

# ACCUMULATING ASSETS, DEBTS IN YOUNG ADULthood

*Children as Potential Future Investors, Report II of III*

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*Children as Potential Future Investors* is a three-part series of reports that focuses on connecting children to the financial mainstream by giving them savings accounts. Children are potential future investors and when they have savings accounts of their own, they may be more likely to maintain relationships with mainstream banks and to invest money into their accounts in young adulthood. This series of reports examines (1) connections with banking institutions and diverse asset portfolios in young adulthood, (2) accumulating assets, debts in young adulthood, and (3) children's savings accounts offered by mainstream banking institutions. The first report examines whether having a savings account at a mainstream bank in childhood predicts owning a savings account and other types of assets in young adulthood. The second report examines whether having a savings account at a mainstream bank in childhood predicts the savings, assets, debts, and net worth accumulated in young adulthood. The third report descriptively examines existing savings accounts for children at the top 25 mainstream banking institutions in the United States and asks whether those accounts augment children's capacity to save. While children may have limited savings to invest initially, they may increasingly invest more money into different types of savings products over time. Mainstream banks stand to profit from this long-term relationship, which may begin to justify a business case for children's savings and why mainstream banks should continue offering savings accounts to children. Policy endeavors that remove barriers to account ownership may be advantageous for children and mainstream banks.

## HIGHLIGHTS:

- Young adults accumulate medians of \$1,000 in savings accounts, \$4,600 in total assets, \$965 in debt excluding student loans, and \$4,000 in net worth excluding student loans.
- When student loans are included, young adults accumulate medians of \$1,000 in debt and \$300 in net worth.
- Young adults from racial and ethnic minority groups and lower income households are at a disadvantage in terms of asset and debt accumulation compared to their counterparts.
  - White young adults accumulate medians of \$1,668 in savings, \$6,000 in total assets, \$1,670 in debt (excluding student loans), and \$4,990 in net worth (excluding student loans).
  - Black young adults accumulate medians of \$300 in savings, \$1,000 in total assets, \$538 in debt (excluding student loans), and \$40 in net worth (excluding student loans).
  - Young adults from high-income households accumulate medians of \$2,049 in savings, \$7,000 in total assets, \$970 in debt (excluding student loans), and \$6,500 in net worth (excluding student loans).
  - Young adults from low-to-moderate-income households accumulate medians of \$300 in savings, \$2,600 in total assets, \$960 in debt (excluding student loans), and \$1,080 in net worth (excluding student loans).
- Descriptively, young adults accumulate more savings, total assets, debt, and net worth when they have savings accounts as children.
  - Young adults who had savings accounts as children accumulate medians of \$1,900 in savings and \$5,025 in total assets greater than their counterparts without savings as children.
  - Young adults who had savings accounts as children accumulate medians of \$818 more in debt (excluding student loans) and \$4,538 in net worth (excluding student loans) greater than their counterparts without savings as children.
- Young adults accumulate significantly more savings and total assets when they have savings accounts as children.
- Young adults accumulate less debt and more net worth when their households accumulate high net worth.

A policy question of interest is whether or not there is any demand for children's savings accounts offered by mainstream banking institutions. In other words, should mainstream banks offer savings accounts to children? The first report in this series provides a preliminary answer to this question by testing whether or not children are potential future investors. Friedline and Elliott (2013) find that young adults are two times more likely to own savings accounts, two times more likely to own credit cards, and four times more likely to own stocks when they have savings accounts as children compared to those who do not. Young adults' total asset ownership is also associated with having accounts as children. It appears that there may be demand from children and young adults for investing in mainstream banks. If children build on this foundation by investing greater amounts into other banking products, then mainstream banks may have some incentive for offering savings accounts to children. That is, offering savings accounts may be beneficial for connecting children—particularly lower income and minority children—to mainstream banks while simultaneously producing savings accounts that become fiscally profitable for mainstream banks over time. This report builds on Friedline and Elliott's (2013) previous report to provide a test of children as potential future investors. Here, we ask whether or not children with savings accounts invest more into their accounts in young adulthood, as evidenced by asset and debt accumulation.

