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International Child Development Accounts

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Abstract

Child Development Accounts (CDAs) are subsidized savings or investment accounts to help people accumulate assets for developmental purposes and life course needs. They are envisioned as universal (everyone participates), progressive (greater subsidies for the poor), and potentially lifelong national policy. These features distinguish CDAs from most existing asset-building policies and programs around the world, which are typically regressive, giving greater benefits to the well-off. With policy innovation in recent years, several countries now have national CDA policies, and four states in the United States have statewide programs. Some of these are designed to be universal and progressive. Evidence indicates that true universality can be achieved, but only with automatic account opening and automatic deposits. In the absence of automatic features, advantaged families participate and benefit more. Today, momentum for universal and automatic features is gradually gaining traction and accelerating. At this stage in the emergence of inclusive asset-based policy, this is the most important development.

Key words: assets; Child Development Accounts; development; lifelong; progressive; social policy; universal.

Child Development Accounts (CDAs) are subsidized savings or investment accounts to help people accumulate assets for developmental purposes and life course needs. They are envisioned as universal (everyone participates), progressive (greater subsidies for the poor), and potentially lifelong national policy (Sherraden, 1991; 2014). In the U.S., one proposal is to provide every newborn an investment account automatically opened with a \$1,000 initial deposit. Low- and moderate-income children might receive additional deposits at certain milestones such as starting kindergarten and graduating high school. Individual deposits would be encouraged, and deposits into the accounts of low- and moderate-income children might be matched at a 1:1 rate. Program deposits (e.g., initial, milestone, and matching deposits) could be used only for certain purposes such as postsecondary education, home purchase, small business development, and eventually retirement security (Sherraden, 1991). The concept of universal and progressive accounts beginning as early as birth, first proposed in 1991, sparked an interest in asset-based policy as a complement to income-based policy. (For more about the importance of asset building, the distribution of assets, and asset policy, see Sherraden et al., 2016.)

Why Asset Building for All?

Income is the typical metric for evaluating economic well-being. While income (the flow of resources over time) supports consumption, it is not sufficient for economic well-being. Assets (the “stock” of resources) help people finance irregular expenses, purchase large-ticket items, and weather financial crises. Assets also enable people to make investments that expand their capabilities and improve their circumstances over the long term—for example, investments in education, homes, or enterprise (Paxton, 2001, 2002; Sherraden, 1991). The capacity to invest in one’s self and one’s family has become even more important in today’s rapidly changing knowledge-based global economy

(Sherraden, 2014). Thus, it makes sense that many countries today are exploring the potential of asset-based social policy (Organisation for Economic Co-operation and Development, 2003).

But asset policy does not necessarily support asset accumulation by low- and moderate-income families. In fact, the original proposal for CDAs was partly a response to regressive asset policy in the United States, which supports asset accumulation for middle- and especially upper-income families through income tax benefits (Sherraden, 1991; see also Howard, 1997; Woo, Rademacher, and Meier, 2010). For example, in 2013, U.S. taxpayers in the highest income quintile received 72% of federal tax expenditures on the home mortgage interest deduction (which supports home ownership and the accumulation of home equity), and those in the second highest quintile received 19%. The other 60% of taxpayers received less than 10% of these subsidies (Steuerle, Harris, McKernan, Quakenbush, and Ratcliffe, 2014). Meanwhile, some means-tested welfare programs penalize asset accumulation in low-income households by imposing “asset tests” that require families to maintain very low levels of assets and sometimes spend down assets in order to receive benefits. This is inconsistent and lopsided policy, diminishing resources of the poorest and adding to resources of the well-to-do, contributing directly to economic inequality. In this unfortunate policy context, universal and progressive CDAs can become a tool to distribute public asset-building subsidies more fairly.

Inclusive Asset Building Policy and CDAs

In contrast to asset policies that benefit mostly the well-off, which are very common in the United States and other countries, inclusive asset building is universal, progressive, and lifelong (Sherraden, 2014; Sherraden et al., 2016). CDAs are explicitly designed with these characteristics in mind.

Research on a variety of asset-building programs shows clearly that voluntary programs—programs that require people to enroll and contribute—are far from universal. Economically advantaged families, those who are most able to save, are the ones who participate and benefit (Congressional Budget Office, 2011; Dynarski, 2004; Government Accountability Office, 2012; Springstead and Wilson, 2000; U.S. Department of the Treasury, 2009). Thus, the vision is for CDAs to be automatically opened and to provide automatic initial deposits for all. Parents could opt out if they chose.

Progressive subsidies are another way to support the participation and asset accumulation of less advantaged families. CDA policies might provide lower-income families with larger initial deposits, additional deposits at later points in time, and/or greater savings matches. Progressive subsidies would acknowledge that it is very difficult for low-income families to save for long-term goals. They would also take a modest step toward distributing public asset-building subsidies more equitably.

There are several reasons to make CDAs lifelong, starting at birth. First, asset accumulation is a long-term process: Most people build assets by making deposits over time. Opening accounts and encouraging saving early gives people more time to make deposits, and even small deposits made frequently enough can result in meaningful asset accumulation. Second, personal and program deposits made early have more time to accrue investment earnings. Program deposits made at birth may grow substantially, resulting in meaningful CDA balances—even for those whose families do not contribute (see, e.g., Beverly, Clancy, Huang, and Sherraden, 2015). Third, there is evidence that asset holding positively affects attitudes and behaviors, making people more future-oriented, for example (see reviews in Elliott, Choi, Destin, and Kim, 2011; Grinstein-Weiss, Williams Shanks, and

Beverly 2014; and Williams Shanks, Kim, Loke, and Destin, 2010). When children have assets from birth, they may benefit from a lifetime of future-oriented attitudes and behaviors, including the future-oriented attitudes and behaviors of parents.

In addition to initiating account holding and asset accumulation early, the potential to make CDAs lifelong can support a variety of life course investments, from education in childhood to retirement stability in later life. Having a single account that follows an individual from birth into retirement is the most efficient way to make asset policy lifelong.

During the past 25 years, many CDA programs and policies have been created—in schools, cities, states, and countries. Objectives vary as do policy and program details. Some are more inclusive than others. They operate under different auspices, using different asset managers, with different goals and guidelines. The next sections describe national CDA policies, statewide and city programs, and large research projects on CDAs.

National CDA Policies

Several countries have established national CDA policies. Table 1 summarizes the essential elements of these policies from a participant's point of view.

