



Lever for Success

**Key Features and Outcomes
of Children's Savings Account
Programs**

A Literature Review

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1

Executive Summary

Today, more than half of families with children (52%) are asset-poor, meaning they do not have enough savings to live at the federal poverty level for three months without an income [1], let alone pay for higher education. Children's Savings Account (CSA) programs provide savings or investment accounts and financial incentives to children for the specific purpose of funding postsecondary education or other asset-building.¹ Beyond their financial role, CSAs are associated with beneficial effects on parents and children across a range of domains, including educational aspirations, socioemotional development, college access, academic success, and equity. Numerous states, cities, localities, and organizations across the United States have begun sponsoring CSAs in recent years. However, no consensus has been reached on the optimal structure for CSA programs.

The purpose of this literature review is to identify features of CSA programs that are associated with high levels of uptake and engagement by low- to moderate-income (LMI) families, as well as features that contribute to the long-term sustainability of CSAs. To that end, this literature review examines the empirical research on five key features of CSAs that make them a promising policy strategy for economic inclusion:

- 1) **UNIVERSAL ENROLLMENT:** Every child within the program area receives an account automatically
- 2) **SEED:** The initial deposit into the account, provided by a program funder

¹As originally envisioned, CSA programs allow the funds to be used for other designated asset-building purposes, such as purchasing a home, starting a small business, or retirement. In practice, however, many CSA programs focus exclusively on postsecondary education [3, 11].

If a CSA's primary goal is to achieve maximum account accumulation, higher seed deposits or benchmark incentives may be called for. If maximizing savings by LMI families is the primary objective, programs can emphasize higher match rates and match caps along with inclusive approaches.

- 3) **MATCH:** Deposits provided by program funders, proportional to participants' savings
- 4) **BENCHMARK INCENTIVES:** Deposits provided by program funders for achieving certain goals
- 5) **INCLUSIVE APPROACHES:** Features that make the program accessible to LMI families

Based upon evidence from the field, we assess the impact of each feature on three outcomes:

- 1) **CSA PARTICIPATION:** The percentage of eligible families that enroll in the program
- 2) **ENGAGEMENT:** Participants' interaction with the accounts, particularly depositing money; but also activities like attending meetings or financial education classes related to the account
- 3) **SUCCESS AND SUSTAINABILITY:** Achievement of specific program goals, as well as political and administrative feasibility and longevity

KEY FINDINGS:

Certain CSA features are associated with positive outcomes for participants, such as high savings rates, and some features are associated with

high uptake rates or greater political feasibility. However, a positive impact on one outcome does not always correspond to success on others. There is strong evidence of a positive relationship between automatic enrollment and participation, between a high match limit and participant savings, between seed deposits and account accumulation, and between high-touch services and LMI family engagement. Other relationships are less clear. For example, the connections between seed deposits and participation or between universal accounts and program success have not been conclusively determined. Major lessons from the literature on CSAs are summarized in Table 1.

Inherent in these findings are tradeoffs among various outcomes, and individual CSAs must tailor their programs based on their specific goals. For instance, if a CSA's primary goal is to achieve maximum account accumulation, higher seed deposits or benchmark incentives may be called for [4]. If maximizing savings by LMI families is the primary objective, programs can emphasize higher match rates and match caps along with inclusive approaches. Limited resources mean that programs must often choose between different types of incentives. Ultimately, architects of CSA programs will need to make informed decisions based on the research available, the initiative's goals and resources, and the greater community context.

TABLE 1: KEY FINDINGS ON CSA FEATURES AND LIMITATIONS

Feature	Promising finding	Limitation
Universal enrollment through automation	<ul style="list-style-type: none"> + Associated with very high participation rates + Associated with greater participation among LMI families + Associated with greater savings among LMI families 	<ul style="list-style-type: none"> - May be associated with lower overall engagement. More research is needed. - Impact on account accumulation is inconclusive
Seed deposit	<ul style="list-style-type: none"> + Associated with greater account accumulation 	<ul style="list-style-type: none"> - Relationship with participation and participant savings rates has not been conclusively determined
Savings matches	<ul style="list-style-type: none"> + Higher match rates may boost LMI participation + Associated with higher participant savings, especially when the match limit is higher 	<ul style="list-style-type: none"> - Relationship between the match rate and participant savings is inconclusive - Higher match limits do not significantly increase account accumulation
Benchmark incentives	<ul style="list-style-type: none"> + Associated with greater account accumulation + Associated with greater participation in incentivized activity 	<ul style="list-style-type: none"> - Relationship with participation and savings rates has not been conclusively determined
Inclusive approaches	<ul style="list-style-type: none"> + Features such as a simple application process are associated with greater participation and savings rates, especially for LMI families 	<ul style="list-style-type: none"> - Often harder to scale, creating a potential tradeoff between inclusivity and universal enrollment

Table of Contents

2	EXECUTIVE SUMMARY
5	INTRODUCTION
6	WHY CSAs? Family Aspirations and Socioemotional Effects College Access and Academic Success Social Equity and Economic Inclusion
8	MAJOR CSA POLICIES AND PROGRAMS IN THE U.S.
9	FEATURE 1: UNIVERSAL ENROLLMENT VIA AUTOMATION A. Definition: Universal Enrollment B. Effect of Universal Enrollment on Participation C. Effect of Universal Enrollment on Engagement D. Effect of Universal Enrollment on CSA Success and Sustainability
13	FEATURE 2: SEED A. Definition: Seed Deposit B. Effect of Seed on Participation C. Effect of Seed on Engagement D. Effect of Seed on CSA Success and Sustainability
15	FEATURE 3: MATCH A. Definition: Savings Match B. Effect of Match on Participation C. Effect of Match on Engagement D. Effect of Match on CSA Success and Sustainability
18	FEATURE 4: BENCHMARK INCENTIVES A. Definition: Benchmark Incentives B. Effect of Benchmark Incentives on Participation C. Effect of Benchmark Incentives on Engagement D. Effect of Benchmark Incentives on CSA Success and Sustainability
20	FEATURE 5: INCLUSIVE APPROACHES A. Definition: Inclusive Approaches B. Effect of Inclusive Approaches on Participation C. Effect of Inclusive Approaches on Engagement D. Effect of Inclusive Approaches on CSA Success and Sustainability
23	SUMMARY AND CONCLUSION
25	APPENDIX: METHODS
26	REFERENCES
TABLES AND FIGURES	
3	TABLE 1: KEY FINDINGS ON CSA FEATURES: PROMISING OUTCOMES AND LIMITATIONS
24	TABLE 2: OUTCOMES AND TRADEOFFS OF KEY CSA FEATURES

Introduction

To achieve economic security and mobility, families need both income and assets. We define assets as “the foundation of resources that families and communities draw on to meet more than their basic needs” [5]. Financial assets include savings, stocks, bonds, business holdings, and real estate. While income helps cover basic expenses, assets can be leveraged to access potentially transformative opportunities like post-secondary education, homeownership, and business initiatives, and to weather financial crises like job loss [5, 6]. However, nearly half of Americans do not have even \$400 in savings for an emergency, let alone savings for college or a home [7]. This deficit is made worse by the fact that most policies designed to help households accumulate capital currently favor families that are already wealthy [8, 9]. Policymakers are increasingly recognizing this problem and taking action to give more families the chance to achieve financial stability through asset accumulation. One way policymakers are creating an “inclusive platform for lifelong savings and investment” is through Children’s Savings Accounts (CSAs) [4].

