particular, Medicaid was signed into law in 1965 under Title XIX of the Social Security Act and provides health insurance to low-income individuals and families, with temporary expansions authorized under the American Rescue Plan of 2021 (Council of Economic Advisors, 2021).

age range for eligible filers. The American Rescue Plan also expanded the Child Tax Credit (CTC) to more closely resemble an unconditional child allowance, making the full benefit available to all families—with income up to $150,000 for married and $112,500 for single parent household heads—irrespective of meeting minimum earnings thresholds (Curran, 2021).

As of December 2021, the federal Earned Income Tax Credit distributed $60 billion in cash aid to 25 million recipients (Internal Revenue Service, 2021). Eligibility for the EITC is based on family structure and family income and earnings. To qualify for a non-zero credit, income must be positive and below a threshold that varies with family size. The credit amount also varies with the number of qualifying children in the household. In addition to the federal EITC and local EITCs in many states and municipalities, families with children are eligible for the Child Tax Credit. Unlike the EITC, the Child Tax Credit was not fully refundable until 2021; that is, many families with very low income were not eligible for the full credit amount. The Child Tax Credit also targets higher-income families with a larger income threshold than the EITC (Nichols & Rothstein, 2016).

2. The impact of cash and in-kind aid for families in the U.S.

2.1. Early experimental evidence on cash aid

The first experimental evaluations of cash aid in the United States were the 1970s Negative Income Tax (NIT) experiments. A negative income tax scheme guarantees a maximum cash transfer benefit, which is reduced with earned income at a benefit-reduction rate. The U.S. government-authorized NIT experiments, conducted between 1968 and 1982, were in fact the first randomized controlled trials in the social sciences (Marinescu, 2018). Four experiments were conducted at sites across the country: urban areas in New Jersey and Pennsylvania; rural areas in Iowa and North Carolina; the city of Gary, Indiana; and the cities of Seattle, Washington, and Denver, Colorado. The main goal of the NIT experiments was to analyze the effects of guaranteed income on the labor supply of low-income families, and participation was not limited to families with children. However, data on children's health and education outcomes were collected, allowing researchers to evaluate the impacts on children's well-being and placing the NIT experiments within the scope of this review.

Data from the rural North Carolina and Iowa NIT experiments show improvements in children's school attendance, grades, and test scores in grades 2 through 8 but null effects for

older children (Maynard, 1977). Maynard and Murnane (1979) analyze data from the Gary, Indiana, experiment and find positive impacts of the NIT transfers on children's test scores in grades 4 through 6. As in Maynard (1977), effects are not statistically detectable for older children. Furthermore, Maynard and Murnane (1979) document larger test score increases for children from families with the lowest income. Using data from the Gary, Indiana, experiment, Kehrer and Wolin (1979) find positive impacts on birth weight for children born to mothers with high-risk pregnancies. Salkind and Haskins (1982) review the evidence from all four United States NIT experiments on children's health and education and conclude that the transfers improved children's school attendance and performance, decreased the incidence of low birth weight, and increased the consumption of nutritious foods.

More recent experimental evidence of the impacts of conditional cash transfers on children and families comes from the 1990s welfare-to-work experiments. MDRC, a nonprofit research organization, conducted seven experiments to evaluate 10 welfare and antipoverty programs in 11 sites.[4] The experiments evaluated various combinations of the following program components, which were designed to increase self-sufficiency of low-income parents: earnings supplements, work first, education/training first, time limits, and child care assistance. In each experiment, the treatment group was assigned to the relevant program while the control group continued to be eligible for traditional cash welfare through AFDC. Duncan et al. (2011) exploit exogenous variation in family income generated by random assignment and variation across treatment sites to identify positive effects of income on young school-aged children's academic achievement, as measured by parent and teacher reports and math and reading test scores.

In addition to the welfare-to-work experiments, MDRC partnered with New York City government in 2007 to conduct a conditional cash transfer program called Opportunity New York City–Family Rewards. The program was designed to incentivize participation in health care, education, and employment among families with children by conditioning incremental cash rewards on 22 different activities. Primary evaluation results show that the program reduced poverty and material hardship, improved schooling outcomes among high school students but not

[4] See the following for primary evaluation results from each of the 16 program/site combinations: Connecticut's Jobs First (Bloom et al., 2002); Florida's Family Transition Program (Bloom et al., 2000); the Los Angeles Jobs-First Greater Avenues for Independence Evaluation (Freedman et al., 2000); the Minnesota Family Investment Program (Gennetian & Miller, 2000; Miller et al., 2000); the National Evaluation of Welfare-to-Work Strategies (Hamilton et al., 2001); the New Hope Project (Huston et al., 2001); and the Canadian Self-Sufficiency Project (Michalopoulos et al., 2002; Quets et al., 1999).

younger children, and increased families' usage of health insurance and receipt of medical care (Riccio et al., 2010, 2013). Additional research on participating adolescents finds that the program increased time spent in academically oriented activities but did not improve academic engagement or motivation, reduced time spent socializing with friends, and reduced aggression and rates of substance use (Aber et al., 2016; Morris et al., 2017).

A follow-up experiment called Family Rewards 2.0 was conducted in 2011 in the Bronx, New York, and Memphis, Tennessee. In response to evidence from the first Family Rewards experiment, several changes were made to the program. Family Rewards 2.0 offered fewer rewards in each domain of children's education, family health, and parents' work; offered the education rewards only to high school students; paid the rewards monthly instead of annually; and included family guidance to help families develop strategies to earn rewards (Dechausay et al., 2014). While the decreased number of rewards and increased guidance led to higher rates of reward take-up, with fewer rewards the total cash transfer amounts were smaller (Dechausay et al., 2014). Evaluation results show that the program reduced poverty during the transfer period, improved parents' self-reported life satisfaction and happiness, and increased preventive dental visits. There were no statistically detectable impacts on children's educational outcomes (Miller et al., 2016).