Offering savings accounts may be beneficial for connecting children—particularly lower income and minority children—to mainstream banks while simultaneously becoming fiscally beneficial for mainstream banks.

## CONTEXT OF YOUNG ADULTS' ASSET AND DEBT ACCUMULATION

Young adulthood can be characterized as a period of low asset and high debt accumulation. Across the entire life course, the greatest likelihood of lacking sufficient accumulated assets to live for three months at the poverty line—what researchers refer to as asset poverty—occurs in young adulthood (Rank & Hirschl, 2010). In a life course analysis using longitudinal data from the Panel Study of Income Dynamics (PSID), Rank and Hirschl (2010) find that anywhere from 46 to 64 percent of young adults ages 25 to 29 experience asset poverty. Young adults who are black, unmarried, and have lower education levels are at an increased risk. For the most part, these percentages decline over the life course, suggesting that people accumulate more assets over time and decrease their likelihood of asset poverty. Low accumulated assets and high accumulated debts in young adulthood is consistent with the life cycle hypothesis (LCH; Modigliani & Brumberg, 1954), which suggests there is little reason to believe young adults early in the life course are accumulating assets because they are involved in accumulating debt. Given their low incomes coupled with high consumption, young adults accumulate debt for expenses like tuition at post-secondary institutions or homes. They begin to accumulate assets once their incomes rise and debts decline in middle adulthood. In old age, they spend down their assets to supplement their declining income post-retirement. From this perspective, it is not surprising that young adults experience the greatest likelihood of asset poverty.

In addition to being characterized as a period of low asset and high debt accumulation, young adulthood is also a period of transition. Young adults are entering the labor force full time, gaining financial independence from their families, and establishing households of their own (Bell, Burtless, Gornick, & Smeeding, 2007). Given their state of transition, young adults are susceptible to fluctuations in the economy. For example, young adults in the U.S. fared poorly during the Great Recession compared to the rest of the population. Using data from young adults ages 16 to 24 from the Current Population Survey (CPS), researchers find that their median wage

fell 3 percent more than older age groups between 2007-2010 (Bell & Blanchflower, 2011). The unemployment rate in 2011 for young adults under age 25 was 16 percent compared to 7 percent for older age groups (Jacobsen & Mather, 2011). Families may become safety nets when young adults face unexpected unemployment or need a financial boost to meet needed expenses. In some cases, young adults postpone their financial independence altogether by waiting longer to move out on their own or moving back in with their families. Nearly a quarter of young adults ages 18 to 34 reportedly moved back in with their families during the Great Recession (Taylor, Parker, Kochhar, et al., 2012).

Accumulated assets and debts have a role to play in the transition to young adulthood. Young adults with greater accumulated assets likely have a better financial foundation than those with fewer accumulated assets. Young adults still need to afford rent, utilities, medical expenses, and student loan payments when a job loss occurs, despite interrupted income. Young adults with accumulated assets may be in a better position to afford these expenses, especially for those from lower income households whose families may be unable to provide a financial safety net. Young adults may also acquire debt to afford expenses, such as being eligible to receive loans and credit that can be used to pay for tuition, first-time home purchase, or transportation. Finding ways to help young adults gain secure financial footing may be especially relevant given that they experience higher rates of asset poverty compared with other age groups. Moreover, secure financial footing in young adulthood is a foundation on which they can build across the life course.

## **THE ROLES OF CHILDREN'S SAVINGS AND MAINSTREAM BANKS**

Child Development Accounts (CDAs) is one policy proposal that helps build assets from birth with particular emphasis on children from lower income households. A number of CDA policy proposals has emerged in the U.S., including the America Saving for Personal Investment, Retirement, and Education (ASPIRE) Act, Young Savers Accounts, 401Kids Accounts, and Baby Bonds (Cramer, 2010). Of these policy proposals, the ASPIRE Act is perhaps the most well-known and comprehensive. The ASPIRE Act proposes to roll out CDAs universally to newborns at birth with a \$500 initial deposit and children whose households' incomes fall below certain thresholds are eligible for additional subsidies. Accounts are proposed to be administered by the Thrift Savings Plan, which is the retirement account system for federal employees, and savings can be used toward expenses like education, home ownership, or retirement after age 18 (Cramer, 2010). Projected possible savings amounts by age 18 have been estimated to range between \$4,000 and \$56,000 depending on contributions and interest rates (Butrica, 2008; Butrica, Carasso, Steuerle, & Toohey, 2008). While no national CDA policy has been adopted in the U.S., CDA policies have been implemented in Singapore, the United Kingdom, Canada, South Korea, and several other countries (Loke & Sherraden, 2009). A large consortium project called YouthSave<sup>1</sup> is currently testing the delivery of savings accounts to children in Colombia, Ghana, Kenya, and Nepal and monitoring children's savings movements around the globe (Center for Social Development, 2011; Deshpande & Zimmerman, 2010).

