



# GAO

Government Accountability Office

New Mexico Office of the State Auditor

November 2017

## Investing in the Future: Child Savings Accounts House Memorial 64 Working Group Report

*The Office of the State Auditor convenes a working group to examine statewide expansion of Child Savings Accounts program*

In New Mexico poverty is at the heart of nearly every challenge we face. Child Savings Accounts (CSAs) are savings vehicles that combine education and incentives to encourage economically disadvantaged youth to save money. In New Mexico, the Prosperity Kids™ program, administered by the non-profit organization Prosperity Works, has been developing and maintaining CSAs since 2014 as a pilot program. Prosperity Kids™ establishes accounts for children with an opening amount of \$100, matches one-to-one up to \$200 per year for 10 years, and allows parents to earn benchmark deposits for completing activities associated with child development and academic achievement. The program incorporates both account funding and financial training, which builds wealth and creates a college-going identity for children and their families. In addition, the program establishes emergency savings accounts for parents so that if there is a health crisis or the car breaks down, they have resources other than their children's accounts.

Participants in Prosperity Kids™ are saving money at record rates, with 47% of New Mexico's account holders making a contribution to the CSA. Recognizing the strong positive impact of the Prosperity Kids™ program, the New Mexico State Legislature passed [House Memorial 64](#), sponsored by Representative G. Andres Romero, during the 2017 Regular Session. The Memorial charged the Office of the State Auditor (OSA) with convening a working group "to investigate partnership opportunities and permanent funding sources, including the possibility of assessing a fee for financial products licensure that could be applied to teaching financial literacy and the expansion of the Prosperity Kids™ program statewide." It further requests that the HM 64 Working Group "make policy and legislative recommendations to the fifty-third legislature [in 2018]."

Beginning in August of 2017, the OSA began working with a group of experts ("HM 64 Working Group") from the financial and education sectors, officials from state and local government, and individuals engaged in work focused on asset building and financial literacy throughout New Mexico. (See [Appendix 1](#) for meeting agendas.) This Report summarizes the findings and ideas resulting from those efforts and identifies the next steps proposed by the HM 64 Working Group. The HM64 Working Group found that:

- CSAs are a proven tool for combating poverty with bipartisan appeal and a wide range of benefits, including increasing school performance, saving for college, increasing financial literacy, establishing bank accounts that help families avoid predatory lenders, and creating emotional wellbeing.
- CSAs need public funding, together with private sector funding, to be expanded sustainably statewide.
- Possible funding sources for CSAs include allocations from the Tobacco Settlement Program Fund, a tax refund program, revenue diversion programs, and local funding initiatives.
- Moving forward, Prosperity Works will garner support and develop legislation to move toward statewide expansion of the CSA program.

### *Child Savings Accounts in a nutshell*

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CSAs are savings vehicles that combine education and incentives to encourage economically disadvantaged youth to save money. Often seeded with initial deposits, CSAs allow deposits from children and parents, and sometimes third parties. Matching funds ideally leverage these investments. Withdrawals are usually permitted for post-secondary expenses and other investments after graduation.

### *Why expand Child Savings Account programs statewide?*

Child Savings Account (CSA) Programs Work. Research indicates that children with CSAs are immediately more engaged in school, outperform their peers in social-emotional development and are ahead in language arts by third grade and math by fifth grade. These children are four times more likely to go to post-secondary education and three and a half times more likely to complete that education than children with no such account. Mothers of these children have 50% fewer depressive symptoms. Specifically, a study of the Prosperity Kids™ program revealed that participating families are saving for their children's futures early and often, with 47% of the accounts receiving family contributions. The majority of families participating in Prosperity Kids™ are economically disadvantaged. About 84% of participants were eligible for free or reduced-price lunch and 68% reported household incomes of less than \$25,000 per year. This, coupled with the high reported savings rates, demonstrates that families commit substantial investment in a child's post-secondary future, with significantly limited resources, when they have access to financial institutions.

CSA Programs Work Better With Sustained Funding. Research indicates that CSA participation increases over time. Families with younger children demonstrated greater asset accumulation, reflecting commitment to a child's long-term future even when high school graduation is up to a decade away. Foundations and private investment options are an important part of any CSA program, and are excellent options for pilot programs and research. However, grant-based funding sources can be less reliable long-term. Similarly, private investment can be more sporadic, sometimes fluctuating with market trends, and private support can be withdrawn at any time. Given the wide range of benefits and the importance of ending poverty in our State, CSAs appear to be a worthwhile investment of public funds.

CSAs have Bipartisan Support. Just about every elected official wants to make a positive impact on the lives of children. Because they combine education, assistance and personal accountability, CSAs have experienced support from a wide range of politicians. Rick Santorum, the former Republican senator for Pennsylvania, stated that CSAs "would give low-income children in particular a sense of ownership, a stake in the American economy, and a source of wealth to help them through life in a manner similar to a federal employee's Thrift Savings Account." In contrast, Senator Chuck Schumer, a Democrat from New York, has emphasized that CSAs "help middleclass Americans build assets and savings instead of more debt." Other elected officials who have supported CSAs as part of their broader political platforms include Gina Raimondo (D), Rhode Island's former state treasurer and current governor; Deb Goldberg (D), treasurer for the Commonwealth of Massachusetts; and Dan Schwartz (R), Nevada's state treasurer.

CSAs Can Be Part of a Larger Economic Development Strategy. CSAs are a long-term investment in the quality of the workforce. While it is widely acknowledged that higher education is a realistic path to escape from poverty, for many children living in poverty, a high school diploma is a "stretch goal." With an expected 90% of newly created jobs requiring a college degree by 2025, it is imperative that New Mexico focus now on the opportunity that child savings accounts create to increase college educational attainment as an essential element of a state's workforce development. Simply put, CSAs help connect the dots between where we are and where we want to be as a State workforce.

CSAs Help Families Get "Banked" and Avoid Predatory Lenders. A 2013 "National Survey of Unbanked and Underbanked Households" by the Federal Deposit Insurance Corporation indicated that 10.9% of New Mexico households, over 86,000 households, do not use banks or credit unions for financial transactions. CSAs get families into the bank or credit union system. Having a checking and savings account is an important first step in establishing that the family has the financial acumen to apply for credit for a car or home. It also permits families to use direct deposit and automatic transfers to savings. In addition, having bank accounts is part of a strategy for avoiding costly alternative financial services and enabling families to build and protect their wealth. The Prosperity Kids™ program's unique pairing of an Emergency Savings Account with the Child Savings Account makes it an even better program for improving financial literacy and creditworthiness.

CSAs Reduce College Debt. In 2013, the Federal Reserve Bank of New York reported student loan debt was the only form of consumer debt that had grown since the peak of consumer debt in 2008. Student debt

has significant negative impact on states: people with high amounts of student loan debt delay purchasing a first home and have less disposable income. CSAs established at birth with a modest initial deposit (\$50–\$100), contributed to regularly and benefiting from matched contributions, can be expected to produce significant account balances by age 18. While the current financial aid model provides significant financial support to millions of aspiring college students, CSAs represent a meaningful complement to the existing financial aid system.

### *CSAs in New Mexico*

The Prosperity Kids™ program, administered by the non-profit organization Prosperity Works, provides the opportunity for families to develop and maintain child savings accounts. The program creates CSAs with initial funding and an opportunity for additional matching funding, into which the children of families in a child development training program are automatically enrolled. The program creates emergency savings accounts for parents, with a match of up to \$100 annually for five years for parental activities that support healthy outcomes for their children. A secure credit card is also attached to these accounts. Funds are available for post-secondary education upon high school graduation or GED completion. If not used, the funds are available for stable transition into adulthood at age 23. (See Appendix 2 for background information on the Prosperity Kids™ program.)

The project originally launched as a pilot program, in collaboration with the Rio Grande Credit Union. It started with 13 schools, 521 children and 240 families in southeast Albuquerque in 2014. Families completed 10 weeks of child development and community leadership training, after which they had an account opened with \$100 in seed money.

The Prosperity Kids™ program is unique as it incorporates both the account funding and financial training, which builds wealth but also creates a college-going identity for the children and their families. Of the cohorts studied by researchers throughout the country, New Mexico kids come from the poorest families, yet the program leads the nation in savings rates.

### *Benefits of CSAs*

Early research of CSA programs throughout the country revealed positive effects on social-emotional learning, on math and reading scores, and on parents' expectations about their children going to college. Researchers have also seen positive effects with respect to college graduation. Regarding post-college outcomes, children with CSAs are more likely to have savings and assets later in life than children who did not save early in life. Therefore, CSAs have both short and long-term financial impacts on children's outcomes. The durability of these impacts appears robust.

Research indicates that children with a CSA are immediately more engaged in school, outperform their peers in social-emotional development and are ahead in language arts by third grade and math by fifth grade. These children are four times more likely to go to post-secondary education and three and a half times more likely to complete that education than children with no such account. Furthermore, mothers of these children have 50% fewer depressive symptoms. (See Appendix 3 for research on CSAs and educational outcomes.)

In 2015, Dr. William Elliot III, a leading researcher in the field of CSAs, collaborated with the University of New Mexico's Center for Education Policy Research (CEPR) to launch a study of the Prosperity Kids™ program. Their research revealed that participating families are saving for their children's futures, early and often, with 47% of the accounts receiving family contributions. Additionally, savings participation seems to increase over time and analysis revealed greater asset accumulation by families with younger children, reflecting commitment to a child's long-term future even when high school graduation is up to a decade away. Also notable is that the majority of families participating in Prosperity Kids™ are economically disadvantaged. About 84% of participants were eligible for free or reduced-price lunch and 68% reported household incomes of less than \$25,000 per year. This, coupled with the high reported savings rates, demonstrates that families commit substantial investment in a child's post-secondary future, with

significantly limited resources, when they have access to financial institutions. (See Appendix 4 for research on the Prosperity Kids™ program.)

Before college, these effects are stronger among low-income and younger children. Research suggests that families who enrolled when their children were younger had more time to change expectations and build an orientation to saving. Qualitative analysis of the Prosperity Kids™ program reveals that participation makes saving for college a financial priority and builds a college-saving identity among children and their parents. Additionally, due to the structure of the program, parents recruit each other and hold each other accountable to their savings goals, creating positive peer pressure and a shared commitment to saving.

*Budgeting for Statewide Expansion of a CSA Program*

Budgeting for statewide expansion of a CSA program is two-fold, including the establishment of accounts and the funding of the program over time.

**Prosperity Kids™ Program Budgeting, by Enrollment Cohorts\***

| <b>Program Component</b>   | <b>All children in NM</b> | <b>Children born on Medicaid</b> |
|--|---------------------------|----------------------------------|
| Number of children per cohort  | 26,000                    | 18,460                           |
| Year 1: Seed Money (\$100 per account)                                     | \$2,600,000               | \$1,846,000                      |
| Year 1: Parent Education and Training (\$108 per indigent participant)     | \$1,993,680               | \$1,993,680                      |
| Year 1: Program Administration   | \$242,480                 | \$242,480                        |
| Year 1: Emergency Savings Seed (\$10 per indigent account)                 | \$184,600                 | \$184,600                        |
| <b>Year 1 total</b>  | <b>\$4,836,160</b>        | <b>\$4,082,160</b>               |
| Year 2: Seed Money (\$100 per account)                                     | \$2,600,000               | \$1,846,000                      |
| Year 2: Match money assuming 50% contribution rate at full \$200           | \$2,600,000               | \$1,846,000                      |
| Year 2: Parent Education and Training (\$108 per new indigent participant) | \$1,993,680               | \$1,993,680                      |
| Year 2: Program Administration   | \$242,480                 | \$242,480                        |
| Year 2: Emergency Savings Seed (\$10 per indigent account)                 | \$184,600                 | \$184,600                        |
| Year 2: Emergency Savings Match assuming 30% match at full \$100           | \$553,800                 | \$553,800                        |
| <b>Year 2 total</b>  | <b>\$7,436,160</b>        | <b>\$6,112,760</b>               |
| Year 3 Total   | \$11,143,760              | \$8,881,760                      |
| Year 4 Total   | \$12,478,600              | \$11,724,600                     |
| Year 5 Total   | \$15,026,080              | \$14,272,080                     |
| Year 6 Total   | \$17,019,760              | \$16,265,760                     |
| Year 7 Total   | \$19,013,440              | \$18,259,440                     |
| Year 8 Total   | \$21,007,120              | \$20,253,120                     |
| Year 9 Total   | \$23,000,800              | \$22,246,800                     |
| Year 10 Total and Every Year After Year 10                                 | \$24,994,480              | \$24,240,481                     |

\* Estimated costs are presented based on the assumption that about half (50%) of the families within a cohort contribute to their Child Savings and Emergency Savings Accounts and utilize the program's benefits.

Approximately 26,000 children are born each year in New Mexico, referred to here as a “birth cohort.” To fund a CSA in the first year for each child in a birth cohort with \$100 in seed money would cost \$2.6 million. Some states, like Maine, provide accounts for all children born in the state, regardless of income. Other programs target indigent families, whom we define as those children born on Medicaid in New Mexico. Medicaid pays for approximately 71% of births in New Mexico each year. To fund a CSA in the first year for each child born on Medicaid in a birth cohort with \$100 in seed money would cost \$1.8 million in the first year. In addition to the seed money, fixed costs associated with training, emergency savings accounts and program administration would bring the total cost to \$4.8 million for all New Mexico births or \$4 million for all New Mexico children born on Medicaid.

In the second year, assuming at least half of the indigent population within the cohort fully utilize the program’s benefits, the cost is an estimated \$7.4 million. This figure includes all matching funds and incentive match funds for the first cohort, but also the initial seed and program administration costs for the next incoming birth cohort. Given that about 47% of families are saving as of today, the \$7.4 million amount could realistically be lower upon implementation, but the program would ideally be funded to meet the full commitment of program guidelines. Notably, these figures increase each year, accounting for new birth cohorts entering the program, but cap off at year 10, when the program ends for participants.

### *Funding Mechanisms*

The HM64 Working Group proposed and weighed a variety of possible financing mechanisms to establish and fund the statewide expansion of the Prosperity Kids™ program. While the HM 64 Working Group discussed a variety of possibilities to meet its goals, the options presented here are those which the group determined the most feasible, given the current legal and budgetary landscape in New Mexico. (See Appendix 5 for other funding options reviewed and dismissed by the HM 64 working group.) Below is a summary of what each of those mechanisms is, detailing how each works to meet the group’s goals.

The HM64 Working Group acknowledges that sources of funding may need to be different for funding seed money, matching contributions and program costs. The sources of funding may also need to be different for CSAs for families living in poverty and for other families who would be covered in a program designed for all New Mexico children.

Child Support Savings Initiative: State child support arrears accrue when a child relies on public assistance, the costs for which the state then attempts to recoup from the noncustodial parent. This could include time spent in foster care, receipt of TANF, participation in Medicaid or other public support. Many states have initiated reforms to leverage those debts in the form of amnesty programs, support for noncustodial parents, interest modification or wage garnishment. (See Appendix 6 for the Department of Health and Human Services Report on Arrearage Compromise.) For example, in New Mexico, the Human Services Department administers the Fresh Start program, through which the State compromises the debt owed both to the State and the noncustodial parent.

Some states have begun leveraging state-owed child support arrears to establish and maintain CSAs. For instance, the State could compromise a portion of a noncustodial parent’s arrears to the State by requiring the money to go into a CSA instead of to the State. Because the Fresh Start program is already in place, the Human Services Department may be the best state agency to administer such an initiative.

Local Government Initiatives: Many local governments have dedicated funds or sources of revenue to establishing CSAs for children living in their communities. For example, the City of Lansing, Michigan, is contributing general funds toward a public-private collaboration aiming to create a universal, automatic savings structure for children in Lansing in order to improve academic outcomes, increase access to the financial mainstream, and increase asset building for Lansing’s future generations. The City of Oakland, California has set aside funds to phase in college savings accounts for every kindergartner in the city. The All kindergarteners in the City of San Francisco, California start with a CSA administered by the City Treasurer’s office, the revenues for which come from licensing, parking and moving violation fees. (See

Appendix 7 for a list of other CSA programs and funding mechanisms used by state or local governments throughout the U.S.)

Private Donations and Grants: The HM64 Working Group discussed that Prosperity Works will continue to seek funds from individuals, corporations, banks, foundations and other non-governmental sources.

Revenue Diversion Programs: In a revenue diversion program, a state or local government designates a stream of revenue that could be used to fund CSAs. For example, in the City of St. Louis, the City Treasurer's Office is leading the CSA initiative and is responsible for all aspects of the program, including funding, coordination, outreach, and account access and data management, known as "College Kids." The Treasurer's Office of Financial Empowerment administers the program and has engaged with other elected officials in the planning process. College Kids automatically opens accounts savings accounts for all students attending kindergarten in a St. Louis Public district or charter school. The deposit-only savings accounts are seeded with \$50 from the Treasurer's Office. The Treasurer's Office provides the initial \$50 seed deposit. Funds are provided by the net proceeds of the Parking Division, of which the Treasurer is supervisor. Funds for matches and incentives are raised privately through individual donors, foundations, and corporate support.

This type of initiative could occur at the state or local level. Possible sources of revenue include fines or fees from a variety of sources or payments from developers who receive industrial revenue bonds or Local Economic Development Act funds. The HM64 Working Group evaluated whether any fines or fees assessed by the Financial Institutions Division or Securities Division of the Regulation and Licensing Department would be appropriate for diversion, but concluded those sources were inadequate.

Social Impact Bonds: The HM64 Working Group considered, but ultimately rejected, the concept of social impact bonds for funding CSAs. Social impact bonds are essentially a debt finance tool, in which the lender funds a social program and agrees to take the risk of the program failing in exchange for a relatively high rate of return if the program succeeds. The government that borrows the funds must be able to identify a source of funds for repayment of the bonds, usually funds budgeted but saved as a result of the social program. Programs that are compatible with social impact bonds have goals that are associated with discrete monetary savings, such as lower recidivism, fewer appearances in drug court or lower emergency room utilization. CSAs have a proven track record, which means that a social impact bond would be more likely to require repayment of significant interest. Also, CSAs are not associated with a discrete amount of savings. Unfortunately, CSAs are not appropriate for social impact bonds. (See Appendix 8 for materials on social impact bonds.) The group discussed that a local government might consider traditional debt financing (bonding) to fund a CSA, but would likely consider this too risky.

Tax Refund Program: The HM 64 Working Group considered a tax program for parents who deposit into CSAs. Such a program presents an opportunity for New Mexico to aid ordinary families in the same way we already aid businesses with programs like the Refundable Film Tax Credit. In the Refundable Film Tax Credit program, people doing film projects in New Mexico can receive a 25% refundable credit on direct and post-production expenses. New Mexico does not require an application fee, pre-qualification or submission of a distribution plan from the production company. The production receives a cash refund (like a rebate) for the full qualifying amount, with no brokering required, when a state return is filed. The Taxation and Revenue Department sends a check or deposits the amount into the filing entity's bank account. If the company has a tax liability in New Mexico, the liability is offset by any approved credit amount.

In a CSA refundable credit program, a parent who indicates that they deposited an amount of money into a CSA would be able to claim that amount (up to a defined maximum) as a refundable credit. If the parent has tax liability in New Mexico, that liability would be offset by any approved credit amount. The Taxation and Revenue Department would deposit directly into the CSA any remaining credit amount. Note that the total maximum annual program cost for CSAs is less than the Refundable Film Tax Credit available to *just one production* that is New-Mexico based and meets certain other criteria.

**Tobacco Settlement Permanent Fund:** The Legislature established the Tobacco Settlement Permanent Fund under NMSA 1978, Section 6-4-9(A), as a fund that receives New Mexico's share of proceeds from a Master Settlement Agreement between tobacco companies and a number of states. The State Investment Council (SIC) invests the money in the Tobacco Settlement Permanent Fund ("Tobacco Permanent Fund"). As of March 31, 2017, the Tobacco Settlement Permanent Fund had over \$146 million.

The Legislature established the Tobacco Settlement Program Fund ("Tobacco Program Fund") under NMSA 1978, Section 6-4-9(B) to receive annual distributions from the Tobacco Permanent Fund. Annual settlement payments of about \$40 million flow to the SIC from the Tobacco Permanent Fund, and about that same amount is transferred to the Tobacco Program Fund. Half of that (about \$20 million) is earmarked for tobacco cessation and health programs. The other half can be appropriated by the Legislature. For example, pursuant to NMSA 1978, Section 6-4-9, the Legislature directed a one-time annual distribution from the Permanent Fund to early childhood education programs and the lottery scholarship in 2014. In addition, pursuant to NMSA 1978, Section 6-4-10, money may be appropriated from the Program Fund for "health and educational purposes." In the event of a general fund shortfall, the Legislature can appropriate directly from the Tobacco Permanent Fund to the State's General Fund. The Master Settlement Agreement with tobacco companies did not limit how states spend the funds. (See Appendix 9 for materials on the Tobacco Settlement Permanent Fund.)

There are two main routes to accessing the Tobacco Settlement funds for purposes of expanding the CSA Program. The HM 64 Working Group considered requesting an amendment to NMSA, Section 6-4-9, to include a required distribution from the Tobacco Program Fund to a state agency that would assist in the administration of a CSA program. This would be more reliable than an annual appropriation, as it would not require reauthorization each year. Given that the statute contained specific distributions in Fiscal Year 2014, the Legislature may be open to this concept.

