

Household Savings Decisions in Israel's Child Savings Program: The Role of Demographic, Financial, and Intrinsic Factors[†]

Ofir Pinto

Israeli Employment Service

ofirp@ies.gov.il

Olga Kondratjeva

Social Policy Institute, Washington University in St. Louis

okondratjeva@wustl.edu

Maya Haran Rosen

Bank of Israel

maya.haran@boi.org.il

Stephen Roll

Social Policy Institute, Brown School, Washington University in St. Louis

stephen.roll@wustl.edu

Aytakin Huseynli

Brown School, Washington University in St. Louis

ahuseynli@wustl.edu

Michal Grinstein-Weiss

Social Policy Institute, Brown School, Washington University in St. Louis

michalgw@wustl.edu

Social Policy Institute Working Paper
April 2020

Abstract: Israel's Child Development Account (CDA) program, the Savings for Every Child Program (SECP), is universal and automatically enrolls all children under the age of 18, depositing approximately \$14 into their accounts every month. Parents can transfer an additional monthly \$14 into these long-term savings accounts and can choose an investment vehicle for their children's deposits. The total realized benefits from the SECP depend heavily on parents' choices. This study examines how demographic, financial, and intrinsic personality characteristics predict household participation in this program. Using a unique data set combining administrative and survey data, we find that household ethnicity, parental education, and financial circumstances were the most significant predictors of household engagement with the SECP. Important differences in program enrollment and participation are observed by household ethnicity. Our study can inform potential policy designs of CDA programs, especially in middle- and high-income countries, and have implications for enabling less-educated and ethnic minority households to save for their children's future.

Key words: Child Development Accounts; asset building; savings; Israel

[†]Acknowledgement: We thank Daniel Gottlieb and Netanela Barkali for their research support. This manuscript reflects research work conducted by the authors, and does not necessarily represent the views or opinions of the National Insurance Institute of Israel. The authors accept all responsibilities for errors or omissions.

Introduction

This study focuses on enrollment patterns in a universal savings program in Israel and the way these patterns intersect with household financial knowledge, personality traits, and demographic and financial characteristics. Understanding households' interactions and engagement with social welfare programs in Israel is important in promoting improvements in household economic security, as Israel has one of the highest levels of poverty and economic inequality among the members of the Organisation of Economic Cooperation and Development (OECD) (National Insurance Institute of Israel, 2017). In 2016, the incidence of poverty in Israel was 19 percent among families and 31 percent among children. Income inequality in Israel is substantially higher than the OECD average (National Insurance Institute of Israel, 2017) and levels of wealth inequality exceed income inequality (Milgrom & Bar-Levav, 2015).

Extensive research indicates that savings and the accumulation of assets shape financial security of individuals and families in important ways. Sufficient amounts of savings can help households maintain necessary levels of consumption, provide buffers against financial emergencies, and facilitate long-term investments in higher education, homeownership, or business (Sherraden, 1991). Savings accumulation also carries distinct benefits for younger individuals. When children and adolescents have access to savings accounts at early ages, they are more likely to own savings accounts and have greater savings levels in young adulthood (Friedline, Elliott, & Chowa, 2013). Household ownership of financial assets has been shown to be positively linked with children's health and some educational outcomes (Chowa et al., 2010; Loke & Sacco, 2011). Ultimately, the accumulation of economic resources can facilitate intergenerational economic mobility and improve financial well-being of future generations.

Despite the potential benefits of savings and asset accumulation, households tend to

exhibit low rates of savings. Research has identified an array of different factors that explain these low rates, including: a lack of income to put additional money aside; preferences for present consumption rather than future consumption (Laibson, 1997); behavioral factors like a lack of self-control (Thaler & Shefrin, 1981) and the tendency to procrastinate and postpone savings decisions (Madrian & Shea, 2001); and institutional barriers to savings, such as the lack of available attractive savings vehicles for low-income populations or a lack of appropriate incentives to save (Beverly & Sherraden, 1999).

Specialized savings programs such as Child Development Accounts (CDAs) can potentially be effective in helping families overcome institutional barriers to savings and boost long-term asset accumulation. CDA programs, defined as savings or investment accounts opened at birth or young age, can provide children and their families with an access to tax-advantaged savings vehicles that can deliver direct financial benefits to program participants starting in early ages (e.g., through recurring savings deposits, matched savings, or initial seed deposits) and may offer larger benefits to lower-income households (Sherraden et al., 2018). Several countries, including the United Kingdom, Canada, Singapore, South Korea, and Israel, and some states and cities in the United States have previously implemented CDA programs with varying program designs. While the design of CDAs differs across programs, providing children with government-funded initial or recurring deposits can facilitate savings without placing additional strains on household budgets, automatic enrollment can bypass many of the behavioral barriers to savings, and the creation of free universally-accessible accounts can overcome many of the institutional barriers to savings.

Israel's CDA program, called the Savings for Every Child Program (SECP), was rolled out in January of 2017. The SECP is the first universal CDA program worldwide that

automatically deposits funds into savings or investment accounts for every child in a country (Sherraden et al., 2018). Under the program, every child under the age of 18 gets NIS 50 (Israeli New Shekels, approximately USD 14, based on January 2020 exchange rates) deposited by the government into their CDA accounts each month. In addition, parents can choose between several savings and investment account options to hold their children's deposits and can transfer an additional NIS 50 from a separate government-sponsored child allowance payment into their children's SECP funds. Depending on parents' choices, the SECP can deliver substantial financial benefits and potentially improve the financial security of Israelis.

While the program greatly reduces the institutional barriers to long-term savings, families may still face other challenges to savings, including financial constraints, a lack of financial knowledge, or the influence of behavioral biases. This study aims to understand how people save and what predicts savings behaviors in a public savings program when existing institutional barriers have been substantially lowered. Using a combination of administrative and survey data from the first six months of Israel's CDA program, we explore the intersection between early program enrollment and participation decisions and a broad array of household characteristics—demographic characteristics, financial circumstances, financial knowledge and confidence, and intrinsic personality values—examining which predictors contribute most substantially to the decision-making in this public savings program.

We find that household ethnicity, parental education, and household financial circumstances are strong predictors of engagement in the SECP. Ethnic minorities exhibit distinct and highly divergent engagement patterns in the program, and relatively affluent and more educated households tend to engage with the program at higher rates than less affluent households. We also observe that financial literacy is an important predictor of parents making

additional deposits into the SECP on behalf of their children, while financial confidence is not significantly associated with any participation decision in the SECP. Finally, our findings show that certain personality traits are associated with differential engagement in the program.

Notably, important differences in program participation are observed by household ethnicity.

Several studies have explored the relationship between different household characteristics and CDA participation decisions. However, much of the existing research has focused on a fairly limited set of demographic and financial variables, many studies relied on relatively small sample sizes, and only a few studies have explored the role of financial savviness and intrinsic personality values on CDA program enrollment and participation. This study extends existing CDA-related research by incorporating a more comprehensive set of variables into an analysis of a universal CDA program and by relying on a larger sample size. It also points toward potential tools policymakers can use in developing interventions intended to improve participation in CDA programs, both in Israel and elsewhere. For example, many studies have demonstrated the impact of behavioral interventions in promoting savings (Beshears et al., 2015; Choi et al., 2017; Kaiser & Menkhoff, 2017; Thaler & Sunstein, 2009). By developing an understanding of the ways that personality traits, knowledge, and household characteristics and circumstances intersect, this work can advise on ways to design future interventions that can more optimally reach the households that may benefit from them the most.

Literature Review

Seeking to investigate the relationship between early enrollment and participation in Israel's CDA program and an array of household characteristics, we break down household characteristics into four categories—demographic characteristics, financial circumstances, financial knowledge, and intrinsic personality values—and summarize how these categories

relate to household savings behaviors and wealth accumulation, including asset building through CDA programs.

Demographic Characteristics and Asset Accumulation

Substantial body of research shows that demographic household characteristics, such as educational attainment (e.g., Boshara, Emmons, & Noeth, 2015) and race/ethnicity (e.g., McKernan et al., 2013; Shapiro, Meschede, & Osoro, 2013), can be strong predictors of household savings. A similar pattern in wealth disparities by racial/ethnic origins holds in the context of Israel, where Israeli-born residents tended to hold more wealth than Jewish immigrants and Arab Israelis (Semyonov & Lewin-Epstein, 2011) and Non-Ultra-Orthodox Jews tend to own more financial assets than Ultra-Orthodox Jews and Arab Israelis (Regev, 2014).