Singapore

Singapore has one of the earliest CDA policies in the world. Its CDA policy is a comprehensive system of accounts that support early childhood development, primary and secondary education, postsecondary education, and health care, at different stages of a child's life (Loke and Sherraden, 2015). To support every child in maximizing their educational opportunities, the Edusave Account was established in 1993 for every school-aged child. These accounts receive a government contribution of at least S\$200 each year, to be used for educational enrichment. In 2001, the government introduced the Baby Bonus Scheme comprising an unrestricted cash gift of up to S\$10,000 for each child, and a Child Development Account with a government contribution of up to S\$18,000 in savings match. Funds in the Child Development Accounts may be used to cover expenses incurred in early childhood for childcare; preschool and kindergarten; special education or early intervention programs; and healthcare. Beginning in 2016, the government will kick-start savings in the Child Development Accounts with an initial contribution of S\$3,000, without parents having to save in these accounts first. (This deposit counts toward the government's existing contribution caps.) Unused funds in Child Development Accounts and Edusave Accounts are eventually transferred to the Post-Secondary Education Account (PSEA), established in 2005 to help every Singaporean build resources to finance postsecondary education. These PSEAs receive periodic top-ups from the government. For example, in 2015, children ages 17 to 20 years received up to S\$500 in their accounts, based on their household economic status. Unused PSEA funds are later transferred to the individual's Central Provident Fund account, to be used for housing, health care, and retirement purposes. Finally, every child has a Medisave account, a health savings account administered by the government and opened automatically when a birth is registered. These accounts are endowed with S\$4,000 from the government, sufficient to pay the premiums of Medishield Life, a basic healthcare insurance plan, for 21 years.

Table 1. National Child Development Account Policies

Policy	Eligibility and enrollment	Withdrawals and use of funds	Public contributions	Matching contributions
Singapore				
Baby Bonus Cash Gift	For every Singaporean child born to lawfully married parents who apply when they register the child's birth	Intended for newborn expenses	S\$8,000 each for the first and second children; S\$10,000 each for subsequent children	Not applicable
Baby Bonus Child Development Account (CDA)	Account opened for every Singaporean child born to lawfully married parents who apply online	For child care, early intervention, education, and healthcare expenses for child and siblings (up to age 12)	S\$3,000 for children born on or after March 24, 2016. (This contribution counts toward the lifetime cap.)	100% public match up to lifetime cap of between S\$6,000 to S\$18,000. ^a
Edusave	Account opened automatically for all Singaporean primary and secondary students	For educational enrichment activities	S\$200 per year for primary students; S\$240 per year for secondary students	None
Post-Secondary Education Account (PSEA)	Accounts opened automatically for all Singaporean children aged 7 to 20 years old	For postsecondary education expenses of child and siblings	In some years. Amount depends on child's age and rental value of the family's home. ^b	100% public match up to lifetime cap ^a
Medisave	Accounts opened automatically for all Singapore citizens upon birth registration	For qualified healthcare expenses and health insurance	Medisave Grant for Newborn of S\$4,000	None
Canada				
Canada Education Savings Program (CESP)	Individuals may open a Registered Education Savings Plan (RESP) for any Canadian. Individuals must apply for CESP funds, usually with help of a RESP provider.	For postsecondary education expenses of child and siblings	For low- and moderate-income children, the Canada Learning Bond program contributes C\$525 when a RESP is opened and C\$100 each year for up to 15 years	Canada Education Savings Grant provides a 20% match on the first C\$2,500 deposited each year. Low- and moderate-income families receive an additional 10% or 20% match on the first C\$500 deposited up to a lifetime cap of C\$7,200 per child.
United Kingdom				
Child Trust Fund (CTF) (2005–2010)	Parents of all children born on or after September 1, 2002, received a voucher that could have been invested in a private CTF account. Accounts opened automatically after 1 year if parents did not open one.	At age 18, young adults may withdraw funds for any purpose	£250 at account opening and £250 at age 7. Low-income children received a supplemental £250 at both points in time.	None
Korea				
Child Development Account (CDA)	Children in the child welfare system and some children in families receiving welfare benefits are eligible. An application is required.	At age 18, young adults may withdraw funds for education, vocational training, housing, small business development, medical expenses, or wedding expenses	None, but children who cannot save may seek sponsorship from the Korea National Council on Social Welfare	100% match up to ₩30,000 per month
Israel				
	Accounts opened automatically at birth for all newborn residents of Israel—Jewish, Palestinian and others	Funds are not restricted to certain uses. Young adults may withdraw at age 18 with parental permission or at age 21 on their own.	50 Shekels per month. Parents can choose to have another 50 Shekels per month put into the CDA from Child Allowance funds.	No savings match. Young adults who leave the money in the account until age 21 receive an additional 1,000 Shekels (500 at age 18 and 500 at age 21).

Note: Adapted and expanded from *Child Development Accounts and College Success: Accounts, Assets, Expectations, and Achievements* (p. 2), by S. G. Beverly, W. Elliott III, and M. Sherraden, 2013, St. Louis, MO: Washington University, Center for Social Development.

^a The combined lifetime cap for CDA and PSEA contributions is S\$6,000 each for first and second children, S\$12,000 each for third and fourth children, and S\$18,000 for each subsequent child.

^b In 2015, children aged 17 to 20 received either S\$250 or S\$500.

Although an ideal CDA policy might not use multiple accounts across the life course, Singapore stands out for having an innovative, inclusive, and generous lifelong policy. Two points are especially important: CDAs in Singapore are strongly oriented toward human capital development during childhood and youth; and CDAs are integrated into a lifelong asset-based social policy (Loke and Sherraden, 2009, 2015; Zou and Sherraden, 2010).

Canada

Registered Education Savings Plan (RESP) accounts are CDAs that supports postsecondary education in Canada. To provide an incentive for parents, other family members, and friends to open and save for a child's post-secondary education in an RESP account, the Canada Education Savings Grant (CESG) was introduced in 1998. It provides a 20% savings match on RESP contributions each year, up to an annual cap of C\$500 and a lifetime cap of C\$7,200. Low- and moderate-income children are eligible for an additional 20% savings match on the first C\$500 saved each year. In addition, under the Canada Learning Bond program implemented in 2005, low- and moderate-income children are eligible for a C\$525 initial deposit when they open a RESP account, and C\$100 annual deposits into their RESPs for up to 15 years. These public deposits are not contingent on personal deposits (Loke and Sherraden, 2009).

United Kingdom

Based on asset-building research results in the United States and consultations by Michael Sherraden at the Center for Social Development at Washington University in St. Louis (CSD), with the Tony Blair government, the United Kingdom initiated the first fully universal and automatic national CDA policy, known as the Child Trust Fund in 2005. The policy was running smoothly and perceived as successful, but nevertheless in 2010 it was suspended due to budget decisions by a new government (Child Trust funds to be scrapped, 2010). In the Child Trust Fund, children received a £250 voucher at birth. Parents could redeem the voucher by opening a special account. If parents did not do so within a year, the government automatically opened an account and automatically deposited £250 for the child. Children received an additional £250, through an automatic deposit, at age 7. Low-income children received an additional £250 at both points in time. The program aimed to help children and parents begin to accumulate assets and establish connections with financial institutions, and to enable youth to have more successful transitions to young adulthood. Although the government no longer contributes, individuals may still make deposits into existing accounts. Youth may withdraw funds when they turn 18, with no restrictions on use (Loke and Sherraden, 2009).