Internationally, children's savings initiatives have leveraged mainstream banking institutions as key partners in account design and delivery. The Child Trust Fund (CTF), which was the United Kingdom's original CDA policy that operated between 2005–2010, partnered with mainstream banking institutions to deliver savings accounts to children. The CTF was a nationwide, government-funded children's savings program that partnered with existing mainstream banks to deliver and manage the accounts. The CTF created demand for children's

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<sup>1</sup> Notably, YouthSave does not have a universal, automatic enrollment design which is different, for instance, from the proposed CDAs within the ASPIRE Act.

savings accounts, and mainstream banks responded by supplying accounts. All families with eligible children automatically received vouchers that they could take to local banks, credit unions, or other institutions to open accounts in children's names. At the end of the first year, account holders had already accumulated a median of £2,548 (\$3,262) in their CTF accounts held at mainstream banks and the projected account balance by age 18 was upwards of £25,000 (\$32,000; Kempson, Atkinson, & Collard, 2006; Mensah, Schneider, & Aboufadi, 2004). Junior Individual Savings Accounts (ISAs) replaced the CTF in 2011 and discontinued the universal and automatic enrollment features; however, mainstream banks remain important partners in the policy endeavor. In some cases, mainstream banks in international settings are leading children's savings efforts by providing specially designed savings accounts for children (Deshpande & Zimmerman, 2010; Kilara & Latortue, 2012; Meyer, Masa, & Zimmerman, 2009). For instance, the Government Savings Bank in Thailand and Hatton National Bank in Sri Lanka both offer accounts to children within school systems. Combined, they have opened over one million children's savings accounts (Deshpande & Zimmerman, 2010). In the YouthSave project, a primary question asks whether there is incentive for mainstream banking institutions to partner for providing savings accounts to children (Deshpande & Zimmerman, 2010). Here, this question explores the business case for partnerships by asking whether for-profit, mainstream banks have incentive to partner in such endeavors despite the small amounts of money children save.

Mainstream banking institutions are the primary providers of savings accounts and thus can be considered important partners in children's asset and debt accumulation.

In the U.S., less attention has been given to the business case<sup>2</sup> for banking institutions' involvement with CDAs. Perhaps this is due in part to the push for a universal policy managed by the Thrift Savings Plan that does not identify a role for mainstream banks. Yet mainstream banks are currently the primary suppliers of savings accounts and thus can be considered important partners in children's asset and debt accumulation. If mainstream banks are important partners, then researchers and policy makers are obliged to explore possible incentives for offering children's savings accounts. One example of this need comes from a conversation that the first author had with a branch manager of a local bank. When asked if their branch offered savings accounts for children,<sup>3</sup> they stated that many banks are unfortunately not compelled to offer this type of an account because of the small market and the small amounts of money that children save. In other words, demand does not exist for children's savings accounts. Further, small dollar accounts do not justify the extra work or costs that go into account administration.

In some ways, mainstream banking institutions' hesitation to offer savings accounts to children is justified. Children do indeed save small amounts of money. In the Saving for Education, Entrepreneurship, Downpayment (SEED) national research initiative that opened savings accounts for their participants at 12 locations across the country, children with an average age of seven saved a mean quarterly amount of \$30 and a mean total amount of \$1,518 after four years (Mason, Nam, Clancy, Kim, & Loke, 2010). On average, young adults ages 17 to 22 save a median of \$500 (Friedline, Elliott, & Nam, 2011). Those from lower income households save a median between \$200 and \$390 and blacks save a median of \$20 during the same age range

<sup>2</sup> The term "business case" has been used in the field previously. Hirschland (2009) used the concept to discuss children's savings from the perspective of mainstream banks and other financial institutions. Others have built upon this concept by using the term "business case," including Deshpande and Zimmerman (2010), Westley and Palomas (2010), and Kilara and Latortue (2012).

