



## Center for Social Development

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK

# RESEARCH BRIEF

| JULY 2012 | CSD PUBLICATION NO. 12-34 |

## Socioeconomic Status and Early Savings Outcomes: Evidence from a Statewide Child Development Account Experiment

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SEED for Oklahoma Kids (SEED OK) is a policy experiment. The overall purpose is to test a universal and progressive policy of lifelong asset building beginning at birth. The platform for asset building is the Oklahoma College Savings Plan (OK 529), an existing state-sponsored 529 education savings plan. In terms of study design, SEED OK is a randomized experiment with a probability sample.

For every child in the treatment group, SEED OK opened a state-owned OK 529 account and “seeded” it with \$1,000.<sup>1</sup> Primary caregivers of these treatment children were also encouraged to open their own (private, not state-owned) OK 529 account with the child as beneficiary. Those who opened a “participant-owned” OK 529 account by April 15, 2009, received a \$100 account-opening incentive. For about four years, low- and moderate-income treatment families were eligible for additional incentives, in the form of saving matches. Caregivers in the control group did not receive any information from SEED OK about the OK 529, were not eligible for the state-owned OK 529 account, and were not offered any SEED OK financial incentives. However, they could open their own “participant-owned” OK 529 accounts, just as any non-study participant can (Zager et al., 2010).

Nam et al. (in press) examine the impact of the SEED OK intervention on several savings outcomes and find that the initiative increased 529 account holding, individual 529 savings, and total 529 assets. In the research described here, we ask whether SEED OK savings outcomes vary by socioeconomic status (SES) and whether the impact of the intervention varies by SES. It is important to examine the relationship between SES and savings outcomes in SEED OK for several reasons. First, in the current social, economic, and policy environment, patterns of asset accumulation vary markedly by SES (see, e.g., U.S. Census Bureau, 2010a; 2010b). Second, low-SES individuals and households have been less likely to participate in existing asset-building programs such as 529 plans, Individual Retirement Accounts, and 401(k)s (Dynarski, 2004; Madrian & Shea, 2001; Springstead & Wilson, 2000). Third, the SEED OK intervention attempts to remove common barriers to account holding, saving, and asset accumulation by low-SES households. To fully assess the SEED OK intervention, it is necessary to document SEED OK savings outcomes for low-SES subgroups and the impact of SEED OK on low-SES subgroups.

This brief is based on the full working paper: Beverly, S., Kim, Y., Sherraden, M., Nam, Y., & Clancy, M. (2012). *Socioeconomic status and early savings outcomes: Evidence from a statewide Child Development Account experiment* (CSD Working Paper 12-30). St. Louis, MO: Washington University, Center for Social Development.



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## Research Methods

The sampling frame for the SEED OK experiment was all children born in Oklahoma in two three-month periods (April through June and August through October, 2007). Three minority groups (African Americans, American Indians, and Hispanics) were oversampled, using a stratified random sampling method. Caregivers (mostly mothers) of 7,115 children were invited to participate in the SEED OK study. Of these, 2,704 completed the baseline telephone survey. Mothers were randomly assigned to treatment and control groups after completing the baseline survey. Our sample consists of 2,698 mothers, including 1,353 in the treatment group and 1,345 in the control group.<sup>2</sup>

Our outcome variables come from OK 529 account records for the period from January 1, 2008, through September 30, 2010, when SEED OK children were younger than four years old. Thus, we examine early outcomes and the early impact of SEED OK. Our first set of outcomes measures 529 account holding, i.e., whether a SEED OK child is the beneficiary of an OK 529 account. Holding a 529 account, whether actively or automatically opened is an important outcome for several reasons. Having a labeled account (e.g., “Tanya’s college account”) and receiving quarterly 529 account statements may increase saving by making the goal (assets for future college expenses) more salient. Having a tax-favored account may increase saving by families who benefit from the tax provisions. And, opening or receiving a 529 account when a child is young allows more time for people to make deposits and for assets to accumulate, and more time for a child to be aware that there is college savings in her name.

Our second set of outcomes measures individual savings in OK 529 accounts for SEED OK children, that is, deposits made by individuals, not including any SEED OK incentives. Individual savings is not the primary outcome of interest because SEED OK is a test of universal and progressive policy, not a test of individual behavior. Still, asset-building policy will be more effective, and presumably more politically popular, if it encourages individual saving as well as providing subsidies. In addition, because SEED OK match money is targeted to lower-income families to increase saving as well as to subsidize asset building, it is important to examine whether the treatment does increase saving by low-income and other disadvantaged families. However, comparing the impact of SEED OK on individual savings for different SES subgroups is complicated by the fact

that disadvantaged subgroups, on average, have less ability to save out of income, have less savings to reshuffle, and are less likely to expect their children to go to college (Hao & Bonstead-Bruns, 1998; Zhan, 2006; Zhan & Sherraden, 2011).