CSAs provide savings and/or investment accounts for children which are intended for postsecondary education (or other asset-building) and which provide direct, monetary incentives for savings [10]. Broadly speaking, CSA funds may be used for postsecondary education, home purchase, business development, or retirement, but in practice, many CSAs focus exclusively on postsecondary education, which includes college and graduate degrees, as well as licenses, industry-recognized credentials, apprenticeships, certificates, and other accredited training [3, 11]. Educational attainment is an important predictor of higher earnings and economic mobility [12, 13]. Over the last 15 years, states, cities, localities, and non-profit organizations have implemented CSA programs to expand educational opportunity, boost the education level of the workforce, and address poverty in their communities. Research and evaluations of these programs offer crucial lessons for future CSAs on program design and strategy. Despite their overall promise, CSAs can actually increase economic inequalities if they lack features that boost access for lower-income families by enabling higher-income families to accumulate wealth at greater rates than LMI families [4]. The purpose of this literature review is to identify

features of CSA programs that are associated with high levels of uptake and engagement by low- to moderate-income (LMI) families, as well as features that contribute to the long-term sustainability of CSAs.

This literature review examines the empirical and theoretical research on five key features of CSAs that make them a promising policy strategy for economic inclusion: universal enrollment, seed, match, benchmark incentives, and inclusivity.

- **UNIVERSAL ENROLLMENT:** Every child within the program area receives an account automatically
- **SEED:** The initial deposit into the account, provided by a program funder
- **MATCH:** Deposits provided by program funders, proportional to participants’ savings
- **BENCHMARK INCENTIVES:** Deposits provided by program funders for achieving certain milestones or goals
- **INCLUSIVE APPROACHES:** Features that make the program accessible to LMI families

Based upon evidence from the field, we assess the impact of each feature on three outcomes: CSA Participation, Engagement, and Success and Sustainability.

- **PARTICIPATION:** The percentage of eligible families that enroll in the program
- **ENGAGEMENT:** Participants' interaction with the accounts, particularly depositing money; but also activities like attending meetings or financial education classes related to the account
- **SUCCESS AND SUSTAINABILITY:** Achievement of specific program goals, as well as political and administrative feasibility and longevity

In addition, this report offers insight into the current trade-offs and challenges facing CSA policymakers, practitioners, and funders as they seek to lower financial barriers to postsecondary education for all youth in the U.S.

In evaluating CSAs' success and sustainability, it is important to note that CSA programs' goals vary, as do definitions of success in the literature. Ultimately, program success will be determined by participants' enrollment and performance in postsecondary education. Because most CSAs have not yet seen children to and through postsecondary education, most of the literature relies on interim metrics for evaluating programs' efficacy. Some research studies measure success in terms of participation rates [2, 14]. Others define success in terms of participant engagement [15, 16] or account accumulation (the total amount of money in the account, including participant deposits, seeds, matches, and other incentives) [2, 17]. Still others look to socioemotional effects or academic achievement for signs of success [18, 19]. A brief summary of findings in each of these areas is presented. However, this review primarily focuses on the first three definitions—participation, engagement, and account accumulation—to evaluate success because these are most closely related to policy sustainability at this time. An important qualification of this literature review is that relatively few full evaluations of CSAs have been conducted. Hence, some of the conclusions in this review are based upon a small number of studies, and it is possible that further research will uncover different findings. Ongoing monitoring and careful

evaluation of CSAs, including interim metrics, are critical to understanding the degree to which CSAs meet their goals and their effectiveness as a policy tool overall [20].

Why CSAs?

In his 1991 book *Assets and the Poor*, social work scholar Michael Sherraden introduced the idea of Individual Development Accounts (IDAs)—savings accounts that would provide progressive incentives for low-income individuals to save for a life-changing asset, such as a home or small business [21]. Sherraden suggested that children would be an ideal target audience of IDAs and postsecondary education a perfect goal for which to save. In this way, the idea for Children's Savings Accounts grew out of the IDA model, and soon, policymakers began to realize the value of building assets early in the life course [22, 23]. Indeed, there is evidence that even beyond their financial role, CSAs have beneficial effects on parents and children across a range of domains, including educational aspirations, socioemotional development, college access, academic success, and equity.

FAMILY ASPIRATIONS AND SOCIOEMOTIONAL EFFECTS

CSAs begin to show positive effects for children and families from a young age. For instance, infants with family incomes under 200% of the federal poverty line who receive CSAs have higher socioemotional skills at age 4 than those who do not receive CSAs [19]. Additionally, parents of children who receive CSAs have higher academic expectations for their children starting in their infancy, compared to parents whose kids do not have CSAs [24]. Participating in a CSA program may make postsecondary education a salient financial objective, increasing parents' urgency to start saving [16, 25]. CSAs are also positively associated with children's own educational aspirations after high school [26-29]. According to Elliott and Harrington (2016), socioemotional skills and parents' and children's college expectations are effective interim metrics for predicting future college success [20].

COLLEGE ACCESS AND ACADEMIC SUCCESS

There is a large body of research linking children's savings to college enrollment and success.

Quantitative analyses suggest that children who have savings accounts are more likely to have a "college-bound identity" five years later [28]. Further, children who have even modest amounts of savings for education (\$1 to \$499) are more than two and a half times more likely to enroll in and graduate from college [18]. The beneficial effects of modest savings appear to vary with income level and race. LMI children with modest college savings are three times more likely to attend college and four times more likely to graduate from college than those without savings [30, 31]. Whereas savings are not significantly related to college outcomes for white children, black children with modest savings are four times more likely to graduate from college than those with no savings [32]. LMI young adults with savings designated for higher education are also more than three times as likely to be on course with their postsecondary academics than those without any school savings [33].

Although these findings are promising, some qualification is necessary in interpreting data on the positive effects of modest savings. First, these findings are drawn not from CSA evaluations but from analyses of large national datasets like the Panel Study of Income Dynamics. While the findings are informative about the value of savings in general, they may not reflect the experience of children enrolled in dedicated CSAs. These studies also focus on children age 12 and older, and thus may not reflect effects for younger children. Second, the quantitative analyses cited above report numerous counterintuitive and sometimes conflicting findings, such as little or no benefit associated with savings greater than \$500 in some cases and substantial benefits associated with savings of less than \$1 in others [18, 31]. The authors provide little explanation for why this would be the case, instead focusing on the potential promise of small-dollar savings

in general. Quantitative studies of this kind tell us little about families' actual experiences with savings and postsecondary education, which qualitative studies and program evaluations may be better able to address. Third, the importance of the amount of savings should not be underestimated. For the practical purpose of funding higher education, simply owning an account or saving up to \$499 may not be enough. Indeed, unmet need is a significant barrier to college attendance and completion, particularly for students of color and those from low-income families [34-36]. Findings on the positive effects of account ownership and small-dollar savings should be interpreted within this context.

Additionally, there is not complete agreement in the field regarding the mechanisms by which CSAs "work." For example, research from the SEED OK experiment and other datasets suggests that ownership of an account in itself leads to positive outcomes for families [19, 24, 27, 28, 31, 37]. However, other researchers emphasize families' savings behaviors or the amount of money saved in the account as important determinants of children's and families' outcomes [38-40]. Still others emphasize ways in which the programmatic components that some CSAs include, such as coaching, financial education, and career planning, influence children's outcomes [25, 41]. At this time, it is not clear which CSA program components are most important for individuals' or programs' successes [25], a question that this literature review begins to answer.