The second route the HM 64 Working Group considered is to establish a CSA program within a specific state agency and then work with the Legislative Council Service and legislators to request an appropriation from the Tobacco Program Fund each year. This route might be easier to accomplish than passing an amendment to the statute, but it may also be less stable because the Legislature would need to continue to make the appropriation regularly.

Either of these approaches requires identification of a department and fund to which the distribution would be made, such as the State Treasurer, New Mexico Finance Authority, Department of Workforce Solutions, Children, Youth and Families Department, Human Services Department or Public Education Department. Similarly, both approaches would require a contractual agreement between the department and a nonprofit that would run the program, like Prosperity Works, to reduce the burden of creating an administrative structure for the program within that department.

#### Learn More

For more information on Child Savings Accounts, visit: [Asset Funders Network](#)

For more information on the Prosperity Kids™ program, visit: [Prosperity Kids™](#)

For research on the Prosperity Kids™ program, visit: [Prosperity Kids 2017 Savings Brief](#)

For information on other CSA programs throughout the U.S., visit: [City-led CSA Learning Collaborative](#)

For more information on student loan debt, see: [Federal Reserve Bank of New York](#)

For more information on Unbanked and Underbanked Households, see: [Federal Deposit Insurance Corporation's National Household Survey](#)

Funding Mechanisms: Feasibility by Program Components

| Criteria                                   | Programs                         |                         |                              |                            |                    |                                  |
|--|----------------------------------|-------------------------|------------------------------|----------------------------|--------------------|----------------------------------|
|  | Child support savings initiative | Local government grants | Private donations and grants | Revenue diversion programs | Tax Refund program | Tobacco Settlement Program funds |
| Feasible in 1-4 years?                     | —                                | ✓                       | ✓                            | —                          | —                  | —                                |
| Stable revenue?                            | ✗                                | ✗                       | ✗                            | ✗                          | ✗                  | —                                |
| Adequate revenue for statewide expansion?  | ✗                                | ✗                       | —                            | ✗                          | ✗                  | ✓                                |
| Appropriate for indigent families?         | —                                | ✓                       | ✓                            | ✓                          | —                  | ✓                                |
| Appropriate for non-indigent families?     | ✗                                | —                       | —                            | —                          | ✓                  | —                                |
| Appropriate for seed and matching funding? | —                                | ✓                       | ✓                            | ✓                          | ✓                  | ✓                                |
| Appropriate for programmatic funding?      | ✗                                | ✓                       | ✓                            | ✓                          | ✗                  | ✓                                |



Very likely



Possible



Not likely

*Data Challenges*

Although data on the impact of CSAs is critical to obtaining funding from any source, there are substantial limitations to the data collected for CSA research in New Mexico. For instance, very little data is analyzed by racial or ethnic indicators because student data is often not disaggregated by such measures. As the program expands, obtaining longitudinal and comprehensive data on impacts and outcomes will be increasingly important.

During HM 64 Working Group meetings, Dr. Meriah Heredia-Griego, Director of CEPR, indicated that data challenges are multilayered. There is inconsistency in collection and maintenance of student data, both at the district and state level. This makes it difficult to systematically test the impact of initiatives like CSAs on educational outcomes or make meaningful determinations about specific indicators, such as age or race and ethnicity. A comprehensive longitudinal dataset, which is accessible at all levels, would create transparency and help administrators and policymakers make informed conclusions about New Mexico's students and their educational outcomes.

### *Legal Matters*

When considering funding mechanisms, the HM 64 Working Group acknowledged certain legal issues regarding the use of public funds. During HM Working Group meetings, David Buchholtz, Esq. referred specifically to Article IX, Section 14 of the State constitution, commonly referred to as the Anti-Donation Clause. The Anti-Donation Clause restricts the ability of the State, with exceptions, to “directly or indirectly lend or pledge its credit or make any donation to or in aid of any person, association or public or private corporation.” Exceptions include the care and maintenance of sick and indigent persons, certain scholarship programs for veterans, loans to students of the healing arts and economic development projects for land, building and infrastructure. Relying on precedent, the HM 64 Working Group determined that the Anti-Donation clause does not preclude a state-funded Child Savings Account program that is structured appropriately.

- **Contractual Agreements:** Entering into an agreement with an organization like Prosperity Works, in which the government is contracting for a service (in this case, the Prosperity Kids™ program), has historically not been interpreted to be a donation.
- **Tax credit programs, royalty arrangements, investments in business, loan participations and payments to entities in consideration for the operations of programs beneficial to the government** have generally, but not universally, been acceptable under the Anti-Donation Clause.
- **Indigent Persons Exception:** This exception has been interpreted to cover a range of issues with respect to the Anti-Donation Clause. In regards to a statewide CSA program, “indigent” is a definition used to determine which children and families will participate in the Prosperity Kids™ program. Historically the exception has not been formally interpreted to cover a benefit to all individuals, though, so funding the seed money for every child born each year would unlikely be covered by such an exception.

### *Next Steps*

After assessing all of the research and proposed financing mechanisms presented in its meetings, as well as considering legislative strategy and feasibility, the HM 64 Working Group developed some next steps for the upcoming 2018 and subsequent legislative sessions. These steps can serve as a framework for determining which proposed recommendations will most effectively meet the primary goals set forth in House Memorial 64: expanding the CSA program statewide to serve all children in New Mexico and permanently funding the program.

With these legal considerations in mind, Prosperity Works will continue to work toward statewide expansion of the CSA program through the following:

- Assessing legislative avenues through which to approach statewide expansion of the program.
- Identifying potential state agencies or departments through which funds would flow and program management would occur.
- Identifying sponsors for potential legislation and a three-year legislative strategy.
- Working with the sponsors and Legislative Council Service to prepare proposed legislation.
- Determining if enabling legislation or model ordinances for revenue diversion or other local programs would be appropriate and working to develop those tools.
- Collaborating with state agencies and CEPR to evaluate how to assemble comprehensive and meaningful data to shed light on the program’s impact and provide valuable information for future funding sources. As discussed above, this data is not consistently collected or accessible across the district and state levels, but it could become so through legislative direction to agencies, such as the Public Education Department or the Department of Health.

## Acknowledgements

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- Dr. William Elliot III, University of Michigan
- Dr. Steven Dubb, Nonprofit Quarterly Magazine
- Joseph Antolin, J.D., Asset Funders Network

HM 64 Working Group members:

- Timothy Keller, New Mexico State Auditor
- Tim Eichenberg, New Mexico State Treasurer
- Steve Moise, New Mexico State Investment Officer
- Diane Gibson, Albuquerque City Councilor
- Dr. Richard J. Bailey, President of Northern New Mexico College
- Charles Wollmann, Director of Communications and Legislative Affairs, State Investment Council
- David Craig, Director of School Budget and Finance Analysis Bureau, Public Education Department
- Christopher Moya, Director of Financial Institutions Division, Regulation and Licensing Department
- Sarita Nair, General Counsel & Chief Government Accountability Officer, Office of the State Auditor
- Mike Athens, Vice President of Operations, Rio Grande Credit Union
- David Buchholtz, Esq., Board Member, Prosperity Works
- Jill Geltmaker, Vice President of Strategic Initiatives, Prosperity Works
- Kelcy Flanagan, President, New Mexico Society of CPAs
- John Bingaman, Lone Creek Management, LLC
- Dr. Meriah Heredia-Griego, Director, UNM Center for Education Policy Research
- Ona Porter, President and CEO, Prosperity Works
- Alan Webber, Founder, One New Mexico

## Appendices

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House Memorial 64 Working Group Meeting Agenda

September 6, 2017

9:30 am to 11:30 am

State Auditor Tim Keller, Chair

- I. Welcome and Introductions: 9:30 – 9:40
- II. Opening Remarks: 9:40 – 9:50 (State Auditor Tim Keller)
- III. Background & Presentations: 9:50 – 10:50
  - a. Goal of the working group in House Memorial 64 – Ona Porter (5 mins)
  - b. Prosperity Kids™ program: Power and Opportunity – Ona Porter (15 mins)
  - c. Research on child savings accounts (CSAs) – Dr. William Elliot III (20 mins)
  - d. Why public financing is important – Ona Porter (10 mins)
  - e. Q & A (10 mins)
- IV. Steps to meet the working group's goals: 10:50 – 11:20
  - a. What are the characteristics of an appropriate revenue stream to expand the CSA program?
    - i. Connection to mission or substance of child savings program
    - ii. Adequate revenue
    - iii. Minimal or predictable fluctuation from year to year
    - iv. What else?
  - b. Possibilities Considered and Dismissed by Planning Group – Sarita Nair (5 mins)
  - c. What are the possible sources of recurring revenue?
    - i. Dedicated taxes
    - ii. Licensing fees
    - iii. Fines and penalties
    - iv. Transactional cost
    - v. What else?
- V. Next Steps: 11:20 – 11:30

House Memorial 64 Working Group Meeting Agenda

October 11, 2017

9:30 am to 11:30 am

State Auditor Tim Keller, Chair

- I. Welcome and Summary of First Meeting: 9:30 – 9:40
  - a. Introductions
  - b. September 6<sup>th</sup> Meeting Minutes
  
- II. Proposed recommendations on funding sources: 9:40 – 10:30
  - a. Legality Issues (David Buchholtz)
  - b. Previously proposed funding sources:
    - i. Tobacco Settlement Fund
    - ii. Child Support Arrears
    - iii. Advance institutional pledges at college
    - iv. Set-asides from programs similar to Industrial Revenue Bonds
    - v. Tax levied on payday lenders
  - c. Other funding source recommendations
    - i. Work to Save Program
  
- III. Social Impact Bonds Presentation (Dr. Steve Dubb): 10:15 – 10:45
  - a. Background and Considerations
  - b. Q & A
  
- IV. Proposed recommendations to Legislature from Working Group: 10:45 to 11:20
  - a. Legislation and Sponsors
  - b. Timeline
  
- V. Next Steps: 11:20 to 11:30
  - a. Third working group meeting?



## Prosperity Kids

### *Child Savings Accounts for New Mexico*

- Goal:** A Child Savings Account for Every Child Born in New Mexico
- Account Type:** Custodial Account
- For the exclusive benefit of the child to:
    - Utilize for post-secondary education
    - Utilize for transition into adulthood (age 23)
- Enrollment:** Automatically Enrolled at Birth with a **\$100** Seed for the Account
- Families are able to “opt-out”
- Program:** Families are able to enroll in financial education and Abiendo Puetras
- Match Amounts:** 1:1 up to **\$200 per year** for 10 years as long as the child is in New Mexico
- Incentive Amounts:** Emergency Savings for Parents Available
- **\$10** seed
  - Incentivized up to \$100 annually for 5 years
  - Focus on parental activities that support healthy outcomes for kids
  - Account is attached to a secured credit card to build/repair credit
- Population Focus:** Child Savings Account – all children born in New Mexico
- Prosperity Kids Programming and Match Accounts – focus on children born to single-mothers



Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

# Small-Dollar Children's Savings Accounts and College Outcomes

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University of Kansas

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# Small-Dollar Children's Savings Accounts and College Outcomes

*In this paper, I examine the relationship between children's small-dollar savings accounts and college enrollment and graduation by asking three important research questions: (a) are children with savings of their own more likely to attend or graduate from college, (b) does dosage (i.e., having no account; having basic savings only; having savings designated for school of less than \$1, \$1 to \$499, or \$500 or more) matter, and (c) is having savings designated for school more predictive than having basic savings alone? I use aggregate data from the newest wave of the Panel Study of Income Dynamics (PSID) and its supplements. Propensity score-weighted findings suggest that children who have a small amount of money (e.g., less than \$1 or \$1 to \$499) designated for school are three times and two and a half times more likely, respectively, to enroll in and graduate from college than children with no account. Findings also show that having savings designated for school might have a stronger impact on children's college outcomes than having basic savings. The paper concludes by explaining how federal policies might promote children's savings and subsequent self-identification as college savers.*

**Key words:** *saving, asset-building, wealth accumulation, low-income, child development accounts, children's savings accounts, educational outcomes, college savings, college enrollment, college graduation, small-dollar accounts*

## **Highlights**

- A child with school savings of less than \$1 is approximately three times more likely to enroll in college than a child with no savings.
- A child with school savings of less than \$1 is more than four and half times more likely to enroll in college than a child with only basic savings.
- A child with school savings of \$1 to \$499 before reaching college age is almost two and half times more likely to graduate from college than a child with no savings.
- Wealth-building policies to improve college enrollment and graduation rates might have positive effects even when children save only small amounts.
- When examining whether a school savings program is effective, enrollment and graduation outcomes might be equal or better indicators of saving behaviors or amounts saved.
- If one of the main goals is to improve children's college enrollment and graduation outcomes, programs that create separate school accounts or encourage children to designate a portion of savings for school might be more effective than programs that promote saving without encouraging children to link savings mentally to college.

## Introduction

In 1991, Michael Sherraden proposed Child Development Accounts (CDAs) as a way to create an inclusive and accessible opportunity for lifelong savings and asset building. Specifically, CDAs have the potential to serve as a policy vehicle to allocate both intellectual and material resources to low- and moderate-income (LMI) children. Allocation of resources to LMI children is important because of disparity in the abilities of LMI parents and high-income (HI) parents to invest in their children. For example, Kornrich and Furstenberg (2010) find that Americans at the upper end of the income spectrum spend nine times as much per child as low-income families do. In their study, spending includes childcare, education, clothes, toys, and other child-related costs, investments that appear to matter for children's educational outcomes.

Entwisle, Alexander, and Olson (2005) find that differences in economic resources drive much of the racial-ethnic attainment gap. Controlling for other factors, minority and White students are equally likely to be enrolled in two- or four-year colleges at age 22. Baily and Dynarski (2011) examine two generations of students: those born from 1961 to 1964 and those born from 1979 to 1982. By 1989, one third of the HI students in the first generation had finished college. By 2007, more than half of the second generation had done so. However, only 9% of the low-income students in the second generation had completed college by 2007.

Finding ways to allocate additional assets to LMI children might be particularly important. Elliott (2013) finds that children living in liquid and net worth asset-poor families have lower academic achievement scores, high school graduation rates, college enrollment rates, and college graduation rates than children living in families that are asset sufficient. He concludes, "a bifurcated welfare system, with income-based programs for poor families and asset-based programs for higher income families, provides higher income families with an educational advantage over low-income families and might ultimately help exacerbate educational inequalities in America" (p. 15). Moreover, Elliott and Friedline (2012) find that 41% of students from low-income (\$0 to \$20,000) families report paying for college with family contributions while 81% of students from HI (\$100,001 or higher) families report paying for college with family contributions.

Given the disparities in investment in children by income level and the impact of having assets on college completion rates, finding ways to allocate resources—especially assets—to LMI children for human capital development appears worthwhile. Since 1991, when CDAs were first proposed, Singapore, the United Kingdom, South Korea, and Canada have initiated CDA policy efforts (Loke & Sherraden, 2009). In the United States, CDAs have been discussed as a promising asset-based approach for helping children think about their futures and prepare for college, but they have yet to be adopted at the national level. However, a number of legislative proposals have been developed, including the America Saving for Personal Investment, Retirement, and Education (ASPIRE) Act, Young Savers Accounts, 401Kids Accounts, Baby Bonds, and Portable Lifelong Universal Savings Accounts (Cramer, 2010).

The ASPIRE Act is an example of what a large, universal children's savings account effort would look like. ASPIRE would create Lifelong Savings Accounts for every newborn with an initial \$500 deposit and opportunities for financial education. Children living in households with incomes below the national median would be eligible for an additional contribution of up to \$500 at birth and a savings incentive of \$500 per year in matched funds. When accountholders turn 18, they would be

permitted to make tax-free withdrawals for costs associated with post-secondary education, a first-time home purchase, and retirement security.<sup>1</sup>

National interest in the potential for CDAs to provide greater access to and completion of college for more children is evident in the rapidly changing U.S. Department of Education (DOE) policy on children's savings. In November 2010, the DOE, Federal Deposit Insurance Corporation (FDIC), and National Credit Union Administration (NCUA) established a new federal partnership to encourage schools, financial institutions, federal grantees, and other stakeholders to work together to increase financial literacy, access to federally-insured bank accounts, and savings among students and families across the country.<sup>2</sup> In 2011, as part of Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), the DOE announced an invitational priority that reflected Secretary of Education Arnie Duncan's interest in financial literacy and savings as part of a plan for ensuring secondary school completion and postsecondary education enrollment of GEAR UP students. Of the 66 grants awarded, 42 included some aspect of financial literacy and savings in their applications.

On May 31, 2012, the DOE announced a new college savings account research demonstration project, which will be implemented within the GEAR UP program. The demonstration will test the effectiveness of pairing new federally supported college savings accounts with GEAR UP activities against the effectiveness of standard GEAR UP activities that do not include college savings accounts. To support the demonstration, \$8.7 million has already been allocated.

Despite the growing interest in children's savings, important questions remain unanswered. This study examines whether having only small amounts of money in savings accounts—small-dollar accounts—can have a positive effect on children's college outcomes; whether having savings specifically for school is a stronger predictor of educational outcomes than having only basic savings; and if children's savings (basic or school-designated) are associated with college graduation.<sup>3</sup>

### **Review of Research on Children's Savings and College Outcomes**

Six studies discussed below (Advisory Committee on Student Financial Assistance [ACSFA], 2006; Elliott & Beverly, 2011a; Elliott, Choi, Destin, & Kim, 2011; Elliott, Chowa, & Loke, 2011; Elliott, Constance-Huggins, & Song, 2012; Elliott & Nam, 2012) are part of a growing body of work that may be particularly informative for developing CDA policies designed to help children accumulate assets and develop their own human capital.<sup>4</sup> Before discussing specific findings on children's

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<sup>1</sup> A description of the ASPIRE Act and its provisions can be found in Cramer and Newville (2009).

<sup>2</sup> For more information, go to <http://www.ed.gov/news/press-releases/fdic-and-ncua-chairs-join-education-secretary-announce-partnership-promote-finan>.

<sup>3</sup> I would like to thank Dr. Terri Friedline for suggesting the phrase "small-dollar accounts."

<sup>4</sup> The idea of universal and progressive accounts made available at birth is being tested in a large randomized experiment called SEED for Oklahoma Kids (SEED OK). SEED OK aims to test whether (a) institutions for saving and asset accumulation can be extended successfully to the full population in a progressive rather than regressive manner and potentially over a lifetime and (b) this eventually increases savings, asset accumulation, attitudes and behaviors of parents, and attitudes, behaviors, and achievements of children (Nam, Kim, Clancy, Zager, & Sherraden, 2011). Such programs will provide a more direct test of CDA policies. However, because the accounts were opened in 2008 for newborns, researchers will not be able to test this design as it relates to college outcomes for several years.

savings and their relationship to college outcomes, it is important to provide some background information on the data used in these studies and how college outcomes and children's savings have been measured.

### Panel Study of Income Dynamics

The six studies reviewed in this paper use data from the Panel Study of Income Dynamics (PSID) and its supplements, the Child Development Supplement (CDS) and the Transition into Adulthood (TA) Study. This paper also uses data from the PSID and its supplements. The PSID, a nationally representative longitudinal survey of individuals and families, began in 1968 and collects data on employment, income, and assets. The CDS was administered to 3,563 PSID respondents in 1997 to collect a wide range of data on parents and their children aged birth to 12 years. It focuses on a broad range of developmental outcomes across the domains of health, psychological well-being, social relationships, cognitive development, achievement motivation, and education. Follow-up surveys were administered in 2002, 2007, and 2009. Children are followed by the CDS until they reach age 18 but do not join the core PSID until they become economically independent around age 25. The TA was designed to fill the gap between ages 18 and 25, an important time of life when youth decide whether to go to work or college.<sup>5</sup> The TA measures outcomes for children who participated in earlier waves of the CDS and were no longer in high school. It was administered in 2005, 2007, and 2009.

While the PSID and its supplements provide one of the few opportunities researchers have to examine the potential effects of children's savings on educational outcomes, previous research on the subject has been limited to college enrollment and college progress/persistence. Until the 2009 wave of data was released, too few children in the TA had graduated from college to conduct a meaningful analysis of the relationship between savings and college graduation. *College enrollment* is measured as having ever enrolled in college at any point, and *college progress* is measured as either having graduated from college or currently being enrolled.

College enrollment and college progress are important indicators to study because they reflect steps toward college graduation. For example, Baily and Dynarski (2011) find that inequality in college persistence explains a substantial share of inequality in college completion. Children must be prepared to *enter* college and able to *persist* in college if they are to graduate. People fail to persist at every stage, so interventions that have positive effects at any point are useful, and those that have positive effects at multiple stages might be especially effective for improving children's outcomes and appealing to policymakers.

In almost all college enrollment studies using the PSID, children's savings has been measured either as a binary variable or a three-level variable. The CDS asks children between the ages of 12 and 18 whether they have a savings or bank account in their name. The children's basic savings variable divides children into two categories: (a) those who had an account in 2002 and (b) those who did not. An account here refers to a basic savings account that can be opened at a local bank or credit union. Children who answer yes are asked whether they are saving some of this money for future education. The focus of college enrollment studies primarily has been whether children have savings

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<sup>5</sup> The age ranges are not exact. Some children leave high school earlier than others, and some children achieve economic independence later than others.

for future schooling (children's school savings) (see Elliott & Beverly, 2011a; Elliott, Choi, Destin, & Kim, 2011; Elliott, Chowa, & Loke, 2011; Elliott, Constance-Huggins, & Song, 2012; Elliott & Nam, 2012). Children's school savings has been operationalized in PSID studies as a binary variable with (a) children who have no account and children with only basic savings as the reference group and (b) children who have designated a portion of their basic savings for future school. This question in the CDS does not refer to having an actual savings account for school (e.g., a state 529 account) but rather to children's mental accounting of savings, a topic that will be discussed more in the theoretical framework section of this paper.