Studies on CDAs have paid significant attention to the demographic predictors of CDA program enrollment and participation, reporting mixed findings for parents' age, parental marital status, race/ethnicity, and the number of children in the household (e.g., Zager et al., 2010; Huang et al., 2013; Okech, 2011; Grinstein-Weiss et al., 2019a). For example, Kempton, Finney, & Davies (2011) and Okech (2011) concluded that race/ethnicity was not significantly associated with program participation decisions, whereas Zager et al. (2010) described that 85 percent of account openers in the U.S. SEED OK program were non-Hispanic White and 37 percent of account non-openers were non-White households. Studies consistently report a strong positive correlation between CDA program participation and educational attainment of parents (Zager et al., 2010; Huang et al., 2012; Okech, 2011; Grinstein-Weiss et al., 2019a; Employment and Social Development Canada, 2015; Frenette, 2017). Within Canada's program, for example, the rate of account holding ranged from 12 percent among parents without a high school diploma to

68.8 percent in families where at least one parent had a graduate or professional degree (Frenette, 2017).

Financial Circumstances and Asset Accumulation

Much of the general research on savings and asset accumulation has focused on the degree to which a household's financial characteristics and circumstances predict asset building in households. Unsurprisingly, this research tends to indicate that relatively affluent or economically stable households tend to have higher savings rates and asset levels: Higher incomes (Dyner, Skinner, & Zeldes, 2004), the access to short-term or emergency savings (Gjertson, 2016; McKernan, Ratcliffe, & Vinopal, 2009), relatively stable incomes and expenses (Mullainathan & Shafir, 2013), and the ownership of non-financial assets like a house (Grinstein-Weiss et al., 2013) may all help facilitate long-term wealth accumulation.

When considering CDA programs, household income tends to have a strong positive association with program enrollment and participation decisions, which is consistently observed across multiple contexts and programs (Zager et al., 2010; Kempton et al., 2011; Han & Chia, 2012; Imbeau, 2015; Okech, 2011; Grinstein-Weiss et al., 2019a; Frenette, 2017). For example, nearly one-half of account openers within the SEED OK program reported household income of \$54,000 and above, compared to only 19 percent of account non-openers reporting the same income (Zager et al., 2010). In Canada, 67.9 percent of families in the top income quintile opened CDA accounts in 2012, compared to 25.3 percent in the bottom income quintile; the mean value of deposits into CDAs was more than seven times higher for highest income quintile families relative to those in the bottom income quintile (Frenette, 2017). Analogously, within a now-discontinued U.K. CDA program, 38 percent of households with net monthly incomes of

£569 or less and 48 percent of households with net monthly incomes of £3,400 or more contributed funds to their CDA accounts (Kempton et al., 2011).

The degree to which household ownership of financial and non-financial assets is important for CDA savings decisions varies across studies. Owning a home has been shown to correlate with greater participation within the SEED OK program (Zager et al., 2010) but not in Maine's CDA program (Huang et al., 2013). For financial assets, the proportion of households with retirement accounts was twice as large among account openers than among account non-openers within the SEED OK program (Zager et al., 2010), even though retirement account ownership was not associated with program participation in Maine's program (Huang et al., 2013). Having investment assets, such as stocks and bonds, has been shown to be significantly related to program enrollment within both of these programs (Zager et al., 2010; Huang et al., 2013), and families that reported having other savings tended to engage more actively with the program in Uganda (Karimli et al., 2015) and contribute more into their children's accounts in the U.K. (Kempton et al., 2011). Frenette (2017) illustrates large disparities in investment decisions across different wealth levels in Canada: while 19.5 percent of families in the bottom net worth quintile had CDAs in 2012, the account incidence reached 73.2 percent in the top net worth quintile.

Financial Literacy, Financial Confidence, and Asset Accumulation

Financial knowledge has been proposed as an effective approach for individuals to achieve optimal financial decisions and improve financial behaviors (Lusardi & Mitchell, 2014). The literature distinguishes between actual (objective) financial knowledge that measures individual understanding of specific financial issues and self-assessed (subjective) financial confidence that

describes one's confidence in own knowledge of financial issues. The two indicators have been shown to measure distinct dimensions of financial knowledge (Lusardi & Mitchell, 2014).

Extensive research shows a correlation between higher levels of measured financial literacy and better financial decisions and behaviors, such planning for retirement (Lusardi & Mitchell, 2011), participating in the stock market (Van Rooij, Lusardi, & Alessie, 2007), paying greater attention to investment funds fees (Hastings and Tejada-Ashton, 2008), and following better financial management practices, including savings behaviors (Hilgert, Hogarth, & Beverly, 2003). In particular, Hilgert, Hogarth, & Beverly (2003) found that the average financial knowledge score was 22 percentage points lower among households that followed suboptimal saving practices, compared to those engaging in more positive savings behaviors. A positive relationship has also been identified between financial literacy and wealth accumulation (Behrman et al., 2012), as well as financial knowledge and holding of liquid and illiquid assets holding among young adults (Letkiewicz & Fox, 2014). Beyond the measured financial literacy, subjective financial knowledge and financial confidence have been linked to more positive financial decision-making and financial behaviors (Hadar, Sood, & Fox, 2013; Allgood & Walstad, 2015). For example, Allgood and Walstad (2015) showed that the self-assessed financial confidence can be as important as actual financial knowledge in explaining financial behaviors, such as credit card payment behaviors, investment decisions, and loan behaviors.

Despite the prevalence of literature that explores the link between financial literacy and financial behaviors, little is known about the extent to which financial knowledge predicts active engagement with CDA programs. We have identified a single study that that directly examined the connection between financial knowledge and opening of CDAs, which found that those who reported having higher levels of financial knowledge were 8 percentage points more likely to

open CDAs for their children compared to those who reported lower levels of financial literacy (Employment and Social Development Canada, 2015). Other studies considered alternative variables that could potentially approximate financial aptitude and financial savviness of households. For example, having a financial advisor (Huang et al., 2013) and positive savings attitudes (Han & Chia, 2014) has been shown to be positively correlated with program enrollment. Nonetheless, given the overall scarcity of research exploring the influence of financial knowledge on participation in the CDA programs, our study makes an important contribution to the CDA literature.

Intrinsic Personality Values and Asset Accumulation

Intrinsic personal traits represent internal motivations, norms, and orientations that guide human decisions and actions. Relevant to this study, a household's tendency to save and build assets has been shown to correlate with a wide array of intrinsic characteristics, such as their future orientation (Howlett, Kees, & Kemp, 2008), planning horizon (Fisher & Montalto, 2010), risk tolerance (Finke & Huston, 2003), perceived locus of control (Cobb-Clark, Kassenboehmer, & Sinning, 2016), and self-control (Strömbäck et al., 2017). Several studies analyzed the role of the "Big Five" personality traits, used to broadly describe human personality, on household savings and wealth. Duckworth and Weir (2010) concluded that conscientiousness was linked to more wealth accumulation, while agreeableness was associated with less. Letkiewicz and Fox (2014) found a positive relationship between conscientiousness and liquid and illiquid asset holding and net worth among young adults, while Brown and Taylor (2014) found that extraversion was negatively associated with the amount of held financial assets for different age groups, and the opposite held for openness to experience.

The Portrait Values Questionnaire (PVQ) offers another way to measure personality traits and human values. As illustrated in Table 1, the PVQ incorporates ten universal values representing fundamental value motivations of human beings: benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, security, tradition, and conformity (Schwartz, 2012). The measurement of ten values has been validated and empirically supported across different cultures (Schwartz, 2012), and the theory of human values has been extensively applied in cross-cultural research to study various topics, including crime (Goossen, Johansson, & Larsson, 2016), trust in institutions (Devos, Spini, & Schwartz, 2010), attitudes towards migration (Ramos, Pereira, & Vala, 2016), attitudes toward sexual minorities (Kuntz, Davidov, Schwartz, & Schmidt, 2015), and attitudes toward the welfare state (Kulin & Meuleman, 2015).

Existing studies on CDA programs have paid relatively little attention to the importance of intrinsic personality values for program enrollment and participation decisions. Several studies considered the importance of educational aspirations on CDA-related decisions, finding that greater emphasis on a child's education tends to correlate with enrollment and participation in CDA programs (Zager et al., 2010; Han & Chia, 2014; Karimli et al., 2015), though Huang et al. (2013) found no significant association between these two variables. The PVQ—which encompasses a comprehensive array of universal intrinsic characteristics—has not yet been applied in the context of household savings or CDA programs, and our study is the first to do so.

Israel's CDA Program: The Savings for Every Child Program

The universal Israeli asset-building SECP was implemented in January of 2017 in an effort to address institutional barriers to savings and mitigate persistent poverty in the country by emphasizing the importance of asset accumulation and investments in long-term child development (Grinstein-Weiss et al., 2019b). Under this program, administered by the National

Insurance Institute of Israel (NII), every Israeli child under the age of 18 gets a SECP account opened under their name, to which the government deposits NIS 50 each month.¹

Though the program is universal and benefits every age-eligible child in Israel, parents can choose to actively enroll in the program—in which case they have the option to change the deposit amount and location of the SECP funds. Specifically, while each child receives a guaranteed monthly deposit of NIS 50 from the NII into their SECP account, parents can decide to transfer an additional NIS 50 from their monthly child support income to the SECP account, increasing the total monthly deposit to an SECP account from NIS 50 to NIS 100. In addition, parents who actively enroll can also select where their children’s SECP funds are deposited, choosing between deposits into lower-yield bank savings accounts or managed investment funds that tend to have higher average rates of return, although returns may vary substantially depending on the fund selected. Households can choose between low-, medium-, and high-yield investment tracks, as well as religious investment accounts (Sharia and Halakhic) that are compliant with Islamic or Jewish religious principles, respectively, and typically have lower rates of return.²

If households do not actively enroll in the program or miss the six-month active enrollment window, they still receive a total of NIS 50 per month from the NII and are automatically defaulted into a low-return investment fund or into a savings account. For children born before 2017, the default savings vehicle was a low-return investment fund for children under the age of 15 and a savings account for those 15 years old or older.