RACIAL EQUITY AND ECONOMIC INCLUSION

Current asset-building policies in the U.S., such as retirement savings vehicles, 529 accounts², and mortgage interest tax deductions,

² 529 plans are postsecondary education savings accounts that are offered in 50 states and the District of Columbia. Savings in 529s grow free of federal taxes, and many states offer tax deductions for 529s as well [42]. Savings matches and seeds for 529 plans are growing in popularity, but most 529s are not automatic, inclusive, or seeded. This literature review includes information about 529s that offer a savings match or other financial incentive beyond tax deductions. 529 plans whose only incentives are tax deductions are not included because these deductions may not be accessible to the lowest-income families, who have no tax liability [10].

disproportionately benefit those with greater wealth [9, 43]. Even more significant are the wealth-building policies throughout the twentieth century that were available to white families but almost entirely excluded families of color, such as Federal Housing Authority loans and the GI Bill [44]. The legacy of these policies is apparent in today's racial wealth gap. At the median, white households own 20 times the wealth of black families and 18 times that of Latino families [45]. According to a recent analysis, if current trends continue, the racial wealth gap will never close and will in fact exacerbate over time [46]. Public policy reform and significant financial investment in low-asset families would be necessary to make even gradual change to the racial wealth gap [46, 47]. Accessible and progressive CSAs, together with other asset-building policies, can begin to narrow these gaps by providing families who have historically been excluded from the financial mainstream with a savings platform and incentives to boost savings. CSAs also help to address issues of equity by facilitating access to higher education for those who have historically been excluded.

Major CSA Policies and Programs in the U.S.

Maine and Nevada have active statewide CSA programs into which eligible children are automatically enrolled. Many states, including Arkansas, Colorado, Connecticut, Kansas, Louisiana, Maine, Nevada, North Dakota, Rhode Island, Tennessee, and West Virginia, have added savings matches or other incentives to their 529 plans, with varying degrees of universality and inclusivity [42, 48].³ Several other states, including Indiana, Massachusetts, New Hampshire, and Vermont, are planning or piloting large-scale CSAs [42, 50, 51]. At the city level, San Francisco and St. Louis have active CSA programs, while Oakland,

Boston, and several other cities are piloting new CSAs [42, 51-53]. There are many locally based CSA programs as well, run by nonprofit organizations, housing authorities, schools, or other agencies. The outcomes and experiences of existing CSAs provide valuable lessons on CSA design and implementation.

Another important source of information on CSAs is the Savings for Education, Entrepreneurship, and Downpayment (SEED) demonstration, which pilot tested CSAs in 12 different communities with varied program designs and incentives, starting in 2003 [4]. Of particular note, the SEED for Oklahoma Kids (SEED OK) pilot features an experimental design, which allows researchers to compare outcomes from families enrolled in CSAs to a treatment group of comparable families [2]. Other SEED programs used non-experimental or quasi-experimental designs [17].

Across the U.S. CSAs differ in structure, ranging from a limited savings match on 529 contributions to a universal seeded program. Some rely on individual accounts and some use omnibus accounts in which funds are held in trust for children by the city or school district. The surrounding context varies as well. For instance, some CSAs stand alone, while others are part of “college promise” initiatives, which promise tuition assistance to students who meet eligibility criteria. Although both account structure and contextual factors may be important to the outcomes of CSA programs [54], a full analysis of these variables is beyond the scope of this review. Still, research findings from SEED and existing CSAs provide valuable information on the program features that are associated with positive outcomes for children and with policy viability. The following sections explore the relationships between each of the five features of CSA programs—universal enrollment, seed, match, benchmark incentives, and inclusive features—and each of the three outcomes of interest—participation, engagement, and success and sustainability.

³ This list of programs is not an exhaustive. For more information on CSA programs nationwide, see the Corporation for Enterprise Development's Directory [10] and Saving for College's “Compare 529 Plans” tool [49].

FEATURE 1: UNIVERSAL ENROLLMENT VIA AUTOMATION

- + Boosts participation overall
- + Boosts participation and engagement among LMI savers
- May be associated with lower overall participant engagement. More research is needed.
- Impact on account accumulation is inconclusive

CSA SUCCESS – UNIVERSAL ENROLLMENT

- By switching to an opt-out structure, Maine's statewide CSA increased participation rates from 40% to 100% [14].
- San Francisco K2C made enrollment automatic by using student ID numbers from the school district [57].
- San Francisco K2C made their universal CSA more progressive by doubling the seed amount for children receiving free or reduced school lunch [57].

A.

DEFINITION: UNIVERSAL ENROLLMENT

Many CSA initiatives aim to achieve universal enrollment, that is, to provide an account for every child within a program's geographical or jurisdictional reach—or as close to 100% as possible [2, 23, 55, 56]⁴. Simply making CSAs available to all children within a specified area or jurisdiction does not guarantee that all eligible families will participate and in fact, usually skews toward those with higher income and asset levels [55, 59]. The key to attaining near-universal participation appears to be enrolling children in CSAs automatically, that is, not requiring an application or any other action to create an account [2, 4, 55, 57, 58]. This is also known as an “opt-out”

⁴The term “universal” can also refer to a policy that is available to all who meet the eligibility criteria, regardless of the actual uptake rate. However, researchers in the CSA field tend to use the term “universal” to refer to universal enrollment or uptake of accounts [2, 55, 56]. For this reason, this review focuses on universal enrollment, rather than universal availability. The literature also suggests that automation is necessary to achieve true universal enrollment [2, 55, 57, 58], so universality and automatic enrollment are discussed together.

approach because families are enrolled by default unless they choose to opt out [50]. Programs that are automatically enrolled may still include targeted components, such as additional matching funds for children from LMI families.

CSAs can be universal on a city, state, or even national level. For instance, San Francisco's Kindergarten to College (K2C) establishes a college savings account for every child who enrolls in kindergarten in the city's public school district, starting in the Spring of 2011 [52, 60]. Maine's Harold Alfond College Challenge (HACC) includes every child born a Maine resident in the year 2009 or later [14, 55]. Singapore and the United Kingdom have both implemented nationwide CSAs conferred at birth, though the UK's is now defunct [61-63].

B.

EFFECT OF UNIVERSAL ENROLLMENT ON PARTICIPATION

By definition, universal enrollment means attaining a participation rate as close to 100% as possible. Automatic enrollment appears to

be necessary in order to achieve this goal [55]. Programs with automatic enrollment, such as SEED OK and San Francisco K2C, have achieved nearly 100% participation [2, 57, 58]. Maine's HACC is a valuable case study on the role of automation on participation. From 2009 to 2013, HACC offered \$500 to parents of all newborns in the state, but enrollment was not automatic. The switch to an opt-out model in 2014—retroactive to January 1, 2013—increased participation rates from 40% to an estimated 100% [14].

As Maine's experience illustrates, non-automatic programs generally do not approach 100% participation. The UK Child Trust Fund (CTF) gave parents one year to open an account, after which the government opened one on behalf of the child [61]. Although almost all of UK parents (97%) reported being aware of the program, only about 75% of eligible parents opened accounts within a year, suggesting that outreach alone is not enough to reach full participation [62, 64]. Similarly, Michigan SEED was only able to recruit between 40% and 60% of eligible participants into the program [65]. The Promise Indiana initiative, which offers financial incentives for opening a 529, had a participation rate of 68% in 2013 but only 28% in 2015 [25]. Although all of these programs' participation rates far exceed the uptake of 529s nationwide—less than 3% of families [66]—their enrollment is still far from universal.

Automation also makes CSAs more progressive by improving participation among LMI families. Without automation, those with less financial knowledge and resources are less likely to utilize CSAs than are more privileged families. This may be because parents with more financial assets and connections to formal financial institutions are more likely to “understand the program rules, benefits, and application process, and feel more comfortable enrolling a child” [55, 59]. For instance, before Maine's HACC was automated in 2013, parents with higher income, higher education, and other investments were more likely to have 529 accounts [14, 55]. Similar to Maine's

universal, opt-out structure, SEED OK opened and seeded accounts automatically for all 1,358 newborns in the treatment group. This structure “eliminate[d] essentially all inequality in OK 529 account holding,” among participants [67]. The SEED OK program increased 529 holdings for low-income and unbanked families, mothers receiving public assistance, African Americans, and Native Americans [67].

C.