There are two exceptions to how children's savings has been operationalized. In the first exception, researchers treat children's savings as a three-level variable instead of a binary variable (has savings/does not have savings). For example, Elliott and Beverly (2011b) use a three-level variable with children who have (a) no account, (b) basic savings only, or (c) school savings. Using a three-level categorical variable allowed Elliott and Beverly to examine whether children's basic savings and children's school savings have individual effects on college enrollment (i.e., having ever enrolled), but it does not allow for a direct test of whether basic savings or school savings has more predictive power. In a study examining children's math scores, Elliott, Jung, and Friedline (2011) suggest that having savings specifically for school purposes is likely to have a stronger effect on educational outcomes than basic savings. The evidence is mixed, however. While they find that children with basic savings have slightly higher math scores, the strength of the relationship varies by family net worth (e.g., children who live in higher net worth families score higher). In the case of school savings, the effects are the same regardless of net worth. Conversely, Elliott and Beverly (2011b) find evidence that both types of savings have a positive effect on children's college enrollment, but basic savings has a stronger effect. One reason could be that Elliott and Beverly restrict their sample to children who expect—before reaching college age—to graduate from a four-year college. They suggest this could be because when children already expect to graduate from college, having savings specifically for college matters less.

The second exception to how children's savings is measured has to do with whether basic savings has different effects when children do and do not have positive college expectations. Elliott, Choi, Destin, & Kim (2011) use the binary basic savings-only variable, but they combine it with children's college expectations to create dosages. More specifically, they create four doses: (a) children who have no savings and are uncertain whether they will graduate from a four-year college, (b) children who have basic savings only, (c) children who are certain only, and (d) children who have savings and are certain they will graduate from a four-year college. The reference group for each dosage is all other dosages. For example, the reference group for children who have basic savings only is children with no savings and are uncertain, children who are certain only, and children who have savings and are certain. The authors find when children do not expect to graduate college, basic savings is a negative predictor of college enrollment. But when children have basic savings and expect to graduate from college, having basic savings is a positive predictor of college enrollment. This supports the proposition that the type of savings they have matters less when children have positive college expectations.

Several important differences exist between accounts examined in studies using the PSID and CDAs. CDAs proposed in the ASPIRE Act and other popular education accounts (e.g., Coverdell Education Savings Accounts, Uniform Gifts to Minors Act [UGMAs], 529 college savings plans run by states, and Roth Individual Retirement Arrangements [IRAs]) offer their owners protection from

taxation, and some have infrastructures that allow for direct deposit and provide savings matches to encourage saving. Savings in these accounts typically cannot be withdrawn without taxes or penalties until youth reach college age, and withdrawals must be spent on college-related expenses. As a result, these accounts can be defined as non-liquid. Unlike users of these popular education accounts, children in this study can withdraw and use money from their accounts without penalty, but they do not benefit from tax breaks or other incentives that are common components of CDAs (e.g., initial deposits or savings matches provided by the federal government or another agency).

Moreover, the operationalization of children's savings accounts in previous PSID studies has not answered questions from the media, policymakers, and the general public. After the announcement of the GEAR UP demonstration by the U.S. Department of Education, a reporter asked if \$1,600 dollars would be enough to make a meaningful difference in a child's life. Determining whether owning an account—even if money is not deposited into it—can change children's educational outcomes would have strong implications and is an important question to address. This study will begin to examine that question.

### **College enrollment findings**

Elliott and Beverly (2011a) examine whether children aged 17–23 who have already left high school are enrolled in or have graduated from a two-year or four-year college. Being currently enrolled in or having graduated from college is defined as being *on course*. Not currently being enrolled in or having graduated from college is defined as being *off course*. On average, 57% of children in the study are on course. However, 75% of children with their own savings are on course contrasted with 45% of children without savings.

When factors such as race, family income, parent's education, and children's academic achievement are controlled for, children's savings remains an important predictor of whether or not they are on course. In fact, findings indicate that 17–23-year-old children who have savings are approximately twice as likely to be on course as their peers without savings, which implies the importance of policies promoting large-scale children's savings programs. Evidence from this study also indicates that children's savings is connected with having a more positive college-bound identity, which shapes decisions about whether or not to remain on course. Policies that promote children's savings may reduce fears that financial barriers will prevent them from staying on course.

Elliott, Constance-Huggins, and Song (2012) ask whether the effects of savings for children's on college progress differ between LMI (below \$50,000) children and HI (\$50,000 or above) children. Findings indicate that only 35% of LMI children are on course compared to 72% of HI children. Regarding children's savings, 46% of LMI children with their own accounts are on course, while only 24% of LMI children without their own accounts are.

When factors such as parents' expectations and school involvement, family income, and children's academic achievement are controlled for, the presence of children's savings remains an important predictor of whether or not LMI children are on course. However, having savings is not an important predictor for HI children, which suggests that HI children are confident in their parents' ability to pay for college. LMI children, however, may see their families being unable to pay bills, buy a washer and dryer, or afford groceries. An important implication is that using public funds to target

LMI children may be more impactful because these children may be more influenced to stay on course by the presence of a savings account than HI children would be.

Elliott and Nam (2012) examine whether there are differences in effects of children's savings by race.<sup>6</sup> In particular, they examine whether or not Black and White children are on course. Among Black students, only 37% are on course compared to 62% of White students. When similar factors as those in the previous two studies are controlled for, Black and White children who have savings are about twice as likely to be on course as their counterparts without savings. This finding may be particularly important for Black children, who experience higher amounts of debt upon graduating from college on average. Twenty-seven percent of Black young adults who graduated from a four-year college in 2007–08 finished with \$30,500 or more of debt in comparison to 15% of their White counterparts (Baum & Steele, 2010). Evidence shows that large levels of debt increase college dropout rates among Black students (Somers & Cofer, 2000). Therefore, having savings likely would lessen the debt load carried by a disproportionate number of Black students.

The ACSFA (2006) examines the effect that financial constraints have on actual college attendance by identifying children who expect to attend college but do not do so soon after graduating from high school. Elliott and Beverly (2011b) call this phenomenon “wilt.” In this study, wilt is used to describe the experience of children who have not attended a four-year college by 2005 despite holding expectations in high school in 2002 that they would attend and graduate. Findings from this study indicate that 55% of children without accounts of their own experience wilt, while only 20% of children with accounts do. After controlling for a variety of factors—including academic achievement—findings show that children who expect to graduate from a four-year college and have an account are about six times more likely to attend college than those who expect to graduate from a four-year college but do not have an account. Moreover, when children's savings are added to the model, academic achievement is no longer statistically significant, which implies that desire and ability alone may not be enough for children to attend college. In an earlier report to Congress, ACSFA (2001) draws a similar conclusion stating, “Make no mistake, the pattern of educational decision making typical of low-income students today, which diminishes the likelihood of ever completing a bachelor's degree, is not the result of free choice. Nor can it be blamed on academic preparation” (p. 18).

Elliott, Choi, Destin, and Kim (2011) examine whether having savings leads to more positive expectations or whether more positive expectations lead to children having savings. This is an important question related to the potential of CDAs to have indirect effects. While this study could not establish a causal link between children's savings and their expectations for college, it does provide evidence that having savings might lead to more positive college expectations among children. However, the most accurate interpretation might be that two-way causation exists (i.e., children's savings leads to more positive college expectations, and more positive college expectations leads to children having savings of their own).

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<sup>6</sup> However, an important limitation of the PSID and CDS is that low-income families are disproportionately represented among Black households, and very few high-income Black households are included in the sample. As a result, findings using samples of Blacks only are probably more indicative of low-income Blacks than all Blacks.

Elliott, Chowa, and Loke (2011) build on Elliott, Choi, Destin, and Kim (2011) and ask whether a combined approach that promotes children's savings and positive college expectations is more effective than either strategy alone. To test this, the study divides children into four groups: (a) those with no school savings who are uncertain before leaving high school whether they would graduate from a four-year college, (b) those who have school savings and are uncertain before leaving high school whether they would graduate from a four-year college, (c) those who have no school savings and are certain before leaving high school they would graduate from a four-year college, and (d) those who have school savings and are certain before leaving high school they would graduate from a four-year college. Findings support the hypothesis that having savings is more effective when children expect to graduate from college.

## Summary

Overall, findings from these studies suggest that programs promoting children's savings have a positive effect on children's college enrollment. Evidence to date suggests that positive effects are more likely to occur for LMI children than HI children. There appears to be a point at which household income is high enough that having savings makes no statistical difference in whether children have graduated from college or are currently progressing toward graduation. This may be because beyond a certain income threshold, children do not doubt that their families will be able to pay for college. Findings also suggest that having a stake in college (i.e., owning savings) has a positive effect on Black children's college progress.

## Small-Dollar Accounts Can Create Psychological Effects

In this section, I use theories of mental accounting and identity-based motivation (IBM) to lay out a theoretical framework for understanding how small-dollar accounts can lead to positive educational outcomes. I also begin to describe why we might expect *basic* savings to have different effects on children's educational outcomes than *school* savings. I conclude by stating the primary research questions that flow from this framework and are examined in this study.

## Mental accounting

Mental accounting has been described as the process of dividing current and future money into different categories to monitor spending (Thaler, 1985). Behavioral economists suggest that people use mental accounting techniques to think about different pots of money, which affects when and how they use it (Kahneman & Tversky, 1979; Lea, Tarpy, & Webley, 1987; Thaler, 1985; Winnett & Lewis, 1995; Xiao & Anderson, 1997). In other words, different mental or physical accounts have different purposes and meanings that affect how people deposit money into the accounts and use it (Winnett & Lewis, 1995). However, I suggest that the process of creating mental accounts might affect formation of actionable identities, which in turn might help explain how small-dollar accounts can positively affect children's educational outcomes.<sup>7</sup>

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<sup>7</sup> Oyserman and Destin (2010) suggest children do not always act on an identity.

## Explaining the effects of small-dollar accounts and the role of IBM

IBM is a theory about how identities are formed and which identities people will act on. IBM theorists suggest that three principal components affect the relationship between self-conceptions and motivation and give significant attention to how social and cultural context drives the process. The three core principles of IBM include (a) identity salience, (b) congruence with group identity, and (c) interpretation of difficulty (Oyserman & Destin, 2010). Salience is the idea that children are more likely to work toward a goal when images of their own future are at the forefront of their mind. Congruence with group identity occurs when an image of the self feels tied to ideas about relevant social groups (e.g., friends, classmates, family, and cultural groups). When this occurs, the congruent personal identity is reinforced. IBM theorists highlight the importance of having a means for normalizing and overcoming difficulty. From this perspective, in order for children to sustain effort and work toward a self-image (e.g., college-bound), they and their environment must provide ways to address inevitable obstacles (e.g., financing college). These principles have been found to be important predictors of children's school behaviors (Oyserman & Destin, 2010).

The IBM framework can be used to understand how designating small amounts of money for school (mental accounting) can lead to positive educational outcomes. How might this happen? I suggest that the mental accounting categorization process (i.e., designating savings for school) helps children manifest abstract conceptions of the self (e.g., college-bound). According to the principles of IBM—identity salience, congruence with group identity, and interpretation of difficulty—mentally designating savings for college, regardless of the amount, indicates that college is the child's goal and expectation and the child sees saving as a relevant behavioral strategy for overcoming the difficulty of paying for college. Even small-dollar accounts may signal to a child that financing college is possible despite the high cost because the child may be considering future expected savings not current savings. From this perspective, expected savings might be as important as current savings—or at least a sufficient reason—for believing that college is within reach and requires current action.<sup>8</sup> Finally, designating money for college indicates that children recognize that people like them can go to college and that they are ready to take action to fulfill the college-bound identity.

### Basic savings versus school savings

As stated in the research review section, children's savings measured in studies using the PSID and its supplements are not in school-specific accounts but rather in basic savings accounts that children have designated mentally for school purposes. The process of mentally designating savings for school leads to the formation of what I refer to as a college-saver identity. Being a college saver indicates—more accurately than being college bound—that the child has identified saving as a strategy to attain the future goal of college attendance. Distinguishing between having a college-bound identity and a college-saver identity acknowledges that children can perceive of themselves as being college-bound without having a strategy for overcoming the difficulty of paying for college (i.e., they might not have linked saving to college or may not be able to trust that their families will pay for college).

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<sup>8</sup> For more information about the concept of future expected savings, see Sherraden (1991).

When children mentally designate savings for college, they are more likely to have made the link between saving and paying for college. While I cannot directly test this proposition in this study, evidence suggests that children's savings programs might help children link saving to paying for college. Elliott, Sherraden, Johnson, and Guo (2010) find that the proportion of second graders in a comparison group who mentioned savings as important (20%) was approximately the same as that of second graders in a treatment group (23%) in a children's savings program called "I Can Save." By fourth grade, I Can Save children far more commonly mentioned savings as being important to their ability to finance college (74%) than comparison group children (25%). The embedded process or strategy in this case is most simply stated by a lower income student who said, "Well, I'm going to pay for [college], because I have my own bank account" (Elliott et al., 2010, p. 6). When children designate savings for school, they are more likely to see themselves as being college-bound, but I posit that the college-saver identity is a better predictor of not only college attendance but also *completion*.

A body of literature suggests that low-income and minority children who expect to attend college often fail to enroll (Elliott & Beverly, 2011b; Schneider & Stevenson, 1999; Trusty, 2000). According to Elliott and Beverly (2011b), children who have *college-saver* identities are much more likely to act on them than those with only *college-bound* identities without a strategy. This suggests that not all identities are equally actionable.

A potentially important difference exists between being in a children's savings program and simply designating savings for school. Unlike a savings program in which children might be signed up by their parents or see it as an opportunity to spend time with friends, designating money for college involves thinking actively about college and saving (i.e., identity salience), understanding that others like the child go to college (i.e., group congruence), and viewing college as an important goal and saving as a way to pay for it (i.e., interpretation of difficulty as normal). In this way, designation of money for college appears to align with the three main principles of IBM.<sup>9</sup>

For the purpose of this study, I assume that children who have designated savings for school have made the link between saving and paying for college. In contrast, I do not assume that a child with a basic savings account who does not report designating some money for college sees saving as a way to pay for college or that college is important.<sup>10</sup> Basic savings accounts can be opened and used for many different purposes. Therefore, I posit savings designated for school should be more closely associated with educational outcomes than basic savings.

### **Situation sensitivity – the financial context and why children save**

IBM theorists suggest that while children act in ways that fit their possible selves, identities are highly situation sensitive. It might be that before and after the process of categorization (i.e., formation of an identity as a college saver) takes place, the level of financial need helps provide the situational context for actual allocation of earnings to mental accounts (see Xiao & Anderson,

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<sup>9</sup> For information about IBM and school engagement, see Oyserman and Destin (2010).

<sup>10</sup> This might suggest that CDA programs need to develop financial education curriculums, for example, or build in other ways that help children adopt mental accounting techniques.

1997).<sup>11</sup> This helps explain why children might not save (or designate savings from) current income in their school savings account or might save very little. As described by Xiao and Anderson (1997), Maslow contends that people will attempt to fulfill higher level needs (e.g., by saving for college education) only after lower level needs (e.g., purchasing groceries and paying bills) have been met. From this perspective, needs are categorized into two types: deficit (e.g., lower level) needs and growth (e.g., higher level) needs. People seek to fulfill their deficit needs first and then begin to direct their behavior toward fulfilling growth needs. Building on Maslow's theory, Xiao and Anderson (1997) identify three categories of financial need based on tolerance for risk taking: survival needs, security needs, and growth needs. The categories are based on research conducted by Xiao and Noring (1994), who find that low-income consumers are more likely to report saving for daily expenses (survival needs), middle-income consumers are more likely to report saving for emergencies (security needs), and high-income consumers are more likely to report saving for growth.

Assuming various financial accounts can be used to represent different financial needs, I posit that savings vehicles designated exclusively to growth needs (e.g., education) may have less of an impact than basic savings accounts on the saving behavior of children in disadvantaged households. This is not to suggest that disadvantaged children do not perceive the value of fulfilling growth needs but rather that their actual saving behaviors are likely to reflect a need to fulfill survival needs.

This raises questions about whether amount saved is the right variable to study when evaluating the effectiveness of children's savings accounts for improving college outcomes. Evidence suggests that having an account might be as important as the amount in the account for children's college outcomes. Jackson (1978) finds that simply receiving a financial aid award can be more influential in whether a child enrolls in college than the amount of the award. In this study, I examine the potential of small-dollar accounts—not the amounts in them—to have positive effects on children's college outcomes.

### **Research Questions**

The following three research questions flow out of the theoretical framework outlined above: (a) are children with savings of their own more likely to attend or graduate from college, (b) does dosage (i.e., having no account; having basic savings only; or having designated savings for school of less than \$1, \$1 to \$499, or \$500 or more) matter, and (c) is designating savings for school more predictive than having basic savings alone?

### **Methods**

#### **Data**

This study uses data from the PSID and its supplements, the CDS and TA, which are discussed in more detail earlier in this paper. The three data sets are linked using PSID, CDS, and TA map files containing family and personal ID numbers. The linked data sets provide a rich opportunity for

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<sup>11</sup> Before and after identity formation takes place, financial need may affect the process and help determine what mental categories are formed. After they are formed, it also might affect decisions about into which account current savings should be allocated.

analyses in which data collected at an earlier point in time can be used to predict outcomes at a later point in time and stable background characteristics can be used as covariates. Because the PSID initially oversampled low-income families, all analyses using the full sample were weighted using the last observed weight variable as recommended by the PSID manual (Institute for Social Research, 2007).

### Sample data

The 2009 TA sample consists of 1,554 participants. The sample in this study is restricted to Black and White youth because only small numbers of other racial groups exist in the TA. The sample also is restricted to children who were 14 to 19 years old in 2002 so they would be old enough to have graduated college by 2009. Our final sample consists of 857 children and their families.

In the final TA weighted sample, approximately 19% of children are Black, 29% of heads of households have a four-year college degree, and 48% of families are low income (below \$50,000). Approximately 73% of children enrolled in college, while only 26% graduated. Less than 50% had school savings, and the mean amount saved for school was \$386.57. Table 1 provides descriptive data for the sample.

Table 1. Descriptive statistics ( $N = 857$ )

| Categorical variables                     | Non-weighted    |            | Weighted        |            |
|---|-----------------|------------|-----------------|------------|
|   | Number          | Percentage | Number          | Percentage |
| Black                                     | 404             | 47         | 163             | 19         |
| Female                                    | 460             | 54         | 442             | 52         |
| Married                                   | 553             | 65         | 641             | 75         |
| Region of the country in 2003             |                 |            |                 |            |
| Northeast                                 | 122             | 14         | 173             | 20         |
| West                                      | 228             | 27         | 244             | 29         |
| North central                             | 397             | 46         | 276             | 32         |
| South                                     | 110             | 13         | 161             | 19         |
| Household head's education level          |                 |            |                 |            |
| High school or less                       | 472             | 55         | 400             | 47         |
| Some college                              | 198             | 23         | 204             | 24         |
| Four-year degree or more                  | 187             | 22         | 251             | 29         |
| Family income                             |                 |            |                 |            |
| Low- and moderate-income (below \$50,000) | 512             | 60         | 411             | 48         |
| High-income (\$50,000 or above)           | 345             | 40         | 444             | 52         |
| Child's savings dosages                   |                 |            |                 |            |
| No account                                | 407             | 48         | 318             | 37         |
| Only basic savings                        | 152             | 18         | 196             | 23         |
| Savings for school w/less than \$1        | 100             | 12         | 115             | 13         |
| Savings for school w/\$1 to \$499         | 90              | 11         | 93              | 11         |
| Savings for school w/\$500 or more        | 108             | 13         | 133             | 16         |
| College enrollment                        | 575             | 67         | 623             | 73         |
| College graduation                        | 175             | 20         | 224             | 26         |
| Continuous variables                      | Mean (median)   | SD         | Mean (median)   | SD         |
| Child's age (2002)                        | 16.11 (16.10)   | 1.52       | 16.11 (16.02)   | 1.50       |
| Academic achievement                      | 203.31 (200.00) | 31.44      | 211.43 (209.00) | 31.19      |
| Parents' education level                  | 13.03 (12.00)   | 2.25       | 13.43 (13.00)   | 2.36       |
| Household size                            | 3.88 (4.00)     | 1.29       | 3.85 (4.00)     | 1.21       |
| Log of family income                      | 9.26 (10.62)    | 3.73       | 9.85 (10.87)    | 3.28       |
| IHS net worth                             | 7.92 (11.12)    | 7.33       | 9.31 (11.70)    | 6.48       |
| Log of liquid assets                      | 5.09 (7.49)     | 5.84       | 6.53 (8.37)     | 5.19       |
| Children's school savings amount          | 386.57 (0.00)   | 1,106.86   | 386.57 (0.00)   | 1,106.86   |

*Note:* Data from the PSID and its supplements are used. Data imputed using the chained regression method. Data are weighted using 2009 Transition into Adulthood weight.