¹ For a more detailed description of the program, see Grinstein-Weiss et al. (2019b).

² Since the SECP funds are expected to be invested for the period of 18 years, each account can be assumed to have similarly low risk levels in the long run. In the short run, the potential risk levels tend to correspond to the expected levels of return; that is, low-, medium-, and high- yield accounts may be associated with low, medium, and high short-term risk levels, respectively.

Households can enroll in the SECP online, via phone, or in-person. Except for the cases of a child's severe illness or death, accumulated savings in SECP accounts can be only accessed after a child reaches 18 years of age, with parental permission. No parental permission is required to withdraw the funds after the age of 21. The SECP places no restrictions on the use of withdrawn funds. Several bonuses embedded in the program at different points in the child's life provide additional increases in savings and encourage children and their parents to keep funds in the SECP accounts for a longer time period. With these bonuses, financial program benefits can be substantial, though they depend on choices made by children and their parents (see Grinstein-Weiss et al., 2019a; 2019b for more details).

To date, the only empirical analysis that examined the early program enrollment patterns demonstrated that a high proportion of Israeli households was willing to engage with the program in ways that promote long-term asset development (Grinstein-Weiss et al., 2019a). Using population-level data, the authors describe that over the first six months of the program's implementation, around two-thirds of all Israeli households made an active choice in the program; of those, roughly two-thirds transferred an additional NIS 50 into their SECP account from their child allowance. Despite these high levels of program enrollment and participation, economically vulnerable households—ethnic minority, less-educated, and less-employed households—tended to engage with the program in less optimal ways, opting for lower-yield investment funds or opting out of depositing extra funds.

Data and Methods

Data and Sample

Data for this research come from administrative records on the SECP and a household survey given to program participants. Both the administrative data and the household survey data are

from the NII, which administers the SECP. Administrative data contain demographic, financial, and SECP enrollment and participation indicators for all Israeli children who were eligible for the program during the first six months since its inception, including approximately 3.1 million children from nearly 1.3 million households. Specifically, under the SECP policy passed by Israel's parliament in 2015, all children who were under the age of 18 between May 2015 and December 2016 qualified for the SECP during the first six months after the program was rolled out in January of 2017. In addition to administrative data, between December and July of 2017, the NII administered a survey to a random sample of Israeli households that were eligible for the program in the first six months of the SECP, interviewing parents of SECP-eligible children. Of approximately 10,000 families that were invited to participate in the survey, 4,838 parents completed the survey; a response rate of nearly 50%. The survey captures the measures of parents' subjective well-being and intrinsic personality values, SECP-related goals for the future, and additional financial and demographic information that was not available through administrative records, such as financial confidence, financial literacy, household's access to liquidity, the presence of household debt and savings, difficulty covering household expenses, and homeownership.

The study sample consists of households that had at least one child under the age of 15 between May 2015 and December 2016 and qualified for the SECP during the first six months of the program's existence. The age limit was imposed for several reasons. First, considering that the default savings vehicle for younger children was a low-return investment fund—as opposed to a savings account that was a default savings option for those 15 years of age and older—all else equal, these children are expected to benefit more from the SECP. Additionally, given higher future payoffs, parents of younger children may be more motivated to actively engage

with the program and thus may be more responsive to any informational interventions and campaigns aimed at improving program enrollment and participation. At the same time, since the difference in returns between the higher-yield and default lower-yield accounts is relatively small for younger children, parents may choose to simply rely on program defaults.

In total, out of 4,838 households, 1,026 were dropped because their children were above the age threshold. We also excluded households in which surveys were not completed by the primary financial decision maker in the household, i.e., a family member who is responsible for making day-to-day financial household decisions (N=482). Surveying household members who were most informed about household's financial management allowed us to obtain more reliable and accurate information about household's financial circumstances and financial literacy. After these exclusions, the sample consisted of 3,330 households; following the listwise deletion of missing data for the full set of regressors, our final analytical sample was 3,097.

Empirical Method

To explore the relationship between demographic characteristics, financial circumstances, financial knowledge, and intrinsic personality values and household decisions to enroll and participate in the SECP, we estimate the following linear probability model:

$$y_i = \alpha + \mathbf{D}_i\beta_1 + \mathbf{F}_i\beta_2 + \mathbf{K}_i\beta_3 + \mathbf{I}_i\beta_4 + \varepsilon_i$$

where y_i is a dichotomous outcome for household i that corresponds to one of three SECP-related decisions: (i) active enrollment in the program (1=household i made an active choice for at least one child, 0=household i 's children were enrolled in the program default); (ii) making an additional monthly deposit (1=household i transferred NIS 50 from their child allowance to the SECP account for at least one child; 0=household i did not deposit additional funds); and (iii) selecting a higher-yield investment fund (1=household i selected a high- or medium-yield

investment track for at least one child; 0=household i selected a religious fund, a low-yield investment track, or a savings account). The model that examines the overall program enrollment uses the full sample of SECP-eligible households, and the analysis of decisions to select a higher-yield investment fund and deposit an additional NIS 50 is limited to households that made an active decision to enroll in the SECP.

The primary independent variables, described in Table 1, reflect four broad categories: demographic characteristics (D_i), financial circumstances (F_i), financial knowledge (K_i), and intrinsic personality values (I_i). Demographic characteristics (D_i) include household's ethnicity (Ultra-Orthodox Jews, Arab Israelis, and Non-Ultra-Orthodox Jews), the number of children in the household, the age of the youngest child in the household, parental marital status, the structure of intrahousehold decision-making, and parental employment and educational attainment. Financial circumstances (F_i) captures household's financial and non-financial assets and income flows using the following four variables: a household's homeownership status, ability to come up with NIS 2,000 within a month in an emergency, monthly wages, and the presence of additional family savings excluding retirement savings and SECP funds. Financial knowledge variables (K_i) denote objective financial literacy describing respondent's knowledge of certain financial issues and subjective financial confidence that represents respondent's self-assessed financial knowledge. Intrinsic personality values of the child's parents (I_i) are measured using a validated 21-item scale that captures ten fundamental human values, including conformity, tradition, benevolence, universalism, self-direction, stimulation, hedonism, achievement, power, and security (Schwartz, 2012). Finally, ε_i is a heteroskedasticity-robust error term.

Summary Statistics

Of 3,300 households included in the full sample (Table 2), 79.7 percent made an active choice to enroll in the SECP (N=2,655). Of these, 65.8 percent selected a higher-return investment fund (N=1,746) and 73.7 percent chose to deposit an extra monthly NIS 50 (N=1,958). The majority of households were Non-Ultra-Orthodox Jews (74.4 percent); Arab Israelis and Ultra-Orthodox Jews comprised 17.0 and 8.6 percent of the sample, respectively. Over half of families had one or two children, and the average age of the youngest child was 5.0 years. Parents were predominantly married (86.8 percent); mothers were primary decision makers in 18.4 percent of households, and fathers in 17.4 percent of families. Fifty-two percent of mothers and 41.3 percent of fathers had some college or a college degree, and only in 4.4 percent of households were all parents unemployed. Two-thirds of parents reported living in an owned property, 42.1 percent said they were confident they could access NIS 2,000 in an emergency, and 59.3 reported having additional family savings. The average monthly household wages were NIS 19,850 (USD 5,544). Only 14.3 percent of respondents answered all financial literacy questions correctly, although 31.7 percent rated their financial knowledge as 4 or above (out of 5). The most prominent values were benevolence and security (averages of 4.70 and 4.73 points, respectively), whereas the least prominent measured values were stimulation and power (average scores of 3.09 and 3.81 points).

Table 3 highlights the key differences between our analytical sample and the population of Israeli households with children under the age of 15. Relative to the general population, sampled households tended to engage with the SECP to a greater degree. Our sample also contained a larger proportion of Non-Ultra-Orthodox Jews, a smaller proportion of Arab Israelis, a greater fraction of educated households, a smaller proportion of households in the lowest income quantile and lower socio-economic cluster.