2.2. Quasi-experimental evidence on cash aid

A number of quasi-experimental studies of ongoing benefits and cash transfers complement the aforementioned experimental studies. The earliest quasi-experimental evidence of the impacts of cash aid on children in the United States comes from the Mother's Pension program. This program, administered by states from 1911 to 1935, was the first U.S. government-sponsored welfare program. Eligibility was limited to nonworking mothers who were income poor and whose husband was either missing or incapacitated, and transfers typically represented 12 to 25 percent of household income and lasted for three years. Aizer et al. (2016) match data on Mother's Pension program applicants with Census, World War II, and death records to evaluate the impacts of program acceptance on children's longevity, educational attainment, nutrition, and adult income. Because the sample is majority white (as Black mothers were subject to exclusions that precluded receipt) and because women's last names shifted upon marriage, and were not engaged in the public sector and thus present in public records as readily as men, the findings are most generalizable to white males. Using applicants who were denied

the benefit as a comparison group for identification, the authors find positive effects of the transfers on children's longevity. Potential mechanisms for longevity effects include decreases in the probability of low birth weight, increases in educational attainment, and higher adult income.

Akee et al. (2010) study casino lottery payments to Eastern Cherokee families in North Carolina. Since 1996, approximately $6,000 in annual casino profits have been distributed to each adult tribal member, split into two payments per year. The authors use a difference-in-differences strategy to evaluate the impacts of these transfers, comparing American Indian children with non-American Indian children, before and after the casino opened. They find that the transfers increased educational attainment of American Indian youth and reduced criminal behavior and drug use.

Jones and Marinescu (2022) study dividend payments to Alaska residents from the Alaska Permanent Fund, which was established in 1979 to invest Alaskan oil royalties and smooth fluctuations in state revenue. Since 1982, all Alaskan residents have received an annual dividend payment that ranges from roughly $300 to over $2,000 depending on the performance of the fund. Using a synthetic control method that matches Alaska with a weighted average of control states, the authors find no significant employment effects. Guettabi (2019) reviews the literature on the Alaska Permanent Fund, noting three papers that study the impacts of the transfers on children and families. Berman and Reamey (2016) compare Census Bureau income data with and without the Alaska Permanent Fund dividend payments and find that eliminating the payments would increase the number of Alaskan children living in poverty by 4.3 percentage points. Chung et al. (2016), using a difference-in-differences strategy that exploits a delay in the distribution of the first dividend payments, find that the payments increased birth weight and decreased the likelihood of low birth weight, with stronger effects for less educated mothers. Additionally, Watson et al. (2019) exploit exogenous variation in payment amounts induced by date-of-birth eligibility cutoffs to show that the payments decreased children's likelihood of obesity.

Capitalizing on a unique historical event, Bleakley and Ferrie (2016) offer insights on intergenerational impacts of an infusion of financial resources by examining Georgia's Cherokee Land Lottery of 1832 that awarded winners a plot of land worth roughly the median level of land wealth at the time. Compared with those who did not win the lottery, lottery winners had more family members (increased family size), but school attendance of children did not increase.

Further, lottery winnings did not statistically impact children's subsequent accumulation of wealth, income, or literacy nor grandchildren's literacy or school attendance.

Leveraging expansions that began in the late 1980s, evidence on the impact of cash aid on children and families in the United States can also be gleaned from quasi-experimental analyses of the Earned Income Tax Credit (EITC) and the Child Tax Credit (CTC) that demonstrate reductions in poverty among families with children and improvements in children's health and education outcomes (Committee on the Budget, 2018; Marr et al., 2015). See Hotz and Scholz (2003) and Nichols and Rothstein (2016) for comprehensive reviews of the EITC literature, which, similarly to the literature on U.S. welfare programs, has only recently included impacts on children's outcomes.

Using an instrumental variables approach, Dahl and Lochner (2012, 2017) find that EITC expansions led to large increases in math and reading test scores. Chetty et al. (2011) exploit the nonlinearity of the EITC schedule to identify similarly large effects of EITC receipt on New York City schoolchildren's test scores, along with reduced teenage birth rates and increased earnings later in life. Manoli and Turner (2018) exploit the same nonlinearity to identify the effect of the EITC on older children's educational attainment. Specifically, the authors use a regression kink design to identify positive effects of EITC receipt in the senior year of high school on subsequent college enrollment. Evidence of impacts on children's health is presented in Baker (2008), which uses difference-in-differences and triple-differences models to leverage differential EITC expansions by family size, and Hoynes et al. (2015), which uses three identification strategies including difference-in-differences, event study, and panel fixed effects. Both studies find that the EITC expansions of the late 1980s and early 1990s reduced the incidence of low birth weight. Baker (2008) finds no effects of the EITC on prenatal care decisions, while Hoynes et al. (2015) find suggestive evidence that improvements in birth weight were driven by increases in prenatal care and decreases in maternal drinking and smoking. Hoynes et al. (2015) find no evidence that health effects were driven by increased insurance coverage; while they document shifts from public to private health insurance, they find a small overall reduction in insurance coverage.

Several studies additionally leverage variation in state-level EITC benefits. Michelmore (2013) estimates the impact of state-level EITCs on children's educational attainment using a triple-differences strategy, finding that EITC benefits increased college enrollment and

bachelor's degree completion among children who were younger than 12 at the time of EITC implementation, with no impact on older children (for whom the EITC could subsidize college tuition fees). Maxfield (2015) leverages within-family variation in exposure to federal and state EITC expansions using panel fixed effects models and finds increases in math achievement, high school completion probability, and college enrollment. All three effects are larger for boys and for minority children, and math achievement effects are larger for children who were younger at the time of benefit expansion. As in the federal EITC literature, impacts of state EITC expansions on health outcomes are generally positive, although evidence on the underlying mechanisms is mixed. Using difference-in-differences strategies with state fixed effects, Strully et al. (2010) find that EITC benefits increased birth weights and reduced maternal smoking, while Baughman and Duchovny (2016) use a "simulated benefits" strategy (Currie and Gruber 1996) to identify shifts from public to private insurance coverage and increases in self-reported health status for older children. The latter study finds no evidence of health-related impacts for children younger than 6 and no change in the fraction of uninsured children.

Taken together, the empirical evidence on the impacts of federal and state EITCs shows large effects of EITC benefits on children's academic achievement as well as improvements in infant health, although the mechanisms driving health effects are unclear. Recent literature provides evidence that EITC benefits can impact children's longer-term outcomes as well. Bastian and Michelmore (2018) use panel data from the Panel Study of Income Dynamics (PSID) to identify the impacts of the EITC on children's education, employment, and earnings in adulthood. Instrumenting for income using annual measures of EITC exposure in childhood, the authors find that EITC exposure between ages 13 and 18 increases the likelihood of high school and college completion as well as employment probability and earnings as a young adult. Using the same identification strategy and PSID data, Braga et al. (2020) estimate long-term health impacts of childhood EITC exposure. The authors find positive effects on self-reported health status in young adulthood and decreases in the likelihood of obesity, with stronger effects among children who grew up in single-parent households and children of less-educated parents. Barr, Eggleston, and Smith (2022) use administrative tax data to identify the impacts of the EITC on children's education and employment outcomes in adulthood, focusing on benefits provided during infancy. The authors use a regression discontinuity design, exploiting the January 1 birthdate eligibility cutoff for claiming dependent children. Results indicate that transfers in

infancy increase young adult earnings, with stronger impacts for males. Earnings increases may be driven by improved academic achievement and high school graduation rates.