EFFECT OF UNIVERSAL ENROLLMENT ON ENGAGEMENT

Universal CSAs appear to garner higher rates of saving among LMI participants compared to non-universal programs. As of 2016, 18% of families have made deposits into the San Francisco K2C program, and 50% of depositors are from LMI families [60]. In the UK CTF, 24% of all families had deposited funds by 2009, and lower-income families were saving a greater proportion of their monthly income than higher-income families [62, 64]. In SEED OK, low-income children in the treatment group were significantly more likely to have made deposits to their individual 529 accounts compared to the control group [2]. However, existing research does not determine whether these savings rates are due to the universal nature of these programs or the seed, match, outreach, or other incentives.

Despite these promising findings among LMI families, universal enrollment does not guarantee high participant savings. Opt-out CSA programs may suffer from low participant savings rates. For example, the 25% of accounts in the UK CTF opened by the government instead of by parents had near-zero savings levels [62], while accounts opened by parents carried higher balances [68]. In Ohio, the Cuyahoga County CSA, which opened accounts automatically for every child, had fewer than 4% of accounts registered in a year, and even fewer with deposits [69]. In retirement savings plans, participant deposit levels in opt-out programs are often lower than opt-in programs, in part because

automatic enrollment increases participation among demographic groups who are likely to have lower contribution rates (e.g., black and Latino workers, lower wage earners, and the young) [70, 71]. This suggests a tradeoff between inclusivity and savings rates. Another reason for lower savings rates in opt-out programs is selection bias, that is, those who take the initiative to sign up for a savings program may be more motivated to save. These findings are far from conclusive, and more research is needed on the relationship between automatic CSA enrollment and engagement.

It is also important to note that non-universal programs (programs that target certain populations and do not automatically enroll participants) can foster high savings rates as well, likely due to other elements of program design. For instance, 39% of participants make monthly deposits in the Inversant CSA program, an LMI-targeted, high-touch program in Boston [41]. In the Prosperity Kids program, another small, targeted CSA in New Mexico, 29% of participants deposited at least once [16]. Because the Inversant CSA and Prosperity Kids are small, targeted, and high-touch, their findings may not be directly comparable to larger-scale CSAs, and findings from their programs should be interpreted with this in mind. Research on Maine HACC pre-automation also shows that offering parents a direct deposit service is associated with increased participant savings in an opt-in program [15].

Beyond savings rates, there are other ways in which universal CSAs can increase program engagement. Researchers posit that universal CSAs can increase the importance of and access to financial education, to the extent that such education is integrated into the standard public school curriculum [72]. A case in point, San Francisco K2C program administrators note that the universal nature of K2C gives teachers a tool to educate students about finances in the classroom [52]. Financial education can be incorporated into non-universal CSAs, but when every child has an account, all can be equally engaged with the

lesson. CSAs also have the potential to improve access to financial institutions and credit, as Singapore's program appears to do [38, 63].

D.

EFFECT OF UNIVERSAL ENROLLMENT ON CSA SUCCESS & SUSTAINABILITY

Universal CSAs “build a sense of unity and participation” [13] and receive promising public support. In a national telephone survey accompanying the SEED program, 69% of respondents liked the idea of universal CSAs, and 78% would actively support the policy [4]. Automatic enrollment may also be associated with higher account accumulation (total balance including incentives), an important metric of CSA success, although this hinges on the availability of financial incentives. In SEED OK, the automatically-enrolled treatment group had significantly higher account accumulation than the control group, but this effect was largely due to the \$1,000 seed deposit [56]. The specific impact of universal enrollment on accumulation has not been determined.

However, automation does not ensure program success. Because automatic enrollment may be associated with a lower rate of participant contributions [70, 71], low account engagement may place programs in jeopardy. For instance, low deposit rates and political pressure led to the premature cancellation of two CSAs in recent years. In the UK in 2010, demands for fiscal austerity after the recession led the government to cancel the CTF, despite its popularity with the public over its 8-year tenure [61, 62]. In 2015, the Cuyahoga County Council canceled its CSA program after just two years of operation, citing high administrative costs and low deposit rates [69]. Having many savings accounts with low balances and few transactions is costly for banks to manage, making it difficult to secure partnerships with banks in the long run [70, 73].

Additionally, there may be a tradeoff between

universalism and progressiveness. Proponents of a targeted approach might say that programs should only offer accounts to those who most need them, in order to utilize resources most efficiently. However, means-testing CSAs could lessen national support for the accounts or stigmatize account-holders [74]. Some CSAs have worked around this problem by establishing universal accounts and offering progressive matches or additional grants for LMI families. For example, SEED OK offered low-income families either 0.5:1 or 1:1 matches, depending on their income level [58]. San Francisco K2C doubles the seed amount for children receiving free or reduced school lunch [52, 60].

The research is mixed regarding the administrative difficulty of universal accounts. First, creating universal, automatic accounts using the 529 platform is difficult because 529s require substantial disclosures and a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN) for each participant [75]. These numbers can be difficult to collect without individual permission, and those who lack such documentation are by default excluded from any program that employs individual 529s. To work around these restrictions, some CSA programs that utilize 529s make use of an omnibus account to hold all seed and match dollars, then require parents to open their own accounts in order to make their own contributions [75]. Secondly, non-529 accounts can also present certain challenges. For instance, San Francisco K2C faced challenges in automatically enrolling all kindergarteners because they needed to open savings accounts without parents' signatures [57]. They also faced difficulties with "data exchange, tax reporting, and other legal hurdles" [52]. K2C solved this problem by establishing a custodial account structure in which all deposits are held in trust in each child's name in sub-accounts created using student ID numbers [57]. While this structure enables universal, automatic account opening without paperwork, SSNs, or ITINs, Elliott and colleagues (2015) suggest that problems may arise

in the future if depository institutions have not established a mechanism to disperse funds directly to schools [75].

On the other hand, it can be administratively easier to have a universal rather than means-tested program because verifying eligibility and collecting income information for means-testing are costly and time-consuming [22, 52]. Additionally, automatic enrollment may make recruitment easier and less resource-intensive, as the costs to facilitate self-enrollment can be prohibitive for larger programs [22]. However, this may differ with population size. Lower populations in small states make universal accounts less costly and easier to manage, a fact that has contributed to the proliferation of CSA programs and pilots in New England [51].

Cost is another important consideration for universal programs. Administering accounts for every child requires staff and funding. Funding that is spent on opening accounts or seeding new accounts cannot be spent on savings matches or incentives for achieving other benchmarks, such as financial education. Also, low savings rates or political pressure can lead to questions about a program's cost-effectiveness, as with the UK CTF and Cuyahoga County CSA.

FEATURE 2: SEED

- + Associated with greater account accumulation
- Relationship with participation and participant savings rates has not been conclusively determined

CSA SUCCESS – SEED DEPOSIT

- In SEED OK, the treatment group, which received a \$1,000 seed, had over \$1,500 more in average total savings compared to the control group after 7 years [2].
- In the SEED programs, direct contact between potential participants and staff or community partners helped clear up misconceptions about the seed and increased participation [65, 76, 77].
- Participants who made deposits in the St. Louis-based “I Can Save” program saved much more in the first ten months following the seed deposit than during other time periods [78].

A.

DEFINITION: SEED DEPOSIT

The seed is the initial deposit provided by a program funder as an incentive for families to save [17]. Considerations for program seeds include whether or not a seed is provided, the amount of the seed, whether the seed varies based on income, and whether or not there are supplemental grants offered later [79]. Although the seed could be any amount, most CSA seeds in the U.S. range from \$25 to \$1,000 [17, 57].

B.

EFFECT OF SEED ON PARTICIPATION

A seed deposit appears to be a good incentive for CSA participation. For instance, the most common reason parents gave for enrolling their child in Maine's (pre-automation) HACC was the “free money” available through the seed [55]. Similarly, SEED OK financial incentives were associated with significantly higher participation in 529 plans [56]. The same is true for Promise Indiana, which

provides a \$25 seed for opening a 529 account. Before Promise Indiana, LMI families in the state had “negligible reported use of 529s,” while in 2015, nearly a quarter of low-income families reported saving in 529s [80]. Further, in the program's first year, nearly 60% of eligible students created accounts through Promise Indiana, though uptake attenuated over the program's first three years [25].