### Variables

The variable of interest in this study is children's savings, created using 2002 CDS data. The CDS asks children between the ages of 12 and 18 whether they have a physical savings or bank account in their name. The children's basic savings variable divides children into two categories: (1) those who had an account in 2002 and (2) those who did not have an account. Children with accounts were asked whether they were saving some of this money for future schooling (i.e., whether they had mentally set aside some savings for school). Children who replied yes were asked the amount of savings they had for future schooling between \$.01 and \$9,997.99. Using the two children's savings variables and the amount saved for school variable, I created five treatment groups, or doses, similar to Imbens' (2000) multiple-dose treatment approach (see also Guo & Fraser, 2010). The doses are children with (a) no savings, (b) basic savings only, (c) school savings of less than \$1, (d) school savings of \$1 to \$499, and (e) school savings of \$500 or more.

#### *Outcome variables*

The two outcome variables in this study are college enrollment and college graduation. College enrollment is operationalized as whether or not a child had ever enrolled in college by 2009 (1 = yes; 2 = no). College graduation measures whether a child had graduated from college by 2009 (yes = 1; no = 0). In this study, college refers to either a two- or four-year college.

#### *Control variables*

There are 11 control variables used in this study, including child's age in 2002, child's race (1 = Black; 0 = White), child's gender (female = 1; male = 0), child's academic achievement, head of household's marital status in 2003 (1 = married; 0 = not married), head of household's education level in 2003, household size in 2003 (continuous variable), region of the country in which the family lived in 2003, log of household income, inverse hyperbolic sine of household net worth, and log of liquid assets.

*Log of household income.* The log of household income was created using income variables from 1989, 1994, 1999, 2004, and 2009 and inflated to 2009 price levels using the Consumer Price Index (CPI). Income variables were averaged across all five years, and average income was transformed using the natural log transformation to account for the skewedness of the variable.

*Inverse hyperbolic sine of household net worth.* Household net worth is a continuous variable that sums all assets, including savings, stocks/bonds, business investments, real estate, home equity, and other assets and subtracts all debts, including credit cards, loans, and other debts as reported in the 1989, 1994, 1999, and 2001 PSIDs. I use the inverse hyperbolic sine (IHS) transformation (Kennickell & Woodburn, 1999), which allows for the existence of negative values and more clearly demonstrates changes in wealth distribution (Kennickell & Woodburn, 1999). The natural log transformation does not.

*Head of household's education level.* In the PSID, the head of household's education level is a continuous variable (1–16) with each number representing a year of completed schooling.

*Region.* This variable captures the region in which a child's family lived at the time of the 2003 interview, including the Northeast, North Central, South, and West regions of the country.

Northeast includes Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. North Central includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. South includes Alabama, Arkansas, Delaware, the District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. West includes Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. The Northeast region is the reference group for this study.

*Academic achievement.* This is a continuous variable that combines math and reading scores. The Woodcock Johnson (WJ-R), a well-respected measure, is used by the CDS to assess math and reading ability (Mainieri, 2006). In descriptive analysis, I use a dichotomous variable indicating whether children had average, above-average, or below-average achievement. Average and above-average achievement are coded as 1, and below-average achievement is coded as 0.

*Child's age.* Age in 2002 is a continuous variable. In the descriptive analysis, a dichotomous variable indicates whether children were 16 years old or younger (coded as 0) or older than 16 years (coded as 1) in 2002.

## Analysis plan

I conducted four stages of analysis in this study. In stage one, I completed missing data using the *da.norm* function in R (R Development Core Team, 2008), which simulates one iteration of a single Markov chain regression model. The iteration consists of a random imputation of the missing data given the observed data and current parameter value, followed by a draw from the parameter distribution given the observed data and imputed data (Shafer, 1997). Missing data can lead to inaccurate parameter estimates and biased standard errors and population means, resulting in inaccurate reporting of statistical significance or non-significance (Graham, Taylor, & Cumsille, 2001).

Remaining analyses were conducted using STATA version 12 (STATA Corp, 2011). In stage two, I conducted propensity score weighting with multi-treatments/dosages to balance selection bias between those who were exposed to having savings and those who were not, based on known covariates (Guo & Fraser, 2010; Imbens, 2000). More specifically, I created five groups: (a) children with no savings; (b) children with basic savings only; (3) children with school savings of less than \$1; (d) children with school savings of \$1 to \$499; and (e) children with school savings of \$500 or more. Next I estimated a multinomial logit regression that predicted multi-group membership using the 11 covariates in this paper. All variables were included in the multinomial logit regression because all had a positive correlation with the outcome variables (Guo & Fraser, 2010). The resulting coefficient estimates were used to calculate propensity scores for each group. The inverse of that probability was used to create the propensity score weight.

In stage three, I tested covariate imbalance after weighting. Since propensity score weighting does not use matching, I ran a weighted simple logistic regression or an ordinary least squares (OLS) regression depending on whether the dependent variable (i.e., child's age, race, gender, head of household's marital status, head of household's education level, household size, region lived in, log of family income, (IHS) net worth, and log of liquid assets) was dichotomous or continuous with

savings dosage as the independent variable (Guo & Fraser, 2010). Those with no account were the reference group. Results from simple logistic regressions and OLS regressions are reported in Table 3. Information is reported before and after weighting using unadjusted and adjusted models.

In stage four, I used logistic regression as the primary analytic tool to assess statistical significance for the overall relationship between each dose separately and the outcome variable with and without propensity score weights. Children with no savings are the main comparison group. That is, the primary question is whether having savings is more closely associated with the outcomes than not having savings. However, separate models were estimated by rotating the dosage that served as the reference group. This was done to determine whether one dosage was more closely associated with the outcomes than another. I provided measures of predictive accuracy through the McFadden's pseudo  $R^2$  (not equivalent to the variance explained in multiple regression model, but closer to 1 is also positive). I also reported odds ratios (OR) for easier interpretation. The odds ratio is a measure of effect size, describing the strength of association.

## **Results**

Findings from the covariate balance checks are discussed in the first part of this section, followed by logistic regression results for college enrollment and college graduation. However, only findings from propensity score adjusted models are discussed. Propensity score analysis allows researchers to balance potential bias between, for example, children exposed to having savings and those who are not, based on known covariates (Rosenbaum & Rubin, 1983). Until recently, propensity score methods have been limited to two-group situations, such as a single treatment and a comparison group. However, Imbens (2000) extends the method to multi-group situations (see Guo & Fraser, 2010). Because of selection effects in observational data, propensity score analysis is a more rigorous statistical strategy to estimate effects than a conventional regression or regression-type model. For this reason, I discuss findings from adjusted models only (Berk, 2004). Further, I report findings for controls only when using no savings as the reference group to save space because there are no meaningful differences when the reference group is changed among controls.

### **Bivariate results from covariate balance checks**

Results from balance checks are presented in Table 2. In the unadjusted sample, almost all covariates show significant group differences regardless of the dosage. After propensity score weighting, group differences are no longer significant in almost all cases, which suggests that weighting is successful in reducing bias among observed covariates. For those with school savings of \$500 or more, academic achievement, marital status, family size, and net worth remain significant, which suggests that attempting to generalize findings from results for children with \$500 or more should be done with caution.

Table 2. Covariate balance of dosages of children's savings (no account, basic savings only, school savings of less than \$1, school savings of \$1 to \$499, and school savings of \$500 or more) after adjusting for propensity score weight ( $N = 857$ )

|                                    | Before weighting                     |             | After weighting |             | Before weighting                      |             | After weighting |             |
|------------------------------------|--------------------------------------|-------------|-----------------|-------------|---------------------------------------|-------------|-----------------|-------------|
|                                    | No account/Basic savings             |             |                 |             | No account/Account with less than \$1 |             |                 |             |
|                                    | <i>B</i>                             | <i>S.E.</i> | <i>B</i>        | <i>S.E.</i> | <i>B</i>                              | <i>S.E.</i> | <i>B</i>        | <i>S.E.</i> |
| Child's age in 2002                | 0.332**                              | 0.143       | 0.288 *         | 0.172       | -0.286*                               | 0.168       | 0.611*          | 0.312       |
| Black                              | -1.699****                           | 0.213       | -0.176          | 0.262       | -1.530****                            | 0.244       | 0.522           | 0.370       |
| Child is female                    | 0.031                                | 0.190       | -0.215          | 0.248       | 0.713***                              | 0.235       | -0.441          | 0.407       |
| Academic achievement               | 17.537****                           | 2.820       | 0.373           | 4.767       | 21.048****                            | 3.311       | -3.620          | 5.927       |
| Married                            | 0.961****                            | 0.211       | 0.082           | 0.259       | 1.105****                             | 0.258       | -0.030          | 0.438       |
| Head of household's education 2003 | 1.123****                            | 0.175       | 0.098           | 0.283       | 1.043****                             | 0.201       | -0.104          | 0.319       |
| Family size in 2003                | -0.291*                              | 0.170       | -0.088          | 0.203       | 0.106                                 | 0.198       | 0.278           | 0.471       |
| Region                             | -0.223***                            | 0.084       | -0.015          | 0.098       | -0.143                                | 0.099       | 0.176           | 0.111       |
| Log of family income               | 1.457****                            | 0.349       | 0.574 *         | 0.345       | 1.367***                              | 0.409       | 0.674           | 0.428       |
| IHS net worth                      | 4.031****                            | 0.675       | 0.714           | 1.282       | 3.625****                             | 0.793       | 1.272           | 0.845       |
| Log of liquid assets               | 2.807****                            | 0.323       | 0.089           | 0.473       | 2.887****                             | 0.379       | -1.248          | 0.852       |
|                                    | No account/Account with \$1 to \$499 |             |                 |             | No account/Account with \$500 or more |             |                 |             |
|                                    | <i>B</i>                             | <i>S.E.</i> | <i>B</i>        | <i>S.E.</i> | <i>B</i>                              | <i>S.E.</i> | <i>B</i>        | <i>S.E.</i> |
| Child's age in 2002                | 0.230                                | 0.176       | -0.020          | 0.237       | 0.326**                               | 0.163       | -0.456          | 0.371       |
| Black                              | -0.948****                           | 0.237       | 0.543           | 0.312       | -1.500****                            | 0.235       | 1.938           | 0.694       |
| Child is female                    | 0.504**                              | 0.239       | -0.434          | 0.328       | 0.116                                 | 0.217       | -0.849          | 0.985       |
| Academic achievement               | 19.906****                           | 3.456       | -9.253**        | 5.364       | 25.634****                            | 3.211       | -39.703****     | 16.217      |
| Married                            | 0.744***                             | 0.251       | -0.395          | 0.362       | 1.260****                             | 0.259       | -2.079***       | 0.744       |
| Head of household's education 2003 | 0.800****                            | 0.211       | 0.421           | 0.484       | 1.494****                             | 0.198       | 0.427           | 0.604       |
| Family size in 2003                | -0.584***                            | 0.213       | -0.296          | 0.307       | 0.060                                 | 0.192       | -2.415***       | 0.844       |
| Region                             | -0.163                               | 0.103       | 0.181           | 0.128       | -0.099                                | 0.096       | 0.047           | 0.362       |
| Log of family income               | 1.695****                            | 0.427       | 0.245           | 0.610       | 1.386***                              | 0.397       | 0.314           | 0.253       |
| IHS net worth                      | 2.683***                             | 0.827       | 0.997           | 1.066       | 3.971****                             | 0.769       | -12.494***      | 3.692       |
| Log of liquid assets               | 2.399****                            | 0.395       | -0.851          | 0.711       | 3.136****                             | 0.367       | -1.341          | 0.490       |

*Note:* Weighted data from the PSID and its supplements are used and imputed using the chained regression method. To conserve space, I present imbalance checks only using the reference: no accounts. This is the comparison of most interest in this study. The weights (adjusted) are based on the propensity scores (or predicted probabilities) calculated using the results of the multinomial logit model. Comparison groups consist of all children not in the dose category. Estimates are propensity score-adjusted using the weighting scheme in Guo and Fraser (2010) (see also Foster, 2003; Imbens, 2000). The propensity score weights are based on the propensity scores (or predicted probabilities) calculated using the results of the multinomial logit model.

\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ; \*\*\*\* $p < .001$ .

### Descriptive results on enrollment and graduation

Overall, the pattern is that White children, children in more educated households, and children in higher income households are more likely to enroll in college. A lower percentage of Black children (55%) enroll in college than White children (77%) (see Table 3). Similarly, a lower percentage of children in households whose heads have a high school degree enroll in college (55%) than children in households whose heads have a four-year degree (94%). Children from low-income families also enroll in college at lower rates (53%) than children from high-income families (91%).

When examining college graduation rates, the first notable observation is that few children graduate from college by 2009 regardless of demographic characteristics. Moreover, Table 3 shows that patterns of race and class disparities continue for college graduation as they did for enrollment. A higher percentage of children in high-income households (39%), White children (29%), and children in the most educated households (39%) graduate from college than children in low-income households (12%), Black children (14%), and children in households whose heads have a high school education or less (19%).

Assets appear to matter for college enrollment and graduation. Regarding enrollment, 60% of children with no account, 71% of children with only basic savings, 89% of children with school savings of less than \$1, 77% of children with school savings of \$1 to \$499, and 91% of children with school savings of \$500 or more enroll in college. Regarding graduation, 14% of children with no account, 26% of children with only basic savings, 30% of children with school savings of less than \$1 of savings for school, 31% of children with school savings of \$1 to \$499, and 49% of children with school savings of \$500 or more graduate from college.

Table 3. College enrollment and graduation in 2009 by demographic characteristics and saving dosage ( $N = 857$ )

| Covariates                                | College enrollment | College graduation |
|---|--------------------|--------------------|
|   | Percentage         | Percentage         |
| Black                                     | 55                 | 14                 |
| White                                     | 77                 | 29                 |
| Female                                    | 75                 | 29                 |
| Male                                      | 70                 | 23                 |
| Married                                   | 79                 | 31                 |
| Not Married                               | 56                 | 13                 |
| Region of the country in 2003             |                    |                    |
| Northeast                                 | 74                 | 33                 |
| West                                      | 68                 | 22                 |
| North central                             | 71                 | 24                 |
| South                                     | 82                 | 30                 |
| Head of household's education level       |                    |                    |
| High school or less                       | 55                 | 19                 |
| Some college                              | 81                 | 25                 |
| Four-year degree or more                  | 94                 | 39                 |
| Family income                             |                    |                    |
| Low- and moderate-income (below \$50,000) | 53                 | 12                 |
| High-income (\$50,000 or above)           | 91                 | 39                 |
| Child's savings dosages                   |                    |                    |
| No account                                | 60                 | 14                 |
| Only basic savings                        | 71                 | 26                 |
| Savings for school w/less than \$1        | 89                 | 30                 |
| Savings for school w/\$1 to \$499         | 77                 | 31                 |
| Savings for school w/\$500 or more        | 91                 | 49                 |

*Note.* Weighted data from the Panel Study of Income Dynamics (PSID) and its supplements are used. Data imputed using the chained regression method.

### Logit results with no savings as reference group – college enrollment

Table 4 provides unadjusted and adjusted logit models examining the relationships among different dosages of children's savings and college enrollment. In the adjusted models, controls that are statistically significant predictors of college enrollment are child's age, academic achievement, head of household's marital status, education level, region of the country, log of family income, and IHS net worth.

For each one-year increase in age, children are about 33% more likely to enroll in college ( $OR = 1.332, p < .01$ ). For each one-point increase in academic achievement scores, children are approximately 3% more likely to ever enroll in college ( $OR = 1.034, p < .001$ ). Children who live in households whose head is married are about three times more likely to ever enroll in college than

children who live in households whose head is not married ( $OR = 2.921, p < .10$ ). For each one-year increase in the head of household's education level, a child is about 26% more likely to ever enroll in college ( $OR = 1.264, p < .05$ ). A child who lives in the South is more than three times more likely to ever enroll in college than a child who lives in the Northeast ( $OR = 3.367, p < .05$ ). When controlling for all other factors, a child is 19% less likely to ever enroll in college for each log-point increase in family income ( $OR = .081, p < .01$ ). Conversely, a child is approximately 19% more likely to ever enroll in college for each one-point increase in IHS net worth ( $OR = 1.190, p < .001$ ).

Table 4. Logit examining the relationship between child's savings (no account, only basic savings, school savings of less than \$1, school savings of \$1 to \$499, and school savings \$500 or more) and college enrollment in 2009 ( $N = 857$ )

|  | Unadjusted |       |       | Adjusted  |       |       |
|--|------------|-------|-------|-----------|-------|-------|
|  | B          | S.E.  | O.R.  | B         | S.E.  | O.R.  |
| Child's age in 2002                                    | 0.066      | 0.060 | —     | 0.287***  | 0.107 | 1.332 |
| Black  | 0.545**    | 0.241 | 1.725 | 0.400     | 0.373 | —     |
| Child is female  | 0.546***   | 0.174 | 1.727 | 0.230     | 0.305 | —     |
| Academic achievement                                   | 0.040****  | 0.005 | 1.040 | 0.033**** | 0.007 | 1.034 |
| Married  | 0.717***   | 0.209 | 2.048 | 1.072*    | 0.476 | 2.921 |
| Head of household's education level in 2003            | 0.267****  | 0.051 | 1.306 | 0.234**   | 0.100 | 1.264 |
| Family size in 2003                                    | 0.070      | 0.077 | —     | -0.110    | 0.165 | —     |
| Region of the country in 2003 (Northeast as reference) |            |       |       |           |       |       |
| West   | -0.195     | 0.312 | —     | 0.309     | 0.438 | —     |
| North central  | -0.157*    | 0.297 | 0.855 | 0.174     | 0.399 | —     |
| South  | 0.719      | 0.404 | —     | 1.214**   | 0.537 | 3.367 |
| Log of family income                                   | -0.056**   | 0.040 | 0.945 | -0.214*** | 0.077 | 0.807 |
| IHS net worth  | 0.047      | 0.020 | —     | 0.174**** | 0.032 | 1.190 |
| Log of liquid assets                                   | -0.009     | 0.041 | —     | -0.032    | 0.098 | —     |
| Child's savings dosage                                 |            |       |       |           |       |       |
| No account (reference)                                 | —          | —     | —     | —         | —     | —     |
| Only basic savings                                     | -0.048***  | 0.249 | 0.954 | -0.497*   | 0.267 | 0.609 |
| Savings for school with/less than \$1                  | 0.875      | 0.317 | —     | 1.040**   | 0.432 | 2.830 |
| Savings for school with \$1 to \$499                   | 0.345**    | 0.340 | 1.412 | 0.697     | 0.498 | —     |
| Savings for school with \$500 or more                  | 0.651****  | 0.347 | 1.917 | -0.303    | 0.456 | —     |
| Child's savings dosage                                 |            |       |       |           |       |       |
| No account   | 0.048      | 0.249 | —     | 0.497*    | 0.267 | 1.643 |
| Only basic savings (reference)                         | —          | —     | —     | —         | —     | —     |
| Savings for school with/less than \$1                  | 0.923**    | 0.356 | 2.516 | 1.537***  | 0.463 | 4.649 |
| Savings for school with \$1 to \$499                   | 0.392      | 0.380 | —     | 1.193**   | 0.551 | 3.297 |
| Savings for school with \$500 or more                  | 0.698*     | 0.374 | 2.010 | 0.193     | 0.486 | —     |
| Child's savings dosage                                 |            |       |       |           |       |       |
| No account   | -0.875***  | 0.317 | 0.417 | -1.040**  | 0.432 | 0.353 |
| Only basic savings                                     | -0.923**   | 0.356 | 0.397 | -1.537*** | 0.463 | 0.215 |
| Savings for school with/less than \$1 (reference)      | —          | —     | —     | —         | —     | —     |
| Savings for school with \$1 to \$499                   | -0.530     | 0.432 | —     | -0.344    | 0.635 | —     |
| Savings for school with \$500 or more                  | -0.224     | 0.427 | —     | -1.344**  | 0.629 | 0.261 |
| Child's savings dosage                                 |            |       |       |           |       |       |
| No account   | -0.345     | 0.340 | —     | -0.697    | 0.498 | —     |
| Only basic savings                                     | -0.392     | 0.380 | —     | -1.193**  | 0.551 | 0.303 |
| Savings for school with/less than \$1                  | 0.530      | 0.432 | —     | 0.344     | 0.635 | —     |
| Savings for school with \$1 to \$499 (reference)       | —          | —     | —     | —         | —     | —     |
| Savings for school with \$500 or more                  | 0.306****  | 0.449 | 1.358 | -1.000    | 0.646 | —     |
| Child's savings dosage                                 |            |       |       |           |       |       |
| No account   | -0.651*    | 0.347 | 0.522 | 0.303     | 0.456 | —     |
| Only basic savings                                     | -0.698*    | 0.374 | 0.497 | -0.193    | 0.486 | —     |
| Savings for school with/less than \$1                  | 0.224      | 0.427 | —     | 1.344**   | 0.629 | 3.833 |
| Savings for school with \$1 to \$499                   | -0.306     | 0.449 | —     | 1.000     | 0.646 | —     |
| Savings for school with \$500 or more (reference)      | —          | —     | —     | —         | —     | —     |

Pseudo R<sup>2</sup> = 0.278 across all models      Pseudo R<sup>2</sup> = 0.562 across all models

*Note.* Weighted data from the PSID and its supplements are used. Data imputed using the chained regression method. S.E. = robust standard error. O.R. = odds ratios. For the adjusted model, estimates are propensity score-adjusted using the weighting scheme in Guo & Fraser, 2010 (see also Foster, 2003 and Imbens, 2000). The propensity score weights are based on the propensity scores (or predicted probabilities) calculated using the results of the multinomial logit model. The *B* and *S.E.* remain the same for control variables across all five models so only presented for Model I. \* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ; \*\*\*\* $p < .001$ .