The recent and evolving research on the 2021 Expanded Child Tax Credit applying similar quasi-experimental techniques points to findings, so far, that are similar to the above established research. In particular, the child tax credit expansion is associated with reductions in food insufficiency and material hardship among families with children in the lowest income brackets (e.g., see Parolin et al., 2021; Pilkauskas et al., 2022).

3. Evidence on cash aid to families with children outside of the U.S.

Evidence from several experimental and quasi-experimental studies from other high-income nations sheds further light on the impacts of cash aid on children's outcomes.

Concurrently with the United States Negative Income Tax (NIT) experiments, Canada launched a similar experiment called Mincome in the province Manitoba from 1974 to 1979. In the rural town Dauphin, all 10,000 residents were eligible to participate in the program, while participation was randomized in Winnipeg similarly to the United States experiments (Simpson et al., 2017). Using a matching strategy that compares Dauphin residents with residents of similar Manitoba population centers, Forget (2011) finds that Mincome reduced the early high school dropout rate, with some evidence of declines in hospitalizations and no evidence of impacts on fertility, birth weight, or family dissolution.

Milligan and Stabile (2011) provide additional evidence on the impacts of cash transfers in the Canadian context, using a simulated benefits strategy that leverages variation across Canadian provinces in the generosity of the National Child Benefit program. The authors find significant positive effects of benefit generosity on children's math and vocabulary test scores as well as several measures of children's physical and mental health. Additionally, the child benefits reduced rates of hunger and maternal depression.

Outside of North America, several studies have examined the impact of income on children's outcomes in the European context. In a study of the Dutch child benefit, which depends on the age and number of children in a household but not on income, marital status, or employment, Kooreman (2000) finds that the marginal propensity to consume children's clothing from the benefit is higher than from other sources of income. Cesarini et al. (2016) estimate the causal effects of wealth shocks on children's health and development in Sweden, using lottery

receipt as an instrument for wealth. While the authors find null effects of wealth on health outcome among adults, they find positive effects on children's health care utilization. They find precise zero effects on children's drug consumption, school achievement, and skills, hypothesizing that the null results may be attributed to the extensive social safety net in Sweden.

Borra et al. (2021) study the effects of the "baby bonus" program in Spain, a lump-sum transfer introduced in July 2007 and given to all Spanish mothers immediately after birth. Using a difference-in-discontinuity design, the authors find that the transfer had no statistically detectable impact on children's health and educational outcomes through age 8 or on parental employment, fertility, living arrangements, and time investments. Effects are also null among a sample of low-income bonus recipients, potentially due to existing social safety net policies in Spain. However, González and Trommlerová (2021, 2022) find that the transfer had positive effects on fertility and on younger siblings' health at birth. Furthermore, the cancellation of the program in 2010 caused mothers to shift deliveries before the cancellation date, increasing the incidence of low birth weight and neonatal mortality (Borra et al., 2014).

Universal basic income programs, with recent findings from several high-income OECD nations, offer yet another complementary body of evidence.[5] Finland's nationwide basic income experiment was conducted over a two-year period from 2017 to 2018. The experiment randomly assigned 2,000 unemployment benefit recipients between the ages of 25 and 58 to receive 560 euros per month, with a control group of 5,000 participants. Preliminary evaluation results show insignificant employment effects and positive effects on well-being, although effects were not identified separately among families with children (Kangas et al., 2019). Furthermore, Verho et

[5] In 2017, eleven municipalities in the Netherlands began two-year experiments which are often characterized as basic income experiments, although their goal was to test conditional benefits designed to promote reintegration into work. In total, the experiments recruited 5,000 social assistance beneficiaries, who were randomized into four treatment groups which varied slightly across sites: the self-management and exemption group, the earnings release group, the tailor-made supervision group, and the standard treatment group (Muffels & Gielens, 2019). Participants in the self-management and exemption group were expected to help themselves in the re-entry to work and were exempted from existing job application and reintegration requirements, while participants in the earnings release group were rewarded for their attempts to find work with a 50 percent income withholding rate instead of the standard 75 or 100 percent. Participants in the tailor-made supervision group received extra work re-entry support. The standard treatment group, functioning as the control group, received standard Dutch social assistance benefits. Results from 752 participants in the Utrecht experiment, conducted by researchers at Utrecht University, demonstrate small impacts on labor market participation, social participation, health, and well-being (Verlaat et al., 2020). None of the evaluation results published in English discuss impacts of the Netherlands experiments on children and families in particular.

al. (2022) find null employment effects in the full sample, while Hämäläinen and Verho (2022) find positive employment effects among families with children only.

In Canada, the Ontario Basic Income Pilot (OBIP) began in 2017 in three communities: Hamilton, Thunder Bay, and Lindsay. The pilot was designed to last for three years and randomly assign 4,000 low-income participants between the ages of 18 and 64 to receive monthly transfers, with a control group of 2,000 participants. Single participants received up to 16,989 Canadian dollars annually, or 75 percent of Canada's Low Income Measure (LIM), minus 50 percent of any earned income. The program ended prematurely in July 2018, when a new government was elected and made the decision to cancel OBIP prior to data collection and evaluation. Despite the lack of administrative evidence on the impacts of OBIP, academic researchers have attempted to evaluate the program's impacts using data collected from other sources. McDowell and Ferdosi (2020, 2021) collected survey responses from 217 participants and interviewed 40, a self-selected sample from the 1,000 participants in the Hamilton, Ontario region. No control group participants were surveyed; therefore, the authors' results are descriptive in nature. McDowell and Ferdosi (2020) summarize findings among the 85 survey respondents who reported accessing social assistance programs Ontario Works (OW) and Ontario Disability Support Program (ODSP) prior to the basic income pilot. They find that 65 percent of respondents indicated that their general health improved while receiving basic income, and 13 of the 16 respondents with children (81 percent) indicated improvements in their children's health. McDowell and Ferdosi (2020, 2021) summarize findings among the full sample of 217 survey respondents; among this sample, 79 percent indicated general health improvements, and 22 of the 32 respondents with children (69 percent) indicated improvements in their children's health. Additionally, the authors find small reductions in labor force participation and improvements in social relations, food and housing security, and financial security (McDowell & Ferdosi, 2020, 2021).