<sup>3</sup> These accounts are often called 'minor' savings accounts, which are opened by account holders under age 18.

(Friedline & Elliott, 2011; Friedline, Elliott, & Chowa, 2013). In many cases these amounts are not even enough to afford an initial deposit or maintain minimum account balances. From this perspective, it is likely true that mainstream banks would not receive immediate gains from children's small investments. However, children may make increasing investments over time and may accumulate savings and assets in their accounts. If children with savings accounts increasingly invested more money into their accounts, concerns about the profitability of small dollar accounts might be allayed. Moreover, children may begin to take advantage of banks' other products and invest in different types of assets (Friedline & Elliott, 2013). In the first report of this series, researchers find that young adults are more likely to diversify their asset portfolios when they have savings accounts as children (Friedline & Elliott, 2013). It stands to reason that they may also accumulate more assets and debts, perhaps because they have developed relationships with banks that offer an array of products from stock options to student and home loans.

## RESEARCH QUESTIONS

We ask two research questions in this report. The first question is descriptive in nature and asks how much savings, assets, debts, and net worth young adults have accumulated by ages 22 to 25 in 2009? The second research question asks whether children with savings accounts in 2002 accumulate significantly greater savings, assets, debts, and net worth as young adults in 2009 compared to children without savings accounts in 2002, after controlling for relevant covariates? Given that no previous studies examine the relationships between children's savings accounts and their assets, debts, and net worth accumulated in young adulthood, the latter research question is exploratory in nature.

## METHODS

### Data

This study used longitudinal data from the PSID and its Child Development Supplement (CDS) and Transition into Adulthood (TA) supplement. The PSID is a nationally representative longitudinal survey of U.S. individuals and families that began in 1968. The PSID collects data every two years on characteristics such as employment, income, and assets. The CDS was administered to 3,563 PSID respondents in 1997 to collect a wide range of data on parents who participated in the PSID and their children (birth to 12 years). Questions covered a range of developmental outcomes across the domains of health, psychological well-being, social relationships, cognitive development, achievement, motivation, and education. Follow-up surveys were administered in 2002 and 2007. The TA supplement, administered in 2005, 2007, and 2009, measured outcomes for young adults who participated in earlier waves of the CDS and were no longer in high school. The three data sets were linked using PSID, CDS, and TA map files that contained family and personal identification numbers. The linked data sets provided an opportunity to analyze data collected at earlier points in time could be used to predict outcomes at a later point in time, with stable background characteristics as covariates.

### Independent Variables

Ten independent variables were used in this study: children's race and gender; young adults' employment and college enrollment status; head of households' marital status and education level; households' income, net worth, and parents' savings for their children; and children's savings account. Children's savings account was the primary variable of interest. Table 1 describes in detail how independent variables were measured.



## Outcome Variables

There were six outcome variables, all of which measured young adults' accumulated amounts in 2009. These amounts included savings, assets, debts (with and without student loans), and net worth (with and without student loans). Debts and net worth were measured with and without student loans because young adults ages 22 to 25 are at college- or post-college age. Given increasing reliance on student loans to finance post-secondary education (Elliott & Friedline, 2013), a large portion of young adults' accumulated debts (and thus, net worth) may come from student loans. The amounts were transformed two ways for use in analyses. The inverse hyperbolic sine (IHS) transformation retained the continuity of asset amounts while adjusting for skewness (Friedline, Masa, & Chowa, 2012). The variables were also categorized based on the 25th, 50th, and 75th percentiles. Table 2 describes in detail how outcome variables were measured.