Regression Results

Table 4 presents findings from a linear regression analysis regressing SECP enrollment and participation decisions on an array of household characteristics. Column 1 presents findings for the decision to make an active program selection, and Columns 2 and 3 describe program participation decisions among those that made an active program selection—decisions to select a higher-yield investment funds and to add an additional NIS 50 to the account, respectively. We use the 0.05 threshold to interpret statistical significance and provide the F-statistic to test the joint significance of the four categories of household characteristics. The variance inflation factor in each regression model corroborates that multicollinearity is not an issue in our models.³

Demographic Characteristics and SECP Participation

Overall, household demographic characteristics were predictive of SECP participation decisions, as the F-test values ($p < .001$) for household demographic characteristics were high across all SECP participation decisions. The strongest individual predictor for all SECP participation decisions was household ethnicity. Compared to Non-Ultra-Orthodox Jews, Ultra-Orthodox households were, on average, significantly more likely to actively enroll in the program (by 11.6 percentage points, $p < .001$), and, in contrast, Arab Israeli households were significantly less likely to actively enroll in the SECP (by 22.6 percentage points, $p < .001$). Once actively enrolled in the program, households of both ethnic groups appeared to make similar decisions. Compared to Non-Ultra-Orthodox households, both groups had a lower probability of choosing higher-yield investment accounts (by 25.0 and 37.1 percentage points for Ultra-Orthodox Jews and Arab Israelis, respectively, $p < .001$) and a lower probability of making additional investments (by 15.8

³ We also estimated (1) a logistic regression model instead of the linear regression model, and (2) a two-stage regression model to correct for self-selection for decisions to invest in a higher-yield investment fund and to deposit an additional NIS 50. The results remained largely consistent with the findings reported in this section and can be presented upon request.

and 12.3 percentage points for Ultra-Orthodox Jews and Arab Israelis, respectively, $p < .001$). These results were observed even after including demographic, financial, knowledge-based, and intrinsic controls, potentially indicating that differential cultural preferences and predispositions may be guiding SECP enrollment and investment decisions among minority households.

The age of the youngest child was negatively associated with the decision to enroll ($p < .001$) as well as the decision to invest in a higher-yield fund ($p < .001$). Since higher-yield investment accounts tend to carry greater risks in the short run, this finding may point to more risk-averse investment decisions that parents tend to make as children grow older. The coefficient on the decision to invest additional funds was statistically insignificant at the 0.05 level. The average number of children in the household was negatively correlated with the decision to add an extra NIS 50 to the SECP account, but not with the active program enrollment or the selection of a higher-return investment vehicle, potentially implying that households with more children are under greater financial constraints and are thus less able to shift funds from their unrestricted Child Allowance into the SECP.

There was no statistically significant link between parental employment and SECP decisions, whereas the level of parents' education was strongly associated with program enrollment and participation. The likelihood of an active enrollment was 6.3 percentage points higher ($p < .001$), on average, in households where mothers had some college or a college degree, relative to those where mothers had no college experience. The coefficient on educational attainment for fathers was slightly lower (3.8 percentage points, $p < .05$). Among actively enrolled households, the relationship between parental educational attainment and the selection of a higher-yield investment vehicle was positive and statistically significant: On average, the probability of selecting a high- or medium-yield investment fund was 7.0 percentage points

($p < .01$) and 12.5 percentage points ($p < .001$) higher when mothers and fathers, respectively, had some college or a college degree. Interestingly, the association for the additional NIS 50 deposit was statistically significant for the educational attainment of mothers (7.9 percentage points, $p < .001$) but not fathers, perhaps indicating that the mother's but not the father's educational attainment may be more important in guiding additional deposit decisions.

Finally, after controlling for parental education, the type of intra-household decision-making was not significantly associated with the SECP enrollment decision and the decision to contribute an additional NIS 50. However, compared to households where father was the primary financial decision maker, households in which mother was considered the primary financial decision maker were less likely to select a higher-return investment fund (3.8 percentage points, $p < .05$), which may point to more risk averse preferences of children's mothers. Parents' marital status was not statistically significant across all regression models.

Financial Circumstances and SECP Participation

The variables representing household financial circumstances were jointly significant in predicting SECP enrollment and participation ($p < .001$). Homeownership was positively associated with the SECP enrollment decision. Households that resided in owned properties, on average, tended to enroll in the program at higher rates than those that did not (by 4 percentage points, $p < .001$); once enrolled, there were no statistically significant differences in participation choices between the two groups.

Household income and access to liquidity were not statistically associated with program enrollment at the 0.05 significance level. When considering program participation, both of these variables were positively associated with the selection of a higher-yield account ($p < .001$) and additional deposits ($p < .05$). These results are consistent with prior research indicating that when

selecting savings vehicles higher-income and less liquidity constrained households tend to be more risk tolerant and may have more opportunities to consider a wide range of different investment options selecting the one with higher long-term returns. In particular, a one-point increase in the self-assessed confidence to come up with NIS 2,000 in an emergency was associated with a 2.3 percentage point increase in the likelihood to invest in the higher-yield investment fund. The coefficient magnitude on income was substantially smaller: an increase in household monthly income by NIS 2,000 (or 10 percent from the sample average of NIS 19,850) was associated with a 0.8 percentage point increase in the likelihood to select a higher-yield fund. Similarly, households with higher incomes and greater access to liquidity generally face lower financial constraints, which may facilitate their decision to forgo NIS 50 from the child allowance program and instead deposit this money into longer-term SECP funds.

Finally, compared to households that did not have additional savings, those that did had a significantly higher probability on average to actively enroll in the program (by 0.7 percentage points, $p < .001$) and to deposit an additional NIS 50 into children's SECP accounts (by 0.5 percentage points, $p < .01$). Though these associations were not economically significant, they may point to the willingness of families that already save to accumulate additional savings.

Financial Knowledge and SECP Participation

The coefficient on financial literacy indicates that after adjusting for parents' education, correctly answering one additional question on financial literacy increased the likelihood of selecting a higher-yield investment fund by 2.6 percentage points ($p < .01$), on average. This result shows that objective financial literacy appears to matter for more complex investment decisions, such as the selection of higher-yield investment funds, where one needs knowledge of more intricate financial issues. Coefficients on financial literacy and confidence were not significant at the 0.05

level for other SECP decisions. The two variables were not jointly significant for the enrollment decision and the decision to deposit additional funds (at the 0.05 level); the F -test pointed to a joint significance of these two variables for the investment allocation decision. While the general absence of statistical significance on the financial knowledge variables may be surprising, one plausible explanation is that parental education—which shows a consistently positive relationship with SECP-related choices—may be a more robust proxy for parents' financial savviness, financial aptitude, and general financial literacy.

Intrinsic Personality Values and SECP Participation

The joint significance test for intrinsic personality values indicates that as a whole, the variables were not jointly significant at the 0.05 level for the decision to enroll and deposit extra NIS 50 after adjusting for other key demographic and financial characteristics. The ten intrinsic personality value characteristics were jointly significant for the decision to select a higher-yield investment fund. Looking at individual coefficients, on average, a one-point increase in the security score was associated with a 2.9 percentage point increase ($p < .05$) in the likelihood of active program enrollment, suggesting that those who value harmony and stability are also more likely to take an active part in the program. The likelihood of selecting a higher-interest fund increased by 6.1 percentage points for a one-point increase in the measure of traditional values ($p < .001$), even after adjusting for household's ethnicity. This relatively large and significant estimate may point to the importance of cultural beliefs in guiding investment behaviors— independent of household ethnicity—as more traditional households may exhibit greater risk aversion and prefer lower-yield investments that tend to carry lower short-term financial risks. Finally, with a one-unit increase in the universalism value item, the probability of depositing an additional NIS 50 grew, on average, by 4.6 percentage points ($p < .05$). This finding may suggest

that those who are more future-oriented and exhibit greater care for other people's well-being may also be more likely to invest extra money for their children's future. The rest of intrinsic characteristics under investigation did not show statistical significance at the 5 percent level in relation with SECP enrollment decisions.

Subsample Analysis: Household's Ethnicity

Given that household's ethnicity was the strongest predictor of household's engagement with the SECP, we conducted a subgroup analysis to explore whether the observed relationships varied by household's ethnicity. For this set of analyses, we focused on the decision to actively enroll in the SECP and the decision to deposit additional funds. Overall, our findings point to substantial heterogeneity in the association between household characteristics and SECP-related decisions.

For the decision to actively enroll in the SECP (Table 5), the educational attainment of both parents appeared predictive of enrollment decisions in Non-Ultra-Orthodox households, only the coefficient on mother's education was statistically significant for Arab Israeli households, and parental education was not a statistically significant predictor of enrollment decisions among Ultra-Orthodox families. This finding may speak to the differential importance of the intersection between gender and educational attainment for household decision-making across different demographics groups in Israel. The presence of additional family savings was positively associated with enrollment decisions in Non-Ultra-Orthodox ($p < .001$) and Arab Israeli ($p < .01$) families, but not in Ultra-Orthodox households. Findings also suggest that homeownership was an important enrollment predictor for Arab Israelis ($p < .05$), while the youngest child's age ($p < .001$) and household income ($p < .05$) were correlated with enrollment decisions for Non-Ultra-Orthodox families. Notably, the intrinsic value of security was statistically significant for Non-Ultra-Orthodox Jews ($p < .05$), but not for minority households.

