

What Do We Know about Baby Bonds?

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Baby bonds are publicly funded child trust accounts that target children from lowwealth or low-income families. When the children reach adulthood, they can use the funds for wealth-building activities such as purchasing a home or starting a small business. Versions of baby bonds programs currently exist and are in early implementation stages in Connecticut and Washington, DC. In California, a pilot program exists for children who lost a primary caregiver to COVID-19 or have longterm stays in the state's foster care system, but the distribution amount is yet to be determined, and there are no current use restrictions. Baby bonds policies were designed in the context of a rich body of evidence that demonstrates positive impacts on asset-building when investments are seeded early for children. However, there are no existing evaluations of the policy because it is nascent where implemented. In this brief, we provide a literature review of three simulation studies that model the potential impacts of baby bonds, with a focus on outcomes relating to racial wealth equity. We also review literature of related early life wealth-building programs (e.g., child development accounts) to assess outcomes that may be achievable with baby bonds policies.

We have two primary goals in this literature review:

1. **Provide a review of all the known simulation studies done on baby bonds**. Because this is a new policy, there are no evaluations of a US baby bond program to date. Consequently,

everything we know about the potential of baby bonds, we learned from simulation exercises. Comparing the existing studies side by side allows those in the field to see a straightforward summary of the potential impacts of baby bonds on wealth, and in particular, racial wealth equity.

2. Distill learnings from empirical research on the impacts of similar early life wealth-building policies, both on monetary and behavioral outcomes. Baby bonds are built on—and share key features with—other early life asset-building policies like child development accounts (CDAs). Because CDA policies have existed for a longer period, there are empirical studies from the literature that provide helpful starting places for understanding baby bonds' potential impact on outcomes like educational attainment. This review will allow researchers to create inputs for other modeling exercises to better estimate the nonmonetary potential outcomes of baby bonds.

The structure of this brief follows our goals chronologically. First, we lay out key design features of baby bonds to outline the policy being studied. Then, we review the three baby bonds simulation studies across methodologies, data, findings, and projected impacts on racial wealth disparities. Finally, we provide a scan of literature on CDAs, focusing on outcomes associated with asset positions of families and education. We conclude with potential questions for future research that could explore other nonmonetary outcomes of baby bonds.

Baby Bonds in Concept & Practice

Racial wealth inequities are three times larger than racial income inequities in the US. Income is money that comes from employment, social security, and other sources, and wealth¹ consists of assets minus debt. Wealth provides insurance against tough times, tuition to prepare for a better job, capital to build a small business or buy a home, and savings to retire on (Brown et al. 2023). In 2019, the typical white family had eight times the wealth of the typical Black family and five times the wealth of the typical Hispanic family. Despite some fluctuations over the past four decades, this ratio disparity was as high in 2019 as it was in 1983 for the typical Black family (Kijakazi et al. 2020).

Interested in addressing racial wealth inequities head-on, in 2010, Dr. Darrick Hamilton and Dr. William Darity, Jr. released a paper in the *Review of Black Political Economy* calling for a "progressive child development account (CDA)-type program that could go a long way towards eliminating the racial wealth gap" (Hamilton and Darity 2010). The authors envisioned a plan, calling their policy "baby bonds," that would essentially increase the scale and magnitude of the American Savings for Personal Investment Retirement and Education (ASPIRE) Act, which at the time had been introduced every year going back to 2004 in Congress (see Sherraden 2009 for more details; Sherraden 1991; and Sherraden & Clancy 2005 for CDA design).

Hamilton and Darity's proposal emphasized six design features that would help baby bonds deliver on the promise of reducing racial wealth inequities: (1) automatic enrollment and universal eligibility, (2) financial progressivity, (3) flexible use of funds, (4) public funding, (5) substantial initial endowments, and (6) individual account holders (Brown et al. 2023). Detailed below, these components appear in the design for the baby bonds policy (Hamilton and Darity 2010) and/or in further explanations (see Markoff et al. 2022):

- 1. Automatic enrollment and universal eligibility: The baby bonds policy, as originally designed (Hamilton and Darity 2010), is for all children born in the US. The policy was also conceptualized (Nieves et al. 2020) to automatically enroll all children at birth to maximize inclusivity. Automatic enrollment ensures children do not miss out because families are unaware of the policy or choose not to sign up because of administrative burdens or other factors.
- 2. Financially progressive: Though it is important that all children born are automatically enrolled for a baby bond at birth, addressing racial wealth inequities requires that children from the lowest-wealth households receive higher seed fund amounts than children from higher-wealth households. This is because race and wealth are inextricably linked in the US. Research and analysis show that the origins of wealth inequity lie in policies, programs, and institutional practices that created pathways to building wealth for white families while creating barriers to wealth for families of color. Racial covenants, land seizures, internment, redlining, and violence—including during the Tulsa Race Massacre—systematically stripped Black, Indigenous (Biu et al. 2021), and immigrant communities in the US from attaining wealth (Messer, Shriver, and Adams 2018). Investments into the accounts would be made progressively based on the net worth of a child's family rather than the family's household income. This is a key piece of the proposal, as wealth can paint a very different picture of a family's financial status than income. While basing investments on family wealth is ideal, at the moment, it is difficult for states to obtain net worth data, so most programs use income as a proxy (Markoff et al. 2022).
- 3. Flexible use of funds towards wealth building: Upon reaching adulthood, baby bond recipients can access the account and use the funds for activities that can grow their wealth and help them avoid debt. Because this policy is designed to help reduce racial wealth inequities, the funds should be used to purchase or invest in resources that will appreciate over time and generate wealth (Markoff et al. 2022). These investments may include higher education, retirement, real estate, and business ownership. It is important that recipients have agency in selecting how to use the funds. But to reduce racial wealth inequities, it is also important that funds are used towards asset-building activities.
- 4. **Publicly funded:** Because of administrative and economic realities surrounding racial wealth inequities, the baby bonds policy is designed to be publicly funded. Research (Darity et al. 2018) indicates that racial wealth disparities cannot be adequately explained by differences in income, education, or savings rates; rather, they are the consequence of 400 years of policy, practice, and violence blocking and stripping wealth from people of color. Programs should thus not rely on family contributions to grow to a substantial amount, especially given the day-to-day economic demands on families.