**TABLE 1—Independent variables for children ages 15 to 19 and their households from the PSID, CDS, and TA.**

Variable Name	Description	Coding
<i>Child and Young Adult Variables</i>		
Race	Available from the 1997 CDS.	White = 1; Black = 0
Gender	Available from the 1997 CDS.	Male = 1; Female = 0
Employment status	Young adults in the 2007 TA are asked whether or not they are currently working for money.	Yes = 1; No = 0
College enrollment status	Young adults in the 2007 TA are asked whether or not they have ever enrolled in college.	Yes = 1; No = 0
<i>Head and Household Socio-Economic Status (SES) Variables</i>		
Head's marital status	Available from the 2001 PSID that asks heads of households whether or not they are married.	Married = 1; Not married = 0
Head's education level in 2001	Continuous variable available from the 2001 PSID where each number represents a year of completed schooling (e.g., 12 years of education indicated graduating high school).	Range from 1 to 16
Household income (natural log transformed)	Continuous variable that averages household income from the 1996, 1997, 1999, 2001, and 2003 PSID after inflating to 2003 prices with the Consumer Price Index, log transformed.	Range from 1 to 13.956 (log transformed)
Household net worth (IHS transformed)	Continuous variable that sums all assets, including savings, stocks / bonds, business investments, real estate, home equity, and other assets, and subtracts all debts, including credit cards, loans, and other debts and available from the 1984, 1989, 1994, 1999, 2001, and 2003 PSID. Inverse hyperbolic sine (IHS) transformation is used (Friedline, Masa, & Chowa, 2012). Splines for each sample (3 knots, including $\leq 0$ [zero and negative], $0 < 10$ [moderate], and $> 10$ [high]) are included in the analyses.	Range from $\square$ 11.176 to 17.575 (IHS transformed)
Parents' savings for child	Two questions from the 2002 CDS ask parents whether they have money for their child in a bank account separate from other savings, and whether they have money specifically for their child's future schooling, separate from other savings. Combined responses create a dichotomous variable.	Yes = 1; No = 0
<i>Variable of Interest</i>		
Child's savings account	Available from the 2002 CDS that asks children whether they have a savings or bank account in their own name.	Yes = 1; No = 0

**TABLE 2—Asset accumulation outcome variables for young adults ages 22 to 25 from the Transition into Adulthood (TA) in 2009.**

Variable Name	Description	Coding
Savings accumulation	Young adults were asked the amount saved in bank or savings accounts.	Range \$0 to \$30,000 IHS range 0 to 11 Percentiles: \$0 = 0 (reference); > \$0 < \$200 = 1; ≥ \$200 < \$1,000 = 2; ≥ \$1,000 < \$4,000 = 3; ≥ \$4,000 = 4
Asset accumulation	Young adults were asked whether they owned savings accounts, stocks, bonds, vehicles, and the value of each asset. The values were summed to calculate assets held by young adults.	Range \$0 to \$95,000 IHS range -9.901 to 12.157 Percentiles: \$0 = 0 (reference); > \$0 < \$1,000 = 1; ≥ \$1,000 < \$4,600 = 2; ≥ \$4,600 < \$11,200 = 3; ≥ \$11,200 = 4
Debt accumulation (excluding student loans)	Young adults were asked whether they owed money on credit cards or other loans and the value of each type of debt. The values were summed to calculate debts held by young adults.	Range \$0 to \$50,000 IHS range 0 to 11.612 Percentiles: \$0 = 0 (reference); > \$0 < \$1,000 = 1; ≥ \$1,000 < \$12,935 = 2; ≥ \$12,935 = 3
Debt accumulation (including student loans)	Young adults were specifically asked whether they owed student loans and the value of these loans. Student loan values were added to credit card and other loans to calculate total debt held by young adults.	Range \$0 to \$55,000 IHS range 0 to 11.612 Percentiles: \$0 = 0 (reference); > \$0 < \$300 = 1; ≥ \$300 < \$3,000 = 2; ≥ \$3,000 = 3
Net worth accumulation (excluding student loans)	The summed value debts (excluding student loans) were subtracted from the summed value of assets.	Range -\$18,000 to \$95,000 IHS range -10.499 to 12.151 Percentiles: < \$300 = 0 (reference); ≥ \$300 < \$4,000 = 1; ≥ \$4,000 < \$10,432 = 2; ≥ \$10,432 = 3
Net worth accumulation (including student loans)	The summed value debts (including student loans) were subtracted from the summed value of assets.	Range -\$53,500 to \$95,000 IHS range -11.589 to 12.151 Percentiles: < -\$6,500 = 0 (reference); ≥ -\$6,500 < \$300 = 1; ≥ \$300 < \$8,000 = 2; ≥ \$8,000 = 3