However, it appears that offering a seed alone does not guarantee high participation rates. Indeed, uptake rates vary from as low as 4% to 75%. In the Cuyahoga County CSA, parents were offered a \$100 seed, but fewer than 4% registered an account [69]. Canada introduced the Canada Learning Bond (CLB) in 2005, which provides a \$500 seed when a Registered Education Savings Plan (similar to a 529) is opened, plus \$100 per year until the child reaches age 15. Participation rates have gradually increased from 16% in 2008 to 33% in 2015, and 98% of participants have made a personal contribution to the account [81, 82]. As noted above, before Maine's HACC changed to an automatic enrollment structure, 40% of eligible participants opened accounts, despite the \$500 seed. The highest opt-in

participation was in UK CTF, which also featured a \$500 seed, and 75% of parents registered an account in the first year [62, 64]. However, people with more education, access to other investments, or a financial advisor were more likely to enroll [55].

Qualitative research from the SEED program and Prosperity Kids has found that lack of trust in government and financial institutions makes potential participants wary of accepting the seed [4, 16]. Some potential Michigan SEED participants did not enroll because they thought there was a “catch” to the seed—that they had to contribute their own money first [65]. The same was true for some SEED OK parents, who did not open private 529 accounts because they thought they had to contribute their own \$100 to start saving [83]. However, findings from SEED suggest that direct, respectful communication from staff or community partners can help clear up misconceptions about CSAs and increase participation [65, 76, 77].

C.

EFFECT OF SEED ON ENGAGEMENT

Research is mixed regarding the relationship between the amount of the seed deposit and participant engagement. In the SEED programs, a higher than average seed deposit was not associated with higher than average participant savings [4, 17]. However, this does not necessarily mean that the seed has no effect on participant engagement. Participants who made deposits in the St. Louis-based “I Can Save” program saved much more in the first ten months following the seed deposit than during other time periods [78]. This implies that participants may be more motivated to save right after the initial deposit is provided, which researchers call the “seed deposit effect.” Qualitative research with CSA participants also finds that families value the seed deposit as a resource and savings tool [84, 85].

D.

EFFECT OF SEED ON CSA SUCCESS AND SUSTAINABILITY

Although the seed may not have a large effect on participants' savings contributions, it does appear to increase account accumulation (total balance including incentives). In an evaluation of SEED programs, the initial deposit had a large and significant association with accumulation; a \$100 increase in the initial deposit was associated with a \$110 increase in accumulation [17]. In SEED OK, the seed deposit was a strong predictor of account accumulation, as the average treatment group account had \$1,851, compared to \$323 for the control group—a difference of more than \$1,500 over the seven-year preliminary study period [2]. Based on a statistical analysis, Butrica (2008) predicts that adding an additional seed deposit of \$500 for LMI families would increase their account balances, especially for families in the lowest income quintile and for African American households [79].

Because seed deposits are associated with increased accumulation of savings, they may have beneficial effects on children's educational outcomes, despite relatively low parental deposit rates. As noted in the Why CSAs section, having just a few hundred dollars in college savings is associated with higher rates of college attendance and completion [30]. To the extent that these positive educational outcomes are an important goal of CSAs, the college savings created by seeds are hallmarks of program success. However, seed deposits alone are not enough to guarantee program sustainability; low participant engagement rates could place CSAs' political viability at risk.

As discussed in the previous section, providing each account with an initial deposit can be costly, leaving less funding available for outreach, staff, and other incentives. Depending on the program budget, there may be a tradeoff between seed amount and match incentive [4].

FEATURE 3: MATCH

- + Higher **match rates** may increase LMI participation
- + Associated with higher participant savings, particularly when the **match cap** is higher
- Relationship between **match rates** and participant savings is inconclusive
- Higher **match caps** do not significantly increase account accumulation

CSA SUCCESS – SAVINGS MATCH

- Since the Canada Education Savings Grant increased its match rate by 10-20% for low-income families, the proportion of LMI families saving the program has grown more than fivefold [82].
- In the SEED demonstration, match caps over \$1,500 were associated with higher than average savings [17].
- Match caps have the largest influence on saving behavior at the beginning of the program and when participants are close to their goal, at the end of the program [78].

A.

DEFINITION: SAVINGS MATCH

Many CSAs offer matching deposits proportional to private contributions [79], intended to both encourage participant savings and increase account accumulation. CSA programs vary by match rate (the proportion of deposits that are matched) and match cap (the limit on the amount of savings matched) [79, 86]. Match rates in CSAs generally range from 0.5:1 (50 cents provided for every dollar saved) to 2:1 (two dollars provided for every dollar saved). CSAs can have annual and/or lifetime caps on the amount of savings matched. Annual match caps generally range from \$100 to \$1,000, while lifetime caps generally range from \$100 to \$5,000 [42]. Matches also differ in terms of progressivity (whether the rate or cap varies with participants' income) and eligibility criteria.

B.

EFFECT OF MATCH ON PARTICIPATION

There is some evidence that offering a match and increasing the match rate are associated with higher participation. In 2005, the Canada Education Savings Grant (CESG), a 20% match on educational savings, was augmented by an additional 10-20% match for low-income families. Since 2005, the proportion of LMI families saving in these education savings accounts has grown more than fivefold [82]. In Individual Development Account (IDA) programs, higher match rates are also associated with a greater likelihood of continued participation and a lower rate of exiting the program without making a matched withdrawal [87, 88].⁵ Beyond these few studies, quantitative research on the relationship between matches and initial participation in both CSAs and IDAs is

⁵ Note that IDAs and CSAs differ in important ways. IDAs are provided to adults and intended for asset-building on a shorter-term basis than CSAs.

scarce. However, in a randomized, experimental study of Individual Retirement Account (IRA) enrollment among LMI tax filers, the presence of a match increased participation relative to the control group. Offering a higher match rate further increased IRA participation [89].

Qualitative research on CSAs finds that generally, participants are enthusiastic about the idea of a savings match, and a match may increase participation in the program [61, 77, 84, 90, 91]. For example, in Maine, 51% of 529 account owners who received the initial matching grant (IMG) of \$200 on a \$50 deposit stated that grant was “very important” to their decision to open a 529 account [92]. Similarly, some participants in the New Mexico-based Prosperity Kids CSA said that the match was the reason they joined the program, and some used the match to encourage others to join the CSA [16]. IDA participants in qualitative research also report that the match is a major reason for enrolling [93].

C.

EFFECT OF MATCH ON ENGAGEMENT

The existence of a savings match, the match rate, and the match cap all have different effects on participant savings. The existence of a match and a high match cap appear to have a positive effect on participant savings, while the effect of the match rate on savings is not conclusive in the literature.

SAVINGS MATCH. There is some evidence that including a savings match is associated with higher participant contributions. In SEED OK, LMI individuals in the treatment group, who received a match, had 30% higher savings than similar individuals in the control group [2], but this effect could be due to the match or other program features. In Maine, 47% of 529 account owners who made use of the NextGen annual matching grant (AMG) reported that the match was “very important” to their decision to continue saving [92]. Additionally, those who received the AMG made significantly more deposits and higher total

contributions than those who did not [15, 92]. From 2002-2004, participants had to deposit at least \$200 per year for the first three years to receive the AMG of .25:1, up to \$100 per year; those who received the AMG made deposits beyond the amount needed to secure the match. The initial match, which only requires a one-time \$50 deposit, does not appear to inspire ongoing participant savings in the same way [15]. The minimum annual deposit to receive the AMG was reduced to \$50 in 2005, and the match rate increased to .5:1 [92]. In 2015, Maine's match became even more generous; the match cap increased to \$300 per year, and the lifetime limit was removed [51, 94]. The effects of these changes on savings rates have not yet been determined.