- 5. **Substantial initial endowment and substantial value at disbursement**: To significantly move the needle on the racial wealth gap, baby trust accounts must accumulate a balance sufficient to meaningfully expand a person's life opportunities in young adulthood. A reasonable minimum balance depends on the jurisdiction, but it should be targeted toward key sums such as the median local down payment, one or two years of in-state tuition, or business startup costs.
- 6. Individual recipient: One benefit of wealth that comes from baby bonds is that young people will grow up knowing they have resources being set aside for them that they can choose how to use in adulthood. Rather than being dependent on their family's resources and choices or being mandated to use their funds in specific ways, young people will be the ultimate beneficiaries and decisionmakers about their wealth and future.

The baby bonds program Hamilton and Darity imagined would create accounts progressively rising to \$50,000 or \$60,000 for children in families in the lowest-wealth quartile and accessible once the child turns 18 years of age. The individual trust would be comprised of federally managed investments and have a guaranteed growth rate of 1.5–5 percent annually. This analysis was done using simple compound estimates; no modeling or algorithms were mentioned, nor were any national data sets used.

Legislative Progress and Design

Senator Cory Booker (D-NJ) introduced the American Opportunity Accounts Act (S. 2231) in 2018, which called for federally funded and managed savings accounts (American Opportunity Accounts) to be established for American children under age 18². The American Opportunity Accounts Act followed Hamilton and Darity's baby bonds program design, with universal and automatic enrollment for all children in the US, in initial contribution, and progressive annual contributions (table 1).

In 2021, Senators Booker and Ayanna Pressley (D-MA) reintroduced the bill (Pressley 2021)³. In the same year, Connecticut and the District of Columbia passed legislation creating baby bonds in their jurisdictions, and in 2022, California codified the Hope, Opportunity, Perseverance, and Empowerment (HOPE) Accounts in their 2022–23 budget. Nine additional states across the country introduced baby bonds legislation in 2022 or 2023. The DC, Connecticut, and California programs all differ from the original design in key ways: none have universal eligibility, the size of the initial endowment varies, and California currently has no use restrictions around the dollars (table 1).

TABLE 1

Comparison of Federal Baby Bonds Bill and Passed Baby Bonds Programs in States & Cities in the US

	Federal	Connecticut	DC	California
Bill number/ name	American Opportunity Accounts Act (Proposed 2021) ^a	Authorizing and Adjusting Bonds for Capital Improvements, Transportation, and Other Purposes (Enacted—H. B. 6690) ^b :	Child Wealth Building Emergency Act of 2021 (Enacted—B. 24-439) ^c	Hope, Opportunity, Perseverance, and Empowerment (HOPE) for Children Trust Account Fund (Passed in 2022–23 budget) ^d
Initial deposit	\$1,000	\$3,200	\$500	Up to \$8,000 per child
Annual contributions from government	Up to \$2,000 annually based on family income	None; interest	Up to \$1,000 annual deposits plus earnings	None; interest
Estimated total account value	Up to \$50,000	\$5,000-\$10,000	\$15,000-\$25,000	\$6,000-\$12,000
Automatic enrollment?	Yes	Yes	Yes	Under consideration and will be determined by the working group in coordination with the HOPE Board
Universal eligibility?	Yes	No; eligibility is limited to children from Medicaid- eligible households	No; eligibility is limited to children in Medicaid- eligible households with income below 300 percent of FPL	No; eligibility is limited to children who have lost a parent or caregiver during the pandemic and long- term children in the state's foster care system
Flexible uses of funds?	1. Education 2. Home purchase 3. Other assets yielding long-term gains to wages or wealth 4. No restrictions after recipient turns age 59.5	 Education Home purchase Business investment Other assets yielding long-term gains to wages or wealth 	1. Education 2. Home or commercial property purchase 3. Business investment 4. Retirement investment	Under consideration and will be determined by the working group in coordination with the HOPE Board

Source(s): ^a Proposed February 1, 2021, 117th Congress,

https://pressley.house.gov/sites/pressley.house.gov/files/American%20Opportunity%20Accounts%20117th%201.pdf; ^b State of Connecticut General Assembly, January Session, 2021, LCO No. 10579, https://www.cga.ct.gov/2021/TOB/H/PDF/2021HB-06690-R00-HB.PDF; ^c Council of the District of Columbia, Signed and Enacted with Act Number A24-0196, December 30, 2021, https://lims.dccouncil.gov/Legislation/B24-0439; ^d California State Budget 2023-24, https://www.ebudget.ca.gov/FullBudgetSummary.pdf.

Studies Predicting Baby Bonds' Impact on Wealth

Baby bonds are grounded in the theory that the introduction of assets into young people's lives—seeded progressively by a family's wealth status—can help reduce racial wealth inequities in the long run. As much of the racial wealth gap is explained by inheritance (McKernan et al. 2014), a young adult of color from a low-wealth family can use the baby bonds funds to have opportunities to invest in assets even if they don't receive an inheritance. They can go to college without incurring debt or engage in activities to build more wealth such as purchasing an asset like a home, starting a business, or investing in a retirement account. The simulation studies conducted so far make progress in answering an important question: What might racial wealth inequities look like if we had a baby bonds program?

Simulation Studies

In the absence of empirical studies, simulation studies can predict outcomes of new policies based on assumptions. In the case of baby bonds, these assumptions include seed deposit amounts, the financial position of various households, and more; the predicted outcomes of interest are net worth and the reduction in the racial wealth gap. Dr. Naomi Zewde, at the Center on Poverty and Social Policy at Columbia University, conducted a simulation in 2018, and Lia Mitchell and Aron Szapiro of Morningstar Data + Research conducted a simulation in 2020 (table 2). In 2021, Christian Weller, Connor Maxwell, and Danyelle Solomon published a simulation of large policy proposals aimed at closing the Black-white wealth gap in the *Journal of Economics, Race, and Policy*—one of those policies studied was baby bonds. Key distinctions across methods and findings of these studies are discussed below (as shown in table 2). It is worth noting that these simulations are of baby bonds policies as proposed, not the ones that have been passed and implemented. Most notably, all assume larger initial endowments into the accounts than any existing program has.