Among variables of interest, having basic savings is negatively associated with college enrollment, while having school savings of less than \$1 is a statistically significant predictor of college enrollment in the adjusted model. A child with basic savings prior to reaching college age is 39% less likely to ever enroll in college than a child with no savings prior to reaching college age ( $OR = .609, p < .10$ ). A child with less than \$1 designated savings for school is about three times more likely to ever enroll in college than a child with no savings ( $OR = 2.830, p < .05$ ).

### **Dosage-specific findings – college enrollment**

Findings indicate that children with no savings accounts, savings for school of less than \$1, or savings for school of \$1 to \$499 are more likely to ever enroll in college by 2009 than children with only basic savings (see Table 4). Children with no savings are about 64% more likely to ever enroll in college than children with basic savings only ( $OR = 1.643, p < .10$ ). Children with school savings of less than \$1 are more than four and half times more likely to ever enroll in college than children with basic savings only ( $OR = 4.649, p < .01$ ). Children with school savings of \$1 to \$499 are more than three times more likely to ever enroll in college than children with basic savings only ( $OR = 3.297, p < .05$ ).

The following dosages are statistically significant when children with school savings of less than \$1 are used as the reference group: those with no account, those with basic savings only, and those with school savings of \$500 or more. Children with no accounts are nearly 65% less likely to ever enroll in college than children with school savings of less than \$1 ( $OR = 0.353, p < .05$ ). Children with basic savings only are 79% less likely to ever enroll in college than children with school savings of less than \$1 ( $OR = 0.215, p < .01$ ). Children with school savings of \$500 or more are almost 74% less likely to ever enroll in college than children with school savings of less than \$1 ( $OR = 0.261, p < .05$ ).

The only significant dosage when children with school savings of \$1 to \$499 are used as the reference group is basic savings only. Children with basic savings are about 70% less likely to ever enroll in college than children with school savings of \$1 to \$499 ( $OR = 0.303, p < .05$ ). In the final college enrollment model, I find that the school savings of less than \$1 dosage is a statistically significant predictor of college enrollment when children with school savings of \$500 or more are used as the reference group. Children with school savings of less than \$1 are almost four times more likely to ever enroll in college than children with school savings of \$500 or more ( $OR = 3.833, p < .05$ ).

### **Logit results with no savings as reference group – college graduation**

Table 5 provides information on two-year or four-year college graduation. In the adjusted models, controls that are statistically significant predictors of college enrollment are child's age, gender, academic achievement, log of family income, and IHS net worth.

For each one-year increase in age, a child is about 39% less likely to graduate from college ( $OR = 1.610, p < .001$ ). Female children are about 64% more likely than male children to graduate from college after controlling for all other factors ( $OR = 1.635, p < .10$ ). For each one-point increase in a child's academic achievement score, the child is approximately 1% more likely to graduate from college ( $OR = 1.012, p < .10$ ). For each log-point increase in family income, a child is 26% less likely

to graduate from college when controlling for all other factors ( $OR = 0.736, p < .01$ ). Conversely, for each one-point increase in IHS net worth, a child is approximately 18% more likely to graduate from college ( $OR = 1.176, p < .001$ ).

Regarding savings, only school savings of \$1 to \$499 is a statistically significant predictor of college graduation in the adjusted model. Children with school savings of \$1 to \$499 before reaching college age are almost two and half times more likely to graduate from college by 2009 than children with no savings in 2002 ( $OR = 2.394, p < .05$ ).

Table 5. Logit examining the relationship between child's savings (no account, basic savings only, school savings of less than \$1, school savings of \$1 to \$499, and school savings of \$500 or more) and college graduation in 2009 ( $N = 857$ )

|  | Unadjusted |             |             | Adjusted   |             |             |
|--|------------|-------------|-------------|------------|-------------|-------------|
|  | <i>B</i>   | <i>S.E.</i> | <i>O.R.</i> | <i>B</i>   | <i>S.E.</i> | <i>O.R.</i> |
| Child's age in 2002                                    | 0.571 **** | 0.074       | 1.771       | 0.476 **** | 0.112       | 1.610       |
| Black  | -0.092     | 0.282       | —           | -0.476     | 0.368       | —           |
| Child is female  | 0.623 ***  | 0.210       | 1.865       | 0.492 *    | 0.296       | 1.635       |
| Academic achievement                                   | 0.019 **** | 0.004       | 1.020       | 0.012 *    | 0.007       | 1.012       |
| Married  | 0.177      | 0.264       | —           | -0.155     | 0.404       | —           |
| Head of household's education level in 2003            | 0.107 **   | 0.054       | 1.113       | 0.238      | 0.151       | —           |
| Family size in 2003                                    | 0.103      | 0.093       | —           | 0.028      | 0.126       | —           |
| Region of the country in 2003 (Northeast as reference) |            |             |             |            |             |             |
| West   | -0.422     | 0.320       | —           | -0.249     | 0.370       | —           |
| North central  | -0.261     | 0.319       | —           | 0.089      | 0.382       | —           |
| South  | -0.195     | 0.355       | —           | -0.094     | 0.415       | —           |
| Log of family income                                   | -0.218 *** | 0.068       | 0.804       | -0.307 *** | 0.090       | 0.736       |
| IHS net worth  | 0.114 **** | 0.030       | 1.120       | 0.162 **** | 0.045       | 1.176       |
| Log of liquid assets                                   | 0.115 **   | 0.055       | 1.122       | 0.102      | 0.105       | —           |
| Child's savings dosage                                 |            |             |             |            |             |             |
| No account (reference)                                 | —          | —           | —           | —          | —           | —           |
| Only basic savings                                     | 0.082      | 0.304       | —           | -0.099     | 0.307       | —           |
| Savings for school with/less than \$1                  | 0.228      | 0.341       | —           | -0.364     | 0.397       | —           |
| Savings for school with \$1 to \$499                   | 0.649 *    | 0.351       | 1.914       | 0.873 **   | 0.432       | 2.394       |
| Savings for school with \$500 or more                  | 0.992 ***  | 0.308       | 2.697       | 0.531      | 0.327       | —           |
| Child's savings dosage                                 |            |             |             |            |             |             |
| No account   | -0.082     | 0.304       | —           | 0.099      | 0.307       | —           |
| Only basic savings (reference)                         | —          | —           | —           | —          | —           | —           |
| Savings for school with/less than \$1                  | 0.146      | 0.346       | —           | -0.265     | 0.407       | —           |
| Savings for school with \$1 to \$499                   | 0.567      | 0.358       | —           | 0.972 **   | 0.428       | 2.643       |
| Savings for school with \$500 or more                  | 0.910 ***  | 0.311       | 2.483       | 0.630 *    | 0.343       | 1.878       |
| Child's savings dosage                                 |            |             |             |            |             |             |
| No account   | -0.228     | 0.341       | —           | 0.364      | 0.397       | —           |
| Only basic savings                                     | -0.146     | 0.346       | —           | 0.265      | 0.407       | —           |
| Savings for school with/less than \$1 (reference)      | —          | —           | —           | —          | —           | —           |
| Savings for school with \$1 to \$499                   | 0.421      | 0.389       | —           | 1.237 **   | 0.574       | 3.444       |
| Savings for school with \$500 or more                  | 0.764 **   | 0.351       | 2.146       | 0.895 **   | 0.432       | 2.448       |
| Child's savings dosage                                 |            |             |             |            |             |             |
| No account   | -0.649 *   | 0.351       | 0.523       | -0.873 **  | 0.432       | 0.418       |
| Only basic savings                                     | -0.567     | 0.358       | —           | -0.972 **  | 0.428       | 0.378       |
| Savings for school with/less than \$1                  | -0.421     | 0.389       | —           | -1.237 **  | 0.574       | 0.290       |
| Savings for school with \$1 to \$499 (reference)       | —          | —           | —           | —          | —           | —           |
| Savings for school with \$500 or more                  | 0.343      | 0.362       | —           | -0.342     | 0.453       | —           |
| Child's savings dosage                                 |            |             |             |            |             |             |
| No account   | -0.992 *** | 0.308       | 0.371       | -0.531     | 0.327       | —           |
| Only basic savings                                     | -0.910 *** | 0.311       | 0.403       | -0.630 *   | 0.343       | 0.532       |
| Savings for school with/less than \$1                  | -0.764 **  | 0.351       | 0.466       | -0.895 **  | 0.432       | 0.409       |
| Savings for school with \$1 to \$499                   | -0.343     | 0.362       | —           | 0.342      | 0.453       | —           |
| Savings for school with \$500 or more (reference)      | —          | —           | —           | —          | —           | —           |

*Pseudo R*<sup>2</sup> = 0.261 across all models      *Pseudo R*<sup>2</sup> = 0.317 across all models

*Note.* Weighted data from the PSID and its supplements are used. Data imputed using the chained regression method. *S.E.* = robust standard error. *O.R.* = odds ratios. For the adjusted model, estimates are propensity score-adjusted using the weighting scheme in Guo & Fraser (2010) (see also Foster, 2003 and Imbens, 2000). The propensity score weights are based on the propensity scores (or predicted probabilities) calculated using the results of the multinomial logit model. The *B* and *S.E.* remain the same for control variables across all five models so only presented for Model I. \* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ; \*\*\*\* $p < .001$ .

### **Dosage specific findings – college graduation**

Findings indicate that children with school savings of \$1 to \$499 or \$500 or more are more likely to graduate from college than children with basic savings only (see Table 5). Children with \$1 to \$499 are about two and half times more likely to graduate from college than children with basic savings only ( $OR = 2.643, p < .05$ ). Children with school savings of \$500 or more are about twice as likely to graduate from college than children with basic savings only ( $OR = 1.878, p < .10$ ).

The following dosages are statistically significant when children with school savings of less than \$1 are used as the reference group: school savings of \$1 to \$499 and school savings of \$500 or more. Children with school savings of \$1 to \$499 are about three and half times more likely to graduate from college than children with school savings of less than \$1 ( $OR = 3.444, p < .05$ ). Children with school savings of \$500 or more are almost two and half times more likely to graduate from college than children with school saving of less than \$1 ( $OR = 2.448, p < .05$ ).

Having no account, basic savings only, or savings for school of less than \$1 are significant when children with school savings of \$1 to \$499 are used as the reference group. Children with no account are 59% less likely to graduate from college than children with school savings of \$1 to \$499 ( $OR = 0.418, p < .05$ ). Children with basic savings only are about 62% less likely to graduate from college than children with school savings of \$1 to \$499 ( $OR = 0.378, p < .05$ ). Children with school savings of less than \$1 are about 71% less likely to graduate from college than children with school savings of \$1 to \$499 ( $OR = 0.290, p < .05$ ).

In the final college graduation model, I find having basic savings only or school savings of less than \$1 are statistically significant predictors of college graduation when children with school savings of \$500 or more are used as the reference group. Children with basic savings only are almost 47% less likely to graduate college than children with school savings of \$500 or more ( $OR = 0.532, p < .10$ ). Children with school savings of less than \$1 are almost 59% less likely to graduate college than children with school savings of \$500 or more ( $OR = 0.409, p < .05$ ).

### **Discussion**

The DOE's announcement of a new college savings account research demonstration project to be implemented within the GEAR UP program has raised questions about whether small-dollar savings accounts can improve college enrollment and graduation rates. This study examines whether children's savings are associated with college graduation, small-dollar accounts can have a positive effect on children's educational outcomes, and having savings specifically designated for school is a stronger predictor of children's college outcomes than having basic savings only.

Consistent with previous research (e.g., Elliott & Beverly, 2011a), findings suggest that having savings is an important predictor of college enrollment. However, this paper improves upon past research by using propensity score weighting, which allows researchers to balance potential bias between children exposed to having savings and those who are not, based on known covariates (Rosenbaum & Rubin, 1983). This study also improves upon past research by measuring dosages of children's savings (no savings, basic savings only, and school savings of less than \$1, \$1 to \$499, and

\$500 or more). By doing so, I examine whether different amounts of savings—particularly small-dollar amounts—can have a positive effect on children's college enrollment outcomes.

Regarding college enrollment, findings suggest that children who have basic savings only are less likely to enroll in college than children with no savings at all. Elliott, Chowa, and Loke (2011) also find that having basic savings only is a negative predictor of college enrollment, possibly because children with basic savings who do not designate some of it for college are less likely to see college as an important or attainable goal. This implies that most children who have savings and perceive of college as important designate some of that savings for college even if they do not save large amounts. Elliott, Chowa, and Loke (2011) find that children who expect to graduate from college and have basic savings are more likely to enroll in college than children with no savings, children who expect to graduate but have no savings, and children with basic savings who do not expect to graduate.

Findings from this study also indicate that having school savings of \$1 or less increases the odds that a child enrolls in college. While this finding suggests that even very small-dollar amounts can make a difference in whether a child enrolls in college, the fact that having larger amounts is not significant raises questions about why small-dollar amounts do and larger dollar amounts do not. Having larger amounts may not be significant because children with higher amounts of savings might also have other characteristics (e.g., being high academic achievers) or external circumstances (e.g., having parents who have attended college or are high-income) that make them likely to attend college, reducing the overall effect of having savings. Elliott, Constance-Huggins, and Song (2012) use separate samples of low-income and high-income children and find that having school savings is significantly related to college progress (i.e., being currently enrolled in college or having graduated from college) among low-income but not high-income children.

Propensity score-weighted balance checks for this study also suggest that this might be the case, particularly among children with school savings of \$500 or more. Even with weighting, academic achievement, head of household's education level, family size, and family net worth remain significant predictors of having school savings of \$500 or more and are important predictors of college enrollment in previous studies. While it is not particularly surprising to find that children from more advantaged backgrounds are disproportionately represented among children who have higher amounts of school savings, it is noteworthy that when children with similar observables (e.g., live in households with similar incomes, have parents with similar education levels, and have similar levels of academic achievement) are examined, those who have a small-dollar school accounts are more likely to enroll in college than those with no accounts. Overall, these findings can be interpreted as evidence for the proposition that small-dollar school savings accounts can play an important role in increasing children's access to college.

Further, when basic school savings and school savings of less than \$1 are analyzed together, findings suggest that school savings are more likely than basic savings to positively affect children's college enrollment. However, there is more direct evidence that having savings specifically for school is a stronger predictor of children's college outcomes than having basic savings only. When basic savings is used as the reference group, having less than \$1 of school savings and having \$1 to \$499 of school savings are both positive predictors of college enrollment.

Even after controlling for children's savings, academic achievement, marital status, and head of household's education level remain consistent positive predictors of college enrollment. Previous research on net worth and college enrollment that controls for academic achievement has been mixed,<sup>12</sup> but in this study, I find that net worth is a significant predictor of college enrollment. An important difference between this study and previous research is the way net worth is measured. In this study, I use the inverse hyperbolic sine (IHS) of net worth instead of the natural log of net worth, the benefits of which are that IHS allows for the existence of negative values and can more clearly demonstrate changes in the wealth distribution (Kennickell & Woodburn, 1999), whereas the natural log transformation does not.

Interestingly, income is a negative predictor of college enrollment. That is, after controlling for all other factors, higher income children are actually less likely to enroll in college by 2009. This might be because of the way that college enrollment is measured. College enrollment includes two- and four-year college attendance, and in this sample, more children attend two-year colleges than four-year colleges. Further, research suggests that lower income children are more likely to enroll in two-year than four-year colleges (Louie, 2007). Given this imbalance, the result might be driven primarily by two-year college enrollment. The same might be true for college graduation because income is also a negative predictor of college graduation.

Regarding college graduation, I find that having small-dollar accounts is statistically significant. However, children with less than \$1 of school savings are not significantly more likely to graduate from college than children who have no savings, but children with \$1 to \$499 of savings are more likely to graduate from college than children with no savings. Practically speaking, it might not matter whether children have less than \$1 or \$1 to \$499 since neither is enough savings to pay for a single credit hour or books for one semester at most colleges. I suggest that the effects from small-dollar accounts are not based primarily on helping children pay for college but rather on the psychological effects and resultant behavioral changes.

From an IBM perspective, designating money for college involves thinking actively about college and saving (i.e., identity salience), understanding that others who are similar go to college (i.e., group congruence), and viewing college as an important goal and saving as a way to pay for it (i.e., interpretation of difficulty as normal). According to IBM theory, salience, group congruence, interpretation of difficulty as normal, are important predictors of school engagement. In turn, school engagement has been linked to positive educational outcomes (e.g., Oyserman & Destin, 2010).

### Limitations

Propensity score analyses have two clear disadvantages relative to randomized trials. One is the need to assume conditional independence (i.e., eliminate selection bias by controlling for observed covariates). This may not be true as it is impossible to know all the covariates that may influence the choice to participate in treatment. The precision of controlling for treatment choice goes as far as the covariates included in the study. In randomized trials, the researcher can be confident that the treatment group and the control group are similar in observed and unobserved characteristics.

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<sup>12</sup> For a review of these studies, see Elliott, Destin, & Friedline (2011).

Second, whereas propensity score analyses can estimate treatment effects only where there is overlap between the exposed group (e.g., that does have savings) and the unexposed group (e.g., that does not have savings), random assignment ensures that there is common support across the entire sample. These considerations make experimental techniques superior to propensity score analyses in a number of important ways.

However, randomization also has limitations of cost and time. Cost is a major concern when designing random control trials to test CDAs because providing children with initial deposits and savings matches is expensive. A large experiment called SEED for Oklahoma Kids (SEED OK) with CDAs in the state's name and youth as beneficiaries is being tested.<sup>13</sup> However, because the accounts were issued at birth in 2004, researchers will not be able to test this design as it relates to college progress for a number of years. In the meantime, CDAs have been proposed in Congress, and providing policymakers with information and using the best available data and methodology are of the utmost importance.

Another limitation of this study is the lack of variation in school savings amount. Few children have savings above \$1,000. Given this, it is hard to examine at what exact point the amount of savings matters, particularly at the high end. Ideally, researchers would be able to examine a number of different cut points, but the primary question in this study is whether or not small-dollar accounts matter for improving children's college enrollment and graduation rates. It is also important to point out that propensity score weights are less effective for school savings of \$500 or more. After weighting, academic achievement, head of household's education level, family size, and family net worth remain significant. Given this, results for school savings of \$500 or more should be interpreted with caution.

### **Policy Implications**

The results from this study indicate that policies for building children's wealth as a way to improve college enrollment and graduation might still have positive effects even when children mentally designate relatively small amounts of savings for school. Further, when examining whether a school savings program is effective, these findings suggest that savings behaviors or amounts saved might not be the best indicator. Instead, children's improvement in school (e.g., academic achievement scores, college enrollment rates, and college graduation rates) might be a better or at least equally important indicator. Findings also imply that children's savings programs that have raising college enrollment and graduation rates as their primary goal might be more successful if they either create a separate account for school purposes or encourage children to designate a portion of their savings specifically for school purposes. Encouraging this type of savings might be done as part of a financial literacy class or as a financial literacy component of a children's savings program.

### **Conclusion**

This study provides some evidence that designating money for college through a mental accounting process can have a positive effect on college enrollment and graduation even when small amounts are allocated for school. However, because of their inability to process all cognitive stimuli and limited capacity for making conscious decisions (i.e., Bargh & Chartrand, 1999), children may be

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<sup>13</sup> For more information on SEED OK, see <http://csd.wustl.edu/AssetBuilding/SEEDOK>.

unlikely to form mental accounts via conscious processes. Further, children who subsist at the level of meeting basic survival needs only may not be likely to develop strategies for financing college, even if the desire to attend is there. Formal institutions may be able to provide children with schemas, rules, norms, and routines that become embedded thought processes and can be used to develop an identity as a college saver.

According to Sherraden and Barr (2005), a formal institution within the applied social science context can be thought of as a type of intervention designed to alter behaviors and outcomes of individuals (i.e., institutional theory). As such, a national children's savings program might be thought of as a type of institution designed to help children form college-saver identities (i.e., college savings programs may encourage children to adopt future-oriented or asset-based patterns of behavior). In an analysis of institutions and rational choice, Nobel Prize winner Douglas North (2005) states, "...much of what passes for rational choice is not so much individual cogitation as the embeddedness of the thought process in the larger social and institutional context" (p. 24). Similarly, in reference to asset accumulation, Michael Sherraden (1991) observes that the middle-class, "participates in retirement pension systems...not [as] a matter of making superior choices. Instead, a priori choices are made by social policy, and individuals walk into the pattern that has been established" (p. 127). If we agree with these views, children's savings programs hold real promise for helping children not only pay for education but also develop mental accounting strategies that might lead to the development of a college-saver identity and greater engagement in school. However, more research is needed.

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**Recommended citation**

Elliott, W. (2012). *Small-dollar children's savings accounts and college outcomes* (CSD Working Paper 13-05). St. Louis, MO: Washington University, Center for Social Development.