As shown in Table 6, the mother's (but not the father's) educational attainment was important for the decision to deposit an additional NIS 50 into the SECP funds for each demographic group. The magnitude of coefficients was particularly large for minority households (an increase in probabilities by 19 and 23 percentage points for Ultra-Orthodox Jews and Arab Israelis, respectively, $p < .01$), indicating the particular significance that mother's education may play in financial management decisions in minority households. Financial circumstances were generally more important for the decision to invest an additional NIS 50 in the SECP than actively enroll in the program: Multiple variables reflecting household financial circumstances were statistically significant for Non-Ultra-Orthodox households, higher household income was positively associated with additional contributions for Ultra-Orthodox households, and having access to emergency savings was a positive predictor of additional SECP contributions for Arab Israelis. Interestingly, we also find that Non-Ultra-Orthodox households with higher levels of financial confidence were, on average, less likely to deposit an additional NIS 50 ($p < .05$). As in the case of active enrollment, the intrinsic value of universalism was a significant predictor of additional contributions for Non-Ultra-Orthodox Jews ($p < .05$) and not for minority households.

Overall, the significance of predictors observed in Table 4 largely disappeared in subgroup analyses. While the smaller sample size could partially explain this pattern, it is also likely that there is a host of other unobserved factors specific to different demographic groups that would elucidate the decision making process in minority households.

Conclusions and Policy Implications

Examining enrollment and participation patterns in Israel's universal CDA program, this study found that household ethnicity and parental education were by far the most robust and significant

predictors of household engagement with the SECP. The mother's education was also one of most consistent predictors of SECP engagement across different ethnic groups in Israel. As a whole, household financial circumstances played a significant role in guiding SECP enrollment and participation decisions: Homeowners were more likely to actively enroll in the program and, conditional upon program enrollment, household incomes and access to liquidity were associated with SECP participation decisions. Financial literacy rather than financial confidence was more important for selecting a higher-yield investment fund. After controlling for demographic and financial factors, the value of security was positively correlated with the decision to enroll in the SECP, traditional values were negatively associated with the selection of higher-yield investment funds, and universalism was positively linked with the decision to deposit extra funds. Interestingly, the coefficients on intrinsic values for the decisions to actively enroll in the program and contribute an additional NIS 50 were significant for Non-Ultra-Orthodox families, but not minority households.

Research findings have several implications for policy and practice. While overall household engagement with the SECP has been high, there are several ways in which the expected program benefits could be improved for different segments of society. One potentially cost-effective way to improve financial decision-making with respect to the SECP is to embed low-touch, behaviorally-informed design features into the program. Research in the field of behavioral economics has shown that simple changes to a household's decision environment, such as increasing the salience of options (Grinstein-Weiss et al., 2017), changing message content (Karlan, Morten, & Zinman, 2016), or emphasizing social norms (Cullis, Jones, & Savoia, 2012), can affect how individuals make financial decisions and choices.

Drawing from the evidence in behavioral economics, changes in the decision environment of eligible households can be effectively implemented at several touchpoints, including online program sign-up screens and letters mailed automatically by the NII to parents of every newborn child informing them about the automatic opening of SECP accounts for their newborns. Our study's findings can be used to inform the design and integration of behavioral features throughout the online enrollment process as well as into letters mailed by the NII. For example, given our finding on the positive association between financial literacy and a decision to invest in higher-yield funds, a potential behavioral intervention may include increasing the salience of financial returns in a letter or in online enrollment screens by providing clear information about how making different program choices may impact expected financial returns from the program. Such information may serve as a simple informational reminder about the benefits of selecting higher-yield funds that may help households carefully consider their choice of investment funds. Analogously, different types of messages appealing to the values of security, tradition, and universalism could be embedded into the design of letters and online screens to promote more optimal SECP savings decisions. On average, stressing that the SECP helps promote a sense of belonging and achieve greater stability may nudge households to actively enroll in the program, and suggesting that the SECP enhances equal opportunities for everyone and supports the disadvantaged may increase household's likelihood to invest an extra NIS 50. The design of such interventions could also take into account the fact that messaging approaches may need to be adapted to make them more relevant for different demographic groups.

Even if the effects of low-touch changes in the SECP decision environment may not be economically large, on aggregate, they are likely to be substantial given that any changes in the

design of letters or online forms would affect the entire population of SECP-eligible households. Yet, more fundamental changes in targeting strategies, program structure, and the quality of education may be needed to improve household savings behaviors in more drastic ways.

Our finding on the observed statistically and economically significant association between household ethnicity and engagement in the SECP offers some insights on the type of potential targeted interventions. In particular, Ultra-Orthodox Jews tended to actively enroll in the program at higher rates compared to Non-Ultra-Orthodox Jews, while the opposite pattern was observed for Arab Israelis. Upon actively enrolling in the program, however, the two ethnic minority groups—that also tend to be more economically vulnerable—tended to make SECP decisions that are associated with potentially lower levels of asset accumulation in the future. Therefore, as currently designed, the program may not be able to elevate the economic and social well-being of all Israelis. In addition, we have seen that the key predictors of program enrollment and participation may differ across household ethnicities.

These findings call for a more targeted approach to designing and implementing interventions to improve SECP participation that would be tailored to the needs of ethnic minority groups. For example, following a bottom-up approach to promote the SECP and working with local religious and community leaders, social workers, and health institutions in predominantly-minority areas may help increase program enrollment and improve the quality of SECP decisions. Grinstein-Weiss et al. (2019a) presents evidence that such an approach has been successful in the past in driving active program enrollment among Ultra-Orthodox families. In addition, dissemination of SECP-related information and materials to ethnic minorities could be improved by placing informational billboards in the predominantly-minority communities and working with local newspapers to advertise the program. The exact design of these tools would

be determined through the collaboration with local community representatives. Finally, the government could better incorporate additional languages in the program enrollment process. For example, the current letters delivered to parents of newborn children appear only in Hebrew, which may be a significant enrollment obstacle to many Arab Israeli families. Providing letters in Arabic may help increase accessibility of information to the Arab population and improve SECP-related decision-making among minority groups.

Beyond household ethnicity, families with lower incomes and lower access to liquidity tended to actively enroll at similar rates but made less optimal SECP choices upon their enrollment. If reducing wealth inequality in the country is the program's goal, providing greater financial benefits to lower-income households by introducing a more progressive SECP deposit structure may help achieve this objective. As discussed in detail in Grinstein-Weiss et al. (2019b), the progressive program structure can take several forms: The government could provide matched contributions on SECP deposits made by lower-income and lower-asset households; increase the amount of monthly deposits to economically disadvantaged households; or provide children from disadvantaged backgrounds with the SECP seed deposit at birth. The fact that the program is universal helps address institutional barriers to savings that lower-income families often face to a greater extent (Beverly & Sherraden, 1999), suggesting that the SECP can be a powerful policy tool in addressing economic inequalities in Israel.

Finally, considering that lower levels of parental education and financial literacy have been associated with suboptimal savings decisions, enhancing the quality of education and improving financial literacy could improve SECP-related decision-making. A meta-analysis of financial education literature shows limited impacts of financial education programs on financial outcomes, though evidence also suggests that financial education programs can be effective if

delivered at the right moment—when households are making particular financial decisions (Fernandes, Lynch, & Netemeyer, 2014). In the context of the SECP, the “right opportunity” may come up at the time of program enrollment, when parents use online enrollment forms to enroll their children in the SECP. Including a simple informational reminder about program benefits during the enrollment process, as described above, may be an effective way to educate families about expected financial returns. Similarly, while financial education courses delivered to high school students may be ineffective (Cole, Paulson, & Shastry, 2012) integrating financial concepts into school curricula in a seamless and comprehensive manner may prove effective at increasing both parental and child engage in the SECP.

Overall, the current analysis extends previous literature in three ways. First, we have incorporated a more comprehensive set of household characteristics to shed light on how financial circumstances, financial knowledge, and intrinsic personality values of parents can shape savings patterns in a universal CDA program. Previous research has primarily focused on a relatively limited set of demographic and financial variables, paying limited attention to the role of financial knowledge and intrinsic personality values in guiding household decisions to invest in CDA accounts, or using proxies to measure household financial savviness and motivational orientations (e.g., Huang et al., 2013). Second, whereas many prior CDA analyses incorporated limited sample sizes (e.g., Han & Chia, 2012), our study used a relatively large dataset to draw conclusions about households savings behaviors in CDAs. Third, while the well-established basic human values scale has been previously used to explore a diverse set of topics, it has not yet been applied to study household savings behaviors; our study is the first to do so.