KEY DISTINCTIONS ACROSS THE SIMULATIONS IN METHODS

- Data sources. Zewde (2020) and Mitchell and Szapiro (2020) used the Panel Study of Income Dynamics (PSID), a nationally representative sample of over 18,000 individuals living in 5,000 families in the United States. Started in 1968, the longitudinal survey covers not only the original sample members but also their descendants as they leave home to form their own independent economic family units. Weller, Maxwell, and Solomon (2021) used the Survey of Consumer Finances (SCF), a data set produced by the Federal Reserve Board and the US Department of Treasury.
 - The PSID asks about employment, income, wealth, expenditures, health, marriage, childbearing, child development, philanthropy, and education. The SCF instrument is extensive and features an oversample of households likely to hold very high levels of wealth (Insolera, Simmert, and Johnson 2021).
 - While accurate wealth measurement is an important goal for PSID, the survey also allocates interview time to collect a wide array of economic, social, and health data for responding households. Therefore, the amount of interview time devoted to measuring wealth holdings is much smaller in the PSID than in the SCF. Moreover, the PSID is

longitudinal in design, while the SCF is a cross-sectional survey. These distinctions have consequences for wealth estimates.

- The average (mean) household wealth holdings are 73 percent higher based on the SCF than the PSID (\$659,356 versus \$387,625), while median wealth holdings are 27 percent higher (\$96,800 in SCF and \$76,000 in PSID) (Insolera, Simmert, and Johnson 2021).
 Because of the differences in methodologies in terms of when wealth is assessed during the life course, it is difficult to know whether differences in projected wealth inequities are due to data source or approach.
- Zewde predicts that the median Black-white wealth gap for young adults would be reduced from a factor of 15.8 to 1 (\$46,000 to \$2,900) to a factor of 1.4 to 1 (\$79,000 to \$58,000). This means that white households would have \$1.40 for every \$1 Black households have, rather than \$15.80 for every \$1. Mitchell and Szapiro (2020) predict it would narrow to a factor of 3.4 to 1 at the median for adults ages 18–25, and Weller et al. predict a national baby bonds program would shrink the Black-white wealth ratio to approximately 2.7 to 1 by 2060, still leaving a gap of \$1.37 million.
- Age of analysis. Zewde (2020) and Mitchell and Szapiro (2020) both used a retroactive approach, assessing what the asset position of 18–25-year-olds would be if baby bonds had been implemented when they were born. Zewde used the 2015 PSID cohort while Mitchell and Szapiro used the 2017 cohort. Weller et al. (2021) conduct their assessment later in the life course, creating a hypothetical typical Black and white household, and assess the impacts of various policies by the time that family reaches retirement age, 65, in the year 2060.
- Type of baby bond. Zewde (2020) based her hypothetical program on Darity and Hamilton's 2010 paper— using a 2 percent annual rate of interest and dividing the young adults into 5 quintiles of household net worth at birth. She then assigned categorical initial endowment values according to each wealth quintile, between \$200 for the top 20 percent and \$50,000 for the bottom 20 percent.
 - » Mitchell and Szapiro (2020) use the American Opportunity Accounts Act model of baby bonds in their analysis (see table 1 for a full description of the policy framework). They model a range of 0–3 percent return rates annually and have annual government contributions based on family income (as opposed to Zewde's wealth model). For household incomes up to 100 percent of the poverty line, the annual contribution is \$2,000. From there, the amount declines to a \$250 annual contribution for those with household income up to 500 percent of the poverty line.
 - » Annual contributions ratchet down modestly for individuals whose household income is between these thresholds of more than 100 percent and less than 500 percent of the poverty line. Weller, Maxwell, and Solomon (2021) do not specify the design of the baby bonds policy they assess, including initial seed deposit amounts, so we cannot know what

impact design has on their projections.¹ This creates a serious limitation in comparing the results of their study to the other two.

- Assessment by household vs. individual. Both the PSID and SCF collect data at the household level, so all analyses use households as the unit of analysis. Mitchell and Szapiro (2020) also create projections per minor child by dividing a family's wealth by the number of children in it.
- Measurement/categorization of race. Zewde (2020) and Weller et al. (2021) focus their studies exclusively on Black/white wealth inequalities, while Mitchell and Szapiro (2020) also assess the potential impact on Hispanic families², "other" and "not reported."

DISCUSSION

Overall, all three simulations find that baby bonds would reduce Black-white racial wealth inequities, though they differ in scale. As noted above, Zewde (2020) predicts the biggest improvement in racial wealth inequities—predicting that at the median the white/Black gap would be reduced to a factor of 1.4 to 1 (\$79,000 to \$58,000), compared to 15.8 to 1 (\$46,000 to \$2,900). Weller et al. (2021) estimate that the white/Black wealth gap will reduce to a factor of approximately 2.7 to 1 by 2060, still leaving a gap of \$1.37 million. Mitchell and Szapiro (2020) predict baby bonds would narrow the white/Black gap to a factor of about 3.4 to 1 at the median for adults ages 18–25, with a remaining gap of over \$90,000.

Because of the differences in methodologies described above, and detailed in table 2, these projected impacts are imperfect to compare against each other. In particular, given the lack of a specified seed amount in the Weller et al. study, the different data sets used, and the varied eligibility criteria across wealth and income, we cannot know the true drivers of the varied estimates. However, the ultimate finding is the same—at the median, baby bonds can make meaningful reductions in racial wealth disparities.

¹ It is worth noting, for future simulation exercises, that more than one policy iteration of baby bonds exists. For detailed information about design differences across bills that have been introduced at the state level, please see Brown et al. 2023.

 $^{^{2}}$ We use the identifier Hispanic or Latino throughout this report. We acknowledge that this may not be the preferred identifier, and we remain committed to employing inclusive language whenever possible.