Another two-year basic income experiment beginning in 2017 was Barcelona's B-MINCOME experiment, named after the Canadian Mincome experiment. The experiment randomly assigned 1,000 low-income individuals to receive up to 1,676 euros monthly, depending on household income, household size, and living and housing costs. The control group consisted of 500 individuals who did not receive cash transfers. Within the treatment group of 1,000 cash transfer recipients, 550 individuals were randomly assigned to one of four "active

policy treatments": training and employment, social entrepreneurship, housing grants, and community participation. Within each treatment arm, random assignment was also used to test conditions on active policy participation and limits on earned income. The remaining 450 members of the treatment group received cash transfers without additional policy treatments. Evaluation results show significant positive effects of the cash transfers on well-being, as measured by general satisfaction and financial satisfaction, reduced financial uncertainty, and small reductions in employment (Lain, 2019). Researchers found no statistically detectable impacts on children's education and health, although they caution that educational analyses are incomplete due to the unavailability of administrative education data.

Taken together, results from studies of income supplements in Canada and Europe must be interpreted cautiously in the U.S. context. Null findings of income support in other high-income countries may be partially attributed to a relatively more robust and extensive social safety net that differs from the U.S. or to the additional policy treatments and work requirements tested in some programs. Furthermore, the near-universality of benefits in some programs outside of the United States is not comparable to the income limits and targeted eligibility typical of U.S. programs. Despite these differences between the U.S. context and other high-income countries, results from the previously described studies can still provide insight into the effects of cash aid in the presence of strong governmental and bureaucratic institutions, high-quality health care systems, and robust schooling programs, among other characteristics of developed (high-income) nations.

4. Family investment: The case for unconditional cash supporting children's development

Unconditional cash support, as an avenue of reducing poverty, is posited to support children's well-being through many of the same mechanisms as the income boosts examined in the previously described studies of policies that provide income support. Improved outcomes across the life span resulting from other social safety net programs (AFDC/TANF, SNAP, and WIC) include increased birth weight (Almond et al., 2011; Currie & Cole, 1993), reductions in juvenile crime and psychiatric disorders (Barr & Smith, 2023), greater adult human capital, economic self-sufficiency, and neighborhood quality (Bailey et al., forthcoming), and improved adult earnings and cardiovascular health (Hoynes et al., 2016). Additionally, a robust empirical literature seeks to identify the impacts on children's outcomes of income shocks beyond those

generated by social safety net or income support programs (see Black & Devereux, 2011, and Mogstad & Torsvik, forthcoming, for reviews).[6] Policies that have been demonstrated to reduce poverty also show positive effects on children's development, particularly if benefits are provided early in a child's life (Almond et al., 2018; Brooks-Gunn & Duncan, 1997; Cooper & Stewart, 2021; NASEM, 2019).

The economic theory of family investment posits that cash aid can enable parents to invest in cognitively stimulating items such as books, spend more time with children, obtain higher quality child care, and provide better food, medical care, and housing (Becker, 1965). This theory, which we refer to as the "investment" theory, is the classical economic explanation. Another broadly theorized mechanism is that reduction of financial stress and resulting parenting stress can improve parenting quality by decreasing parental conflict and psychological distress (NASEM, 2019). Recent insights emerging from the psychology of poverty and behavioral economics further point out that ongoing unconditional transfers, unlike lump-sum payments, can liberate parents from many of the cognitive demands imposed by unstable economic resources (Gennetian & Shafir, 2015).

Although economists have not fully integrated nor proposed a unified framework to incorporate theories of human capital development in the analyses of income effects generated through social policy (Aizer et al., 2022), such theories of human capital development have been incorporated into structural models of welfare program optimality. This body of structural modeling in economics finds that children's skills impact their economic and social outcomes later in life (Cunha et al., 2006, 2010; Heckman et al., 2006, 2013; Heckman & Mosso, 2014); thus, these findings have contributed to arguments in support of policy investments directly targeting parenting skills or early childhood education. Examples of such interventions include the well-known HighScope Perry Preschool (Perry) and Carolina Abecedarian (ABC) programs

[6] Examples include the use of instrumental variables and fixed-effects strategies to estimate the causal effect of income on children's outcomes in the absence of experimental evidence. Løken et al. (2012) instrument for income using regional and time variation in the economic boom resulting from the discovery of oil in Norway. Black et al. (2014) interpret child care subsidies as income shocks. Oreopoulos et al. (2008) instrument for income using firm closures and the resulting worker displacement. Other experimental and quasi-experimental studies in this literature largely focus on the joint impacts of income and environmental factors, or "nurture," on children's outcomes. One common empirical strategy leverages the random assignment of adoptees to adoptive families (Björklund et al., 2006; Das and Sjogren, 2002; Plug and Vijverberg, 2003; Sacerdote, 2002). Another common empirical strategy capitalizes on comparisons of twins and finds that correlations between siblings' outcomes are much higher for monozygotic twins than for ordinary siblings, suggesting that "nature" plays some role (Mogstad and Torsvik, forthcoming).

(García and Heckman, 2022). Proponents of these targeted interventions use structural models of parental investments and child development to argue that early childhood education programs and conditional cash transfer programs, when designed optimally, are more cost-effective investments in childhood development than unconditional cash transfer programs (Del Boca et al., 2014, 2016).

Limitations to this structural modeling approach stem from the strong assumptions needed to estimate such models. Common assumptions include full parental knowledge of children's development status (often referred to as "child quality") and the relationship between parental inputs and children's development outcomes; cash transfers as equivalent to other sources of non-labor income that will be partially spent on parental consumption and leisure; and sufficiently high take-up rates to justify administrative costs of verifying program conditions. Additionally, structural models of parental investments and child development typically consider transfer programs with conditions related to children's development, rather than conditions on parental labor supply, as are common in traditional safety net programs. Mullins (2022) addresses this latter assumption by developing a dynamic structural model of labor force participation, welfare participation, and parental investment that incorporates human capital effects of cash transfers and parental time investment on children. Estimates using data from the PSID suggest that, when human capital effects, such as lower earnings and higher crime rates, are taken into account, previous welfare reforms are found to have suboptimally strict work conditions, imposing higher costs than benefits.