Korea

Following consultations with Li Zou and other staff at CSD, the Korean central government established CDAs for children in the child welfare system (including children living in disability facilities) in 2007. Starting in 2011, some children in families receiving welfare are eligible. Since eligible children rarely have money to save, the Korean government recruits sponsors who deposit money into CDAs on behalf of children. Deposits into these accounts (from children, family members, sponsors, and others) earn a 100% match up to ₩30,000 per month. At age 18, young adults may withdraw funds for education or training, housing, small business development, medical

expenses, and wedding expenses (Han and Kim, 2015; Kim, Zou, Weon, Sherraden, and Choi, 2015; Korean Ministry of Health and Welfare, 2016; Nam and Han, 2010). Because eligibility is limited and account opening is not automatic, the program remains small. As of December 2015, about 76,000 children had CDAs, including about 33,000 from families receiving welfare (Korean Ministry of Health and Welfare & Social Service Network, 2016), but some government officials would like to expand the program (Kim, Zou, et al., 2015).

Israel

Vered Slonim-Nevo at Ben Gurion University in Beer Sheva, working with Michael Sherraden from CSD, initiated discussions and proposals for CDAs in Israel in the early 2000s; she was particularly interested in serving the Bedouin people in southern Israel, who struggle with poverty and adaptation to a non-nomadic lifestyle. At that time, there were discussions across ethnic and religious lines of creating a Middle East Development Account that might someday cross national borders, but, needless to say, political conditions in that part of the world are enormously challenging. In 2010, Michal Grinstein-Weiss, with a team from the United States, revived this discussion of CDA policy in Israel, aiming for a universal policy. This effort led to proposed legislation for universal CDAs in Israel put forth by then-Minister of Social Affairs Isaac Herzog in close collaboration with the CSD team. The proposal was presented to and discussed in Israel's parliament, the Knesset, but remained only pending for several years.

Over the next several years, Grinstein-Weiss and others conducted a series of policy briefings and presentations in the United States and in Israel with leaders in the Israeli government, sharing new evidence about CDAs from CSD research. In 2015, it became politically possible to pass and fund a universal and automatic CDA policy in Israel. Beginning in January 2017, accounts will be opened automatically at birth for all Israeli residents who receive the Child Allowance—Jews, Palestinians, and others. The government will automatically deposit 50 Shekels per month until children withdraw at age 18 or 21. Families may arrange to have another 50 Shekels automatically deposited each month, with funds taken from their monthly Child Allowance. No other deposits are permitted. Although in general CDAs are primarily intended to support education, with parental permission young adults may withdraw funds with no restrictions once they turn 18. If young adults wait until age 21 to withdraw, the government will make two additional deposits (500 Shekels at age 18 and 500 at age 21). This Israeli CDA is the first example globally of a universal CDA with automatic monthly deposits, an important precedent and example.

United States

In the United States, CDAs have been proposed at the federal level several times, typically with bipartisan support. The America Saving for Personal Investment, Retirement, and Education (ASPIRE) Act has been introduced in many sessions of Congress (Cramer, 2009; Cramer and Schreur, 2015), and the USAccounts: Investing in America's Future Act was introduced in 2015 (H.R. 4045 2015; Harvin, 2016). Both proposals would open an account and provide an initial deposit for every newborn in the country. Both would provide a progressive savings match. Funds could eventually be used for postsecondary education, homeownership, and retirement security. The

potential for a national policy in the United States may increase, with innovations now occurring in U.S. states and cities (see examples below).

Statewide and City CDA Policies

At this writing, there are four statewide CDAs in the United States (Clancy and Beverly, 2016). These policies are important because they extend the benefits of account holding and asset holding to many families. These state CDAs are also important because they serve as testing grounds, providing lessons and perhaps inspiration for a nationwide CDA program. All four of the statewide CDA programs support asset accumulation for postsecondary education and training. All are built on their state's college savings plan. (College savings plans, commonly called "529 plans", were authorized by the federal government in 1996 to encourage families to save for postsecondary education. They provide tax-advantaged investment accounts with a limited selection of investment options [Clancy, Lassar, and Taake, 2010; Clancy, Sherraden, and Beverly, 2015].)

The oldest and most comprehensive statewide CDA program is in Maine. This program—which is privately funded—was piloted in 2008, was offered statewide in 2009, and became universal and automatic in 2014. Now, every resident newborn automatically receives a \$500 grant for postsecondary education. Personal savings deposited into the state's 529 plan are matched at a 50% rate up to an annual maximum of \$300. Match money is deposited automatically, regardless of family income, and there is no lifetime maximum (Clancy and Beverly, 2016; Clancy and Sherraden, 2014; Huang, Beverly, Clancy, Lassar, and Sherraden, 2013). The decision to make account opening, initial deposits, and matching deposits automatic—which came after CSD research and consultation led by Margaret Clancy—created the first fully inclusive CDA in the United States (Clancy and Sherraden, 2014).

Informed by the development and implementation of Maine's program, Rhode Island, Nevada, and Connecticut have also created statewide CDA programs. In Rhode Island, parents enroll their newborn children by checking a box on a form used to register birth certificates. Enrolled children automatically receive a \$100 initial deposit; there are no additional incentives. Nevada automatically enrolls every public kindergarten student and deposits \$50 into a master account. If parents (or others) open a 529 account for them, then low- and middle-income children are eligible for a savings match on deposits into this account. Connecticut provides a \$100 initial deposit and a small savings match, but only if parents (or others) open a 529 account and enroll their child in the CDA program (Clancy and Beverly, 2016). Other states are considering CDA programs, including Vermont, which passed a law creating CDAs in 2015, but has not yet appropriated funds. CSD continues to work with State Treasurers in many of the states. SEED OK research results (see below) have been extraordinarily important in influencing universal state CDA policies.

In addition to these statewide programs, the city of San Francisco has a large CDA program. Every public school kindergartner automatically receives a savings account with a \$50 initial deposit. Children who receive free and reduced-price lunch receive an additional \$50 deposit (Phillips and Stuhldreher, 2011). St. Louis City recently launched a CDA for all kindergartners in public and charter schools (see <http://www.stlofe.org/collegekids>). Other U.S. cities are making similar plans.

Outside the United States, CDA programs have also been implemented by city governments in Taipei (Cheng, 2003, 2007; Zou et al., 2015), Hong Kong (Zou, Lai, and Sherraden, 2015), and Seoul (Han and Kim, 2015; Kim, Zou, et al., 2015). CSD has advised in each of these initiatives. City governments often have private partners, such as banks, corporations, community chests, and foundations. Sometimes city programs can lead to larger discussions. Li-chen Cheng at National Taiwan University introduced asset building and youth accounts in Taipei, and this has spread to several other cities in Taiwan. During the 2015-16 presidential campaign, the new Taiwan President Tsai Ing-wen proposed universal CDAs for all of Taiwan.