*Note.* Young adults who did not own a particular asset were coded as having a value of \$0. Amounts accumulated for each asset were transformed using the inverse hyperbolic sine (IHS) transformation and transformed into ordered categorical variables based on the 25th, 50th, and 75th percentiles. IHS-transformed assets were used in multiple regression and ordered categorical variables were used in ordered logistic regressions.

## Sample

This study examined financial and nonfinancial assets with an aggregate sample ( $N = 425$ ) that began in childhood in 2002 at ages 15 to 19 and ended in young adulthood in 2009 at ages 25 to 29. Children in 2002 had an average age of 17 and a majority were white (80 percent). There were slightly more females (54 percent) than males (46 percent). A majority was employed (77 percent) and had enrolled in college (74 percent) by 2007. Their heads of households, most of whom were married (78 percent), had about one-and-a-half years of education beyond high school. Households' median annual income was \$66,527 and their median net worth was \$60,427 (including home equity). There were about equal percentages of parents with (53 percent) and without (47 percent) savings accounts for their child. However, a majority of children owned their own savings accounts (74 percent).



## Analysis Plan

There were four steps in the analysis, including (1) accounting for missing data, (2) applying propensity score weighting, (3) checking for balance within the data, and (4) conducting multiple and ordered logistic regression. More details on these steps are available from the authors upon request.<sup>4</sup>

## RESULTS

### Descriptive Results

Young adults accumulated a median amount of \$1,000 in their savings accounts by ages 22 to 25. They accumulated notably greater median savings when they were white (\$1,668) compared with black (\$300) and were enrolled in college (\$2,000) compared with not enrolled in college (\$200). Young adults also had a descriptive advantage in the median amount saved when they had savings accounts as children (\$2,000) compared with those who did not have savings accounts as children (\$100).

Young adults' total assets accumulated summed values from their savings accounts, stocks, bonds, and vehicles. Their median total asset accumulation was \$4,600 and disparities in amounts accumulated fell along lines of race and class. White young adults accumulated six times the amount of assets held by black young adults. Young adults from high-income households accumulated a median of \$7,000 in assets compared to \$2,600 accumulated by young adults from low-to-moderate income households.

Debt accumulation that includes student loans is greatest amongst whites, females, those enrolled in college, high-income and high net worth households, and those with savings accounts as children. When debt accumulation excludes student loans, disparities lessen between young adults enrolled (\$1,134) and not enrolled (\$486) in college. It is not surprising that young adults' debt accumulation is tied to college enrollment.

We looked at young adults' net worth by subtracting their accumulated debts from their accumulated assets. When student loans are included, young adults have a median net worth of \$300. Without student loans, median net worth sores to \$4,000. Median net worth among those enrolled in college is \$5,000 when student loans are excluded, which far surpasses the median of \$500 accumulated among those not enrolled in college. When student loans are included in net worth, those enrolled in college have \$37 compared to \$456 for those not enrolled in college. Young adults also accumulate greater median net worth when they are white, male, employed, and from households with higher socio-economic status. They also accumulate greater net worth when they have savings accounts as children (see Table 3).

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<sup>4</sup> Readers should note that the analysis tests associations between children's savings accounts and young adults' assets and debts; the authors do not make claims about causality in this study.

TABLE 3—Young adults' median savings, asset, debt, and net worth accumulation at ages 22 to 25 from the 2009 TA ( $N = 425$ ).