Our final set of outcomes measures total 529 assets, that is, all money in OK 529 accounts, including deposits made by individuals and any SEED OK incentives given to members of the treatment group. For many purposes, this is the most useful measure of the impact of SEED OK. For example, total 529 assets will be more related to adequacy of funds to finance college than individual savings alone. In addition, because SEED OK is intentionally progressive, with saving matches that aim to subsidize as well as incentivize saving by lower-income households, an analysis that examined only individual savings would be incomplete. Finally, there is growing evidence that financial assets in a household, controlling for other observed variables, are associated with educational outcomes (see Williams Shanks et al., 2010 for a review).

It is important to note that we do not measure any reshuffling of assets between other saving vehicles and OK 529 accounts. We measure saving and asset accumulation in Oklahoma 529 accounts only. At this stage in SEED OK, we do not have data on changes in other assets and liabilities in the household and, therefore, we are not able to conduct an impact test on net worth. As a result, we do not know whether deposits in OK 529 accounts are “new” savings or are simply shifted from other saving vehicles.

SES indicators come from birth records and from the baseline survey conducted from fall 2007 through spring 2008. We examine two of the most common indicators of SES—income and education—as well as several less common measures: race/ethnicity, banked status, home ownership, public assistance, and primary language. We selected indicators of SES that we expect may be correlated with policy-relevant responsiveness to the SEED OK treatment.

The goal of this research is to examine early SEED OK savings outcomes for different socioeconomic subgroups. In particular, we ask whether early SEED OK outcomes vary significantly across socioeconomic subgroups and whether the impacts of SEED OK vary across socioeconomic subgroups. To answer the first question, we compare across SES subgroups. We examine treatment and control groups separately because the associations between SES and savings outcomes may differ by treatment status. For the

second question, we examine differences in savings outcomes between treatment and control groups, for separate socioeconomic subgroups. Because the sample was randomly assigned to treatment and control groups, bivariate treatment-control comparisons reveal the impact of SEED OK on savings outcomes.<sup>3</sup>

## Findings

Without SEED OK, few young children have 529 assets. Not surprisingly, disadvantaged children are particularly unlikely to have 529 accounts and assets: without SEED OK, rates of 529 account holding and asset ownership are less than 1% for almost all disadvantaged subgroups. With SEED OK, account-holding rates for 529 accounts that must be opened by individuals range from 2.2% to 10.4% for disadvantaged subgroups, with most rates greater than 6%. With SEED OK, all children have a 529 account and some 529 assets.

Statistical tests of treatment-control differences show that SEED OK has a significant impact on some but not all of the outcomes examined. SEED OK increases 529 account holding—for accounts that must be opened by individuals, as well as for automatically opened accounts. SEED OK also increases the likelihood that parents or others are setting aside college savings for very young children. These patterns hold for diverse SES subgroups. However, it is not clear that SEED OK increases the amount of 529 savings in all SES subgroups. The treatment group consistently has greater average savings amounts than the control group, but these differences are only sometimes statistically significant.

What about the impact of SEED OK on outcomes that are linked to automatic components of the intervention? A growing body of literature in behavioral economics (e.g., Choi et al., 2004; Madrian and Shea, 2001) suggests that automatic enrollment and other default rules can strongly influence participation in asset-building programs. Not surprisingly, SEED OK has a large effect on total 529 assets (which include SEED OK subsidies), for every subgroup examined. In the control group, children rarely have any 529 assets. In the treatment group, all children have more than \$1,000. The automatic nature of certain components of the intervention also has a striking impact on variation in outcomes by SES. Automatic opening of state-owned 529 accounts eliminates virtually all variation by SES in account holding, and automatic initial deposits eliminate most (but not

all) variation by SES in asset accumulation.

## Discussion

SEED OK provides the best evidence to date regarding the likely outcomes and the impact of a universal and progressive Child Development Account (CDA) policy. The findings reported here show that, in the absence of a universal initiative, few preschool children have a college savings account or any college savings in their name. This is especially true for disadvantaged children. Even with SEED OK, which provides information and incentives, the likelihood that parents or others have opened and saved in a 529 account for these young children is relatively low (except in the highest income and education groups). Adults may open accounts and begin saving later, of course, but early saving has important advantages. In addition to the financial benefits of investment returns, the presence of college savings from an early age may affect the attitudes and behaviors of both children and adults in ways that improve educational outcomes (Williams Shanks et al., 2010).