Research on CDAs and Youth Savings

In addition to the CDA policies and programs created by national, state, and city governments, there are several large research projects on CDAs and other youth savings programs around the world. In this section, we describe several projects that used random assignment to create treatment and control groups. Random assignment increases the likelihood that study participants are similar before receiving a CDA or participating in a savings program. If random assignment is successful, then later differences between treatment and control groups may be attributed to the CDA or savings program. This is a rigorous and fairly uncommon research design for evaluating the impact of an intervention. The projects described below provide useful insight about the design and implementation of CDA programs and important evidence about the impact of CDAs and youth savings programs.

YouthSave Experiment in Ghana

YouthSave is a large multi-method study designed to assess the impacts of offering tailored savings products to low-income youth in developing countries. One component of YouthSave, the Ghana Experiment, is a large-scale rigorous test of youth savings accounts, conducted from 2011 through 2015. Research in YouthSave has been led by Lissa Johnson and others at CSD, and the Ghana experiment has been led by Gina Chowa, with support from David Ansong, at University of North Carolina. Although the intervention in the Ghana Experiment was not a CDA program—there were no automatic deposits or savings incentives, for example, and savings were not designated for particular developmental goals—the program offered savings services to low-income youth, and findings about participation and impact may have implications for CDA policies and programs.

One hundred junior high schools in Ghana were randomly assigned to one of three groups. In two of the groups, students were encouraged to open and save in a project-sponsored account; students in the third group (the control group) were not. The first two groups differed in the level of bank outreach. The bank made multiple visits to schools in the *in-school banking* group, and students could make deposits at school. Banks made just one visit to schools in the *marketing outreach* group. Students could open accounts and make deposits during this visit but had to go to the bank for other transactions. (For more details on the intervention and research design, see Chowa et al. [2015], Johnson et al. [2015], and Lee et al. [2015]).

Researchers examined account data shared by banks to measure the impact of the intervention on account ownership and savings. Over 21% of students in the in-school banking schools and 11% in

the marketing outreach schools opened accounts, compared to less than 1% in the control schools. In both treatment groups, students who opened accounts made about 3 deposits per year, on average, and saved about US\$25 per year (Lee et al., 2015). These are meaningful impacts on financial participation and asset accumulation by children in a resource-limited country. As Lee et al. (2015, p. 9) note, “For low-income youth in a developing country, making deposits several times a year is a positive step toward financial inclusion, with repeated meaningful interactions with a formal financial provider.” Researchers also examined the impacts of the intervention on psychosocial, educational and health outcomes. The differences between groups were not often statistically significant (Chowa et al., 2015).

CDA Experiments in Uganda

Researchers at Columbia University, led by Fred Ssewamala, have examined asset programs for youth affected by AIDS in Uganda. The Suubi and Bridges research program is a set of rigorous studies funded by the National Institutes of Health and now housed at the Columbia University International Center for Child Health and Asset Development (ICHAD). The studies evaluate the impact of CDAs as an asset-led economic empowerment intervention on financial, education, health and psychosocial outcomes for poor, AIDS-affected youth. Beginning in 2004, this program represents the first asset-development research conducted in Uganda, and is among the earliest in Sub-Saharan Africa.

The intervention tested in Suubi and Bridges research is informed by CDA scholarship and adapted for the local context. It includes a matched savings account, financial education, and mentorship. (The intervention is described in detail in Karimli and Ssewamala [2015]; Ssewamala, Neilands, Waldfoegel and Ismayilova [2012]; Ssewamala, Ismayilova, Mckay, Sperber, Bannon, and Alicea [2010]; and Ssewamala, Han, Neilands, Ismayilova, and Sperber [2010].) Local financial institutions facilitate account opening by sending representatives to schools in the treatment group. The accounts are seeded with a small initial deposit, and youth in the treatment group and their families are encouraged to save for secondary education or family small business development. For 24 to 36 months personal deposits made by youth, family members, and friends receive a 100% or 200% match (the maximum value of personal deposits eligible for match is between US\$10 and US\$20 per month), and youth can withdraw matching funds for approved uses. The mentorship component recognizes that youth in this context need support beyond simply establishing an account and includes financial management training by a trusted and supportive young adult (Nabunya, Ssewamala, Mukasa, Byansi, and Nattabi, 2015; Ssewamala, Nabunya, Mukasa, Ilic, and Nattabi, 2014).

Savings and asset accumulation outcomes among youth receiving the intervention have been positive. For instance, in one experiment, 66% of youth in the treatment group opened accounts and made or received personal deposits. On average, youth who opened accounts accumulated \$3 per month in personal savings. With the savings match, over the course of the intervention, the typical youth who opened an account accumulated \$164, enough to pay for about five terms of secondary school (Karimli, Ssewamala, and Neilands, 2014). In another experiment, 91% of youth opened accounts and accumulated some savings. The median amount of personal savings accumulated was over \$5 per month, more than half of the amount that could be matched (Ssewamala and Ismayilova, 2009; Ssewamala, Ismayilova, et al., 2010). Additionally youth and families receiving the

intervention have been able to maintain their accounts and existing physical assets throughout the course of the intervention. Findings about youth participation in the Suubi and Bridges program have been influential in the region, such that local financial institutions have begun creating youth-focused products to foster saving habits and asset accumulation among poor children and adolescents.

Findings regarding the impact of the Suubi and Bridges interventions on nonfinancial outcomes have also been very positive. Evidence indicates that a matched savings account combined with financial education and mentoring can have positive impacts on educational outcomes (e.g., standardized test scores, confidence in educational plans), mental health (e.g., depression, hopelessness, self-concept), future orientation, and attitudes about sexual risk-taking (see, e.g., Curley, Ssewamala, and Han; 2010; Han, Ssewamala, and Wang, 2013; Kagotho and Ssewamala, 2012; Karimli and Ssewamala, 2015; Jennings, Ssewamala, and Nabunya, 2016; Nabunya and Ssewamala, 2014; Ssewamala, Han, et al., 2010; Ssewamala, Ismayilova, et al., 2010; Ssewamala et al., 2012; Ssewamala, Karimili, Neilands, et al., 2016). Longitudinal research on the Suubi and Bridges interventions continues in Uganda. Currently, researchers are investigating impact on medication adherence among HIV+ children and adolescents, a number of long-term nonfinancial outcomes, and cost-effectiveness.

SEED for Oklahoma Kids CDA Experiment in the United States

The SEED for Oklahoma Kids demonstration and experiment (SEED OK), which began in 2007, is the first test of the at-birth, universal, automatic, and progressive CDA policy proposed by Sherraden (1991). With probability sampling from a full state population, random assignment to treatment or control groups, and multiple research methods including a longitudinal survey, SEED OK is very well-positioned to examine the impacts of a CDA program over time. The focus of the CDA in SEED OK is postsecondary education and training, and a college savings account with \$1,000 was automatically opened for every newborn in the treatment group. Families in the treatment group were encouraged to save for future college expenses, and for about 4 years, personal deposits into the accounts of low- and moderate-income children were matched. (Newborns in the control group did not receive the CDA and were not eligible for the match. SEED OK research methods and the CDA itself are described in detail in Zager, Kim, Nam, Clancy, and Sherraden [2010] and Nam, Kim, Clancy, Zager, and Sherraden [2013]).