TABLE 2

Simulation Studies of Baby Bonds, Listed Chronologically by the Three Papers

Paper/ Baby bonds policy proposal used	Findings	Methods	Projected impact on racial wealth equity/ wealth distribution
Zewde (2020) Model presented in Darity & Hamilton (2010) Zewde constructs a means-tested eligibility by parental wealth, not income.	 With baby bonds, the overall median account for adults ages 18–25 comes to nearly \$77,000 (from \$29,000). The study shows that baby bonds would not only improve the net-asset position of all young adults but also improve the distribution of wealth. 	 PSID Simulation: Zewde selects young adults between the ages of 18 and 25 years in the 2015 wave of the PSID. Young adults from 2015 are then matched to earlier PSID waves to obtain information on their household's net worth at the time of their birth. Sample members were born between 1989 and 1996. All values of household wealth at birth are inflated to 2015 US\$ using the Consumer Price Index, less food and energy. Zewde assigned categorical bond values to five wealth quintiles and regressed these discrete values on the continuous measure of net worth. 	 Baby bonds would considerably narrow wealth inequalities by race; every racial group would be better off at the median with such a program. While racial differences would still exist, the program would reduce Black-white wealth disparity from a factor of 15.9 to 1.4 at the median.
 Mitchell and Szapiro (2020) American Opportunity Accounts Act (using a means-tested eligibility based on income) To mimic the American Opportunity Accounts baby bond design, all individuals are given \$1,000. The authors then compound this over 18 years with our real return rate assumption. The base case uses 1 percent real return. However, the authors also simulate the effects with a 3 percent real return because the architects of the program hope to achieve this rate. Annual contributions are calculated and compounded using the same methods. 	 If the program described in S.2231 had been in place over the past 25 years, we estimate half of all kids in America would have a baby bond account balance of around \$13,700 at 18, while nearly one-fourth would have an account balance of more than \$28,400, in real dollars, assuming real returns of 1 percent annually. Without baby bonds, there are sharp differences in total wealth among families by race. In fact, the median Black family in our sample with a child turning 18 has 94 percent less wealth than the median White family, and the median Hispanic family has 88 percent less wealth. When we introduce baby bonds, this gap narrows to 71 percent for Black families and 67 percent for Hispanic families. Without baby bonds, we calculate that Black families have 96 percent less wealth per minor child than white families. 	 PSID Simulation: This analysis looks at individuals in the PSID aged 18 to 25 at the start of 2017, the most recent year for which survey data is available. The analysis relies on the longitudinal aspect of this data set to utilize income and poverty-level data for individuals from their birth to age 18, as well as key data points in either their birth or 18th year, such as family wealth at age 18. The PSID collects race data at the household level, surveying for the race(s) of the heads of households and their spouses, if applicable. As a result, it is assumed that the race(s) of these figures applies to all members of the household. 	 While the program does not consider race, Black children would have a median account balance of \$27,500, Hispanics \$19,800, and whites just \$7,100. Of the individuals receiving the top 10 percent of benefits, ranging from \$36,200 to \$38,400, at least 31 percent would come from Black families and at least 13 percent from Hispanic families, with 33 percent coming from families for which race data is missing. The racial wealth gap would have been narrowed by one-fourth if every child who turned 18 in the US recently had been enrolled in baby bonds, when examining total wealth including home equity. White families have so much more wealth in home equity than Black families that it swamps the offects of haby bonds.

Paper/ Baby bonds policy proposal used	Findings Similarly, without baby bonds, we calculate that Hispanic families have 92% less in wealth per minor child than white families. With baby bonds, they have only 55% less in wealth per minor child. 	Methods	Projected impact on racial wealth equity/ wealth distribution
 Weller, Maxwell, and Solomon (2021) The authors assume a baby bonds proposal would be enacted in 2020 and apply retroactively to all Americans ages 25 and younger—no specific seed amount is named in the paper. The authors state that the program would translate to approximately \$79,170 in assets transferred to the typical Black household in which members are age 25 and \$39,585 for the typical White household in which members are age 25 in 2020. These amounts are then the starting wealth of their projection, in addition to the amount of assumed gifts and inheritances, for both Black and White families. 	 Authors focus on five policy interventions designed to shrink the Black-white wealth gap: canceling student loan debt and making college debt free; providing seed capital for America's youth in the form of a national baby bonds program; fully enforcing existing civil rights statutes prohibiting housing discrimination; bolstering retirement incomes by establishing a national savings plan; and combatting predatory lending by strengthening the Consumer Financial Protection Bureau. Providing a national baby bonds program has the single largest effect on the racial wealth gap of those policies simulated With this intervention, the net worth of the simulation's hypothetical Black household more than doubles, rising to almost \$800,000 by age 65. The simulation's hypothetical white household would also experience considerable gains in net worth, from \$1.87 to \$2.17 million. 	 SCF Simulation: The authors use population-weighted averages to establish baseline earnings, college completion and savings rates, rates of return, and inheritances for the two hypothetical households in our Black-white wealth gap simulations. Each hypothetical household's age earnings profile reflects the population's average earnings for college and noncollege graduates by each subpopulation's—Black or white—shares of people with college degrees and those without one, as detailed further below. They assume that people save out of their current earnings during their careers. Those savings are invested at an assumed rate of return that compounds throughout people's careers until they reach age 65. The annual savings and capital earnings are added to a household's prior year's wealth, which starts out higher for white Americans than African Americans due to inherited wealth. They arrive at a simulated amount of wealth upon retirement at age 65 that amounts to the cumulative effect of inherited wealth, annual savings, and annual capital earnings. 	 A national baby bonds program would shrink the Black-white wealth ratio to approximately 2.7 to 1 by 2060, still leaving a gap of \$1.37 million. It would take an immediate transfer of \$192,711 in 2020 to close the Black-white wealth gap by 2060.

Sources: Zewde, Naomi. 2020. "Universal baby bonds reduce Black-white wealth inequality, progressively raise net worth of all young adults." *Review of Black Political Economy*, 47 (1), 3-19. https://doi.org/10.1177/0034644619885321; Mitchell, Lia, and Aron Szapiro. 2020. "Baby Bonds: How Baby Bonds Can Transform The Racial Wealth Gap." Chicago, IL: Morningstar, Inc.. ; Weller, Christian E., Connor Maxwell, and Danyelle Solomon. 2021. "Simulating How Large Policy Proposals Affect the Black-White Wealth Gap." *Journal of Economics, Race, and Policy* 4 (3): 196–213. https://doi.org/10.1007/s41996-020-00077-8.

Non-Simulation Assessments of Baby Bonds

In this brief, we focus on studies that provide simulated quantitative estimates of the impact of baby bonds on racial wealth inequities, but it is worth noting that there are a handful of other articles and reports that discuss the relative merits of baby bonds policies or provide some sort of comparative analysis. McMullen (2022) complements the economic justifications for the policy by examining the case for the proposal in terms of racial justice. Bourne (2018) argues that the American Opportunity Accounts Act won't promote a "savings culture,"³ and the policy amounts to a new entitlement that would serve as a subsidy for home-buying, college tuition, or retirement.