## PROSPERITY KIDS 2017 SAVINGS BRIEF

### WHAT IS PROSPERITY KIDS?<sup>1</sup>

New Mexico's Prosperity Kids Children's Savings Account (CSA) program provides incentives, financial education, and peer support to encourage participants, most of whom are relatively low-income Latino families, to save for their children's futures. Nonprofit Prosperity Works leverages social networks and community partnerships in the Albuquerque, New Mexico area to recruit accountholders.

While the particular features are somewhat unique, Prosperity Kids evidences the hallmarks of Children's Savings Account policy: initial seed deposits, facilitated or universal account opening, savings incentives, and long-term asset ownership<sup>2</sup>. Those who open Prosperity Kids CSAs receive a \$100 initial deposit and up to \$200 in a 1:1 match for their savings per year, over ten years.<sup>3</sup> Parents may also earn benchmark deposits for completing activities associated with child development and academic achievement. As is the case in many CSA programs, these incentives are financed with a mix of philanthropic and public dollars. Prosperity Kids accounts are custodial, held by Prosperity Works until used for postsecondary education or, when the child turns 23, for 'transition to a stable adulthood', such as homeownership or entrepreneurship.

### PROSPERITY KIDS' ENGAGES DISADVANTAGED ACCOUNTHOLDERS

Encompassing aggregate indicators, New Mexico ranks 49<sup>th</sup> out of 50 states for measures of child well-being.<sup>4</sup> More than 99% of Prosperity Kids accountholders are Latino(a). While information about participants' socioeconomic status is not available directly for children not enrolled in the Albuquerque Public School system, demographic data for the subset of 296 children attending Albuquerque Public Schools demonstrates the considerable challenges facing these families. Among this subset, 57.4% were English Language Learners, 83.4% qualified for Free/Reduced Lunch, and 10.5% received some special education services. However, through Prosperity Kids, these low-income families are building assets for their children's futures.

### SAVING PATTERNS AND ASSET ACCUMULATION

Because of Prosperity Kids' initial seed deposit and opportunities to earn program

**Figure 1** Total Value of Account by Account Tenure among Savers



### CONTRIBUTION FREQUENCY

Figure 2 illustrates that saving in Prosperity Kids increases with account tenure. Specifically, those whose accounts have been open at least two years made the most frequent deposits into the accounts (3.23 deposits per quarter, compared to 1.51 for those who have had Prosperity Kids accounts for less than 12 months). Examining it more closely, about 40% of those whose Prosperity Kids accounts have been open less than twelve months are savers, compared to nearly 55% of those who have had Prosperity Kids accounts for at least 24 months.

### CONCLUSION

Prosperity Kids illustrates that low-income Hispanic/Latino families will save for college when provided with the opportunity. CSA provide that opportunity. However, future research, with this population, may also want to examine whether having access to an account also influences other outcomes such as children's expectations for college, their social emotion development, and their academic outcomes.



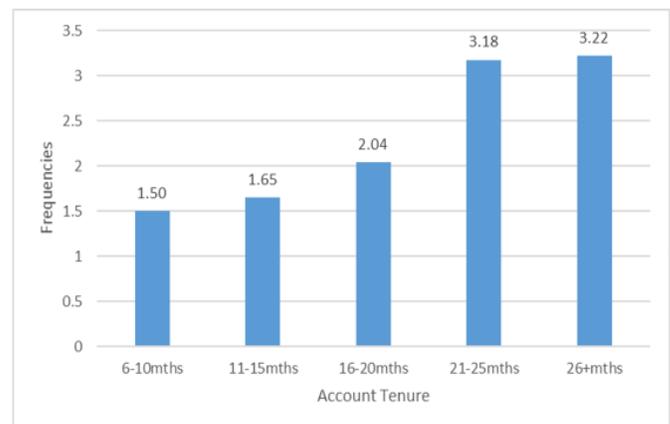
**Table 1** Family Contributions to Prosperity Kids Accounts

|  | As of 2016                 |                            |
|--|----------------------------|----------------------------|
|  | Total Sample<br>N=509      | Savers<br>N=226 (44.4%)    |
| <b>Total Value of Account</b>  | Mean \$274<br>Median \$100 | Mean \$492<br>Median \$370 |
| <b>Total family contribution among all accountholders (no seed or match)</b> | Mean \$94<br>Median \$0    | Mean \$211<br>Median \$133 |
| <b>Total family contribution grouped</b>                                     |                            |                            |
| \$0  | 55.6%                      | 0%                         |
| \$1-\$50   | 12.4%                      | 27.9%                      |
| \$51-\$100   | 5.3%                       | 12.0%                      |
| \$101-\$200  | 9.0%                       | 20.3%                      |
| \$201-\$300  | 5.7%                       | 12.8%                      |
| \$300+   | 11.9%                      | 27.0%                      |

incentives for completing tasks other than making a family contribution, even families that have never contributed to the Prosperity Kids account (non-savers) have some assets held in the CSA.

Figure 1 provides total value of account by the length of time families have had an account. For the entire sample of 509 children, total account values (including seed and match) ranged from \$100 to \$1,440 (mean \$274; median \$100). Forty-four percent (N=226) of accountholders have made at least one contribution to the CSA, with about 60% of these savers contributing at least \$100 (the maximum available match). This suggests that Prosperity Kids' savings incentives may serve as savings goals. Table 1 shows family contribution patterns for savers. Overall, median total family contribution for savers was \$133, with a low of \$5 and a high of \$940. These families, on average, received \$181 in match (ranging from \$5 to \$600; median \$302). Together with the seed deposit, the median total Prosperity Kids account value for savers was \$370 (with mean of \$492 and a range of \$110 to \$1,440).

**Figure 2** Average Number of Quarterly Deposits by Account Tenure<sup>5</sup>



<sup>1</sup> The report was written by the Center on Assets, Education, and Inclusion (AEDI) at the University of Michigan School of Social Work. Support for this research was provided by W.K. Kellogg Foundation and the Charles Stewart Mott Foundation. The full report can be found at [ADD LATER](#)

<sup>2</sup> Goldberg, F. (2005). The universal piggy bank: Designing and implementing a system of savings accounts for children. In M. Sherraden (Ed.), *Inclusion in the American dream: Assets, poverty, and public policy* (pp. 303-322). New York, NY: Oxford University Press; Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, NY: M.E. Sharpe.

<sup>3</sup> For more background on the Prosperity Kids CSA design, see Lewis, M., O'Brien, M., Elliott, W., Harrington, K., & Crawford, M. (2016). *Immigrant Latino Families Saving Against Great Odds: The Case of CSAs and the Prosperity Kids Program*. Lawrence, KS: Center on Assets, Education, and Inclusion.

<sup>4</sup> Annie E. Casey Foundation. (2016). 2016 Kids Count: State Trends in Child Well-Being. Baltimore, MD: Author. Retrieved June 24, 2016 from: <http://www.aecf.org/m/resourcedoc/aecf-the2016kidscountdatabook-2016.pdf#page=20>.

**Savings Patterns and Asset Accumulation in the New  
Mexico's Prosperity Kids Children's Savings Account (CSA)  
Program: 2017 Update**



August 2017

AEDI Working Paper 02-17

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These individuals and organizations are not responsible for the quality or accuracy of the report, which is the sole responsibility of AEDI, nor do they necessarily agree with any or all of the report's findings and recommendations.

## What is Prosperity Kids?

New Mexico's Prosperity Kids Children's Savings Account (CSA) program provides incentives, financial education, and peer support to encourage participants, most of whom are relatively low-income Latino families, to save for their children's futures. Nonprofit Prosperity Works leverages social networks and community partnerships in the Albuquerque, New Mexico area to recruit accountholders. While the particular features are somewhat unique to this model, Prosperity Kids evidences the hallmarks of Children's Savings Account policy: initial seed deposits, facilitated or universal account opening, savings incentives, and long-term asset ownership (Goldberg, 2005; Sherraden, 1991). Those who open Prosperity Kids CSAs receive a \$100 initial seed deposit and up to \$200 in a 1:1 match for their savings per year, over ten years.<sup>1</sup> Parents may also earn benchmark deposits for completing activities associated with child development and academic achievement. As is the case in many CSA programs, these incentives are financed with a mix of philanthropic and public dollars. Prosperity Kids accounts are custodial, held by Prosperity Works until used for postsecondary education or, when the child turns 23, for 'transition to a stable adulthood', such as homeownership or entrepreneurship.

## Report Sample and Methods

Building on previous analysis of quantitative and qualitative data regarding saving and asset accumulation in the Prosperity Kids CSA (Lewis, et al., 2016), this report uses administrative savings data from 509 Prosperity Kids accountholders to examine saving and asset accumulation from the initiation of the CSA program in May 2014 through December 31, 2016. To analyze these data, the Center on Assets, Education, and Inclusion (AEDI) merged Prosperity Kids' enrollment roster, which has basic demographic information including enrollment date, accountholder race/ethnicity, relationship of the accountholder to the child (i.e., parent or grandparent), child's age and school status at enrollment, and name of school, if applicable, with financial records from the credit union holding the accounts, in order to create a complete dataset of account activity including deposit amount by type (i.e., seed, match, or family contribution). Savings data and characteristics of accountholders were summarized with frequencies and descriptive statistics for the overall sample and by sub-groups of savers and non-savers (the latter defined as those families that opened a Prosperity Kids account but made no additional contributions) using STATA version 14.0. To augment these data, additional data on gender, English Language Learner, Free/Reduced Lunch, and Special Education statuses for the 2015-2016 school year were obtained from the Albuquerque Public School (APS) district for the subsample of children attending an APS school.

## Results

Below we present summaries of Prosperity Kids enrollment over time and demographic and savings data for the overall sample of Prosperity Kids accountholders overall, with

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<sup>1</sup> For more background on the Prosperity Kids CSA design, see Lewis et al. (2016).

account data further broken down by saver/non-saver subgroups, account tenure, and quarterly account activity.

### Prosperity Kids Sample Characteristics

Column 1 of Table 1 provides demographics for the entire sample. Columns two and three display demographics by the subgroups of savers and non-savers. All but one of the children in Prosperity Kids are Hispanic/Latino. While information about participants' socioeconomic status is not available directly for children not enrolled in the Albuquerque Public School system, previous research (Lewis et al., 2016), child poverty statistics for the larger community (New Mexico Voices for Children, 2015), and free and reduced-price lunch status for the school district (New Mexico Voices for Children, 2015), all suggest that at least most families with Prosperity Kids accounts are low-income. Encompassing aggregate indicators, New Mexico ranks 49<sup>th</sup> out of 50 states for measures of child well-being (Annie E. Casey, 2016). Reflecting Prosperity Kids' openness to children within a wide age range, children were enrolled as young as 2 months and as old as 12 years, with an average age at enrollment of 6.6 years. This age distribution is also reflected in grade at enrollment, with just over two-thirds of children enrolled before starting elementary school.

**Table 1.** Demographic Characteristics of Prosperity Kids Participants

|   | <b>Total Sample<br/>N=509</b> | <b>Savers<br/>n=226<br/>44.4%</b> | <b>Non-savers<br/>n=283<br/>55.6%</b> |
|---|-------------------------------|-----------------------------------|---------------------------------------|
| <b>Average age in years at enrollment</b>         | 6.6 years<br>(range 0.2-12)   | 7.0 years<br>(range 0.2-12)       | 6.3 years<br>(range 0.2-12)           |
| <b>Grade at enrollment</b>                        |                               |                                   |                                       |
| <b>K</b>  | 10.3%                         | 10.9%                             | 9.8%                                  |
| <b>1<sup>st</sup>-3<sup>rd</sup> grade</b>        | 30.8%                         | 31.2%                             | 30.5%                                 |
| <b>4<sup>th</sup>-6<sup>th</sup> grade</b>        | 21.6%                         | 24.4%                             | 19.2%                                 |
| <b>Pre K, Headstart, EvenStart,<br/>Preschool</b> | 15.6%                         | 18.6%                             | 13.2%                                 |
| <b>Not in school</b>                              | 21.8%                         | 15.0%                             | 27.4%                                 |
| <b>Average months Enrolled</b>                    | 20.6 months                   | 21.3 months                       | 20.0 months                           |
| <b>Time enrolled</b>                              |                               |                                   |                                       |
| <b>&lt;1 month</b>                                | 0%                            | 0%                                | 0%                                    |
| <b>1-6 months</b>                                 | 0.4%                          | 0%                                | 0.7%                                  |
| <b>7-12 months</b>                                | 22.6%                         | 20.8%                             | 24.0%                                 |
| <b>13-18 months</b>                               | 19.7%                         | 20.8%                             | 18.8%                                 |
| <b>19-24 months</b>                               | 29.1%                         | 23.5%                             | 33.6%                                 |
| <b>25 or more months</b>                          | 28.3%                         | 35.0%                             | 23.0%                                 |

Table 2 summarizes demographic data for the subset of 296 children attending Albuquerque Public Schools, also analyzed separately by savers and non-savers. Among this subset, slightly fewer than one-half were male (48.6%), 57.4% were English

Language Learners, 83.4% qualified for Free/Reduced Lunch, and 10.5% received some special education services. These values did not vary substantially when comparing savers to non-savers. Similarly, both savers and non-savers missed between 3-4 total days of school.

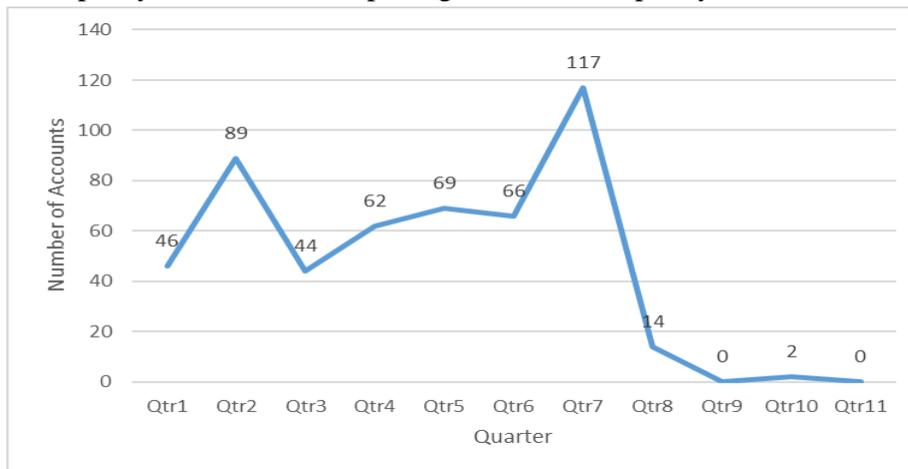
**Table 2.** Demographic Characteristics of APS Students with Prosperity Kids Account

|                                 | <b><u>Total Sample</u></b><br><b><u>N=296</u></b> | <b><u>Savers</u></b><br><b><u>n=143</u></b><br><b><u>49.4%</u></b> | <b><u>Non-savers</u></b><br><b><u>n=153</u></b><br><b><u>50.6%</u></b> |
|---------------------------------|---|--|--|
| <b>Male</b>                     | 48.6%   | 46.9%  | 50.3%  |
| <b>Race/Ethnicity</b>           |   |  |  |
| <b>Hispanic</b>                 | 99.6%   | 99.3%  | 100.0%   |
| <b>White</b>                    | 0.4%  | 0.7%   | 0%   |
| <b>English Language Learner</b> | 57.4%   | 58.7%  | 56.2%  |
| <b>Special Education</b>        | 10.5%   | 14.0%  | 7.2%   |
| <b>Free/Reduced Lunch</b>       | 83.4%   | 80.4%  | 86.3%  |

### Children's Savings Account Ownership in Prosperity Kids

Outreach and recruitment for the Prosperity Kids CSA started in spring 2014, with the first accounts opened in May of that year. The distribution of account opening, by quarter, is displayed below (Figure 1). Prosperity Kids' account ownership tenure at the

**Figure 1.** Prosperity Kids Account Opening, maximum capacity of 500 accounts<sup>2</sup>



end of 2016 reflects the concentration of account-opening activity in the period between mid-2014 and the end of 2015. The first quarter of savings records in Prosperity Kids is spring 2014. By the 7<sup>th</sup> quarter, Prosperity Kids had enrolled 493 kids, almost reaching their target capacity of 500 kids. This upper bound helps explain the steep drop in

enrollment after the 7<sup>th</sup> quarter. However, Prosperity Works received additional funding to allow them to enroll a few additional children by extending the enrollment period. Eventually, the Prosperity Kids CSA enrolled a total of 509 children.

Table 3 provides information on enrollment by child age and, as one would expect given the grade at enrollment data in Table 1, nearly all accounts were opened for children ten years and younger. Since parents may open an account for multiple children at the same time, having siblings may influence the age accounts are opened for children in Prosperity Kids. However, limitations in the dataset do not allow identification of siblings that may both have Prosperity Kids accounts.

**Table 3.** Prosperity Kids Account Ownership by Child Age<sup>3</sup>

| <b>Age Group</b>  | <b>N</b>   | <b>Percent</b> |
|-------------------|------------|----------------|
| <b>0-4 years</b>  | 153        | 31.2%          |
| <b>5-7 years</b>  | 155        | 31.6%          |
| <b>8-10 years</b> | 142        | 29.0%          |
| <b>11 years+</b>  | 40         | 8.2%           |
| <b>Total</b>      | <b>490</b> | <b>100.00%</b> |

### **Savings Patterns**

Because of Prosperity Kids' design, which, as described in the introduction, provides not only savings matches but also an initial seed deposit and opportunities to earn program incentives for completing tasks other than making a family contribution, even those families that have never contributed their own money to the Prosperity Kids account (non-savers) have some assets for their children's educations held in the CSA. For the entire sample of 509 children with Prosperity Kids accounts, total account values (including seed and match) ranged from \$100 to \$1,440 (mean \$274; median \$100). Forty-four percent (n = 226) of accountholders have made at least one contribution to their child's account, with about 60% of these savers contributing at least \$100 (the maximum available match).

Table 4 shows family contribution patterns for this sub-sample of savers. Overall, median total family contribution for savers was \$133, with a low of \$5 and a high of \$940. These families, on average, received \$181 in match (ranging from \$5 to \$600; median \$302). Together with the seed deposit, the median total Prosperity Kids account value for savers was \$370 (with mean of \$492 and a range of \$110 to \$1,440).

While there is little difference in children's ages between savers and non-savers, savers did differ in tenure of account ownership. Specifically, savers have had their Prosperity Kids accounts for average of 21 months, compared to 20 months for non-savers (see Table 1). Notably, there are more savers within the Prosperity Kids program now than at the last point of analysis (Lewis et al., 2016), at the end of 2015. Then, 29% of the Prosperity Kids participants had made at least one deposit, while, by the end of 2016, more than 44% had done so.

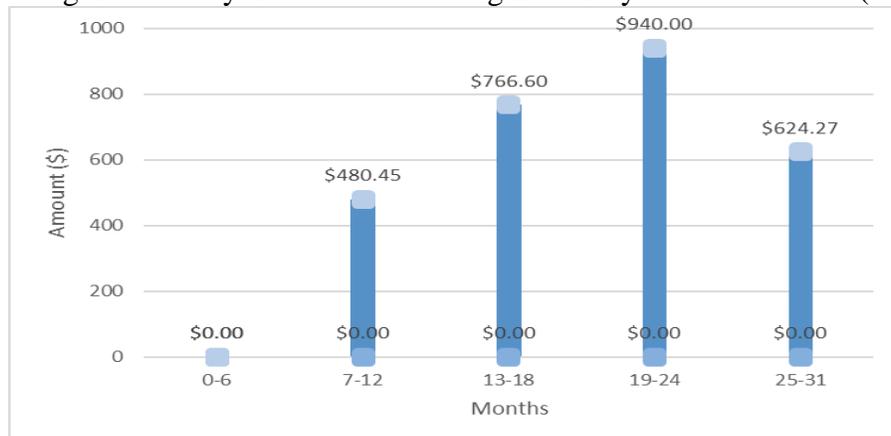
<sup>3</sup> Here, N=490, instead of 509, because 19 cases are missing the child's age.

**Table 4.** Family Contributions to Prosperity Kids Accounts

| <b>As of 2016</b>  |  |  |
|--|--|--|
|  | Total Sample<br>N=509                                | Savers Only<br>N=226 (44.4%)                         |
| <b>Total Value of Account</b>  | Mean \$274<br>Median \$100<br>Range \$100 to \$1,440 | Mean \$492<br>Median \$370<br>Range \$110 to \$1,440 |
| <b>Match</b>   | Mean \$81<br>Median \$0<br>Range \$0 to \$600        | Mean \$181<br>Median \$302<br>Range \$5 to \$600     |
| <b>Total family contribution among all accountholders (no seed or match)</b> | Mean \$94<br>Median \$0<br>Range \$0 to \$940        | Mean \$211<br>Median \$133<br>Range \$5 to \$940     |
| <b>Total family contribution grouped</b>                                     |  |  |
| <b>\$0</b>   | 55.6%  | 0%   |
| <b>\$1-\$50</b>  | 12.4%  | 27.9%  |
| <b>\$51-\$100</b>  | 5.3%   | 12.0%  |
| <b>\$101-\$200</b>   | 9.0%   | 20.3%  |
| <b>\$201-\$300</b>   | 5.7%   | 12.8%  |
| <b>\$300+</b>  | 11.9%  | 27.0%  |
| <b>Family Contribution by months enrolled</b>                                | Mean/ Median/ Range                                  | Mean/ Median/ Range                                  |
| <b>0-6 months</b>  | 0  | 0  |
| <b>7-12 months</b>   | \$71/\$0/\$0-\$480                                   | \$166/\$8-\$480                                      |
| <b>13-18 months</b>  | \$86/\$0/\$0-\$767                                   | \$182/\$5-\$766                                      |
| <b>19-24 months</b>  | \$92/\$0/\$0-\$940                                   | \$259/\$20-\$940                                     |
| <b>25 or more months</b>   | \$126/\$0/\$0-\$624                                  | \$229/\$10-\$624                                     |

### Family Contributions

In Figure 2 one can see that the total family contributions tend to increase the longer an account has been open.