Implementing the CDA in SEED OK has shown that it is possible to provide accounts and deposits to all children. That is, *if accounts and deposits are provided automatically*, it is possible for a CDA to be truly universal (Sherraden et al., 2015). This was the first demonstration of a fully inclusive CDA in the U.S. and sets the stage for an expansion of comprehensive asset policy. As Beverly, Clancy, and Sherraden (2016, p. 8) note, “Demonstrating full inclusion paves the way for widespread participation in asset building and more equitable distribution of public resources.”

SEED OK has also demonstrated the value of a centralized account platform: building the CDA on an existing 529 plan created numerous efficiencies and facilitated automatic account opening and deposits (Clancy, Beverly, Sherraden, and Huang, 2016; Clancy et al., 2015). Holding funds in an investment vehicle (rather than a bank savings account, for example) has also proved to be

important: After several years, a substantial portion of assets in CDAs comes from investment earnings (Clancy et al., 2016).

Researchers have measured the impacts of the CDA in SEED OK on financial outcomes several years after the intervention began. Because disadvantaged children are much less likely to have college accounts and college savings in the absence of a CDA, the CDA in SEED OK has especially large impacts on account holding and asset holding for these children. In fact, the universal and automatic features of the CDA eliminate essentially all inequality in account holding and much inequality in asset holding by income, education, race, and other socioeconomic characteristics (Beverly, Kim, Sherraden, Nam, and Clancy, 2015). The CDA in SEED OK also increases the likelihood that parents themselves save for their children’s future college expenses, and this is true for families of all income levels (Beverly et al., 2015; Clancy et al., 2016).

The CDA in SEED OK also has positive impacts on non-financial outcomes. Experimental evidence shows that the CDA improves mothers’ expectations for their children’s education (Kim, Sherraden, Huang, and Clancy, 2015), mothers’ mental health (Huang, Sherraden, and Purnell, 2014), and children’s social-emotional development (Huang, Sherraden, Kim, and Clancy, 2014). The effects are usually larger for disadvantaged mothers and children than for their advantaged counterparts. And the impacts seem to be primarily related to the automatic features of the CDA, rather than to parents’ saving behavior.

On balance, these large and rigorous studies—all led by applied scholars in social work—demonstrate that CDAs and youth savings programs can have numerous positive impacts. These programs clearly increase account holding rates and asset accumulation. Evidence of positive impacts on nonfinancial outcomes is also quite strong for the CDA programs in Uganda and the United States: Together, these CDAs improve early child development, educational outcomes among adolescents, adolescent and maternal mental health, and the future orientation of adolescents. Future research can examine longer-term outcomes, both attitudinal and behavioral. It is noteworthy that these projects were implemented in developed and developing countries, increasing our ability to generalize findings to a variety of social, economic, and political environments.

Contributions and Directions

Until recently, it was relatively uncommon to talk about asset holding in poor families, especially in Western nations. But all families, especially resource-constrained families, can benefit from having assets—both to support consumption when income decreases or expenses increase and to help them take advantage of opportunities to improve their circumstances over the long-term. A large and growing body of evidence suggests that asset holding improves well-being in a variety of ways—often by changing people’s outlook. Early evidence from the SEED OK experiment suggest that assets have positive impacts even if individuals receive asset transfers rather than accumulating assets by saving over time.

Given the benefits of asset holding, the presence of extreme asset inequality in many countries is problematic. And the fact that public policies often heavily subsidize asset accumulation in wealthy households while providing little support for—or even penalizing—asset accumulation in poor

households is unjust and ineffective. Better asset policy would support the asset accumulation of all, with extra subsidies and supports for those least able to accumulate assets on their own.

CDAs are one form of progressive asset policy, and the SEED OK experiment has demonstrated that it is possible for a CDA policy to be fully inclusive. But full inclusion requires automatic account opening and automatic deposits, features that were uncommon in asset policies and programs until very recently. The good news is that policy makers are beginning to recognize the importance of automatic features, as the recent expansions in Maine and Singapore demonstrate. Indeed, the existence of several national CDA policies, four statewide policies in the United States, numerous local CDA programs, and many programs in development or under discussion represents meaningful progress toward comprehensive asset-building policy. In addition, large private investments in rigorous research projects, including SEED OK, YouthSave, and the Suubi and Bridges research program, demonstrate serious inquiry into the impacts of CDAs and a commitment to knowledge-building to inform future policy. In the case of CDAs, this knowledge building has indeed “paid off” in informing on-going policy innovations.

We cannot predict the future of CDA policies and programs, nor the future of inclusive and lifelong asset-building policy for which CDAs are a necessary first step. But as we move out of the industrial era, and into a more globalized, information-era economy, it seems likely that social policies will be shifting to address new realities. These realities unfortunately include rising income and asset inequality in most countries. In this context, the emergence of universal, lifelong, and progressive asset building might play a positive role in reducing inequality, ensuring household stability, and promoting social and economic development for all families. These are social work goals, and in this regard, it may be important to note that most of the U.S. and international research on CDAs to date, and much of the policy and program influence, has been led by social workers.

References

- Beverly, S. G., Clancy, M. M., Huang, J., & Sherraden, M. (2015). *The SEED for Oklahoma Kids Child Development Experiment: Accounts, assets, earnings, and savings* (CSD Research Brief No. 15-29). St. Louis, MO: Washington University, Center for Social Development.
- Beverly, S. G., Clancy, M. M., & Sherraden, M. (2016). *Universal accounts at birth: Results from SEED for Oklahoma Kids* (CSD Research Summary No. 16-07). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/RS16-07.pdf>
- Beverly, S. G., Kim, Y., Sherraden, M., Nam, Y., & Clancy, M. M. (2015). Can Child Development Accounts be inclusive? Early evidence from a statewide experiment. *Children and Youth Services Review*, 53, 92–104. doi:10.1016/j.childyouth.2015.03.003
- Cheng, L.-C. (2003). Developing Family Development Accounts in Taipei: Policy innovation from income to assets. *Social Development Issues*, 25(1/2), 106–117.
- Cheng, L.-C. (2007, January). *Asset-based policy in Taiwan: Demonstrations and policy progress* (CSD Policy Brief No. 07-33). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/PB07-33.pdf>
- Child Trust Funds to be scrapped. (2010, May 24). *BBC News*. Retrieved from <http://www.bbc.co.uk/news/10146734>
- Chowa, G., Masa, R., Ansong, D., Despard, M., Wu, S., Hughes, D., Osei-Akoto, I., Afranie, S., Mark-Sowah, N. A., Ofori-Acquah, C., Lee, Y., Johnson, L., & Sherraden, M. (2015). *Impacts of financial inclusion on youth development: Findings from the Ghana YouthSave experiment* (CSD Research Report No. 15-35). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/RR15-35.pdf>
- Clancy, M. M., & Beverly, S. G. (2016). *Statewide Child Development Account programs: Design and experience*. Manuscript in preparation.
- Clancy, M. M., Beverly, S. G., Sherraden, M., & Huang, J. (2016). *Testing universal Child Development Accounts: Financial impacts in a large social experiment* (CSD Working Paper No. 16-08). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/WP16-08.pdf>
- Clancy, M. M., Lassar, T., & Taake, K. (2010, September). *Saving for college: A policy primer* (CSD Policy Brief No. 10-27). St. Louis, MO: Washington University, Center for Social Development.
- Clancy, M. M., & Sherraden, M. (2014). *Automatic deposits for all at birth: Maine's Harold Alfond College Challenge* (CSD Policy Report No. 14-05). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/PR14-05.pdf>
- Clancy, M. M., Sherraden, M., & Beverly, S. G. (2015, January). *College savings plans: A platform for inclusive and progressive Child Development Accounts* (CSD Policy Brief No. 15-07). St. Louis, MO: Washington University, Center for Social Development.
- Congressional Budget Office. (2011). *Use of tax incentives for retirement saving in 2006*. Washington, DC: Author.