Despite these contributions, the study is not without its limitations. Financial literacy in our study was assessed using a limited number of financial literacy questions; an ability to

measure financial literacy more comprehensively could improve the analysis. Additionally, the current study explores early enrollment decisions that were made when the program has just come into effect; the observed relationships may not hold in different periods, and future research should explore changes in program participation over time.

References

- Behrman, J. R., Mitchell, O. S., Soo, C. K., & Bravo, D. (2012). How financial literacy affects household wealth accumulation. *American Economic Review*, 102(3), 300-304.
- Beshears, J., Choi, J., J., Laibson, D., Madrian, B., C., & Milkman K., L. (2015). The Effect of Providing Peer Information on Retirement Savings Decisions. *The Journal of Finance*, 70(3), 1161-1201.
- Beverly, S. G., & Sherraden, M. (1999). Institutional determinants of saving: Implications for low-income households and public policy. *The Journal of Socio-Economics*, 28(4), 457-473.
- Boshara, R., Emmons, W. R., & Noeth, B. (2015). *The demographics of wealth: how age, education and race separate thrivers from strugglers in today's economy*. Essay No 1. Federal Reserve Bank of St. Louis, 1-23.
- Brown, S., & Taylor, K. (2014). Household finances and the 'Big Five' personality traits. *Journal of Economic Psychology*, 45, 197-212.
- Choi, J., J., Haisley, E., Kurkoski J., & Massey, C. (2017). Small cues change savings choices. *Journal of Economic Behavior and Organization*, 142, 378-395.
- Chowa, G., Ansong, D., & Masa, R. (2010). Assets and child well-being in developing countries: A research review. *Children and Youth Services Review*, 32(11), 1508-1519.
- Cobb-Clark, D. A., Kassenboehmer, S. C., & Sinning, M. G. (2016). Locus of control and savings. *Journal of Banking & Finance*, 73, 113-130.
- Cole, S. A., Paulson, A. L., & Shastry, G. K. (2012). Smart money: The effect of education on financial behavior. *Harvard Business School Finance Working Paper*, (09-071).
- Cullis, J., Jones, P., & Savoia, A. (2012). Social norms and tax compliance: Framing the decision to pay tax. *The Journal of Socio-Economics*, 41(2), 159-168.
- Devos, T., Spini, D., & Schwartz, S. H. (2002). Conflicts among human values and trust in institutions. *British Journal of Social Psychology*, 41(4), 481-494.
- Duckworth, A., & Weir, D. (2010). Personality, lifetime earnings, and retirement wealth. *Michigan Retirement Research Center Research Paper*, (2010-235).
- Dynan, K. E., Skinner, J., & Zeldes, S. P. (2004). Do the rich save more?. *Journal of political economy*, 112(2), 397-444.
- Employment and Social Development Canada (2015). *Canada Education Savings Program (CESP): Summative Evaluation Report*. Final Report. Evaluation Directorate, Strategic and Service Policy Branch, Employment and Social Development Canada.
- Fernandes, D., Lynch Jr, J. G., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861-1883.

- Finke, M. S., & Huston, S. J. (2003). The brighter side of financial risk: Financial risk tolerance and wealth. *Journal of Family and Economic Issues*, 24(3), 233-256.
- Fisher, P. J., & Montalto, C. P. (2010). Effect of saving motives and horizon on saving behaviors. *Journal of Economic Psychology*, 31(1), 92-105.
- Frenette, M. (2017, April). *Investments in Registered Education Savings Plans and Postsecondary Attendance. Economic Insights*, 71. *Statistics Canada, Catalogue no.* 11-626-X.
- Friedline, T., Elliott, W., & Chowa, G. A. (2013). Testing an asset-building approach for young people: Early access to savings predicts later savings. *Economics of Education Review*, 33, 31-51.
- Gjertson, L. (2016). Emergency saving and household hardship. *Journal of Family and Economic Issues*, 37(1), 1–17.
- Goossen, M., Sevä, I. J., & Larsson, D. (2016). Basic human values and white-collar crime: Findings from Europe. *European Journal of Criminology*, 13(4), 434–452.
- Grinstein-Weiss, M., Cryder, C., Despard, M. R., Perantie, D. C., Oliphant, J. E., & Ariely, D. (2017). The role of choice architecture in promoting saving at tax time: Evidence from a large-scale field experiment. *Behavioral Science & Policy*, 3(2), 21–38.
- Grinstein-Weiss, M., Key, C., Guo, S., Yeo, Y. H., & Holub, K. (2013). Homeownership and wealth among low-and moderate-income households. *Housing Policy Debate*, 23(2), 259-279.
- Grinstein-Weiss, M., Pinto, O., Kondratjeva, O., Roll, S., Bufe, S., Barkali, N., & Gottlieb, D. (2019a). Enrollment and participation in a universal child savings program: Evidence from the rollout of Israel's National Program. *Children and Youth Services Review*, 101, 225–238.
- Grinstein-Weiss, M., Kondratjeva, O., Roll, S. P., Pinto, O., & Gottlieb, D. (2019b). The Saving for Every Child Program in Israel: an overview of a universal asset-building policy. *Asia Pacific Journal of Social Work and Development*, 29(1), 20-33.
- Hadar, L., Sood, S., & Fox, C. R. (2013). Subjective knowledge in consumer financial decisions. *Journal of Marketing Research*, 50(3), 303-316.
- Han, C. K., & Chia, A. (2012). A preliminary study on parents saving in the Child Development Account in Singapore. *Children and Youth Services Review*, 34(9), 1583-1589.
- Hastings, J. S., & Tejada-Ashton, L. (2008). *Financial literacy, information, and demand elasticity: Survey and experimental evidence from Mexico (No. w14538). National Bureau of Economic Research.*
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.

- Howlett, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *Journal of Consumer Affairs*, 42(2), 223-242.
- Huang, J., Beverly, S., Clancy, M., Lassar, T., & Sherraden, M. (2013). Early program enrollment in a statewide Child Development Account Program. *Journal of Policy Practice*, 12(1), 62-81.
- Huang, J., Nam, Y., Sherraden, M., & Clancy, M. M. (2014). Financial capability and asset accumulation for children's education: Evidence from an experiment of Child Development Accounts. *Journal of Consumer Affairs*, 49(1), 127-155.
- Imbeau, E. (2015). *Analysis of the Canada Education Savings Program participation and expenditures for different income groups. Technical Report. Employment and Social Development Canada.*
- Kaiser, T., & Menkhoff, L. (2017). Does Financial Education Impact Financial Literacy and Financial Behavior, and if so, When? World Bank Policy Research Working Paper No. 8161.
- 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.
- Karlan, D., Morten, M., & Zinman, J. (2016). A personal touch in text messaging can improve microloan repayment. *Behavioral Science & Policy*, 1(2), pp. 25-31.
- Kulin, J., & Meuleman, B. (2015). Human values and welfare state support in Europe: An east-west divide?. *European Sociological Review*, 31(4), 418-432.
- Kuntz, A., Davidov, E., Schwartz, S. H., & Schmidt, P. (2015). Human values, legal regulation, and approval of homosexuality in Europe: A cross-country comparison. *European Journal of Social Psychology*, 45(1), 120-134.
- Laibson, D. (1997). Golden eggs and hyperbolic discounting. *The Quarterly Journal of Economics*, 112(2), 443-478.
- Letkiewicz, J. C., & Fox, J. J. (2014). Conscientiousness, financial literacy, and asset accumulation of young adults. *Journal of Consumer Affairs*, 48(2), 274-300.
- Loke, V., & Sacco, P. (2011). Changes in parental assets and children's educational outcomes. *Journal of Social Policy*, 40(2), 351-368.
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics & Finance*, 10(4), 509-525.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of economic literature*, 52(1), 5-44.

- Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. *The Quarterly journal of economics*, 116(4), 1149-1187.
- McKernan, S. M., Ratcliffe, C., & Vinopal, K. (2009). *Do assets help families cope with adverse events?* Washington, DC: Urban Institute.
- McKernan, S. M., Ratcliffe, C., Steuerle, C. E., & Zhang, S. (2013). *Less than equal: Racial disparities in wealth accumulation.* Washington, DC: Urban Institute.
- Milgrom, M., & Bar-Levav, G. (2015). The distribution of wealth in Israel.
- Mullainathan, S., & Shafir, E. (2013). *Scarcity: Why having too little means so much* (1st ed.). New York: Times Books, Henry Holt and Company.
- National Insurance Institute of Israel. (2017, December). *Poverty and Social Gaps in 2016, Annual Report.* National Insurance Institute of Israel.
- Okech, D. (2011). Enrollment decisions in a child development accounts program for low-income families. *Journal of Family and Economic Issues*, 32(3), 400-410.
- Ramos, A., Pereira, C. R., & Vala, J. (2016). *Economic crisis, human values and attitudes towards immigrants.* In *Values, economic crisis and democracy* (pp. 130-163). Routledge.
- Regev, E. (2014). Making Ends Meet—Household Income, Expenditures and Savings in Israel. State of the Nation Report. *Society, Economy and Policy*, 19-89.
- Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1).
- Semyonov, M., & Lewin-Epstein, N. (2011). Wealth inequality: Ethnic disparities in Israeli society. *Social Forces*, 89(3), 935-959.
- Shapiro, T., Meschede, T., & Osoro, S. (2013). The roots of the widening racial wealth gap: Explaining the black-white economic divide. *Research and policy brief.*
- Sherraden, M. (1991). *Assets and the poor: A new American welfare policy.* Armonk, NY: M.E. Sharpe.
- Sherraden, M., Cheng, L.-C., Ssewamala, F. M., Kim, Y., Loke, V., Zou, L., ... Han, C.-K. (2018). International Child Development Accounts. In C. Franklin et al. (Eds.), *Encyclopedia of Social Work.*
- Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being?. *Journal of Behavioral and Experimental Finance*, 14, 30-38.
- Thaler, R. H., & Shefrin, H. M. (1981). An economic theory of self-control. *Journal of political Economy*, 89(2), 392-406.