	Savings Accumulation	Asset Accumulation	Debt Accumulation (Including Student Loans)	Debt Accumulation <sup>a</sup> (Excluding Student Loans)	Net Worth Accumulation (Including Student Loans)	Net Worth Accumulation (Excluding Student Loans)
Full Sample	\$1,000	\$4,600	\$1,000	\$965	\$300	\$4,000
<i>Child and Young Adult Variables</i>						
White	\$1,668	\$6,000	\$1,242	\$1,670	\$1,000	\$4,990
Black	\$300	\$1,000	\$0	\$538	\$0	\$400
Male	\$1,000	\$5,045	\$222	\$755	\$400	\$4,350
Female	\$1,200	\$4,250	\$2,159	\$1,147	\$96	\$3,500
Employed	\$1,000	\$5,014	\$1,000	\$1,019	\$400	\$4,300
Not employed	\$1,200	\$3,500	\$571	\$785	\$1	\$3,000
Enrolled in college	\$2,000	\$6,005	\$6,593	\$1,134	\$37	\$5,000
Never enrolled in college	\$200	\$500	\$2,135	\$486	\$456	\$500
<i>Head and Household Socio-Economic Status (SES) Variables</i>						
Head is married	\$1,828	\$5,800	\$2,000	\$1,039	\$952	\$4,990
Head is not married	\$300	\$2,504	\$133	\$699	\$0	\$803
Head has college degree or more	\$2,531	\$7,000	\$4,500	\$1,073	\$1,678	\$6,000
Head has some college education	\$1,000	\$4,131	\$1,762	\$1,294	\$0	\$3,051
Head has high school diploma or less	\$494	\$3,472	\$0	\$641	\$300	\$3,068
High-income (HI; $\geq$ \$80,000)	\$2,409	\$7,000	\$4,000	\$970	\$1,877	\$6,500
Low-to-moderate income (LMI; $<$ \$80,000)	\$300	\$2,600	\$1	\$960	\$43	\$1,080
High net worth ( $>$ \$10,000)	\$1,500	\$5,317	\$1,391	\$1,061	\$500	\$4,306
Moderate net worth (\$0 ~ \$10,000)	\$20	\$970	\$200	\$485	\$0	\$723
Zero and negative net worth ( $<$ \$0)	\$300	\$1,599	\$0	\$184	\$300	\$814
Parent has savings for child	\$2,000	\$6,669	\$3,000	\$1,154	\$1,000	\$6,000
Parent does not have savings for child	\$400	\$3,473	\$120	\$752	\$20	\$2,000
<i>Variable of Interest</i>						
Child has savings account in 2002	\$2,000	\$6,025	\$2,329	\$1,181	\$1,000	\$5,000
Child does not have savings account in 2002	\$100	\$1,000	\$0	\$363	\$0	\$462

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement. Data is weighted using the sampling weight from the 2009 TA.

Notes: <sup>a</sup> Means are reported for young adults' debt accumulation excluding student loans because medians by covariates are \$0 due to small amounts accumulated. Characteristics presented prior to applying the ATT weight.

## Regression Results

*Savings accumulation.* Results for young adults' savings accumulation are available in Table 4. Model 1 examines IHS-transformed savings amounts with multiple regression and Model 2 examines categorical savings amounts with ordered logistic regression. In Model 1, young adults accumulate significantly more savings when they are white ( $\beta = 1.054, p = .018$ ), enrolled in college ( $\beta = 2.358, p < .001$ ), and live in households with high accumulating net worth ( $\beta = .516, p = .035$ ). Living in households with higher income is related to a decrease in accumulated savings ( $\beta = -.181, p = .051$ ). Young adults also accumulate more savings when they have accounts as children compared to not having accounts as children ( $\beta = 1.028, p = .002$ ). For the most part, these results are consistent with the ordered logistic regression results in Model 2. The odds of accumulating savings at higher percentiles are two times greater for whites compared with blacks ( $\beta = .698, OR = 2.010, p = .002$ ). The odds of accumulating savings at higher percentiles are four times greater for young adults enrolled in college compared with not enrolled ( $\beta = 1.382, OR = 3.983, p < .001$ ). The odds of accumulating savings at higher percentiles are one-and-a-half times greater for young adults whose heads are married compared with not married ( $\beta = .467, OR = 1.595, p = .052$ ). The odds of accumulating savings at higher percentiles are over two times greater for young adults who had savings accounts as children compared to their counterparts who did not have savings accounts as children ( $\beta = .807, OR = 2.241, p = .003$ ).