There are also policy-forward briefs:

- Markoff et al. (2022) lay out the essential elements to include in state- and local-level baby bonds legislation and discuss how to align state and local proposals with a potential national baby bonds program, and two of the authors of this brief wrote a summary of key differentiating features across the various pieces of legislation that were introduced at the state level as of December 2022 (Brown et al. 2023).
- Kilolo Kijakazi and Alex Carther (2020) assessed the average transfer to young adults and proposed a plan to pay for the policy—using Senator Booker's estimate that S. 2231 would cost \$60 billion annually—and discussed a future path for research on the program's impacts.
- Edwards (2022) assessed the political landscape and financial feasibility of the policy, pointing to the report from the Committee for a Responsible Federal Budget (2019) that estimates the cost at \$650 billion over 10 years while noting that the tax increases Booker proposes in parallel will more than offset the cost of the program and bring in about \$700 billion over a decade.
- Also, on the topic of financial feasibility, Zewde (2020) estimates the total cost of the bond at \$82 billion annually by applying the bond simulation to the 1992 SCF (compared to her estimated \$80 billion).

ISSUE OF MEAN VS. MEDIAN

Maybe most relevant to the goals of this brief is the conversation in the literature about the impact of the policy on racial wealth inequities at the mean vs. median. Mean wealth is an average (the total wealth of all individuals in a group divided by the total number of individuals) and reflects the overall distribution of wealth, including extremely high (or low) values, while the median value represents the amount of wealth held by households in the middle of the distribution (at the 50th percentile). All of the simulations in the previous section assess wealth at the median as it is meant to represent the typical young adult. Bruenig (2019) states that the racial wealth gap at the median was \$146,200 in 2016 according to the Survey of Consumer Finances (SCF), and so a policy closing that gap would require transfers of \$456 billion, or 0.5 percent of total wealth in 2016. But at the mean, the gap is not \$146,200

³ It is worth noting that savings rates do not explain wealth gaps. Lower-wealth families do not have as many resources to save for the future but must contend with day-to-day financial emergencies.

but rather \$760,700. Bruenig continues by arguing that if the goal is to ensure that the Black and white communities have the same wealth relative to total dollars held, then the required transfers are \$15.2 trillion or 17.5 percent of US wealth in 2016⁴.

Similarly, Cassidy et al. (2019) contend that the eventual effect of Opportunity Accounts would give Black people 23 cents to each dollar of white wealth, rather than the current 9 cents. That is a 150 percent increase in the proportion, but it would leave 77 cents per dollar untouched. Cassidy et al. (2019) argue, "while the Baby Bonds proposal is a dramatic change from the status quo, it would not dramatically overturn the wealth distribution, but rather create a different floor of resources among young adults."

Literature on Early Life Wealth-Building Programs

Although baby bonds are a relatively newer program given their multiple-use allowances (within the confines of wealth-building) and explicit emphasis on reducing racial wealth inequities, they share commonalities with some programs that have existed for longer and aim to create paths for children to accrue capital by the time they reach young adulthood.

In this brief, we focus on child development accounts (CDAs), which are sometimes called children's savings accounts (CSAs)⁴ or college savings accounts, and share the most salient features with baby bonds. In their most robust form, CDAs are conceptualized to be an asset-building policy where beginning at birth, all children are provided accounts, and children from families with fewer resources receive higher allocations (Huang et al. 2021; Sherraden, Clancy, and Beverly 2018). Thus, in their original designs, CDAs contain the features of universality and financial progressivity. And while postsecondary education became and remains the main focus of existing CDA policies and advocacy, the initial layout of the model did make room for the usage of accumulated funds for a number of purposes (Elliott, Destin, and Friedline 2011).

Another salient feature of baby bonds is the automatic enrollment of all newborn children, which research from existing programs has shown to be critical in helping CDAs achieve their goals (Beverly et al. 2015; Sherraden, Clancy, and Beverly 2018). Baby bonds build on and encompass many of these defining design features of CDAs. As noted above, in their original policy proposal, Hamilton and Darity (2010) categorized baby bonds as a type of CDA program. In some writings, baby bonds are even listed among examples of federal CDA policies in the US that have been introduced thus far (Stevens 2009; Elliott, Destin, and Friedline 2011). Given these theoretical connections, we turn to the literature on CDAs for insights while simultaneously giving context on how they differ from baby bonds,

A key difference between the two programs is that baby bonds emphasize the ability to use accrued funds for multiple purposes for the end goal of building wealth and reducing racial wealth disparities. As noted earlier, while not in the original design, existing CDA programs focus on education and are

⁴ There are some technical differences between child development accounts and children's savings accounts which we do not cover in this brief.

typically for funding a child's postsecondary education. The amount of cumulative account value for baby bonds is to be anchored to certain thresholds, such as the typical amount of money needed for a down payment or to start a business in an area (Brown et al. 2023). Further, while in practice most CDAs start with a small initial seed deposit (ranging from about \$5 to \$1,000), baby bonds programs' initial endowments currently range from \$500-\$3,200, and again, the ultimate account can be used for multiple purposes (e.g., buying a home, starting a business, or retirement) (Clancy and Beverly 2017). With their explicit focus on making an impact on the racial wealth gap, the flexible use of funds for the end purpose of wealth building and a substantial final account value are core features of the baby bonds programs. Finally, CDA programs allow for families to contribute while baby bonds policies do not, so that the burden of savings does not go on families and lower-resourced families can still benefit without disrupting the "program's equity focus (Markoff et al. 2022)."