Thaler, R.H. & Sunstein, C.R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449-472.

Zager, R. (2010). The SEED for Oklahoma Kids experiment: Initial account opening and savings.

Table 1: Description of Predictors

Variable	Description
<i>Demographic Characteristics</i>	
Ethnicity	Household's ethnicity (Arab Israelis, Ultra-Orthodox Jews, and Non-Ultra-Orthodox Jews)
Marital status	Dummy for parents' marital status.
Number of children	Number of children in a household.
Age of youngest child	Age of household's youngest child.
Proportion of working parents	Rate of employment among parents.
Mother's (father's) academic attainment	Indicator of whether mother (father) has some college or college degree. Educational attainment is limited to colleges or universities in Israel.
Primary financial decision maker	Indicates which household member (mother, father, or both) is responsible for making day-to-day financial household decisions.
<i>Financial Circumstances</i>	
Residence status	Indicator of whether family owns or rents their home.
Monthly wages	Household monthly gross wages, in NIS.
Access to NIS 2,000 in an emergency	Household's ability to come up with NIS 2,000 (USD 560) ^a within a month in the case of an emergency, measured on the scale of 1 to 5 (5=high confidence). The measure is conceptually equivalent to the liquid assets benchmark used in the U.S. (e.g., National Financial Capability Study, 2015).
Additional family savings	A dummy for household savings excluding retirement savings and SECP funds.
<i>Financial Knowledge</i>	
Financial literacy	Respondent's knowledge of financial issues, measured by correct responses to the following questions (adapted from Lusardi & Mitchell, 2011): 1) "It is usually possible to reduce the risk of the investment in the stock market by buying a wide range of different stocks and shares"; 2) "The higher the interest rate, the bigger will be your savings next year"; 3) "High inflation means that the cost of living is increasing rapidly."
Financial confidence	Respondent's self-assessed overall knowledge of financial issues, measured on the scale of 1 to 5 (5=high confidence).
<i>Intrinsic personality values^a</i>	
Conformity	Underlying goal: "Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms." (Schwartz, 2012, p. 6).
Tradition	Underlying goal: "Respect, commitment, and acceptance of the customs and ideas that one's culture or religion provides." (Schwartz, 2012, p. 6).
Benevolence	Underlying goal: "Preserving and enhancing the welfare of those with whom one is in frequent personal contact" (Schwartz, 2012, p. 7).
Universalism	Underlying goal: "Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature". (Schwartz, 2012, p. 7).
Self-direction	Underlying goal: "Independent thought and action—choosing, creating, exploring" (Schwartz, 2012, p. 5).
Stimulation	Underlying goal: "Excitement, novelty, and challenge in life" (Schwartz, 2012, p. 5).
Hedonism	Underlying goal: "Pleasure or sensuous gratification for oneself" (Schwartz, 2012, p. 5).
Achievement	Underlying goal: "Personal success through demonstrating competence according to social standards" (Schwartz, 2012, p. 5).
Power	Underlying goal: "Social status and prestige, control or dominance over people and resources" (Schwartz, 2012, p. 5).
Security	Underlying goal: "Safety, harmony, and stability of society, of relationships, and of self" (Schwartz, 2012, p. 6).

^aAs of June, 2019. ^bScores range from 1 to 5 (5=very much like me).

Table 2: Sample Summary Statistics

Characteristic	Mean
<i>Demographic Characteristics</i>	
Ethnicity	
Ultra-Orthodox Jews (%)	8.6
Arab Israelis (%)	17.0
Non-Ultra-Orthodox Jews (%)	74.4
Number of children (%)	
1	22.3
2	34.4
3	26.6
4 and more	16.7
Age of youngest child (years)	4.98
Parents are unmarried (%)	13.2
Mother is a primary financial decision maker (%)	18.4
Father is a primary financial decision maker (%)	17.4
Parent(s) are not working (%)	4.4
Mother has some college or a college degree (%)	51.7
Father has some college or a college degree (%)	41.3
<i>Financial Circumstances</i>	
Residence status: Owned house (%)	65.9
Household monthly wages	19,850
Access to NIS 2,000 in an emergency (%)*	42.1
Has additional family savings (%)	59.3
<i>Financial Knowledge</i>	
Financial confidence (%)*	31.7
Financial literacy (answered all questions correctly) (%)	14.3
<i>Intrinsic personality values</i>	
Conformity	4.28
Tradition	4.30
Benevolence	4.70
Universalism	4.51
Self-direction	4.50
Hedonism	4.21
Achievement	4.55
Power	3.81
Security	4.73
Stimulation	3.09
Number of households	3,330

*Scored 4 or above (out of 5)

Table 3: Comparison of Analytical Sample and General Population (with Children Under 15)

Variable	Full Population (%)	Analytical Sample (%)
Made any choice	73	80
Selected a higher-yield investment fund	32	40
Deposited extra NIS 50	50	59
Mother's age		
18-29	18	15
30-39	42	47
40-49	34	33
50+	6	5
Father's age		
18-29	10	8
30-39	37	39
40-49	39	40
50+	15	13
Number of children		
1-2	55	57
3-4	35	35
5+	10	8
Ethnicity		
Non-Ultra-Orthodox Jews	66	74
Ultra-Orthodox Jews	10	9
Arab Israelis	24	17
Parents are married	82	87
Household head is the mother (based on wages or age)	30	28
Parent(s) are not working	10	4
Parent(s) without any college education	55	46
Household wage quintile		
1 st quintile	17	11
2 nd quintile	19	18
3 rd quintile	21	24
4 th quintile	21	23
5 th quintile	22	24
Socio-economic cluster ^a		
Lower	33	26
Middle	48	52
Higher	19	22
Proximity to major cities ^b		
Long distance	6	6
Medium distance	54	59
Short distance	40	36
Observations	1,098,178	3,330

^aThe index combines demographic, educational, employment, and economic indicators at the regional level. ^bThe index represents regional geographic proximity relative to major cities in Israel, reflecting the combination of the distance to Tel Aviv and larger nearby cities.