One key limitation of these existing theories is the failure to address contextual factors such as purchasing power, cost of living, racial and related exclusion of goods and services, and available infrastructure. Theories of income and child development typically presume that families have equal access to the goods and services necessary for children's well-being, so that cash transfers will enable access without additional interventions. This may not be the case if low-income families systematically lack access to nutritious food, high-quality health care, safe and affordable housing, financial services, and other essential goods and services, which would necessitate additional interventions to complement cash aid. Furthermore, the investment and related child development theories typically presume economic rationality, i.e. that parents are evaluating choices and making decisions with full information about costs and benefits. In actuality, parents may not act in ways predicted by standard rationality assumptions due to

information frictions, uncertainty, and cognitive demands from juggling multiple responsibilities (Gennetian et al., 2021). Parents may not have full knowledge of children's developmental markers and the inputs needed to improve children's developmental outcomes. The cognitive demands of living in poverty may interfere with engaging in programs even when conditions for participation are satisfied (Gennetian et al., 2016; Kalil, 2022). In the face of multiple competing demands, including managing limited and unstable resources, parents may use strategies to "earmark" unconditional cash transfers as distinct from other sources of non-labor income.

Moreover, existing theories do not provide guidance regarding the optimal size, frequency, and duration of unconditional cash transfer programs. Recent discussions of the shortcomings of unconditional cash transfer programs have often pointed to null long-term effects as evidence against the effectiveness of cash aid. These discussions often neglect the trade-off between program scale and program cost that is faced by researchers, policymakers, and other stakeholders. In many cases, cash transfer pilot programs and even governmental transfer programs are limited in size and duration by budgetary constraints and other implementation details. With limited program scope, such as in the case of one-time lump-sum transfer programs, researchers might not expect to find significant long-term impacts.

Two questions naturally arise regarding the trade-off between program scale and program cost. The first is how to optimally design cash transfer programs to weigh competing concerns of scale and cost. Evaluations of the optimality of cash transfer programs on the dimensions of magnitude, frequency, and duration must consider benefits to children and families as well as cost-effectiveness. While child development theory suggests proper timing of transfers in relation to developmental milestones, no concrete guidelines for weighing cost-effectiveness have emerged (Gennetian et al., 2021).

The second question arises in contexts where program implementation costs impose binding limits on the size and duration of cash transfer programs. When transfer size and duration are clearly suboptimal, existing theories do not provide guidance to anchor expectations of the magnitude of cash transfer impacts. Relatively small lump-sum transfers are a feasible policy option that are evaluated frequently in the empirical literature yet are unlikely to lead to significant long-term impacts. It is unclear, however, how researchers should go about responsibly documenting unsurprisingly small or null effects in the presence of political pressures and other incentives to document large and significant program impacts.

5. Unconditional cash aid programs in the contemporary U.S.

In recent years, the United States has begun to embark on a variety of unconditional income support experiments that will begin to fill the aforementioned gaps in the empirical literature. Such experiments have taken on different forms by way of rationales including those motivated by providing basic or guaranteed income administered by local governments to others such as lump-sum cash transfers and recurring payments administered by private community-based and philanthropic entities that have emerged in response to the economic stress imposed by the COVID-19 pandemic. Although many of these programs fall outside of our core scoping review as they are not specifically targeted toward supporting families with children, some do and will offer evidence of the impacts of cash transfer programs on children's outcomes. Many of these programs are pilots in the early stages of implementation and evaluation. The evidence base collated across these endeavors is rapidly growing as public- and private-sector organizations are accelerating their investments in cash transfers.[7]

Mayors for a Guaranteed Income is a network of mayors advocating for direct, unconditional, recurring cash payments to low-income Americans. Many of these guaranteed income pilots will be evaluated by academic researchers in partnership with the Center for Guaranteed Income Research at the University of Pennsylvania (Baker & Martin-West, 2020). Nearly 100 guaranteed income pilots are completed, in place, or are soon to be launched as of December 2022. Participation in many, but not all, of these pilot programs is restricted to families with at least one child in the household.

Stockton Economic Empowerment Demonstration (SEED), the first mayor-led guaranteed income initiative in the United States, randomly assigned 125 low-income residents of Stockton, California to receive $500 per month for 24 months. Preliminary evaluation results include both quantitative and qualitative findings from the first year of the program, evaluated in comparison to a 200-member control group. West et al. (2021) find that the transfer recipients had significantly lower income volatility, improved emotional health, and higher full-time

[7] Unlike other unconditional cash transfer programs, which may be viewed as income supplements, guaranteed income programs are often justified as a human entitlement. That is, guaranteed income programs are motivated by the idea that all citizens deserve economic security and dignity (Gonzalez and Bidadanure, 2020). The Center for Guaranteed Income Research, the Stanford Basic Income Lab, and Mayors for a Guaranteed Income jointly maintain the Guaranteed Income Pilots Dashboard, which provides updated data on guaranteed income pilots across the United States. The dashboard can be accessed here: https://guaranteedincome.us/.

employment participation. Qualitative interview results indicate that parents used the transfers to purchase children's items and childcare and to spend more time with their children. Evaluation results from later mayor-led guaranteed income initiatives are forthcoming.

Nonprofits, academics, and non-governmental organizations (NGOs) have also contributed to the distribution of unconditional cash aid in the United States through lump-sum transfer programs. GiveDirectly, an international NGO that has distributed cash aid in developing countries since 2009, recently began working in the U.S. In 2020, during the COVID-19 pandemic, GiveDirectly distributed one-time cash transfers to SNAP recipients via Fresh EBT, an app that helps recipients manage SNAP benefits. The impacts of these lump-sum transfers were evaluated by researchers at the University of Michigan through randomized controlled trials (Shaefer et al, 2022). The spring 2020 trial restricted participation to low-income families with children, while the fall 2020 trial included low-income families with and without children. Researchers find that the cash transfers decreased material hardship, but only for the most economically disadvantaged (measured by very low earnings) subsample of households with children (Jacob et al., 2022; Pilkauskas et al., 2022). Jaroszewicz et al. (2022) conducted a similar randomized controlled trial that distributed one-time cash transfers to low-income individuals during the first year of the COVID-19 pandemic. Participation was not restricted to families with children. The authors find that the transfers increased spending in the short term but did not improve self-reported well-being.