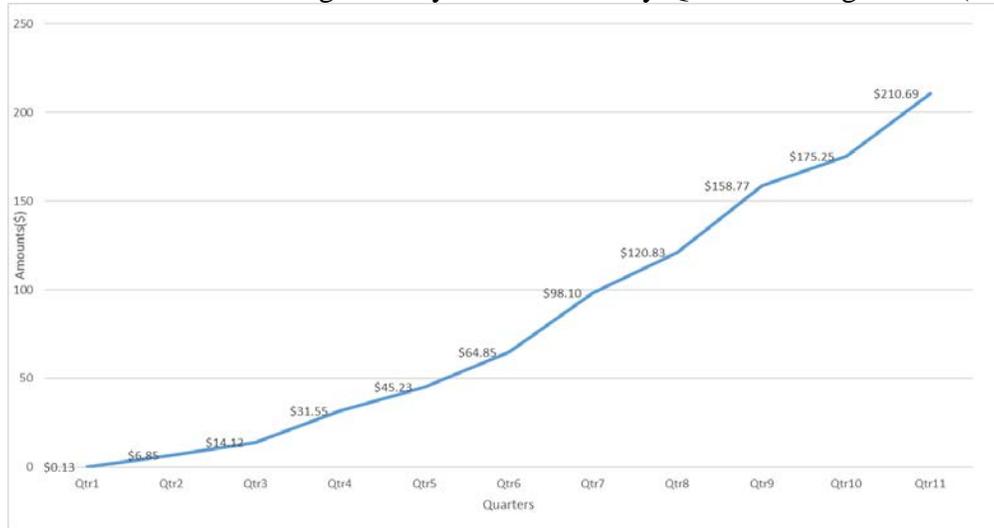
**Figure 2.** Ranges of Family Contribution among Savers by Account Tenure (n = 226)

The drop in value may correspond to the fact that the majority of Prosperity Kids accounts are between 12 and 24 months old (Table 5). There are so few that have had accounts longer than 24 months that this might skew the data.

### Asset Accumulation

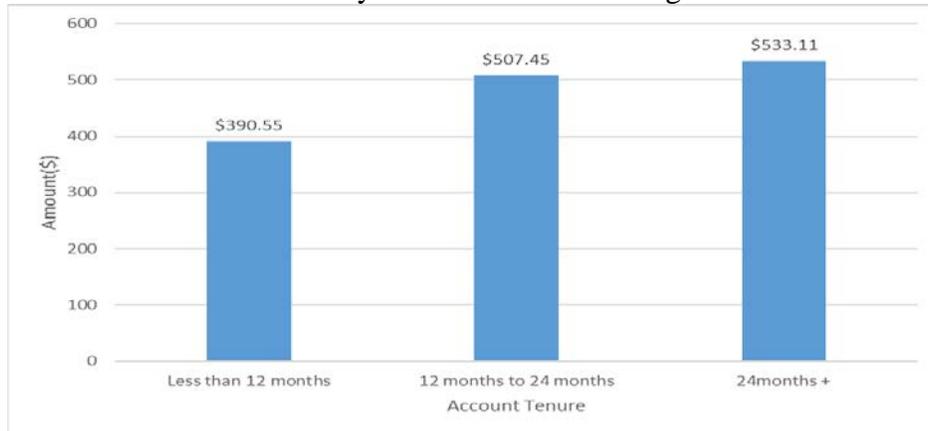
Figure 3 displays the average family contributions as accumulated since account opening. Over time we can see that, on average, family contributions increase regardless of the calendar year the account opened.

**Figure 3.** Accumulated Average Family Contribution by Quarter among Savers (n = 226)



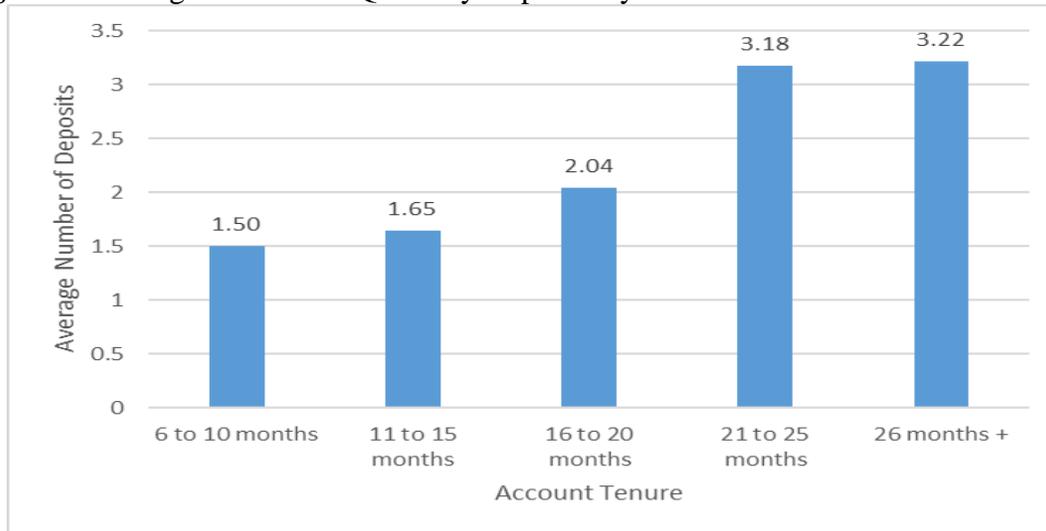
At the end of 2016, most Prosperity Kids accounts (83.5%) that had made at least one contribution (savers) had been open at least 12 months. As depicted below, total asset accumulation in these older accounts is substantially more than in accounts opened within the last year (Figure 4). Notably, this greater asset accumulation reflects both longer periods over which family contributions accumulate (and matches are added), as well as some greater level of contribution activity.

**Figure 4.** Total Value of Account by Account Tenure among Savers



Drilling down further into the differences in family contribution activity by account tenure, the figure below shows that families' frequency of deposit into the Prosperity Kids account is greater at every interval of CSA account ownership tenure. Those whose accounts have been open at least two years made the most frequent deposits into the Prosperity Kids accounts (3.22 deposits per quarter, compared to 1.51 for those who have had Prosperity Kids accounts for less than 12 months) (Figure 5).

**Figure 5.** Average Number of Quarterly Deposits by Account Tenure<sup>4</sup>



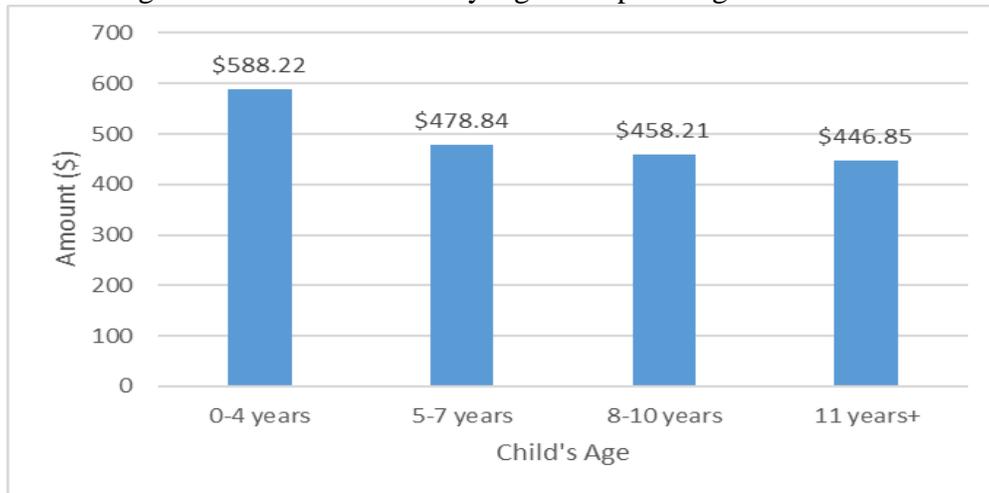
Indeed, looking at saver status by tenure group confirms this divide (see Table 5); 40% of those whose Prosperity Kids accounts have been open less than twelve months are savers, compared to 55% of those who have had Prosperity Kids accounts for at least 24 months.

**Table 5.** Saver Status by Tenure

| Account Tenure         | Non-saver  | Saver      |
|------------------------|------------|------------|
| < 12 months            | 60%        | 40%        |
| 12 months to 23 months | 60%        | 40%        |
| 24 months +            | 45%        | 55%        |
| <b>Total</b>           | <b>56%</b> | <b>44%</b> |

Figure 6 indicates while families of children younger than school age (typically, age 5) are a relatively small percentage of the total Prosperity Kids population (31.2%, with the rest of the children age 5 or older; see Table 3 above), they have accumulated more in assets than any other group of savers, as shown below.

<sup>4</sup> While 35% of the sample has had a Prosperity Kids account for at least 26 months and less than 2% for 10 months or less, the sample size is roughly equivalent in the other categories (25%, 21%, and 18%, respectively).

**Figure 6.** Average Total Account Value by Age Group among Savers

### Discussion

This research extends AEDI's earlier analysis of family contributions and asset accumulation in New Mexico's Prosperity Kids Children's Savings Account program (Lewis et al., 2016), utilizing another year of administrative account data to study how saving and account balances have evolved.

*Families are saving for their children's futures, early and often.* Forty-four percent of Prosperity Kids accounts have seen family contributions, deposits that reflect families' commitment to their children's postsecondary educational futures, even when, in many cases, high school graduation is a decade away. Particularly among accountholders who have had their Prosperity Kids accounts for nearly two years or more, this saving is frequent; on average, accounts open at least 21 months see deposits more than once per month.

*Families are saving, despite considerable odds.* Most notable is the level of family contribution activity among this low-income population. Given that 84% of those for whom household economic status is directly known are eligible for free or reduced-price lunch, the 44.4% of account owners who have deposited at least some of their household's limited resources into an account dedicated for their children's long-term futures represents a substantial investment.

*Earlier enrollees are saving more.* Given the requirement that Prosperity Kids accountholders 'opt in' to account ownership, the greater levels of family contribution by those whose Prosperity Kids accounts are older (by likelihood, amount deposited, and frequency of deposits) could reflect relatively greater savings motivation among these 'first adopters' of the Prosperity Kids CSA. Also possibly explained by differences in the populations that elect to participate in Prosperity Kids is the greater asset accumulation by families with very young children.

Although, in general, families with very young children face considerable financial challenges (Center on Budget and Policy Priorities, 2015), it is possible that, in Prosperity Kids, the families who have opted in to CSA ownership while their children are still quite far from college are those with particular capacity and/or orientation to saving.

*Savings participation seems to increase over time.* There is also evidence that at least some of the families included among the 44.4% who had contributed to the accounts by the end of 2016 were not yet saving at the time of the last data collection, at the end of 2015. This suggests that, at least for some Prosperity Kids accountholders, contributions to the CSAs emerge over time.

*CSA features matter.* Family contributions are not the only variable driving asset accumulation in Prosperity Kids. Indeed, program contributions (initial seed deposit and savings matches) make up 43% of the average total account balance of savers, a figure that illustrates the importance of these progressive features of CSA programs. There is some evidence that the Prosperity Kids design may influence not only total asset accumulation but also family contributions. Specifically, 60% of savers have saved at least \$100, the minimum required in order to receive the maximum annual match. This suggests that Prosperity Kids' savings incentives may be serving as savings goals, encouraging families to sacrifice in order to deposit enough to qualify for possible incentives.

*Accumulation is not the only way CSAs help children.* It should be emphasized that Children's Savings Account programs such as Prosperity Kids have been shown in research to be valuable—particularly to disadvantaged children—even apart from their actual balances, especially in terms of the cultivation of college-saver identities (Elliott, 2013a), greater educational expectations (Kim, Sherraden, Huang, & Clancy, 2015), stronger social and emotional development (Huang, Sherraden, Kim, & Clancy, 2014), and associated effects on academic achievement (Elliott, Jung, & Friedline, 2011) and progress towards college (Elliott, 2013b). At the same time, it must also be acknowledged that CSAs cannot be maximally potent counterbalances to growing wealth inequality unless they are designed and funded to equip low-income families with robust asset balances.

### **Conclusion and Future Research**

Future research with New Mexico's Prosperity Kids CSA program may further explore the relationship between program design and participant savings outcomes, including how the peer support approach used, selection of a credit union partner, and availability of incentives affect participants' experiences with and saving in Prosperity Kids. Given the findings presented here, of particular interest are questions related to why there is greater savings activity among longer-tenured Prosperity Kids accountholders and why the accounts of younger children have larger asset balances. While only universal policy can deliver transformative early assets to every child whose future could be shaped by them, these findings suggest that locally-designed and culturally-responsive CSA interventions can engage families in saving for the postsecondary educations of their

young children. As the national CSA landscape continues to evolve, the lessons learned on the ground in programs like Prosperity Kids can make valuable contributions.

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## **House Memorial 64 Working Group**

### Funding Possibilities Reviewed and Dismissed

Foundations and private investment options are an important part of the Child Savings Account Program, and Prosperity Works has dedicated a great deal of effort trying to access them. Foundations are excellent options for pilot programs and research, but can be less reliable long-term. Similarly, private investment can be more sporadic, sometimes fluctuating with market trends, and private support can be withdrawn at any time. Because the goal of the Memorial is to expand the program statewide, the Working Group is focused on evaluating public sources of funding to supplement any private or charitable funding.

The Office of the State Auditor (OSA) looked into revenue from licensing fees, fines and penalties within the New Mexico Regulation and Licensing Department's (RLD) fiscal year 2016 (FY16) financial audit. That report revealed that despite generating revenue through these mechanisms, after accounting operations and funds being swept and reverted to the State General Fund, the Department has little to no money accumulated from these sources. However, it might be prudent to consider limiting legislative sweeps of these funds during years in which licensing fees revenues are high and instead diverting those funds to the CSA program.

#### **The following initial ideas were not as feasible as originally envisioned:**

1. **RLD Boards and Commissions Division:** This Division has more than 30 professional boards and commissions for the licensing and examination functions for professionals within specific trades. There are over 490 licensing and administrative fees and penalties in total for these boards and commissions. For example, the Accountancy Board fund recorded \$467,093 in license fees in FY16. However, the board used most of this with \$306,621 in expenditures and \$79,657 in interfund transfers out of the fund.
2. **RLD Securities Division:** This Division licenses stock brokers, investors and financial advisers, as well as administers investor education throughout New Mexico. The RLD audit report revealed that the Financial Institution and Securities general fund recorded zero revenues in "other licenses and permits," and operated using State General Fund appropriations. Additionally, in 2015, the Legislature swept \$2,000,000 from the Securities Enforcement and Investor Education Fund to be used for infrastructure improvements projects of other state agencies.
3. **RLD Alcohol and Gaming Division:** This Division issues, transfers and revokes liquor licenses as specified in the Liquor Control Act. There are approximately 47 licensing fees and 60 licensing and Liquor Control Act penalties received within the Division. According to the FY16 audit, this Division also reported zero revenue in "other licenses and permits," and operated with State General Fund appropriations.
4. **RLD Financial Institutions Division:** This Division is responsible for general supervision of all state-chartered financial institutions and regulated industries. As mentioned, the Financial Institution and Securities general funded recorded zero revenues in "other licenses and permits," and operated with State General Fund appropriations according to the FY16 audit report.
5. **RLD Construction Industries & Manufactured Housing Division:** This Division licenses and regulates the State's construction and manufactured housing industry. The Construction Industries and Housing general fund recorded zero revenues and relied on State General Fund appropriations in FY16.

Department of Health and Human Services

**OFFICE OF  
INSPECTOR GENERAL**

**STATE USE OF DEBT  
COMPROMISE TO REDUCE CHILD  
SUPPORT ARREARAGES**



Daniel R. Levinson  
Inspector General

October 2007  
OEI-06-06-00070

# *Office of Inspector General*

<http://oig.hhs.gov>

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## *Office of Audit Services*

The Office of Audit Services (OAS) provides all auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations. These assessments help reduce waste, abuse, and mismanagement and promote economy and efficiency throughout HHS.

## *Office of Evaluation and Inspections*

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The Office of Investigations (OI) conducts criminal, civil, and administrative investigations of allegations of wrongdoing in HHS programs or to HHS beneficiaries and of unjust enrichment by providers. The investigative efforts of OI lead to criminal convictions, administrative sanctions, or civil monetary penalties.

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 EXECUTIVE SUMMARY

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## OBJECTIVE

To determine the prevalence, characteristics, and outcomes of debt compromise programs used by State child support enforcement (CSE) agencies to reduce child support arrearages.

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## BACKGROUND

The Office of Child Support Enforcement (OCSE) estimates that \$100 billion in unpaid child support has accumulated since the inception of a national CSE program in 1972. In an effort to reduce or eliminate possibly uncollectible debt, some States use debt compromise, a process whereby a State settles a portion or all of the child support debt owed to the State by a noncustodial parent. For this evaluation, we identified debt compromise practices among all States based on responses to a survey, evaluated program outcomes through site visits to five States, and examined a sample of 259 cases that underwent debt compromise.

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## FINDINGS

**CSE agencies in 20 States operate fully implemented or pilot debt compromise programs, and another 23 States settle arrearage debt on a case-by-case basis.** Of the 20 States that have debt compromise programs, 12 are fully implemented and 8 are pilot programs. Twenty-three other States compromise arrearages on a case-by-case basis, and the remaining eight States do not allow compromise of arrearages.

**Debt compromise resulted in an average of \$9,383 settled per case in selected States, with lump sum payments made in 45 percent of cases and averaging \$5,515.** In the five States, the estimated average arrearage per case was \$22,029, of which \$9,383 was settled.

Noncustodial parents in 45 percent of cases paid lump sums at the time of the agreements averaging \$5,515, which was disbursed to States for reimbursement of public assistance and/or to custodial parents for payment of past due child support.

**Forty-one percent of sample cases closed following debt compromise, either after lump sum payments or with all debt settled.** In all closed cases in our sample, the noncustodial parent owed only an arrearage. Noncustodial parents in 65 percent of cases that closed paid lump sums as part of the debt compromise agreements. In

## E X E C U T I V E   S U M M A R Y

the remaining 35 percent of cases that closed, the full amount of the arrearage was settled because CSE officials determined that the noncustodial parents were unable to pay any amount or that the families were best served by settling all of the debt.

**When sample cases remained open following debt compromise, four of five States did not routinely follow up when noncustodial parents paid irregularly.** Fifty-nine percent of cases in our sample remained open following compromise. Although all five selected States conduct general reviews of all child support cases, only California reported routinely monitoring debt compromise cases that remain open to determine whether noncustodial parents meet their agreements. We found that noncustodial parents in 60 of the 154 sample cases paid irregularly or not at all following debt compromise but found evidence of rescission in only 2 of these 60 sample cases.

**Cases are eligible for debt compromise based on a number of factors, including large arrearages, and local managers typically negotiate agreements.** Eighteen of the twenty States with programs consider the amount of the arrearage in determining eligibility. Other factors included whether dependents are emancipated and how long the arrearage has been in the caseload. After determining eligibility, local managers most often make the determination to allow debt compromise.

**CSE officials in States with programs report a largely positive view of debt compromise, although a few express concern that settling debt is contrary to the enforcement process.** Officials in 17 of the 20 States with programs reported advantages, including receiving debt payments previously considered uncollectible. Officials from three States noted drawbacks to debt compromise, including the belief that it conflicts with the agency's mission to enforce and collect child support.

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## RECOMMENDATION

We recommend that OCSE issue guidance encouraging States to routinely monitor cases that remain open following debt compromise agreements to ensure that noncustodial parents meet their agreements. Because of the high level of interest in debt compromise, we suggest that OCSE also consider issuing guidance regarding the administration of debt compromise programs to assist States that are considering new programs or revising current practices. Topics could include the criteria used for determining eligibility, the proportion of the debt to be settled,

E X E C U T I V E   S U M M A R Y

suggestions for training staff in making determinations, and use of debt compromise to close child support cases only owing arrearages.

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**AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE**

The Administration for Children and Families (ACF) and the Assistant Secretary for Planning and Evaluation (ASPE) jointly provided comments in response to our draft report. ACF concurred with our recommendation and suggestion and outlined current and planned guidance activities. In describing this current and proposed guidance, ACF did not explicitly address providing guidance to States regarding monitoring of open cases following debt compromise agreements. Because the lack of monitoring of debt compromise cases poses a vulnerability to the integrity of State debt compromise programs, we recommend that ACF provide guidance to States specific to this issue. ASPE commented that the report was useful in providing information regarding a policy area in which little research exists.

**House Memorial 64 Working Group**

**Other Funding Mechanisms in U.S.**

The following are examples of how other cities and states are using different types of revenue to fund CSAs throughout the country.