In the IDA domain, Butrica and colleagues estimate that adding a match incentive to IDAs would more than triple the overall participant savings rate [79]. However, the match would be most impactful for members of the second and third lowest income quintiles, college graduates, and white individuals. Hence, a match alone may not be sufficient to reach children from very low-income families and children of color. However, a match may also be more appealing than traditional interest, particularly to people who are less familiar with formal financial institutions. For instance, in the UK Savings Gateway 2 pilot, which was geared toward adult savers, participants “found the idea of ‘matching payments’...to be ‘straight-forward’ and less complicated than the concept of interest paid on conventional savings accounts” [95].

MATCH RATE. Research on the relationship between match rates and participant savings is not conclusive. Researchers in the CSA field have not experimentally compared the impact of different match rates on participant engagement; however, some observational data suggests a higher match may foster engagement. In Canada, since the CESC matching grant was increased by 10% to 20% for LMI families in 2005, CESC payments to LMI families have grown more than eightfold [82]. This suggests that contributions by LMI families have similarly increased during the 10-year period since

the match rate was increased. Additionally, in an experimental study of IRA contributions among LMI tax filers, a higher match rate was associated with significantly greater participant contributions [89]. Findings in the IDA field are mixed. Schreiner (2006) found that higher match rates (2:1 compared to 1:1) are associated with a greater likelihood of saving in an IDA but a lower dollar amount among those with active accounts [96]. He suggests that in aggregate, the greater number of participants making deposits more than compensates for the decreased contribution rate among active savers. Other studies of IDAs find no association or even a negative relationship between the match rate and participant savings [87, 95, 97, 98]. Neutral or negative relationships between match rates and savings may be due to censoring, which is when participants save only up to the match cap and not beyond it. Indeed, Schreiner (2006) found that as the match rate increases, the proportion of savers achieving the match limit also increases [99].

MATCH CAP. Lastly, the match cap appears to have a small, positive impact on participant savings. In the SEED program, higher match limits are positively associated with net savings by participants, though the effect size is small. In SEED, a \$100 increase in the match limit was associated with a \$2 increase in average quarterly net savings [17]. In the Inversant program, parents also saved more when the match cap was higher. Over a period of 18 months, more than half of the families participating at a site with a higher match cap saved over \$600, whereas most families who were offered a lower match cap saved less than \$400 [41]. This “match cap effect” likely occurs because families perceive the match cap as a savings goal [16, 95]. In the IDA field, a higher match cap is also associated with an increase in net savings per month for savers, even after controlling for censoring [96].

Research from the St. Louis “I Can Save” CSA demonstration shows that the timing of the match also affects participant savings. The match cap effect is more likely to occur at two time periods:

when participants first start saving toward the match cap and when their account accumulation becomes so close to the match cap that with small additional savings, they can achieve the full match [78].

D. EFFECT OF MATCH ON CSA SUCCESS AND SUSTAINABILITY

The existence of a match, match rate, and match cap all contribute to program success by helping participants accumulate savings. Evidence from IDAs suggests that higher match rates can also reduce the risk of withdrawals and exit from the program, which may improve program sustainability [87]. Although CSA participant contributions are generally low, qualitative surveys of CSA participants show that incentives, including matches, help inspire resource-constrained families to save, which is often a desired outcome of CSAs [61, 84].

Although higher match caps are associated with higher net savings by participants, they have only a weak and non-significant effect on total account accumulation. Indeed the initial seed or benchmark incentives have much more pronounced effects on accumulation [100]. This is likely because depositing money into the account is more difficult for participants than getting the seed or benchmark deposits. Thus, providing a match creates a tradeoff between funding available for the seed and other incentives, depending on program resources [4]. Program goals and definitions of success should inform decisions about incentives and program design; for example, if a CSA's primary goal is to increase participant savings rates, a high match cap should be considered. However, if a program aims to achieve maximum account accumulation, higher seed deposits or benchmark incentives may be more appropriate [4].

FEATURE 4: BENCHMARK INCENTIVES

- + Associated with increased account accumulation
- + Associated with greater participation in incentivized activities
- Effect on CSA participation and participant savings rates has not been conclusively determined

CSA SUCCESS – BENCHMARK INCENTIVES

- In SEED programs, incentives successfully encouraged families to participate in program activities, including financial education, to sign up for direct deposit, or to direct a portion of their tax return into their SEED accounts [101].
- In the SEED OK program, treatment group participants were offered an additional \$100 incentive for opening individual 529 accounts, which increased 529 participation [2].
- In the SEED demonstration, an increase in the benchmark cap of \$100 was associated with a \$38 increase in total account accumulation [17, 51].

A.

DEFINITION: BENCHMARK INCENTIVES

Many CSA programs offer participants benchmark incentives, financial incentives for completing certain goals or milestones. Potential milestones include: signing up for direct deposit; signing up for an individual 529 account; consistent saving; staying in the program for a certain amount of time; attending financial education classes; a child's academic achievement; college readiness; or a child's birthday [11, 17, 41, 58, 101]. As these examples illustrate, some benchmarks require the participant to earn the reward, such as by attending a financial education class. Others, like the birthday benchmark, operate more like a gift and serve to remind participants about their accounts [101]. Benchmark incentives vary with participants' ages and other demographic features. When children are very young, these incentives may focus more on parents, and the focus shifts to the children as they get older [101]. Some benchmark incentives are automatically deposited into accounts while others are given to families separately [17, 101].

B.

EFFECT OF BENCHMARK INCENTIVES ON PARTICIPATION

Benchmark incentives do not appear to increase participation in CSA programs as a whole, but they may improve participation in the incentivized activity. For example, early findings from SEED indicate that incentives successfully encouraged families to participate in program activities, including financial education, to sign up for direct deposit, or to direct a portion of their tax return into their SEED accounts [101]. In SEED OK, treatment group participants were offered an additional \$100 incentive for opening individual 529 accounts, with promising results; 16.8% of the treatment group opened their own 529s compared to 1.1% of the control group [2]. In the Inversant program, incentives for attending financial education classes are associated with higher class attendance. Inversant also learned that incentives that penalize participants for missing activities may increase dropout rates [41].

C.

EFFECT OF BENCHMARK INCENTIVES ON ENGAGEMENT

The research on the relationship between benchmark incentives and participant savings is mixed. In SEED programs, benchmark incentives showed potential to encourage families to start or re-start saving [101], but SEED programs with more benchmark incentives did not consistently see higher participant savings [4, 17]. Additionally, incentives for attending financial education classes specifically may increase participant engagement. In both the “I Can Save” and Inversant CSAs, offering incentives for financial education was associated with increased savings [41, 85]. It is possible that financial education and other meetings are more effective tools for engagement than other benchmark incentives, but more research is needed in this area.

challenging for larger programs. For instance, SEED sites that served 75 participants found benchmark incentives to be an effective tool, while a site with 500 participants found them unwieldy relative to their value-added [101]. However, recent survey data from CFED suggests that large and small CSAs offer benchmark incentives at the same rate [102]. The number and kind of incentives also affect the administrative burden. For instance, the Mile High United Way SEED site offered 26 different benchmark incentives, some as small as \$5, for which the administrative cost far exceeded the value of the incentive. Budgeting for benchmark incentives can also present a challenge, as program staff may not accurately predict how many participants will achieve each milestone [22]. To make benchmark incentives administratively feasible, they can be automated, such as a deposit triggered automatically for the child's birthday or when a family signs up for direct deposit [101].

D.