We focus next on a subset of these endeavors that are collaborations across community based organizations, philanthropy, and, in some cases, academic partners and that share the feature of providing recurring unconditional cash transfers directly targeted to families with children in the United States[8]: Baby's First Years, the Bridge Project, In Her Hands, Magnolia Mother's Trust, Family Health Project, MOMentum, Abundant Birth Project, the Columbia Life Improvement Monetary Boost, and LIFT Family Goal Fund.

6. Nine unconditional cash aid programs to families and children in the U.S.

Each of the nine programs in this scoping review of contemporary cash transfer programs share these inclusion criteria: recurring monthly and predictable unconditional cash in contrast to

[8] This list of programs initially evolved prior to publication of Shah and Neighly (2022); however, became refined by the available information in this publication, and the work of the Guaranteed Income Community.

lump-sum transfer programs; specific targeting of families with children, in contrast to guaranteed (or basic) income programs; and targeting based on some measure of low income. In contrast to universal basic income programs, receipt is limited to households with or expecting children, although other eligibility criteria and program design elements vary significantly across programs. We focus on notable program design features and evaluation results for the first cohort of each program, although several programs are rapidly expanding and recruiting additional cohorts of parents and children. The programs and key features are summarized in Table 1.

6.1. Program design

The nine programs differ in the amount (and mode) of cash transferred, the number of targeted recipients, income and child age eligibility, and racial and ethnic composition of families.

Transfer amounts vary in size from $1,000 monthly to $150 every three months; therefore, interpretation of program impacts will need to consider variation in transfer magnitude. Each endeavor has launched one or more pilot programs to evaluate the impacts of unconditional cash transfers on children and families, although evidence regarding program efficacy varies widely in scope, methodology, and quality. Baby's First Years, the Bridge Project, In Her Hands, and LIFT Family Goal Fund are being evaluated using randomized controlled trials. The remaining programs are collecting a variety of longitudinal, descriptive, and qualitative data to evaluate the efficacy of unconditional cash transfers.

The largest program to be evaluated using a randomized controlled trial is Baby's First Years (BFY), which randomized 1,000 mothers from postpartum hospital wards in New York City, New Orleans, Louisiana, the Twin Cities, and Omaha, Nebraska, to receive monthly $333 or $20 cash transfers for the first four years of their children's lives. The Bridge Project randomized 100 pregnant women and mothers of infants residing in New York City to receive biweekly $500 or $250 cash transfers for the first 1,000 days of their children's lives and has enrolled 500 women for a second phase of the pilot. In Her Hands randomized 650 women in three communities in Georgia to receive monthly $850 cash transfers or $4,300 upfront, then monthly $700 cash transfers for 24 months. The Columbia Life Improvement Monetary Boost (CLIMB) randomized 200 fathers currently or recently enrolled in a program with the Midlands Fatherhood Coalition to receive monthly $500 cash transfers.

As of 2022, the Abundant Birth Project is in the process of recruiting 650 pregnant people from San Francisco, California. All mothers enrolled in the program will receive $1,000 monthly throughout pregnancy and during the first six months of their babies' lives. Outcomes will be evaluated using a comparison group of pregnant people from nearby counties. The remaining four programs did not recruit a control or comparison group; therefore, evidence from these programs will be descriptive or longitudinal in nature. Modeled after Baby's First Years, Family Health Project recruited 30 mothers through obstetrician referrals from two Federally Qualified Health Centers in Massachusetts. All mothers enrolled in the program received $400 monthly for 36 months. Magnolia Mother's Trust recruited 110 mothers living in federally subsidized housing in Jackson, Mississippi, and all mothers enrolled received $1,000 monthly for 12 months. MOMentum recruited 110 mothers from Marin County, California, and all mothers enrolled received $1,000 monthly for 24 months. The LIFT Family Goal Fund recruited parents participating in the LIFT coaching program in Chicago, Washington, D.C., Los Angeles, and New York City. All families participating in the coaching program received $150 every three months for the duration of the two-year coaching program.

Although each pilot program is designed to target low-income families, income eligibility criteria vary significantly. The income threshold for enrollment in Baby's First Years was the federal poverty line ($25,750 for a family of four as of 2019), based on self-reported income and household size (including the infant), while In Her Hands allowed enrollment up to twice the federal poverty line. The Bridge Project and Abundant Birth Project set flat household income thresholds of $52,000 and $100,000, respectively. Alternatively, Magnolia Mother's Trust and MOMentum based income thresholds on local economic conditions. Magnolia Mother's Trust enrolled only "extremely low income" mothers living in federally subsidized housing with income below 30 percent of median income in Jackson, Mississippi. MOMentum determined eligibility using the California Family Needs Calculator for Marin County. Finally, Family Health Project, CLIMB, and LIFT Family Goal Fund targeted low-income families but did not have explicit income thresholds.

Child age eligibility criteria also vary across programs. Baby's First Years, Family Health Project, and the Bridge Project restricted participation to mothers of newborns, although not necessarily first-time mothers. Abundant Birth Project restricted participation to pregnant women with or without older children. In Her Hands restricted participation to women but not

necessarily mothers. The remaining programs restricted participation to households with any number of children below the age of 18.

Programs also differed in the racial and ethnic composition of enrolled or targeted families. While the Baby's First Years population of families were racially and ethnically diverse (Noble et al., 2021), In Her Hands and Magnolia Mother's Trust was solely offered to Black women in historically marginalized communities. Similarly, MOMentum targeted women of color, and Abundant Birth Project targeted Black and Pacific Islander women. Although the Bridge Project did not explicitly tailor program participation to women of color, the neighborhoods in which recruitment occurred resulted in half of enrolled families identifying as Latinx and half as Black. Similarly, Family Health Project's referral-based recruitment model drew in a majority of participants who were immigrants from Central America. CLIMB and the LIFT Family Goal Fund did not include participation criteria based on racial or ethnic identification and demographic information on the composition of the enrolled families is not yet published or publicly available.

6.2. Research and emerging evidence

Each of the nine programs incorporates a narrative or qualitative aspect of evaluation, though some do so more systematically than others. Each also provides some type of descriptive longitudinal data. The Bridge Project is part of the Center for Guaranteed Income initiative and thus will be integrated into future cross-cutting intent-to-treat findings.