**Nevada:** The State of Nevada used State Treasurer's funds from the civil forfeiture of property taken from criminals.

**St. Louis, Missouri:** The City of St. Louis used revenues from parking fines. It is still unclear if they added to or if they earmarked existing funds. Either way, revenue was enough to prove concept.

**Rhode Island:** A 529 operator negotiated a contract to run the investments used largely by upper and middle-class families, so there was a claw-back that the Legislature used in order to use those funds.

**Connecticut:** The Public Health Department changed the at-birth requirements and made "opt-in" available. They are rolling out the program in phased ways and working with local government to have it matched.

**Massachusetts:** Boston budgeted for CSAs and has a foundation that matched .50 to every \$1 of public money.

**Utah:** The State of Utah used the State Treasurer's Office surplus that persisted over several years to establish accounts.

**San Francisco, California:** All children in Kindergarten start with a CSA and the City Treasurer's office gets all revenue from licensing fees, parking and moving violation fees.

**Oakland, California:** The City of Oakland took stock of all existing programs and looked at various populations, at various stages, lined them all up and figured out what each can do for CSAs at what stage. The city implemented the "Beautiful Babies to College" program, using private and public funding and utilizing public staffing.

**Maine:** The State of Maine has a family foundation that seeds money at childbirth (\$500 for every child born in Maine). The State's Higher Education Department administers the program. There are other matching programs through United Way and other organizations.

**New York City:** Using corporate "raised" money, the City started with Kindergarten students in 18 schools and are rolling it out to 18 more schools each year.

**Illinois:** The State of Illinois State Treasurer is seeking an add-on to property transfer transactions costs (like a penny for every \$100,000) to fund a CSA.

**Durham, North Carolina:** The City of Durham is implementing the "Durham Kids Save" program, which serves 75 kindergarteners in East Durham, using foundation and private money, as well as corporate partnership funding for data retrieval.



## Social Impact Bonds

9/22/2016

### Overview

Social Impact Bonds (SIBs), a type of pay-for-success funding agreement, are a private financing mechanism used to fund social programs. SIBs are gaining interest from policymakers at all levels of government as a way to mitigate the simultaneous demands of tight budgets and rising social service costs. To date, state level SIB activity has centered on legislative efforts to authorize the process, create study committees, begin pilot projects, engage in feasibility studies and learn which types of programs this financing tool can be effectively used for.

### How Do Social Impact Bonds Work?

SIBs work by allowing private entities to provide upfront capital that government can repay later. This makes SIBs essentially a contract between a private entity and the public sector. The private party commits to pay for a program that leads to improved social results and public sector savings. The private investors are then repaid when contractually agreed upon objectives are achieved.

### Social Impact Bond Implications

SIBs provide a new way to pay for social programs and have the potential to save money and improve accountability. In order for government to attract a private investor and for the SIB agreement to be successful, proposed programs have to be shown to be effective at addressing targeted social problems. Investors also need to know how much these programs will cost. Because these details need to be known prior to a SIB contract being agreed to, not all programs are eligible for SIB financing.

To date, SIBs in the United States have shown mixed results. For example, the Utah High Quality Preschool Initiative, a SIB funded program has shown promising results—more than 700 low-income preschoolers have [improved their school achievement](#) and investors are earning a return. In contrast, a SIB funded juvenile offender program in New York [did not reduce recidivism as intended](#). In this New York program, the funding mechanism worked to shield government from risk. However, because the program did not produce the desired results, the investors are being repaid through a financial guarantee from another private foundation rather than by government. Without this guarantee, investors would have lost their money.

SIBs inherently involve private funding in public programs—and for policymakers who believe that government should be the sole funder of these programs, this can be cause for concern.

Given that no two SIB projects must be the same and SIB funded projects are new, state and local governments will continue to pilot and study SIB initiatives across an array of sectors. These include early childhood education, health initiatives, human service programs and criminal justice efforts, among others.

### Use of Social Impact Bonds at the State Level

At least 24 states and the District of Columbia have considered, are considering or are implementing SIB related projects. Of these, 11 states—Alaska, California, Colorado, Idaho, Maine, Maryland, Massachusetts, New Jersey, Oklahoma, Texas, and Utah—and the District of Columbia have enacted legislation. Legislative introductions and enactments range from establishing study committees to creating funds and supporting pilot projects. Enacted legislative actions are listed below.

Social Impact Bonds: How they Work + Who is at the Table



## Enacted Social Impact Bond Legislation in Various Sectors

### Early Childhood Education and Care and Public Education

Programs aimed at providing prenatal education, increasing early childhood education readiness and supporting academic performance among young learners top the list of SIB efforts in early childhood education and care. Examples include:

- [Idaho HB 170](#) (2015, Enacted): Allows the state Department of Education to enter into pay-for-success contracts designed to enhance student academic achievement. Outlines standards required to enter into pay-for-success contracts.
- [Maine HB 285](#) (2015, Enacted): Directs the Education Research Institute to study the use of social impact bonds to fund extended learning programs and prekindergarten programs and submit report and any recommended legislation to the Joint Standing Committee on Education and Cultural Affairs by Dec. 2, 2015.
- [Utah HB 96](#) (2014, Enacted): Establishes a School Readiness Board to negotiate results-based contracts with private entities to fund high-quality early childhood education programs. Creates a restricted account.

### Health Initiatives

2015 health related SIB efforts included efforts to target public expenditures related to preventive and early intervention care. Examples include:

- [New Jersey A 2771](#) (2015, Vetoed by the Governor): Establishes a five-year social innovation loan pilot program to encourage private investment in preventive and early intervention health care to reduce public expenditures related to those services. **Note:** For more information, please see the [Statement from the Budget and Appropriations committee](#) and the [Governor's veto message](#).
- [New Jersey A 3289](#) (2012, Pocket Vetoed): Establishes a five-year social innovation loan pilot program to encourage private investment in preventive and early intervention health care to reduce public expenditures related to those services. Also creates a social innovation loan fund. Note: *Bill pocket vetoed—no veto message available*

### Human Service Programs

Human service programs that could be funded with SIBs include employment readiness, workforce development services and preventing homelessness. Examples include:

- [Massachusetts HB 3650](#) (2015, Enacted): Directs the Executive Office for Administration and Finance to coordinate with Health and Human Services to develop a pay-for-performance model to promote employment among recipients of programs administered by the Department of Transitional Assistance. Also gives permission for the Executive Office to coordinate with the Social Impact Bond Technical Assistance Lab at the Harvard University Kennedy School to develop the pay-for-performance model and requires a report on the model and feasibility of implementation.

### Criminal Justice Efforts

Use of SIBs to reduce recidivism among offenders and provide services for at-risk youth have been explored across the nation. Examples include:

- [Alaska SB 91](#) (2016, Enacted): Requires the Alaska Criminal Justice Commission to prepare a report regarding the potential use of social impact bonds to reduce recidivism rates. Also outlines requirements of the content of the report, who it must be delivered to and when this must be completed by.
- [California AB 1837](#) (2014, Enacted): Creates the Social Innovation Financing program and authorizes grants by the Board of State and Community Corrections to enter into a pay-for-success or social innovation financing contract.
- [Maryland SB 1005](#) (2016, Enacted): Permits the Justice Reinvestment Oversight Board to make recommendations about entering into public-private partnerships including social impact bonds.
- [Oklahoma SB 1278](#) (2014, Enacted): Creates the Criminal Justice Pay for Success Initiative and authorizes the Office of Management and Enterprise Services to contract with social service providers that provide diversion and reentry programs to persons not under the custody or control of the Department of Corrections.

## General Social Impact Bond Efforts

Legislatures have introduced legislation to study the feasibility and applicability of using social impact bond financing. Examples include:

- [California SB 593](#) (2013, Vetoed by the Governor): Authorizes the Governor to enter into social impact partnerships to address policies or programs not currently funded by the state, to address state programs in order to improve outcomes or lower state costs or to reduce recidivism, reduce child abuse and neglect or to assist foster children. **Note:** For more information, please see the [Governor's veto message](#).
- [Colorado HB 1317](#) (2015, Enacted): Establishes the Pay for Success Contracts Program in order to authorize the state to enter into pay for success contracts pending specific requirements.
- [Massachusetts HB 4219](#) (2012, Enacted): Establishes the Social Innovation Financing Trust Fund for funding contracts to improve outcomes and lower the cost of government spending.
- [Texas HB 3014](#) (2015, Enacted): Establishes the Success Contracts Payments Trust Fund for the purpose of making success contract payments.
- [District of Columbia B 750](#) (2015, Enacted): Authorizes Pay-for-Success contracts in D.C. and establishes a Pay-for-Success Contract Fund that is administered by the Mayor.

*Jessica Hathaway is a policy associate with NCSL's Family Opportunity Project*

## Additional Resources

- National Conference of State Legislatures, LegisBrief: [Funding Social Programs with Social Impact Bonds](#)
- National Conference of State Legislatures: [Video interview with Phil Peterson of KidSucceed, LLC that discusses](#) which projects are appropriate for pay for success, how pay for success is changing the way government operates and why this is of interest to legislators
- Corporation for National and Community Service, Report: [State of the Pay for Success Field: Opportunities, Trends, and Recommendations](#)
- Government Performance Lab at the Harvard Kennedy School, Report: [Social Impact Bonds, a Guide for State and Local Governments](#)
- [Pay For Success Learning Hub](#)

### NCSL Member Toolbox

#### Members Resources

- Get Involved With NCSL
- Jobs Clearinghouse
- Legislative Careers
- NCSL Staff Directories
- Staff Directories
- StateConnect Directory

#### Policy & Research Resources

- Bill Information Service
- Legislative Websites
- NCSL Bookstore
- State Legislatures Magazine

#### Accessibility Support

- Tel: 1-800-659-2656 or 711
- Accessibility Support
- Accessibility Policy

#### Meeting Resources

- Calendar
- Online Registration

#### Press Room

- Media Contact
- NCSL in the News
- Press Releases

#### Denver

7700 East First Place  
Denver, CO 80230  
Tel: 303-364-7700 | Fax: 303-364-7800



#### Washington

444 North Capitol Street, N.W., Suite 515  
Washington, D.C. 20001  
Tel: 202-624-5400 | Fax: 202-737-1069

**House Memorial Working Group**  
**Tobacco Settlement Fund Statutes**

**6-4-9. Tobacco settlement permanent fund; investment; distribution.**

A. The "tobacco settlement permanent fund" is created in the state treasury. The fund shall consist of money distributed to the state pursuant to the master settlement agreement entered into between tobacco product manufacturers and various states, including New Mexico, and executed November 23, 1998 or any money released to the state from a qualified escrow fund or otherwise paid to the state as authorized by Section [6-4-13](#) NMSA 1978, enacted pursuant to the master settlement agreement or as otherwise authorized by law. Money in the fund shall be invested by the state investment officer in accordance with the limitations in Article [12](#), Section [7](#) of the constitution of New Mexico. Income from investment of the fund shall be credited to the fund. Money in the fund shall not be expended for any purpose, except as provided in this section.

B. In fiscal year 2007 and in each fiscal year thereafter, an annual distribution shall be made from the tobacco settlement permanent fund to the tobacco settlement program fund of an amount equal to fifty percent of the total amount of money distributed to the tobacco settlement permanent fund in that fiscal year until that amount is less than an amount equal to four and seven-tenths percent of the average of the year-end market values of the tobacco settlement permanent fund for the immediately preceding five calendar years. Thereafter, the amount of the annual distribution shall be four and seven-tenths percent of the average of the year-end market values of the tobacco settlement permanent fund for the immediately preceding five calendar years. In the event that the actual amount distributed to the tobacco settlement program fund in a fiscal year is insufficient to meet appropriations from that fund for that fiscal year, the secretary of finance and administration shall proportionately reduce each appropriation accordingly.

C. In addition to the distribution made pursuant to Subsection B of this section, in fiscal years 2009 through 2013, 2016 and 2018, the remaining fifty percent of the total amount of money distributed to the tobacco settlement permanent fund in that fiscal year shall be distributed from the tobacco settlement permanent fund to the tobacco settlement program fund.

D. In addition to the distribution made pursuant to Subsections B and E of this section, in fiscal year 2014, twenty-five percent of the total amount of money distributed pursuant to the master settlement agreement to the tobacco settlement permanent fund in that fiscal year shall be distributed from the tobacco settlement permanent fund to the lottery tuition fund.

E. In addition to the distribution made pursuant to Subsections B and D of this section, in fiscal year 2014, twenty-five percent of the total amount of money distributed to the tobacco settlement permanent fund in that fiscal year shall be distributed from the tobacco settlement permanent fund to the tobacco settlement program fund for appropriation for direct services provided by early childhood care and education programs administered by the children, youth and families department.

F. The tobacco settlement permanent fund is a reserve fund of the state. Money in the tobacco settlement permanent fund may be expended:

(1) in the event that general fund balances, including all authorized revenues and transfers to the general fund and balances in the general fund operating reserve, the appropriation contingency

fund and the tax stabilization reserve, will not meet the level of appropriations authorized from the general fund for a fiscal year. In that event, in order to avoid an unconstitutional deficit, the legislature may authorize a transfer from the tobacco settlement permanent fund to the general fund but only in an amount necessary to meet general fund appropriations; or

(2) as provided in Laws 2016 (2nd S.S.), Chapter 4, Section 2 and in Section 7 of this 2017 act.

**History:** Laws 1999, ch. 207, § 1; 2000 (2nd S.S.), ch. 9, § 1; 2003, ch. 312, § 1; 2009, ch. 3, § 5; 2010, ch. 49, § 1; 2011, ch. 3, § 1; 2011, ch. 167, § 1; 2013, ch. 228, § 1; 2015, ch. 36, § 1; 2016 (2nd S.S.), ch. 4, § 1; 2017, ch. 2, § 6; 2017, ch. 80, § 1.

**6-4-10. Tobacco settlement program fund created; purpose.**

A. The "tobacco settlement program fund" is created in the state treasury and shall consist of distributions made to the fund from the tobacco settlement permanent fund. Income from investment of the tobacco settlement program fund shall be credited to the fund. Beginning in fiscal year 2002, money in the tobacco settlement program fund may be appropriated by the legislature for any of the purposes specified in Subsection B of this section and after receiving the recommendations of the tobacco settlement revenue oversight committee. Balances in the tobacco settlement program fund at the end of any fiscal year shall remain in the fund.

B. Money may be appropriated from the tobacco settlement program fund for health and educational purposes, including:

(1) support of additional public school programs, including extracurricular and after-school programs designed to involve students in athletic, academic, musical, cultural, civic, mentoring and similar types of activities;

(2) any health or health care program or service for prevention or treatment of disease or illness;

(3) basic and applied research conducted by higher educational institutions or state agencies addressing the impact of smoking or other behavior on health and disease;

(4) public health programs and needs; and

(5) tobacco use cessation and prevention programs, including statewide public information, education and media campaigns.

**History:** Laws 1999, ch. 207, § 2; 2000 (2nd S.S.), ch. 9, § 2.

New Mexico State Investment Council  
Tobacco Settlement Total Fund Composite  
Schedule of Investable Assets

As of March 31, 2017

| Date                 | Beginning Market Value (\$ 000) | Contributions (\$ 000) | Withdrawals (\$ 000) | Gain/Loss (\$ 000) | Ending Market Value (\$ 000) | % Return |
|----------------------|---------------------------------|------------------------|----------------------|--------------------|------------------------------|----------|
| May 2000 - June 2000 | 49,036                          | 48,808                 | -                    | -47,840            | 50,004                       | 1.50     |
| Fiscal Year 2001     | 50,004                          | 37,389                 | 24,404               | -2,056             | 60,933                       | -7.29    |
| Fiscal Year 2002     | 60,933                          | 43,637                 | 18,694               | -4,416             | 81,460                       | -6.16    |
| Fiscal Year 2003     | 81,460                          | 43,759                 | 65,578               | 2,352              | 61,994                       | 0.22     |
| Fiscal Year 2004     | 61,994                          | 54,839                 | 54,869               | 8,725              | 70,689                       | 12.84    |
| Fiscal Year 2005     | 70,689                          | 35,448                 | 35,448               | 6,645              | 77,334                       | 9.02     |
| Fiscal Year 2006     | 77,334                          | 36,079                 | 36,079               | 7,295              | 84,629                       | 11.14    |
| Fiscal Year 2007     | 84,629                          | 36,240                 | 18,120               | 13,899             | 116,648                      | 14.92    |
| Fiscal Year 2008     | 116,648                         | 44,864                 | 22,432               | -1,234             | 137,846                      | -1.60    |
| Fiscal Year 2009     | 137,846                         | 48,856                 | 48,856               | -16,926            | 120,920                      | -13.64   |
| Fiscal Year 2010     | 120,920                         | 40,165                 | 40,165               | 11,111             | 132,031                      | 9.93     |
| Fiscal Year 2011     | 132,031                         | 37,516                 | 37,516               | 16,760             | 148,791                      | 12.55    |
| Fiscal Year 2012     | 148,791                         | 37,687                 | 37,687               | 186                | 148,978                      | 0.13     |
| Fiscal Year 2013     | 148,978                         | 29,779                 | 29,779               | 21,188             | 170,166                      | 14.14    |
| Fiscal Year 2014     | 170,166                         | 29,516                 | 37,746               | 31,526             | 193,462                      | 18.24    |
| Fiscal Year 2015     | 193,462                         | 35,036                 | 19,283               | 7,147              | 216,362                      | 3.80     |
| Fiscal Year 2016     | 216,362                         | 39,552                 | 40,083               | 3,579              | 219,410                      | 1.39     |
| Fiscal Year 2017     | 219,410                         | 54,251                 | 146,052              | 19,185             | 146,794                      | 12.02    |

Performance shown is gross of fees.

## Tobacco Settlement Fund Appropriations

| (in thousands of dollars)                     |  | FY16             | FY17             | FY18            |
|---|--|------------------|------------------|-----------------|
| <b>Estimated Tobacco Revenues</b>             |  |                  |                  |                 |
| Beginning Balance Permanent Fund              |  | 216,400.0        | 110,400.0        | 133,800.0       |
| Estimated Tobacco Revenue                     |  | 39,600.0         | 54,300.0         | 39,000.0        |
| Appropriation to Program Fund                 |  | (18,500.0)       | (18,500.0)       | (19,500.0)      |
| Gains/Losses                                  |  | 3,600.0          | 6,100.0          | 7,400.0         |
| Additional Transfer to Program Fund           |  | (21,600.0)       | (18,500.0)       | (19,500.0)      |
| Transfer to GF Appropriation Account          |  | (109,100.0)      | 0.0              | (129,200.0)     |
| <b>Total Program Fund Appropriations</b>      |  | <b>40,100.0</b>  | <b>37,000.0</b>  | <b>39,000.0</b> |
| <b>Ending Balance Permanent Fund</b>          |  | <b>110,400.0</b> | <b>133,800.0</b> | <b>12,000.0</b> |
| <b>Tobacco Fund Appropriations</b>            |  |                  |                  |                 |
| <b>Agency</b>                                 | <b>Purpose</b>                                   |                  |                  |                 |
| 609 Indian Affairs                            | Tobacco Cessation Programs                       | 249.3            | 249.3            | 249.3           |
| 630 Human Services Department                 | Medicaid -- Breast and Cervical Cancer Treatment | 1,312.4          | 1,255.4          | 1,255.4         |
| 630 Human Services Department                 | Medicaid   | 7,907.3          | 7,563.9          | 8,563.9         |
| 630 Human Services Department                 | Medicaid, Contingent on Legislation              | 20,800.0         | 18,500.0         | 19,500.0        |
| <b>Sub-total Human Services Department</b>    |  | <b>30,019.7</b>  | <b>27,319.3</b>  | <b>29,319.3</b> |
| 665 Department of Health                      | Tobacco Cessation and Prevention                 | 5,682.0          | 5,435.2          | 5,435.2         |
| 665 Department of Health                      | Diabetes Prevention and Control                  | 748.0            | 715.5            | 715.5           |
| 665 Department of Health                      | HIV/AIDS Services                                | 293.0            | 293.0            | 293.0           |
| 665 Department of Health                      | Breast and Cervical Cancer Screening             | 128.6            | 128.6            | 128.6           |
| <b>Sub-total Department of Health</b>         |  | <b>6,851.6</b>   | <b>6,572.3</b>   | <b>6,572.3</b>  |
| 952 University of New Mexico HSC              | Instruction and General Purposes                 | 607.9            | 581.5            | 581.5           |
| 952 University of New Mexico HSC              | Research in Genomics and Environmental Health    | 979.8            | 937.2            | 937.4           |
| 952 University of New Mexico HSC              | Poison Control Center                            | 590.2            | 590.2            | 590.2           |
| 952 University of New Mexico HSC              | Pediatric Oncology Program                       | 261.4            | 250.0            | 250.0           |
| 952 University of New Mexico HSC              | Specialty Education in Trauma                    | 261.4            | 250.0            | 250.0           |
| 952 University of New Mexico HSC              | Specialty Education in Pediatrics                | 261.4            | 250.0            | 250.0           |
| <b>Sub-total University of New Mexico HSC</b> |  | <b>2,962.1</b>   | <b>2,859.1</b>   | <b>2,859.1</b>  |
| <b>Total Appropriations</b>                   |  | <b>40,082.7</b>  | <b>37,000.0</b>  | <b>39,000.0</b> |