- Cramer, R. (2009). *The ASPIRE Act of 2009: Questions and answers*. Washington, DC: New America Foundation.
- Cramer, R., & Schreur, E. (2015). *Ensure every child has a lifelong savings account* (Paper in the series Pioneering Change: Innovative Ideas for Children and Families). Retrieved from First Focus website: <https://firstfocus.org/wp-content/uploads/2015/04/Ensure-Every-Child-Has-a-Lifelong-Savings-Account.pdf>
- Curley, J., Ssewamala, F. M., & Han, C-K. (2010). Assets and educational outcomes: Child Development Accounts (CDAs) for orphaned children in Uganda. *Children and Youth Services Review*, 32(11), 1585–1590. doi:10.1016/j.childyouth.2009.07.016
- Dynarski, S. (2004). Who benefits from the education saving incentives? Income, educational expectations and the value of the 529 and Coverdell. *National Tax Journal*, 57(2), 359–383.
- Elliott, W., III, Choi, E. H., Destin, M., & Kim, K. H. (2011). The age old question, which comes first? A simultaneous test of children’s savings and children’s college-bound identity. *Children and Youth Services Review*, 33(7), 1101–1111. doi:10.1016/j.childyouth.2011.02.001
- Ferguson Commission. (2015). *Forward through Ferguson: A path toward racial equity* [Report]. Retrieved from Forward through Ferguson website: <http://forwardthroughferguson.org/report/executive-summary/>
- Government Accountability Office. (2012). *Higher Education: A small percentage of families save in 529 plans* (Report No. GAO-13-64). Retrieved from <http://www.gao.gov/products/GAO-13-64>
- Grinstein-Weiss, M., Williams Shanks, T. R., & Beverly, S. G. (2014). Family assets and outcomes: Evidence and directions. *The Future of Children*, 24(1), 147–170.
- Han, C.-K., & Kim, Y. (2015). Asset-based policies in Korea: Expansion, challenges, and future directions. In M. Sherraden, L. Zou, H. Ku, S. Deng, & S. Wang (Eds.), *Asset-building policies and innovations in Asia* (pp. 58–72). New York, NY: Routledge.
- Han, C.-K., Ssewamala, F. M., & Wang, J. S.-H. (2013). Family economic empowerment and mental health among AIDS-affected children living in AIDS-impacted communities: Evidence from a randomised evaluation in southwestern Uganda. *Journal of Epidemiology and Community Health*, 67(3), 225–230. doi:10.1136/jech-2012-201601
- Harvin, M. (2016, May 4). Congressmen seek to help the 97% of families without a college savings 529 Plan. *GoodCall Education News*. Retrieved from <https://www.goodcall.com/news/congressmen-seeking-help-97-families-without-college-savings-529-plan-06467>
- Howard, C. (1997). *The hidden welfare state: Tax expenditures and social policy in the United States*. Princeton, NJ: Princeton University Press.
- Huang, J., Beverly, S. G., Clancy, M. M., Lassar, T., & Sherraden, M. (2013). Early program enrollment in a statewide Child Development Account program. *Journal of Policy Practice*, 12(1), 62–81. doi:10.1080/15588742.2012.739124
- Huang, J., Sherraden, M., Kim, Y., & Clancy, M. M. (2014). Effects of Child Development Accounts on early social-emotional development: An experimental test. *JAMA Pediatrics*, 168(3), 265–271. doi:10.1001/jamapediatrics.2013.4643

- Huang, J., Sherraden, M., & Purnell, J. (2014). Impacts of Child Development Accounts on maternal depressive symptoms: Evidence from a randomized statewide policy experiment. *Social Science & Medicine*, 112, 30–38. doi:10.1016/j.socscimed.2014.04.023
- Jennings, L., Ssewamala, F.M., Nabunya, P. (2016). Effects of savings-led economic empowerment on HIV preventive practices among orphaned adolescents in rural Uganda: Results from the Suubi-Maka randomized experiment. *AIDS Care*, 28(3), 273–82. doi:10.1080/09540121.2015.1109585
- Johnson, L., Lee, Y., Ansong, D., Sherraden, M. S., Chowa, A. N., Ssewamala, F., Zou, L., Sherraden, M., Njenga, M., Kieyah, J., Osei-Akoto, I., Sharma, S., Manandhar, J., Rodriguez, C., Merchán, F., & Saavedra, J. (2015). *Youth Savings Patterns and Performance in Colombia, Ghana, Kenya, and Nepal* (YouthSave Research Report 15-01). St. Louis, MO: Washington University, Center for Social Development.
- Kagotho, N. & Ssewamala, F. M. (2012). Correlates of depression among caregivers of children affected by HIV/AIDS in Uganda: Findings from the Suubi-Maka family study. *AIDS Care*, 24(10), 1226–1232. doi:10.1080/09540121.2012.658754
- Karimli, L., & Ssewamala, F. M. (2015). Do savings mediate changes in adolescents' future orientation and health-related outcomes? Findings from randomized experiment in Uganda. *Journal of Adolescent Health*, 57(4), 425–432. doi:10.1016/j.jadohealth.2015.06.011
- Karimli, L., Ssewamala, F. M., & Neilands, T. B. (2014). Poor families striving to save in matched children's savings accounts? Findings from a randomized experimental design in Uganda. *Social Service Review*, 88(4), 658–694. doi:10.1086/679256
- Kim, Y., Sherraden, M., Huang, J., & Clancy, M. M. (2015). Child Development Accounts and parental educational expectations for young children: Early evidence from a statewide social experiment. *Social Service Review*, 89(1), 99–137. doi:10.1086/680014
- Kim, Y., Zou, L., Weon, S., Sherraden, M., & Choi, J. Y. (2015, December). *Asset-based policy in South Korea* (CSD Policy Brief No. 15-48). St. Louis, MO: Washington University, Center for Social Development.
- Korean Ministry of Health and Welfare. (2016). *Programs for children, 2016*. Seoul, Korea: Korean Ministry of Health and Welfare
- Korean Ministry of Health and Welfare & Social Service Network. (2016). *2015 annual report: Stepping Stone Accounts*. Seoul, South Korea: Stepping Stone Accounts.
- Lee, Y., Johnson, L., Sherraden, M., Ansong, D., Chowa, D., & Osei-Akoto, I. (2015). "Taking the bank to the youth": Impacts on saving and asset Building from the Ghana YouthSave Experiment (CSD Working Paper No. 15-43). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/WP15-43.pdf>
- Loke, V., & Sherraden, M. (2009). Building assets from birth: A global comparison of Child Development Account policies. *International Journal of Social Welfare*, 18(2), 119–129. doi:10.1111/j.1468-2397.2008.00605.x
- Nabunya, P. & Ssewamala, F. M. (2014). The effects of parental loss on the psychosocial wellbeing of AIDS-orphaned children living in AIDS-impacted communities: Does gender matter? *Children and Youth Services Review*, 43, 131–137. doi:10.1016/j.childyouth.2014.05.011