Table 4: Participation in SECP: Linear Probability Model

Dependent Variable	Model 1: Made Any Choice			Model 2 Selected a Higher- Yield Investment Fund			Model 3 Deposited Extra NIS 50		
	Coef.	SE	Sig.	Coef.	SE	Sig.	Coef.	SE	Sig.
<i>Demographic Characteristics</i>									
Ethnicity: Ultra-Orthodox Jews ^a	0.116	(0.02)	***	-0.250	(0.03)	***	-0.158	(0.04)	***
Ethnicity: Arab Israelis ^a	-0.226	(0.02)	***	-0.371	(0.03)	***	-0.123	(0.03)	***
Parents are unmarried	-0.046	(0.02)		-0.033	(0.03)		-0.001	(0.03)	
Number of children	-0.008	(0.01)		-0.012	(0.01)		-0.020	(0.01)	**
Age of youngest child	-0.009	(0.00)	***	-0.010	(0.00)	***	0.002	(0.00)	
Proportion of working parents	0.008	(0.03)		0.005	(0.03)		0.058	(0.04)	
Mother's academic attainment	0.063	(0.02)	***	0.070	(0.02)	**	0.079	(0.02)	***
Father's academic attainment	0.038	(0.02)	*	0.125	(0.02)	***	0.022	(0.02)	
Mother is the primary financial decision maker ^b	0.025	(0.01)		-0.038	(0.02)	*	0.017	(0.02)	
Joint financial decision-making ^b	0.026	(0.02)		0.009	(0.02)		0.018	(0.02)	
<i>Financial Circumstances</i>									
Residence status: Owned house	0.040	(0.02)	**	0.006	(0.02)		-0.010	(0.02)	
Household monthly wages (1,000 NIS)	0.001	(0.00)		0.004	(0.00)	***	0.001	(0.00)	*
Access to NIS 2,000 in an emergency	-0.005	(0.01)		0.023	(0.01)	***	0.015	(0.01)	*
Additional family savings	0.007	(0.00)	***	0.002	(0.00)		0.005	(0.00)	**
<i>Financial Knowledge</i>									
Financial confidence	0.011	(0.01)		0.009	(0.01)		-0.015	(0.01)	
Financial literacy	0.001	(0.01)		0.026	(0.01)	**	0.012	(0.01)	
<i>Intrinsic Personality Values</i>									
Conformity	-0.013	(0.01)		-0.022	(0.01)		-0.007	(0.01)	
Tradition	-0.003	(0.01)		-0.061	(0.01)	***	-0.005	(0.01)	
Benevolence	0.023	(0.02)		0.009	(0.02)		0.002	(0.02)	
Universalism	-0.004	(0.01)		0.001	(0.02)		0.046	(0.02)	*
Self-direction	-0.021	(0.01)		0.018	(0.01)		-0.014	(0.01)	
Stimulation	-0.008	(0.01)		-0.002	(0.01)		-0.003	(0.01)	
Hedonism	-0.014	(0.01)		0.010	(0.01)		0.004	(0.01)	
Achievement	0.009	(0.01)		0.001	(0.02)		-0.008	(0.02)	
Power	0.003	(0.01)		-0.009	(0.01)		0.013	(0.01)	
Security	0.029	(0.01)	*	0.031	(0.02)		0.007	(0.02)	
Constant	0.690	(0.09)	***	0.42	(0.11)	***	0.467	(0.11)	***
R-Squared	0.135			0.282			0.093		
Number of observations	3,097			2,479			2,479		
<i>Joint significance tests</i> (<i>F</i> -statistic and <i>p</i> -value)									
Demographic characteristics	29.58 (<i>p</i> <.000)			33.7 (<i>p</i> <0.000)			9.94 (<i>p</i> <.000)		
Financial circumstances	9.08 (<i>p</i> <.000)			16.2 (<i>p</i> <0.000)			5.86 (<i>p</i> <.000)		
Financial knowledge	1.64 (<i>p</i> =.194)			4.77 (<i>p</i> <0.01)			2.31 (<i>p</i> =.099)		
Intrinsic personality values	1.53 (<i>p</i> =.122)			3.89 (<i>p</i> <0.01)			1.14 (<i>p</i> =.325)		

Notes: Robust standard errors in parentheses. Statistical significance: *** *p*<.001, ** *p*<.01, * *p*<.05.

^aReference group: Non-Ultra-Orthodox Jews. ^bReference group: Father is the primary financial decision maker.

Table 5: Dependent Variable: Made Any Choice, by Ethnicity

	Non-Ultra-Orthodox Jews			Ultra-Orthodox Jews			Arab Israelis		
	Coef.	SE	Sig.	Coef.	SE	Sig.	Coef.	SE	Sig.
<i>Demographic Characteristics</i>									
Parents are unmarried	-0.039	(0.03)		-0.121	(0.11)		-0.129	(0.10)	
Number of children	-0.006	(0.01)		0.005	(0.01)		-0.012	(0.02)	
Age of youngest child	-0.011	(0.00)	***	0.002	(0.01)		-0.004	(0.01)	
Proportion of working parents	-0.015	(0.03)		0.049	(0.06)		-0.004	(0.08)	
Mother's academic attainment	0.051	(0.02)	**	0.072	(0.04)		0.127	(0.06)	*
Father's academic attainment	0.042	(0.02)	*	0.019	(0.04)		0.006	(0.06)	
Mother is the primary financial decision maker ^b	0.008	(0.02)		0.017	(0.04)		0.094	(0.05)	
Joint financial decision-making ^a	0.020	(0.02)		-0.005	(0.04)		0.024	(0.05)	
<i>Financial Circumstances</i>									
Residence status: Owned house	0.033	(0.02)		-0.046	(0.04)		0.110	(0.05)	*
Household monthly wages (1,000 NIS)	0.001	(0.00)	*	0.002	(0.00)		-0.002	(0.00)	
Access to NIS 2,000 in an emergency	-0.007	(0.01)		0.013	(0.01)		-0.006	(0.01)	
Additional family savings	0.005	(0.00)	***	0.004	(0.00)		0.014	(0.00)	**
<i>Financial Knowledge</i>									
Financial confidence	0.007	(0.01)		-0.005	(0.01)		0.025	(0.02)	
Financial literacy	0.006	(0.01)		-0.033	(0.02)		0.011	(0.02)	
<i>Intrinsic Personality Values</i>									
Conformity	-0.005	(0.01)		0.006	(0.02)		-0.053	(0.03)	
Tradition	-0.010	(0.01)		0.030	(0.04)		0.007	(0.03)	
Benevolence	0.018	(0.02)		-0.009	(0.04)		0.063	(0.05)	
Universalism	0.013	(0.02)		-0.020	(0.02)		-0.067	(0.04)	
Self-direction	-0.019	(0.01)		-0.017	(0.02)		-0.019	(0.04)	
Stimulation	-0.007	(0.01)		-0.015	(0.02)		-0.019	(0.02)	
Hedonism	-0.016	(0.01)		-0.005	(0.02)		0.005	(0.04)	
Achievement	0.002	(0.01)		0.013	(0.03)		0.058	(0.04)	
Power	0.002	(0.01)		0.010	(0.02)		0.003	(0.03)	
Security	0.032	(0.02)	*	0.006	(0.02)		0.038	(0.05)	
Constant	0.711	(0.10)	***	0.830	(0.27)	**	0.226	(0.26)	
R-Squared	0.068			0.074			0.108		
Number of observations	2,297			268			532		

Notes: Robust standard errors in parentheses. Statistical significance: ***p<.001, **p<.01, *p<.05.

^aReference group: Father is the primary financial decision maker.

Table 6: Dependent Variable: Deposited Extra NIS 50, by Ethnicity

	Non-Ultra-Orthodox Jews			Ultra-Orthodox Jews			Arab Israelis		
	Coef.	SE	Sig.	Coef.	SE	Sig.	Coef.	SE	Sig.
<i>Demographic Characteristics</i>									
Parents are unmarried	-0.011	(0.03)		0.137	(0.17)		0.099	(0.16)	
Number of children	-0.020	(0.01)	*	-0.038	(0.01)	**	0.013	(0.02)	
Age of youngest child	0.002	(0.00)		-0.004	(0.01)		0.005	(0.01)	
Proportion of working parents	0.048	(0.04)		0.019	(0.11)		-0.101	(0.12)	
Mother's academic attainment	0.045	(0.02)	*	0.188	(0.07)	**	0.227	(0.07)	**
Father's academic attainment	0.029	(0.02)		0.046	(0.09)		-0.080	(0.07)	
Mother is the primary financial decision maker ^b	0.002	(0.02)		0.096	(0.07)		0.008	(0.06)	
Joint financial decision-making ^a	0.019	(0.02)		0.016	(0.07)		-0.016	(0.06)	
<i>Financial Circumstances</i>									
Residence status: Owned house	-0.007	(0.02)		0.011	(0.08)		-0.031	(0.08)	
Household monthly wages (1,000 NIS)	0.001	(0.00)	*	0.011	(0.00)	**	0.005	(0.00)	
Access to NIS 2,000 in an emergency	0.014	(0.01)	*	-0.010	(0.02)		0.042	(0.02)	*
Additional family savings	0.005	(0.00)	**	0.010	(0.01)		0.004	(0.01)	
<i>Financial Knowledge</i>									
Financial confidence	-0.020	(0.01)	*	-0.006	(0.03)		-0.002	(0.03)	
Financial literacy	0.010	(0.01)		0.040	(0.03)		0.018	(0.03)	
<i>Intrinsic Personality Values</i>									
Conformity	-0.009	(0.01)		-0.007	(0.04)		-0.003	(0.04)	
Tradition	-0.005	(0.01)		0.043	(0.06)		-0.041	(0.04)	
Benevolence	0.008	(0.02)		0.031	(0.08)		-0.046	(0.07)	
Universalism	0.044	(0.02)	*	0.028	(0.05)		0.082	(0.05)	
Self-direction	-0.016	(0.02)		-0.042	(0.04)		0.013	(0.05)	
Stimulation	-0.001	(0.01)		0.003	(0.03)		-0.001	(0.03)	
Hedonism	-0.004	(0.01)		0.016	(0.04)		-0.003	(0.07)	
Achievement	-0.019	(0.02)		0.044	(0.05)		-0.032	(0.06)	
Power	0.018	(0.01)		0.021	(0.04)		-0.001	(0.04)	
Security	0.012	(0.02)		-0.037	(0.05)		0.000	(0.07)	
Constant	0.552	(0.13)	***	-0.063	(0.33)		0.509	(0.40)	
R-Squared	0.042			0.144			0.101		
Number of observations	1,933			247			299		

Notes: Robust standard errors in parentheses. Statistical significance: ***p<.001, **p<.01, *p<.05.

^aReference group: Father is the primary financial decision maker.