The patterns are noticeably different for outcomes that are related to automatic components of the treatment. All children in the treatment group have a state-owned 529 account, and all have at least \$1,000 in 529 assets. The fact that these patterns were predictable does not make them less meaningful. If universality is a goal—that is, if we as a society want children from disadvantaged families, not just children from advantaged families, to grow up with accounts and savings for postsecondary education—the evidence clearly favors automatic account opening and some automatic subsidies. If early account holding and early asset accumulation are desirable, then automatic account opening at birth makes sense.

What do we make of the fact that SEED OK increases the likelihood that young children have some college savings but does not increase the amount of savings in all SES groups? Savings amounts are very skewed, and large variances decrease the likelihood that differences are statistically significant. Also, the SEED OK intervention occurred during an economic recession. Families may have had less “surplus” income than usual to put toward savings, and declines in the value of the state-owned OK 529 may have made some treatment participants less willing to save in their own OK 529 accounts. Thus, the recession may have dampened responses to the SEED OK incentives, but there is no way to test this proposition. Regardless, we believe

that saving something for college—even a small amount—is an important outcome. Having some college savings and the act of setting aside money for college may “plant a seed”: parents may now be more aware of college as a possibility for their children and more cognizant of the importance of saving for college.

At the same time, the amount of money accumulated for college does matter. A small amount of savings will not finance a college education for most and may not change parent and child attitudes and behaviors in the pre-college years. Although every treatment child has at least \$1,000 in 529 assets, advantaged children in the treatment group tend to have more because their parents (and others) are more likely to have made their own deposits. Over time, the difference in 529 assets held by advantaged and disadvantaged children is likely to grow. If assets continue to be an important source of funding for college, and if increased access to college for disadvantaged groups is a goal, then disadvantaged families may need additional subsidies. Evidence that 529 assets affect parent and child attitudes and behaviors in ways that improve educational outcomes—a question to be considered in future SEED OK research—could provide further rationale for additional progressive subsidies.

## Endnotes

1. These accounts were automatically opened unless caregivers opted out by notifying the State. One mother opted out for religious reasons. For simplicity, we ignore this case here and state throughout that every treatment child has a state-owned account and at least \$1,000 in 529 assets.
2. We excluded one mother whose child died after the baseline survey and five primary caregivers who are not parents of SEED OK children.
3. All analyses use weighted data to take into account oversampling of minority groups and observed bias created by the fact that not everyone who was invited to participate in SEED OK did so (Marks et al., 2008).

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## Acknowledgements

SEED for Oklahoma Kids (SEED OK) was conceived and designed by the Center for Social Development (CSD). CSD led the RFP process, coordinating a committee that selected the State of Oklahoma. SEED OK is a partnership among the State of Oklahoma (Treasurer's Office, Department of Health, Department of Human Services, Tax Commission, and Oklahoma College Savings Plan), CSD, and RTI International. Major funding for SEED OK comes from the Ford Foundation, with additional support for SEED OK research from the Charles Stewart Mott Foundation and Lumina Foundation for Education. We especially value our partnership with the State of Oklahoma: Ken Miller, State Treasurer; Scott Meacham, former State Treasurer; Tim Allen, Deputy Treasurer for Policy and Administration; James Wilbanks, former Director of Revenue and Fiscal Policy; Kelly Baker, Derek Pate, and Sue Mallonee, Oklahoma State Department of Health; Tony Mastin, Oklahoma Tax Commission Administrator; and James Conway, Program Administrator for Information Services, Family Support Services Division, Oklahoma Department of Human Services. We appreciate the contributions of staff at RTI International, especially those of Ellen Marks, Bryan Rhodes, and Jun Liu. The Oklahoma College Savings Plan Program Manager, TIAA-CREF, has been a valuable partner. We extend thanks to Kerry Alexander, Katrina Moore, Allison Ziegler, and Toniann Nastasi at TIAA-CREF. The authors thank Mark Schreiner, Jin Huang, and Nora Wikoff for comments. Robert Zager contributed to earlier versions of the manuscript. Vernon Loke, Lisa Reyes Mason, and Donna-Mae Knights assisted with data management and cleaning; Carrie Freeman and Julia Stevens provided editing assistance; and Anthony Molieri helped create tables.

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