- Nabunya, P., Ssewamala, F. M., Mukasa, M. N., Byansi, W. & Nattabi, J. (2015). Peer mentorship program and HIV/AIDS knowledge, beliefs and prevention attitudes among AIDS-orphaned adolescents: An evidence based practice. *Vulnerable Children & Youth Studies*, 10(4), 345–356. doi:[10.1080/17450128.2015.1115157](https://doi.org/10.1080/17450128.2015.1115157)
- Nam, Y., & Han, C.-K. (2010). A new approach to promote economic independence among at-risk children: Child Development Accounts (CDAs) in Korea. *Children and Youth Services Review*, 32(11), 1548–1554. doi:[10.1016/j.childyouth.2010.04.009](https://doi.org/10.1016/j.childyouth.2010.04.009)
- Nam, Y., Kim, Y., Clancy, M. M., Zager, R., & Sherraden, M. (2013). Do Child Development Accounts promote account holding, saving, and asset accumulation for children’s future? Evidence from a statewide randomized experiment. *Journal of Policy Analysis and Management*, 32(1), 6–33. doi:[10.1002/pam.21652](https://doi.org/10.1002/pam.21652)
- Organisation for Economic Co-operation and Development. (2003). *Asset building and the escape from poverty: A new welfare policy debate*. Washington, DC: Author.
- Paxton, W. (2001). The asset-effect: An overview. In J. Bynner & W. Paxton (Eds.), *The asset-effect* (pp. 1–16). London, England: Institute for Public Policy Research.
- Paxton, W. (2002). Assets and the definition of poverty. In C. Kober & W. Paxton (Eds.), *Asset-based welfare and poverty: Exploring the case for and against asset-based welfare policies* (pp. 9–12). London, England: National Children’s Bureau.
- Phillips, L., & Stuhldreher, A. (2011). *Kindergarten To College (K2C): A first-in-the-nation initiative to set all kindergartners on the path to college* (Asset Building Program Report). Washington, DC: New America Foundation.
- Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, NY: M. E. Sharpe.
- Sherraden, M. (2014). Asset building research and policy: Pathways, progress, and potential of a social innovation. In R. Cramer & T. R. Williams Shanks (Eds.), *The assets perspective: The rise of asset building and its impact on social policy* (pp. 263–284). New York, NY: Palgrave Macmillan.
- Sherraden, M., Johnson, L., Clancy, M., Beverly, S., Sherraden, M., Schreiner, M., ... Han, C.-K. (2016). Asset building. In C. Franklin (Ed.), *Encyclopedia of Social Work Online*.
- Sherraden, M., Clancy, M. M., Nam, Y., Huang, J., Kim, Y., Beverly, S. G., Mason, L. R., Wikoff, N. E., Schreiner, M., & Purnell, J. Q. (2015). Universal accounts at birth: Building knowledge to inform policy. *Journal of the Society for Social Work and Research*, 6(4), 541–564. doi:[10.1086/684139](https://doi.org/10.1086/684139)
- Springstead, G. R., & Wilson, T. M. (2000). Participation in voluntary individual savings accounts: An analysis of IRAs, 401(k)s, and the TSP. *Social Security Bulletin*, 63(1), 34–39. Retrieved from <http://www.ssa.gov/policy/docs/ssb/v63n1/v63n1p34.pdf>
- Ssewamala, F. M., Han, C.-K., Neilands, T. B., Ismayilova, L., & Sperber, E. (2010). Effect of economic assets on sexual risk-taking intentions among orphaned adolescents in Uganda. *American Journal of Public Health*, 100(3), 483–488. doi:[10.2105/AJPH.2008.158840](https://doi.org/10.2105/AJPH.2008.158840)
- Ssewamala, F. M., Ismayilova, L., McKay, M., Sperber, E., Bannon, W., Jr., & Alicea, S. (2010). Gender and the effects of an economic empowerment program on attitudes toward sexual risk-taking among AIDS-orphaned adolescent youth in Uganda. *Journal of Adolescent Health*, 46(4), 372–378. doi:[10.1016/j.jadohealth.2009.08.010](https://doi.org/10.1016/j.jadohealth.2009.08.010)

- Ssewamala, F. M., Karimli, L., Neilands, T. B., Wang, J. S-H., Han, C-K., Ilic, V., & Nabunya, P. (2016). Applying a family-level economic strengthening intervention to improve education and health-related outcomes of orphaned children: Lessons from a randomized experiment in southern Uganda. *Prevention Science, 17*, 134-143. doi:10.1007/s11121-015-0580-9
- Ssewamala, F. M., Nabunya, P., Mukasa, M., Ilic, V., & Nattabi, J. (2014). Integrating a mentorship component in programming for care and support of AIDS-orphaned and vulnerable children: Lessons from the Suubi and Bridges Programs in sub-Saharan Africa. *Global Social Welfare, 1*, 9-24. doi:10.1007/s40609-014-0008-7
- Ssewamala, F. M., Neilands, T. B., Waldfogel, J., & Ismayilova, L. (2012). The impact of a comprehensive microfinance intervention on depression levels of AIDS-orphaned children in Uganda. *Journal of Adolescent Health, 50*(4), 346–352. doi:10.1016/j.jadohealth.2011.08.008
- Steuerle, C. E., Harris, B. H., McKernan, S.-M., Quakenbush, C., & Ratcliffe, C. (2014, September). *Who benefits from asset-building tax subsidies?* (Opportunity and Ownership Initiative Fact Sheet). Retrieved from Urban Institute website: <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/413241-Who-Benefits-from-Asset-Building-Tax-Subsidies-.PDF>
- U.S. Department of the Treasury. (2009). *An analysis of Section 529 college savings and prepaid tuition plans: A report prepared by the Department of Treasury for the White House Task Force on Middle Class Working Families*. Retrieved from <http://www.treasury.gov/press-center/press-releases/Documents/529.pdf>
- USAccounts: Investing in America's Future Act of 2015, H.R. 4045, 114th Cong. (2015).
- Williams Shanks, T. R., Kim, Y., Loke, V., & Destin, M. (2010). Assets and child well-being in developed countries. *Children and Youth Services Review, 32*(11), 1488–1496. doi:10.1016/j.childyouth.2010.03.011
- Woo, B., Rademacher, I., & Meier, J. (2010). *Upside down: The \$400 billion federal asset-building budget*. Washington, DC: Corporation for Enterprise Development and Annie E. Casey Foundation.
- Zager, R., Kim, Y., Nam, Y., Clancy, M. M., & Sherraden, M. (2010). *The SEED for Oklahoma Kids experiment: Initial account opening and savings* (CSD Research Report No. 10-14). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/RP10-14.pdf>
- Zou, L., Cheng, L.-C., Lee, E., Teyra, C., Chen, C.-Y., & Song, S. S. (2015). A comparative study on asset-building policy diffusion in Korea and Taiwan. In M. Sherraden, L. Zou, H.-B. Ku, S. Deng, & S. Wang (Eds.), *Asset-building policies and innovations in Asia* (pp. 73-88). Abingdon, United Kingdom: Routledge.
- Zou, L., Lai, S., & Sherraden, M. (2015, September). *Asset-based policy in Hong Kong: Child Development Fund* (CSD Policy Brief No. 15-50). St. Louis, MO: Washington University, Center for Social Development.
- Zou, L., & Sherraden, M. (2010). Assets for children: Experiences in Asia and implications for China. *U.S.-China Education Review, 7*(8), 87–94.