Evaluation reports published by the Bridge Project, Magnolia Mother's Trust, and LIFT Family Goal Fund provide preliminary descriptive longitudinal data. The Bridge Project reported that after six months of program enrollment, participants in the high cash transfer group were more likely to have more than $500 in savings and be able to pay for a $400 emergency than participants in the low cash transfer group and control group. Additionally, participants in the high and low cash transfer groups were more likely to receive outside childcare than participants in the control group (The Bridge Project, 2022). Magnolia Mother's Trust reported that after one year of program enrollment, participants were more likely to pay all bills on time, have money saved for emergencies, have health insurance, and seek professional medical help (Magnolia Mother's Trust, 2021). LIFT Family Goal fund reported that among parents engaged in their coaching programs, parents that received the Family Goal Fund were more likely to save

consistently and less likely to pay late fees on their debts (Robinson, 2021). None of the three published evaluation reports discuss the statistical significance of their results.

To date, the Baby's First Years study is the only family-targeted, recurring unconditional cash transfer experiment with evaluation results published in academic journals. Researchers collected data on family life outcomes, including family stability and spending on consumption (that is, on immediate needs such as food, electricity, heat, gasoline, and rides on public transportation), and on child development outcomes, such as brain functioning, social and emotional development, language skills, and learning of children at ages 1, 2, and 3 years. Early results show that after one year of monthly cash support, infants in low-income families were more likely to show brain activity patterns that have been associated with the development of thinking and learning (Troller-Renfree et al., 2022). Additionally, findings show that families receiving cash support increased money and time spent on and with infants (Gennetian et al., 2022). Expenditures on child-focused items such as books, toys, diapers, and children's clothing were larger, and more mothers spent time in early learning activities (e.g., reading books and telling stories) with their children. Mothers' time in paid work and children's participation in childcare did not statistically differ between the high and low cash transfer groups. The cash transfer did not substantively change maternal subjective well-being, mental health or parenting stress (Magnuson et al., 2022). Additionally, the cash transfer did not have statistically detectable impacts on alcohol and cigarette expenditure (Yoo et al., 2022).

Research components from these studies will begin to generate evidence on the impacts of unconditional cash aid on children's development as well as the family investment mechanisms driving developmental outcomes. Due to large differences in program design, however, key questions regarding optimal design elements such as transfer size and duration, income eligibility criteria, and child age targeting will remain unanswered.

7. Discussion and conclusion

Even though children are the largest beneficiaries of the current U.S. social safety net, the impacts of unconditional cash aid on children's development, and on reducing socioeconomic inequalities in children's future economic and health outcomes, are not well understood. Much more evidence has been garnered on the benefits of unconditional cash aid on a variety of economic and health metrics, along with more limited evidence on children's well-being, across

peer high-income nations and in low- to middle-income nations. The closest corollary economic research in the U.S. is constructive but focused on isolating mechanisms of family investment and on poverty reduction, thus offering an important but not holistic view of the impact of unconditional cash aid. Additionally, historical research is limited in its representation of the contemporary demography of child poverty in the U.S. In particular, the Latinx population is a key and growing demographic that is underrepresented in existing economics literature (Gennetian & Tienda, 2021). All participants in the Perry preschool program, which began in 1962, and all but one participant in the ABC program, which began in 1972, were Black (García and Heckman 2022). Earlier programs, such as the Mother's Pension program, were limited almost entirely to white families (Aizer et al., 2016). The impacts of cash transfers may vary by race and ethnicity for several reasons, including vast demographic shifts in the child population (Gennetian & Tienda, 2021), racial differences in wealth and net worth poverty (Gibson-Davis et al., 2021) and time use including in paid work (Antman et al., 2022; Gennetian and Rodrigues, 2021), necessitating updated research on samples representative of the current and anticipated future demography of the U.S. Furthermore, less is known from the historical literature about the outcomes of girls due to labor market exclusion and difficulty tracking name changes in administrative records (Aizer et al., 2016).

Findings from empirical studies show that income boosts for households with children, as well as parenting skills and early education, matter to children's development, especially among children residing in very low and precarious financial circumstances. However, it is less clear from these studies how policy can (efficiently) generate positive change in these mechanisms, as the research relies on a variety of shifting circumstances and programs to arrive at these conclusions. Empirical evidence grounded in a social benefit or social investment framework is particularly lacking. This need for a wider, consistent framework is striking as the U.S. embarks on a variety of unconditional income support "experiments," from citywide guaranteed income pilots to one-time lump-sum cash infusions or temporary expansions of the child tax credit. As we describe in this paper, the impact on children's development of unconditional cash aid to U.S. families with children is a work in progress, with nine current unconditional cash program initiatives setting the stage to generate future evidence.

The U.S. lags behind peer nations along the economic policy and research front for a variety of reasons. One factor is the historical focus on labor supply effects of cash transfers in

the economics literature, and on maternal labor supply in particular, as proposed in classical models of comparative advantage that de facto designated women or mothers with particular advantage in home production. An additional factor is the racially charged historical context that has put structural boundaries on the progress of African American children and families, coupled by damaging narratives that have fueled public and political opinion of cash-transfer programs. Along this front, qualitative approaches and related avenues that document subjective accounts, outside of the economics literature, strive to counterbalance damaging narratives and elevate the social and actual effects of unconditional cash transfers from the voices of recipients that do not necessarily align with predictions from conventional economic theory. Portrayals from parents and related qualitative evidence underscore the human impact of cash aid.[9]

For example, in open-ended semi-structured interviews, Baby's First Years mothers described the cash transfers as distinct from other sources of government income and explicitly discussed mental earmarking of cash transfer money for a variety of household and related investments to support the baby (Gennetian et al., 2022; Halpern-Meekin et al., 2023):

> *"Like I make sure that I get [my daughter's] pampers, her wipes, any little things that she need. I make sure I get that out of the way [for the girls], and then I go to the household stuff. Maybe if I have to pay a bill or something, if I don't have the money to pay the bill, I might use the card to pay the bill, but other than that, the card I use it basically for household stuff and stuff for [the girls]. That's about it."*

The cash transfers also confer autonomy, dignity, and liberation, as described by mothers in the Bridge Project and Magnolia Mother's Trust (Moore et al., 2022):

> *"[With government assistance, I just] had to plead [my] case all the time… they were giving me $19 a month. I don't know what they thought I was going to do with that. <laugh> I just felt hopeless. And with The Bridge Project, I didn't have to do any of that. I really thought this was a joke, because I'd never heard of programs like this. Never. And I'm just so thankful… Everything is for my son.*

[9] Magnolia Mother's Trust launched a "Storytelling Series" to share video interviews of mothers' stories and "elevate the wisdom and experiences of … families." Interviews can be found here: https://springboardto.org/magnolia-mothers-trust/storytelling-series/. GiveDirectly has also shared video interviews of COVID-19 lump-sum transfer recipients, found here: https://www.givedirectly.org/covid-19/us/.