EFFECT OF BENCHMARK INCENTIVES ON CSA SUCCESS AND SUSTAINABILITY

Including benchmark incentives helps to increase overall account accumulation. In the SEED program, increasing the benchmark cap by \$100 was associated with a \$38 increase in accumulation [17]. This may be particularly valuable for LMI families, including those who are unable to make their own financial contributions [101]. As noted above, to the extent that higher account accumulation is associated with positive educational outcomes for children, it is an important indicator of program success.

There may be a tradeoff between funding for benchmark incentives and funding for seeds or matches, depending on program resources [4]. Benchmark incentives are also more difficult to administer compared to seeds or matches, because they may require collecting data from participants or third parties on the completion of milestones [22, 101]. This can be particularly

FEATURE 5: INCLUSIVE APPROACHES

- + Associated with greater participation and savings rates, particularly for LMI families
- May be difficult to bring to scale.

CSA SUCCESS – INCLUSIVE APPROACHES

- Rhode Island's simple "check-box" opt-in procedure more than tripled participation in the CollegeBoundbaby program [51].
- San Francisco K2C and Promise Indiana make it easier for families to save by offering multiple ways to deposit, all of which are widely used [57, 25].
- After the Inversant CSA implemented text message reminders, regular savers increased from 22% to 33% [103].
- Providing informational materials in multiple languages is critical to include non-English-speaking families [41, 52].

A.

DEFINITION: INCLUSIVE APPROACHES

A key goal of many CSA initiatives is to expand educational and financial opportunities for children in LMI families. These programs strive to be inclusive, that is, to "broaden access to the disadvantaged and provide mechanisms to support asset accumulation" [98]. Programs that are inclusive aim to remove barriers for LMI families and make it easier for them to not only have accounts but to actively engage with accounts (e.g., make deposits, track balances, make and meet savings goals). Features of inclusive CSAs include a simple product design; no minimum deposit or fee; materials in multiple languages; partnerships with local community organizations; numerous deposit options; and offering child care and meals at meetings [13, 15, 25, 41].

B.

EFFECT OF INCLUSIVE APPROACHES ON PARTICIPATION

A simple program design and application improve participation for LMI families, whereas complicated applications or materials can dissuade families from participating in CSAs, especially those with little prior experience with formal financial institutions [4, 13]. Participants from UK CTF, pre-automation Maine HACC, and Michigan SEED all reported that complexity was a barrier to participation, citing too much paperwork, complicated applications, or too many choices for investment plans as elements that made it difficult to enroll [16, 55, 62, 65].

In contrast, several CSAs have taken steps to simplify the application process. Most striking is Rhode Island's CollegeBoundbaby program, which allows parents to receive \$100 for their child's education by simply checking a box on the birth certificate application form [51]. When this change was implemented, participation in the program

more than tripled, from 400 children in the program's first five years to 1,500 in the first three months of easy opt-in [51]. The Promise Indiana CSA also simplified Indiana's 529 application form, replacing a 70-page document with a 4-page "Promise Enrollment Form" [80].

CSAs are also more likely to attract LMI participants if they lower or remove financial barriers to opening accounts. In many states, LMI families face many barriers to opening 529 accounts, including initial deposit requirements, minimum monthly deposits, account fees, and complex application forms [13, 25, 50, 66]. States can make 529 plans more inclusive and progressive by removing or reducing fees and minimum deposit requirements [104, 105]. For example, several states, including Utah, Colorado, and Alabama, have made their 529 plans more inclusive by eliminating the minimum initial deposit requirement [71]. Connecticut's Baby Scholars 529 program reduced their minimum deposit amount from \$50 to \$25 and ensured that 529 savings do not exclude parents from financial aid or means-tested benefits. Arkansas' Aspiring 529 plan waives the account fee for Arkansas residents [42].

Programs have also taken steps to make matches and other incentives easy to access. For instance, the Louisiana 529 program partnered with the state Department of Revenue to get income information to automate their progressive match. Thus, no additional application is required for participants to receive matching funds, which has facilitated hundreds of millions of dollars in participant deposits since 1997 [42]. In 2011, Maine eliminated the income thresholds for its 529 matching grant, which allowed the state to jettison its annual match application and income verification forms and to instead provide the match automatically when criteria are met [14]. While this makes the matching grant more accessible, it also makes it less progressive. Several states also offer higher match rates for LMI families [51].

It may also be important that parents understand how the accounts work. In the Inversant CSA, regular savings accounts attracted more families than custodial accounts, despite the increased paperwork to set up savings accounts [41]. These parents may also prefer savings accounts because they are familiar with the structure and hence more comfortable with these than with lesser-known investment accounts. However, traditional savings accounts tend to have much lower interest accumulation than investment accounts [106], and they are subject to asset limits for public assistance programs. In contrast to Inversant, San Francisco K2C decided to use automatically enrolled and seeded custodial accounts in order to remove barriers to saving for families unfamiliar with mainstream financial institutions and to avoid asset limits for public programs [52]. Boston's CSA will also utilize a custodial account structure similar to K2C's for similar reasons [51].

Partnering with community organizations for outreach is also helpful for increasing participation among LMI families. In the absence of automation, one-on-one contact with program staff and partners improved program participation in the Michigan SEED program [4, 65]. Having a trusted local partner at Inversant account opening sessions also encouraged parents to enroll despite having to fill out paperwork [41]. San Francisco K2C's partnership with the public school district was important for outreach to parents, because parents prefer to receive information from teachers and school administrators, rather than from the government or program staff [57, 90]. Promise Indiana also partners with schools to raise awareness about the program and provide college and career planning for students [25]. SEED program administrators found it especially effective to deliver information through existing classroom and after-school programs, underscoring the importance of partnerships with schools [4, 58]. In addition to partnerships, CSA programs are also experimenting with different outreach strategies to most effectively reach the various populations they serve.

C.

EFFECT OF INCLUSIVE APPROACHES ON ENGAGEMENT

An accessible savings account product may boost engagement among LMI families. In the Inversant program, participants using regular savings accounts saved substantially more than those with 529 accounts or custodial accounts. Inversant found that many LMI parents prefer to deposit cash or money orders, which banks readily accept but most 529s do not [41]. Regular savings accounts also allow parents direct access and control over the accounts, allow parents to deposit at local bank branches or online, and do not have a contribution limit—all features that make it easier for parents to engage [41, 106]. However, individually owned savings accounts do require a personal form of identification to open, and families can make withdrawals for any purpose, not just education [41]. This lack of restriction on withdrawals may pose a problem for educational savings when emergency financial needs arise. To address this, Prosperity Kids, a targeted program in New Mexico, offers parents Emergency Savings accounts as well as CSAs, acknowledging that parents need savings both for short- and long-term needs [16].

Other incentives and support can also facilitate LMI families' engagement with CSAs. These features can include free meals, raffles, opportunities to socialize with other parents, and multiple deposit options. Inversant offers free meals and raffles at monthly financial education meetings, which increases meeting attendance. This is important because attending at least one monthly workshop doubled the amount families saved [41]. San Francisco K2C makes it easier for families to save by offering three ways to deposit money, all of which are widely used: 52% of participants deposit in person, 27% with direct deposit, and 21% by mail [57]. Promise Indiana also allows parents to deposit online, in person, or at participating schools [25]. These flexible deposit methods stand in contrast to some SEED sites that

would accept deposits only in the form of cashier's checks or personal checks via mail [107].

Providing assistance in multiple languages is also important for building trust and facilitating savings. For instance, Inversant and San Francisco K2C provide informational materials in multiple languages, so non-English-speaking families are included [41, 52]. Of note, participants in Prosperity Kids, who are mostly Latino, found it difficult to interact with staff at the credit union partner because no one there would serve them in Spanish, a significant obstacle to account engagement [16].