To date, no federal CDA or CSA program exists in the US.^{5, 5}However, a number of state-level programs have been enacted in 38 states and DC, covering an estimated 4.9 million children (Thiemann 2023). SEED for Oklahoma Kids (SEED OK), which modeled the CDA policy features of universal, automatic, progressive, and life-long asset building (Sherraden 1991; Sherraden and Clancy 2005), is also noteworthy for the large body of empirical research surrounding it. SEED OK is an experimental study and not a statewide program. It is currently the largest evaluation of the impacts of a CDA program on account holding, saving, and asset accumulation for children. It is a policy test of universal and progressive CDAs and provides a 529 college savings plan account to every infant in the treatment group with automatic account opening and an initial deposit of \$1,000. SEED OK also encourages treatment participants to open their own 529 accounts with an account opening incentive and a savings match. The experiment uses a sample of infants randomly selected from birth records (N = 2,670) and randomly assigned to treatment and control groups. Thirteen years in, the CDA also has a very large impact on the value of SEED OK 529 assets held for children. On December 31, 2019, the average value of SEED OK 529 assets for treatment children was \$3,243, which is 3.4 times the average value for control children (\$952). The gap between treatment and control children in SEED OK 529 assets has increased over time (Clancy et al. 2021).

In the absence of a national baby bonds program or robust state-level programs that have been in existence long enough, looking to empirical research on CDAs programs, given their common origin story, and contextualizing the key ways they differ from baby bonds might help the field learn important lessons on the potential impacts of such programs.

⁵ There are examples of policies that resemble baby bonds from the international context. For example, in the UK, Child Trust Funds (CTFs) were implemented in 2005 and remained in place until 2010 (and in a few cases beyond 2010). The UK directly contributed an initial deposit of at least £250 (accounting for inflation in the UK, this is equivalent to £420, or \$533, today) – with higher sums for lower-income households (see Ewas and Scott 2023 for more information).

Impacts on Overall Asset Positions of Families

All early childhood bonds and CDAs share the same benefit of time for any assets to accrue interest. In terms of building assets, two main questions guide researchers' approaches to understanding the impact on asset positions of early life wealth building programs:

First, does the asset the recipient receives meaningfully change their day-to-day lived experience?

To answer this question, we must define "meaningful change" in a young person's life. Across the entire life course, the greatest likelihood of asset poverty, meaning lacking sufficient assets to live for three months at the poverty line, occurs in young adulthood (Rank & Hirschl 2010). In general, half of US families lack a \$2,000 savings cushion, but anywhere from 46 to 64 percent of young adults ages 25 to 29 experience asset poverty (Rank & Hirschl 2010). The existence of an early life savings account can have positive impacts on asset-building behaviors. Friedline, Elliott, and Chowa (2012) find that young adults are two times more likely to own savings accounts, two times more likely to own credit cards, and four times more likely to asset ownership is also associated with having accounts as children. Regarding liquid assets, Friedline, Johnson, and Hughes (2014) find that while owning a savings account as a young adult only contributed \$50 toward liquid assets, the added contribution of combined stock and retirement accounts—themselves products of savings account ownership—was \$5,283.

Research shows that families with as little as \$250 to \$749 in nonretirement (liquid) savings are 28 percent less likely⁶ to miss a housing payment than those with between \$1 and \$249. And while children and their families cannot use the money in their accounts for anything other than college costs in the case of CDAs—much like the case of baby bonds, where uses are restricted—research from SEED OK shows that participating in a CDA program leads to higher use of asset-products like non-529 savings accounts that can provide families with access to much needed liquid assets (Huang et al. 2021).

Also important, Sherraden et al. (2011) found that children enrolled in a matched savings program received a financial education curriculum score significantly higher on a financial literacy test than a control group. The literature thus indicates that the existence of an early life account, and the time it has to accrue interest, has a meaningful impact on a young person's likelihood to weather economic shocks.

Second, is there any measurable population-level change on overall asset distribution as a result of a generation receiving these assets?

Based on the literature, meaningful and progressive early life wealth-building programs may have an impact on the absolute and relative wealth positions of families. The racial wealth gap grows sharply with age. In a recent study using the PSID, the median white American was found to have 13 times more wealth than the median Black American in their early 30s. Further, a white person in the 25th percentile of the overall wealth distribution in their early 30s is expected to move up to the 44th percentile by their late 50s, while a Black person who starts with the same wealth level will only move up to the 29th percentile, on average (Shiro et al. 2022). Other scholars agree that even young adults who have a brief convergence between ages 18–25 will end up diverging again with differential incomes, differential savings, differential rates of return (especially on real estate), and differential inheritances (Bruenig 2022). Individuals with a bachelor's degree have more wealth than those in the same race without a bachelor's degree, more upward wealth mobility and less downward wealth mobility, regardless of their initial wealth, than those with less education.

Further, people with high incomes across their prime wealth accumulation years (roughly ages 30– 50) also tend to have more wealth and more upward wealth mobility (Shiro et al. 2022). We currently do not have enough coverage from any automatic early life wealth-building program across the US to know whether we might see large scale shifts in postsecondary attendance rates, or earlier homeownership rate, or higher-paying jobs due to more opportunity, that could feasibly increase the upward mobility of people of color, but these policies are designed to support young people of color in attaining these assets that research does show have a measurable impact in overall life wealth. For example, research by the Institute on Assets and Social Policy finds that a universal, progressive children's asset-building program with an initial deposit of \$7,500 for low-wealth households and incremental declines to \$1,250 for the highest-wealth households could close the Black/white wealth gap by 23 percent at the median and the Latino/white wealth gap by 28 percent (Sullivan et al. 2016).

This modeling was done assuming the assets were being spent towards education, but at the median, there is reason to believe that a policy like baby bonds that expands the use allowances to other asset-building activities for the sake of furthering racial equity could have an impact on the distribution. Regardless of use restrictions, however, in considering wealth disparities across racial groups at the mean, policies likely to make a significant population-level impact are those that have large initial endowments and result in some form of redistribution. It is important to note, however, that racial differences in wealth cannot be explained by education, and Black household with a college degree have substantially less wealth than similar white households (Hicks et al. 2021).

Other Impacts of Baby Bonds and Opportunities for Future Research

Existing studies on baby bonds, CDAs, and other programs noted above focus on predicting the impact of these policies on individuals' assets and overall wealth, and the potential of baby bonds to reduce the racial wealth gap. Some studies also address early impacts of child development accounts on education.

IMPACTS ON EDUCATION: LESSONS FROM CHILD DEVELOPMENT ACCOUNTS

There is an existing and ongoing body of research on the relationship between education and households' financial standing with regard to income, assets, and net worth or wealth more broadly (for example, Braga et al. 2017). There has been a growing area of research more narrowly focused on studying the relationship between education outcomes and child accounts closely related to baby bonds, either directly studying the potential effects of specific child accounts programs or bridging the gap from research more broadly on the impacts of wealth. Given that education increasingly has been the target use of these child accounts, research studying educational outcomes is prominent.