Further Reading

- Beverly, S. G., Clancy, M. M., Huang, J., & Sherraden, M. (2015, October). *The SEED for Oklahoma Kids Child Development Account experiment: Accounts, assets, earnings, and savings* (CSD Research Brief No. 15-29). St. Louis, MO: Washington University, Center for Social Development.
- Beverly, S. G., Clancy, M. M., & Sherraden, M. (2016). *Universal accounts at birth: Results from SEED for Oklahoma Kids* (CSD Research Summary No. 16-07). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/RS16-07.pdf>
- Beverly, S. G., Elliott, W., III, & Sherraden, M. (2013, November). *Child Development Accounts and college success: Accounts, assets, expectations, and achievements* (CSD Perspective No. 13-27). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/P13-27.pdf>
- Beverly, S. G., Sherraden, M., Cramer, R., Williams Shanks, T. R., Nam, Y., & Zhan, M. (2008). Determinants of asset holdings. In S.-M. McKernan & M. Sherraden (Eds.), *Asset building and low-income families* (pp. 89–151). Washington, DC: Urban Institute.
- Boshara, R. (2007). Every baby a trust fund baby. In New America Foundation (Ed.), *Ten big ideas for a new America* (pp. 1–4). Washington, DC: New America Foundation.
- Cramer, R., & Williams Shanks, T. R. (Eds.). (2014). *The assets perspective: The rise of asset building and its impact on social policy*. New York, NY: Palgrave Macmillan.
- Elliott, W., III, & Beverly, S.G. (2011). Staying on course: The effects of savings and assets on the college progress of young adults. *American Journal of Education*, 117(3), 343–374. doi:10.1086/659211
- Elliott, W., III, Choi, E. H., Destin, M., & Kim, K. H. (2011). The age old question, which comes first? A simultaneous test of children’s savings and children’s college-bound identity. *Children and Youth Services Review*, 33, 1101–1111. doi:10.1016/j.childyouth.2011.02.001
- Elliott, W., III, Destin, M., & Friedline, T. (2011). Taking stock of ten years of research on the relationship between assets and children’s educational outcomes: Implications for theory, policy and intervention. *Children and Youth Services Review*, 33(11), 2312–2328. doi:10.1016/j.childyouth.2011.08.001
- Fry, R., & Kochhar, R. (2014, December 17). America’s wealth gap between middle-income and upper-income families is widest on record (Fact Tank post). Retrieved from Pew Research Center website: <http://www.pewresearch.org/fact-tank/2014/12/17/wealth-gap-upper-middle-income>
- 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.
- Gray, K., Clancy, M. M., Sherraden, M. S., Wagner, K., & Miller-Cribbs, J. (2012). *Interviews with mothers of young children in the SEED for Oklahoma Kids college savings experiment* (CSD Research Report No. 12-53). Retrieved from Washington University, Center for Social Development website: <http://csd.wustl.edu/Publications/Documents/RP12-53.pdf>
- McKernan, S.-M. & Sherraden, M. (Eds.). (2008). *Asset building and low-income families*. Washington, DC: Urban Institute.

- Oliver, M. L., & Shapiro, T. M. (2006). *Black wealth/White wealth: A new perspective on racial inequality* (2nd ed.). New York, NY: Taylor & Francis.
- Schreiner, M., & Sherraden, M. (2007). *Can the poor save? Saving and asset building in Individual Development Accounts*. New Brunswick, NJ: Transaction.
- Shapiro, T. M., & Wolff, E. N. (Eds.). (2001). *Assets for the poor: The benefits of spreading asset ownership*. New York, NY: Russell Sage Foundation.
- Sherraden, M. (Ed.). (2005). *Inclusion in the American Dream: Assets, poverty, and public policy*. New York, NY: Oxford University Press.
- Sherraden, M., & Barr, M. S. (2005). Institutions and inclusion in saving policy. In N. P. Retsinas & E. S. Belsky (Eds.), *Building assets, building credit: Creating wealth in low-income communities* (pp. 286–315). Washington, DC: Brookings Institution.
- Sherraden, M., Clancy, M. M., Nam, Y., Huang, J., Kim, Y., Beverly, S. G. Mason, L. R., Williams Shanks, T. R., Wikoff, N. E., Schreiner, M., & Purnell, J. Q. (in press). Universal and progressive Child Development Accounts: A policy innovation to reduce educational disparity. *Urban Education*.
- Sherraden, M., Schreiner, M., & Beverly, S. G. (2003). Income, institutions, and saving performance in Individual Development Accounts. *Economic Development Quarterly*, 17(1), 95–112. doi:[10.1177/0891242402239200](https://doi.org/10.1177/0891242402239200)
- Shobe, M., & Page-Adams, D. (2001). Assets, future orientation, and well-being: Exploring and extending Sherraden's framework. *Journal of Sociology and Social Welfare*, 28(3), 109–127.
- Wikoff, N., Huang, J., Kim, Y., & Sherraden, M. (2015). Material hardship and 529 college savings plan participation: The mitigating effects of Child Development Accounts. *Social Science Research*, 50, 189–202. doi:[10.1016/j.ssresearch.2014.11.017](https://doi.org/10.1016/j.ssresearch.2014.11.017)
- Williams Shanks, T. R., Kim, Y., Loke, V., & Destin, M. (2010). Assets and child well-being in developed countries. *Children and Youth Services Review*, 32(11), 1488–1496. doi:[10.1016/j.childyouth.2010.03.011](https://doi.org/10.1016/j.childyouth.2010.03.011)

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