This project helped him. I am so grateful." (Bridge Project, email newsletter, November 2022)

"I feel free with it. I mean I had never—It was just—I mean I just did stuff with my baby. They never made me feel like I had to do a certain thing with it. So I always gotta be free once I was—Because nobody ever said… you gotta spend it like this. You have to get more receipts for this. You have to do this." (Recipient, Magnolia Trust, Springboard to Opportunities)

Millions of children in the U.S. reside in circumstances of financial poverty and economic precarity (Gibson-Davis et al., 2021). How cash transfers affect the welfare of these children and their families in the U.S. demands timely research that includes descriptive and context-specific portrayals. Research must also address causal impacts on parental investments driving children's development. Such impacts can be measured using a variety of indicators beyond the standard economic metrics of labor market and educational outcomes, such as parental time investments, child-related expenditures, parental stress, and children's language acquisition.

As the U.S. embarks on a number of unprecedented policy experiments of unconditional cash aid, opportunities abound for simultaneously generating new and additional research to inform a number of open questions ranging from optimal design to impacts of unconditional cash transfer programs. Many aspects of efficient and equitable program implementation are not well understood. The nine programs we describe apply a variety of cash delivery approaches that vary their demands on individuals in their experiences of receipt, including debit cards, direct deposit to bank accounts, and mobile phones; and, are not built into existing delivery systems in the U.S. (safety net or tax or social security). These design choices may have been made on the basis of feasibility in specific contexts rather than on the basis of which approach would best support the targeted families.

The evidence base is also thin and inconclusive on the amount of money that should be transferred (whether per family or per child or both), the frequency with which payments should be made, and the timing and duration of the payment period to best support children at the appropriate developmental stages and create long-term impacts on children's outcomes. One-time lump sum transfers are typically easier to implement than longer-term programs; however,

prior evidence finds mixed effects, suggesting that recipients deploy a variety of strategies in allocating money between present and future needs. Recurring payments on a predictable schedule are posited to more likely alleviate both financial and cognitive resource constraints (Gennetian & Shafir, 2015). Longer program durations may also alleviate stress, assuming no uncertainty, and enable savings, but how long-term benefits might outweigh costs and general equilibrium effects is not well understood.

Unconditional cash transfers may act as a companion to in-kind program support for families and parents in ways that recognize their autonomy and diversity of circumstances amid the time, money, and mental demands of parenting, employment, child care, and self-care. By allowing families to address these needs in ways that best fit their circumstances, unconditional cash transfers may thereby unleash family investments in children by way of the mechanisms supported by economic research.

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Table 1. U.S.-based cash transfer programs to families with children, as of August 2022

Program Name	Organization	Evaluation Design	Participants	Income Threshold	Cash Transfer Structure	Paired Programming	Outcomes Studied
Baby's First Years	National Institutes of Health and academic institutions	RCT, qualitative	1,000 low-income mothers recruited in maternity wards in New York City, New Orleans, Twin Cities, and Omaha	Federal poverty line	$333 or $20 monthly for 52 months after birth	None	Child brain activity, health, and development; maternal health; family income; family life
Bridge Project	Monarch Foundation and University of Pennsylvania Center for Guaranteed Income Research	RCT	100 low-income mothers in specified neighborhoods in New York City, recruited through fliers posted in public places	Household annual income below $52,000	$500 or $250 biweekly for 1,000 days after birth	Online resource list	Maternal, child development, and health outcomes
In Her Hands	Georgia Resilience and Opportunity Fund/Give Directly	Treatment randomized; evaluation design unclear	650 low-income Black women (not just mothers) in Atlanta and two other Georgia locations, recruited through online application	2× the federal poverty line	$700 plus $4,300 upfront or $850 monthly for 24 months	None	Unspecified life and well-being outcomes
Magnolia Mother's Trust	Springboard to Opportunities	Descriptive/ longitudinal, qualitative	110 extremely low-income black mothers living in	30% of median	$1,000 monthly for 12 months	No	Bill payments, savings, expenditures, health, food,

			federally subsidized housing in Jackson, MS	income in Jackson, MS			family/children, schooling, transportation
Family Health Project	Family Health Project is an independent, privately funded organization	Qualitative	30 low-income mothers in Lynn and Roxbury, MA, referred by a Federally Qualified Health Center	None	$400 monthly for 36 months	Onboarding and ongoing support by an independent social services firm	Program scalability
MOMentum	Marin Community Foundation	Descriptive/ longitudinal	125 low-income mothers of color with children under 18 in Marin County, CA, from a database of low-income mothers identified as potential participants in a previous project	Determined by California Family Needs Calculator (https://insightcced.org/family-needs-calculator/)	$1,000 monthly for 24 months	UpTogether platform for networking among mothers, shared resources, journaling of experiences, and goal setting	Maternal outcomes: housing, health, social networks, economic mobility, and civic engagement
Abundant Birth Project	Expecting Justice	Descriptive/ longitudinal, comparison group of pregnant people from nearby counties	150 Black and Pacific Islander pregnant people in first or second trimester in San Francisco, CA, identified through online referral from social services, with	Household income less than $100,000	$1,000 monthly throughout pregnancy and first 6 months of baby’s life	Online resource list	Maternal health and birthing outcomes, infant health, financial precarity, employment, benefit utilization

			plans to add 525 pregnant people in San Francisco, Alameda, Contra Costa, Los Angeles and Riverside counties				
CLIMB	Midlands Gives	RCT	200 fathers currently or recently enrolled in a Midlands Fatherhood Coalition program in Columbia, SC	None	$500 monthly for 24 months	Storytelling program for participants to share experiences and raise their voices	Health, child well-being, and financial outcomes
LIFT Family Goal Fund	LIFT	Descriptive/ longitudinal, qualitative	800+ families with parents participating in LIFT's coaching program in Chicago, Los Angeles, New York City, and Washington, DC	None	$150 every 3 months for 2 years	LIFT coaching program	Coaching participation, saving/financial health, cash expenditure