Elliott, Destin, and Friedline (2011) provide a literature review of 34 studies on the relationship between assets and children's educational outcomes, with an explicit focus on drawing implications for policies on CDAs. The authors focus narrowly on the potential role of CDAs in mitigating the cost of attending college. In a departure from the emphasis on income, these studies examine various forms of assets, such as children's own savings accounts, illiquid household assets like homes, and overall household net worth (i.e., assets minus debts). The analyses focus on the relationship between assets with academic achievement, primarily through math and reading scores, college expectations, and college attendance.

The different types of assets differ in their predictive outcome on children's educational outcomes across the various ages and stages of schooling the studies analyzed. Across the 34 studies examined, liquid assets, which are assets that can easily be converted to cash, more consistently predict math achievement than illiquid assets. However, studies related to college attendance and completion, which are more relevant for baby bonds, reveal interesting and interrelated findings. Household assets are found to have "a significant independent effect on whether children attend and ultimately graduate college" (Elliott, Destin, and Friedline 2011). An important connection one study finds is that having liquid assets when children are young, between ages 2–10, influences college attendance by impacting children's earlier academic performance. For college graduation, liquid and illiquid assets are equally important predictors.

Noteworthy are a few longitudinal studies that specifically examine college attendance and graduation using children's assets. Elliott and Beverly (2011a), Elliott, Constance-Huggins, and Song (2013), and Elliott and Nam (2012) have similar findings that children with a share of their assets dedicated specifically for education purposes are twice as likely to have graduated or currently attending college. A fourth study (Elliott and Beverly 2011b) focuses on high schoolers who expect to graduate from a four-year college to study a phenomenon where young people who expect to graduate from college yet do not enroll in college shortly after graduating high school. An estimated 55 percent of children without their own savings experience this. Children with basic savings or a portion of their savings dedicated specifically to education purposes are predicated to be three to six times as more likely to attend college.

In more recent works following the batch of studies examined in Elliott, Destin, and Friedline (2011), research directly examining the relationship between child accounts and education has grown. Notable among them has been research based on the SEED for Oklahoma Kids (SEED OK) CDA. As noted earlier, the experimental design of SEED OK from conception has attracted much empirical research interest. A review of this recent literature shows a consistent finding of positive education expectations among parents and children (Chen et al. 2023).⁷ Given that the SEED OK experiment began in 2007 and is among the first large-scale CDA programs implemented in the US, the children who are beneficiaries of the accounts are still too young for studies on college enrollment and completion. As discussed earlier, evidence from the broader research has been strong with regard to college education.

These studies collectively provide strong evidence about the potential impact baby bonds could have on educational outcomes. Additional resources help children to attain a college education. In addition, the baby bonds policy centered in this brief is more robust and substantial than many of the programs that these studies are based on. For example, consider the four studies discussed earlier that look at the relationship between children's assets and college education (Elliott and Beverly 2011a; 2011b; Elliott, Constance-Huggins, and Song 2013; Elliott and Nam 2012). In all four studies, children's savings and parent savings for youth are categorical variables with values based on the existence and designation of a savings account, so we cannot explicitly compare the issue of substantial endowment. However, for net worth, the authors provide the range values used to create the three tiers of negative net worth, moderate net worth, and high net worth. Given these are longitudinal studies, household net worth is based on earlier periods. As an example, in Elliott and Beverly (2011a), net worth in averaged across several years of data and is in 2002 dollars, with the threshold for high net worth beginning at \$10,000. Using the Bureau of Labor Statistics' online CPI Inflation Calculator, \$10,000 from 2002 translates to roughly \$17,000 in 2023.⁸ Even after making room for higher education costs rising faster than inflation, for example, the point remains that the endowment levels proposed by a baby bonds program outweigh the asset levels in the existing studies. Given the scale of problems baby bonds are designed to help address, their substantial endowments matter and the positive impacts seen from empirical research on existing programs similar to baby bonds should not be ignored.

Furthermore, beyond the direct effects on educational achievement, a separate body of research examines the impact of higher education on other outcomes.⁶ However, as ample research has established, while advanced degrees may improve one's economic position compared to others of the same racial background, education by itself does not address racial disparities and inequities. For example, college-educated Black households have 30 percent less wealth at the median than *noncollege-educated* white households (Hanks et al. 2018).⁹

FUTURE DIRECTIONS FOR THE STUDY OF IMPACTS OF BABY BONDS

Baby bonds are designed to help young people build wealth. As originally designed, they are universal but give more funds to young people for low-wealth families, which undoubtedly benefits people of color. As noted above, aside from helping with asset and wealth building, evidence from child savings accounts indicates that baby bonds could also increase college enrollment and completion.

Additional impacts of baby bonds that may be explored in future research and evaluation as programs are implemented.

Employment. In the long term, researchers could explore if baby bonds can reduce unemployment and increase wages, particularly for people of color by comparing baby bond recipients to similar groups that did not receive baby bonds. Baby bonds could support employment if recipients use the funds to

⁶ The recent Supreme Court decision effectively ended affirmative action. Some researchers examining state-level affirmative action bans found that the enrollment of Black, Latinx, and Indigenous people declined overall, with affects "especially concentrated in selective and flagship institutions" the overall effect on college enrollment throughout the country remains to be seen. https://www.urban.org/urban-wire/future-college-admissions-without-affirmative-action.

attend and complete college as people with college degrees have higher employment rates and wages than their noncollege degree-holding counterparts.¹⁰ While baby bonds may increase employment rates and wages *within* races, racial employment gap differences are unlikely to diminish without additional interventions to address discrimination. For instance, Black college graduates still face higher unemployment rates than their white counterparts with a college degree, are overrepresented in lowerpaying roles for which they are overqualified (Hamilton 2013; Darity and Mason 1998; Holder 2018; Williams and Wilson 2019), and face lower wages within roles (Hamilton et al. 2021) and more wage disparities during recessions (Biu, Famighetti, and Hamilton 2021). While baby bonds could support better employment, discrimination in the labor market still needs to be addressed. Further, even if workers of color are able to have better employment outcomes due to baby bonds, these may not directly translate into wealth, as research shows racial disparities in wealth even for college graduates (Hicks et al. 2021).