Reminders and outreach through technology may be a relatively inexpensive, scalable method to increase savings among LMI participants. For example, after the Inversant CSA implemented text message reminders, regular savers increased from 22% to 33% [103]. Another experiment among LMI youth in Colombia increased savings by 28% by sending monthly text message reminders to save and increased savings by 43% with semimonthly reminders [108]. Similar experiments conducted with new savings account openers in Bolivia, Peru, and the Philippines also showed increased savings and a greater likelihood of attaining savings goals [109].

D.

EFFECT OF INCLUSIVE APPROACHES ON CSA SUCCESS AND SUSTAINABILITY

Research has not directly examined the relationship between inclusive features and CSAs' success or longevity. However, to the extent that inclusive features improve LMI families' uptake and engagement with accounts, these features are likely to improve public and political perception of CSAs [69, 110].

The relationship between inclusivity and success depends on each CSA initiative's goals. Direct contact with staff, additional incentives, and wraparound services can increase participation and engagement for LMI families, but these are costly and often not scalable. Funds spent on staff

salaries, marketing, and incentives cannot be spent on higher seeds or matches. Additionally, more easily scalable savings account platforms such as 529s can be less appealing and accessible to LMI families [104, 105].

Summary and Conclusion

Savings and other assets are associated with numerous positive outcomes for children and families, including upward mobility, higher parental expectations, higher aspirations among children, improved cognitive development, and a greater likelihood of attending and completing college [19, 20, 24, 26-29, 39, 40]. Yet, more than half of families with children (52%) are asset-poor, meaning they do not have enough savings to live at the federal poverty level for three months without an income [1], let alone pay for higher education. In recent years, policymakers have increasingly recognized that asset-building is an important component of economic wellbeing and mobility, and hence a key part of social welfare policy. Several cities and states are investing in CSAs as an avenue to help families build savings and to reduce barriers to higher education for children from low-income families. As CSAs become more widespread, it is important to evaluate the features and design elements of these policies and programs to improve future outcomes. CSAs can be universal or targeted; they can be opt-in or automatic; and they can provide seeds, matches, and other incentives. While the research is not yet conclusive on some of these features, we can draw a few conclusions about the connections between CSA design and outcomes, as noted in Table 2. These findings illustrate that tradeoffs between types of incentives are quite likely, due to limited resources.

There is strong evidence of a positive relationship between automatic enrollment and participation, between a high match limit and participant savings, between seed deposits and account accumulation, and between high-touch services

and LMI family engagement. Absent automatic enrollment, a simple opt-in procedure is also associated with greater participation rates. Other relationships are less clear. For example, the connections between seed deposits and participation or between universal accounts and program success have not been conclusively determined. Additional research is needed to evaluate these relationships. Future research should also consider variables like the age of children at enrollment (e.g., birth or kindergarten), the length of time over which performance is tracked, and the larger economic conditions under which the CSA was operating. Evaluations currently underway of Promise Indiana, Prosperity Kids, San Francisco K2C, and Maine HACC may shed light on some of these questions [111].

Additionally, most of the CSA features highlighted in this document are not simply binary (e.g., is there a seed or not?) but instead can be evaluated on a spectrum, based on the extent to which they are incorporated (e.g., if there is a seed, how much is it, and is it progressive?). For instance, a CSA's success may vary not only with the mere presence of matching funds, but with the rate, timing, and cap on matching funds, and this may need to be evaluated in combination with other features. Further analysis is needed to identify degrees of integration for each feature. Beyond these CSA levers, it is also important to consider the programmatic context in which CSAs operate. As noted, in some CSAs, the savings account is bundled with other programmatic components that may bolster LMI students' academic success, such as mentoring, college visits, and college planning [25]. Some CSAs are part of "college promise" initiatives, which typically pledge to provide tuition assistance to students who meet eligibility criteria. Additional research is needed to understand how CSAs interact with other supports and contextual factors. Ultimately, architects of CSAs will need to make informed decisions based not only on the research available, but on the initiative's goals and resources and the greater community context.

TABLE 2: OUTCOMES AND TRADEOFFS OF KEY CSA FEATURES

FEATURES	OUTCOMES			TRADEOFFS
	Participation	Engagement	Success and sustainability	
Universal enrollment	<ul style="list-style-type: none"> + Near 100% participation + Greater participation among LMI children 	<ul style="list-style-type: none"> + Higher savings rates than 529s nationally + Opportunities for engagement through financial education - Potentially lower engagement than opt-in programs. More research is needed. 	<ul style="list-style-type: none"> + Promising public support for universal enrollment - Impact on account accumulation inconclusive - Having too many dormant accounts can be costly, leading to risk of program cancellation 	<ul style="list-style-type: none"> • Tradeoff between universalism and progressiveness
Seed	<ul style="list-style-type: none"> - Impact on participation rates inconclusive 	<ul style="list-style-type: none"> - Effect on participant savings inconclusive + Seed may have positive effects on other kinds of participant engagement 	<ul style="list-style-type: none"> + Positively associated with account accumulation (often a hallmark of CSA success) 	<ul style="list-style-type: none"> • Often tradeoff among funding available for match, seed, and benchmark incentives
Match	<ul style="list-style-type: none"> + Higher match rates may boost LMI participation 	<ul style="list-style-type: none"> + Match is associated with greater participant savings + Match cap has a positive impact on participant savings - Relationship between match rates and participant savings is inconclusive 	<ul style="list-style-type: none"> - Higher match caps do not significantly affect account accumulation 	<ul style="list-style-type: none"> • Often tradeoff among funding available for match, seed, and benchmark incentives
Benchmark incentives	<ul style="list-style-type: none"> + Improve participation in the incentivized activity - Relationship with participation inconclusive 	<ul style="list-style-type: none"> + May increase engagement by incentivizing financial education - Do not appear to increase participant savings 	<ul style="list-style-type: none"> + Associated with higher account accumulation 	<ul style="list-style-type: none"> • Often tradeoff among funding available for match, seed, and benchmark incentives • Can be administratively burdensome
Inclusive approaches	<ul style="list-style-type: none"> + Inclusive features (e.g., simple application, one-to-one contact with staff) increase LMI participation 	<ul style="list-style-type: none"> + Community partnerships, accessible savings accounts, and practical incentives increase LMI engagement and savings rates 	<ul style="list-style-type: none"> + Important for the message of expanding economic opportunity - Relationship between inclusive features and CSAs' success has not been studied 	<ul style="list-style-type: none"> • May be a tradeoff between inclusivity and universal enrollment because many inclusive program features are not easily scalable

There is strong evidence of a positive relationship between automatic enrollment and participation, between a high match limit and participant savings, between seed deposits and account accumulation, and between high-touch services and LMI family engagement.

Appendix: Methods

Although this is not a comprehensive review of all literature on Children's Savings Accounts, it aims to give an accurate view of the field. Based on a preliminary scan of the literature, the authors identified a list of CSA program features, including universality, enrollment process, financial incentives, and inclusive practices. Using these features as a starting place, the authors conducted an in-depth search of the literature to identify the features within these domains that were associated with outcomes of interest, including participation, engagement, and program success and sustainability. Sources were compiled by searching on Google Scholar and Brandeis Library OneSearch for scholarly papers, reports, and evaluations of existing CSA policies and programs. The authors then used the reference sections of these sources to identify other sources. Previous reviews of CSA programs such as Lewis and Elliot (2015), Lassar et al. (2011), and Butrica (2015) also provided a helpful starting place to identify reliable sources. Research from the Center on Assets, Education, and Inclusion (AEDI); Center for Social Development; and the New America Foundation provided a base for theoretical relationships and rationales for CSAs. Once sources were identified, the authors categorized the key findings by feature (universal enrollment, seed, match, benchmark incentives, inclusive approaches) and outcome (participation, engagement, success and sustainability). In cases where relationships between variables have not been studied for CSAs, the authors examined literature on outcomes related to IDA programs or other investment tools.

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