Business ownership. Black and Latinx people are underrepresented as business owners (Theodos and Su 2023). Researchers could explore if business ownership rates by race and ethnicity meaningfully change in communities where business ownership is an allowed use of baby bonds funds As with employment, other supports are needed to ensure that business owners thrive. Business owners of color also face systemic barriers to loans and other sources of funding (Asiedu et al. 2022; Blanchflower et al. 2023). Black and Latinx owned businesses earn a fraction of business sales, even before the pandemic (Theodos and Su 2023). Black- and Latinx-owned businesses may primarily operate in their own communities, which also have less wealth. This challenge for consumers of color reflects the need for broader efforts to address wealth equity.

Homeownership. A down payment to purchase a home is another proposed use of baby bonds. Homes are the largest share of households' wealth, even more so for Black households (60 percent compared to 43 percent of white households) (McCargo and Choi 2020). However, there is a substantial homeownership gap between Black families and other communities of color (Kijakazi et al. 2016). As of April 2023, potential homeowners need 32.6 percent of median income to afford a 20 percent down payment on a home (Goodman, Ratcliffe, Neal et al. 2023). Communities of color often do not have enough inherited wealth to support a down payment; additionally, white families benefitted from government programs that allowed them to purchase and pass down homes while Black and other communities of color faced redlining and other discriminatory policies preventing homeownership (Brown et al. 2019).

As with employment and business ownership, researchers could explore if baby bonds help make a measurable difference in homeownership rates, particularly for people of color. As with business ownership, there is a need for structural change to ensure that homes owned by people of color have the appropriate value and can be maintained. Research shows that Black and Latinx homeowners face significant challenges compared to their white counterparts, including discrimination in home appraisals that means lower home values and thus lower overall net worth (Neal et al. 2020). Additionally, Back and Latinx households also face more housing depreciation (Neal et al. 2020) as well as higher property taxes as cited in Goodman, Ratcliffe, Visalli and colleagues (2023). Efforts to address employment

discrimination and ensure equitable wages would also help homeowners of color to afford the necessary upkeep on their homes and reap the same benefits of homeownership as white homeowners.

Conclusion

Baby bonds programs are intended to reduce racial wealth disparities by enabling recipients to start young adulthood with an asset, even if they do not come from a wealthy family. Eligible uses of funds typically include college tuition, purchasing a home, starting a business, or other similar activities. Our review of three simulations of baby bonds' impacts reveals that the program would reduce Black-white racial wealth inequities significantly—by more than half in all cases—though researchers have different estimations on the magnitude of that change.

To date, baby bonds have been implemented at the state level and local levels. A federal program would also provide a larger investment and even greater potential to help lower wealth young people enter adulthood with a strong footing (Ford and Balu 2023).

Further, baby bonds will be most impactful when they are coupled with other policies aimed at supporting short- and long-term economic well-being including cash assistance, guaranteed income, and child care supplements (Berlin and Biu 2023). Coupling baby bonds with systemic change and antidiscrimination policies could ensure that people of color reap the same benefits of their assets and reparations would address stolen wealth from Black Americans (Ford and Balu 2023).

Notes

- ¹ Watson, Justyce and Ofronama Biu, 2022, "You Can't Improve Black Women's Economic Well-Being without Addressing Both Wealth and Income Gaps," Washington, DC: Urban institute, https://www.urban.org/urbanwire/you-cant-improve-black-womens-economic-well-being-without-addressing-both-wealth-and.
- ² Bourne, Ryan, (2018, December 10), Cory Booker's 'baby bonds' wouldn't support a savings culture It's just more government subsidies. CATO Institute, https://www.cato.org/commentary/cory-bookers-baby-bondswouldnt-support-savings-culture-its-just-moregovernment.
- ³ "Pressley, Booker Urge Biden Administration to Include 'Baby Bonds' in the Next Economic Recovery Package," Senator Cory Booker, New Jersey, January 14, 2021, https://www.booker.senate.gov/news/press/bookerpressley-urge-biden-administration-to-include-baby-bonds-in-the-next-economic-recovery-package.
- ⁴ Bruenig, Matt, "Baby Bonds Only Modestly Reduce the Racial Wealth Gap," People's Policy Project, January 2022. https://www.peoplespolicyproject.org/2019/01/22/baby-bonds-only-modestly-reduce-the-racialwealth-gap/.
- ⁵ Ewas, Jason and Sophia Scott, "Can Children's Savings Accounts Programs Build Wealth? What The UK Child Trust Fund Program Can Tell Us," Aspen Institute, July 19, 2023, https://www.aspeninstitute.org/blogposts/can-childrens-savings-accounts-programs-build-wealth-what-the-uk-child-trust-fund-program-can-tellus/.
- ⁶ Caleb Quakenbush and Signe-Mary McKernan, "What Amount of Cash Can Help Buffer Families against COVID-19's Economic Impacts?," *Urban Wire* (blog), Urban Institute, April 13, 2020, https://www.urban.org/urbanwire/what-amount-cash-can-help-buffer-families-against-covid-19s-economic-impacts.

- ⁷ Markoff, Shira, Rebecca Loya, and Jessica Santos, "Quick Guide to CSA Research: An Overview of Evidence on Children's Savings Accounts," Washington, DC: Prosperity Now, October 18, 2018. https://prosperitynow.org/resources/quick-guide-csa-research-overview-evidence-childrens-savings-accounts.
- ⁸ "CPI Inflation Calculator," Bureau of Labor Statistics, accessed July 3, 2023. https://www.bls.gov/data/inflation_calculator.htm.
- ⁹ Hanks, Angela, Danyelle Solomon, and Christian E. Weller, 2018, "Systematic Inequality: How America's Structural Racism Helped Create the Black-White Wealth Gap,." Center for American Progress. https://www.americanprogress.org/article/systematic-inequality/.
- ¹⁰ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, accessed July 3, 2023. https://www.bls.gov/data/inflation_calculator.htm.

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Errata

This brief was corrected on September 14, 2023. A reference listing was added on page 20, and its corresponding author-date citation was revised on page 19. Some minor formatting inconsistencies not affecting content were resolved.

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