*Asset accumulation.* Results for young adults' asset accumulation are available in Table 5. Model 3 examines IHS-transformed asset amounts with multiple regression and Model 4 examines categorical asset amounts with ordered logistic regression. In Model 3, young adults accumulate significantly more assets when they are white ( $\beta = .877, p = .077$ ), employed ( $\beta = 1.536, p = .009$ ), and enrolled in college ( $\beta = 2.119, p < .001$ ). Living in households with higher income is related to a decrease in accumulated assets ( $\beta = -.200, p = .038$ ). Young adults also accumulate more assets when they have accounts as children compared to not having accounts as children ( $\beta = .809, p = .012$ ). For the most part, these results are consistent with the ordered logistic regression results in Model 4; however, we also see that head's marital status and household net worth emerge as positive and significant predictors. The odds of accumulating assets at higher percentiles are two times greater for whites compared with blacks ( $\beta = .716, OR = 2.046, p = .018$ ). The odds of accumulating assets at higher percentiles are two-and-a-half times greater for those who are employed ( $\beta = .879, OR = 2.408, p = .005$ ) and enrolled in college ( $\beta = .917, OR = 2.502, p = .002$ ) compared to their counterparts. The odds of accumulating assets at higher percentiles are two times greater for those whose heads are married compared with not married ( $\beta = .589, OR = 1.802, p = .024$ ). There is an 18 percent decrease in the odds of accumulating assets at higher percentiles for every point increase in the log of household income ( $\beta = -.201, OR = .818, p = .004$ ). There is a 53 percent increase in the odds of accumulating assets at higher percentiles for every point increase in the IHS of household net worth ( $\beta = .427, OR = 1.533, p = .006$ ). The odds of accumulating assets at higher percentiles are one-and-a-half times greater for those had savings accounts as children ( $\beta = .463, OR = 1.589, p = .037$ ).

*Debt accumulation (including student loans).* Results for young adults' debt accumulation including student loans are available in Table 6. Model 5 examines IHS-transformed debt amounts with multiple regression and Model 6 examines categorical debt amounts with ordered logistic regression. In Model 5, young adults accumulate significantly more debt when they are employed ( $\beta = 1.538, p = .035$ ), enrolled in college ( $\beta = 4.845, p < .001$ ), and have heads with higher levels of education ( $\beta = .382, p = .007$ ). They accumulate significantly less debt when they are male compared to female ( $\beta = -2.131, p < .001$ ) and when their households have higher net worth ( $\beta = -.698, p = .040$ ). The same variables are significant in Model 6. The odds of accumulating debt at higher percentiles are two times greater for young adults who are employed ( $\beta = .647, OR = 1.926, p = .065$ ) and 10 times greater for young adults enrolled in college ( $\beta = 2.395, OR = 10.968, p < .001$ ) compared to their counterparts. There is a 63 percent decrease in the odds of accumulating assets at higher percentiles for males compared with females ( $\beta = -1.002, OR = .367, p$

< .001) and a 44 percent decrease for every point increase in households' high accumulating high net worth ( $\beta = -.578$ ,  $OR = .561$ ,  $p < .008$ ).

*Debt accumulation (excluding student loans).* Results for young adults' debt accumulation excluding student loans are available in Table 7. Model 7 examines IHS-transformed debt amounts with multiple regression and Model 8 examines categorical debt amounts with ordered logistic regression. Young adults accumulate higher debt when they are employed compared to not employed ( $\beta = .831$ ,  $p = .070$ ) and their heads have higher levels of education ( $\beta = .312$ ,  $p = .015$ ). They accumulate significantly less debt when they are male compared with female ( $\beta = -1.636$ ,  $p = .001$ ). The same variables are significant in Model 8. The odds of accumulating debt at higher percentiles are upwards of two times greater for young adults who are employed compared to not employed ( $\beta = .574$ ,  $OR = 1.775$ ,  $p = .075$ ). There is a 24 percent increase in the odds of accumulating debt at higher percentiles for every additional year of head's education ( $\beta = .214$ ,  $OR = 1.239$ ,  $p = .011$ ). There is a 67 percent decrease in the odds of accumulating debt at higher percentiles for males compared with females ( $\beta = -1.103$ ,  $OR = .332$ ,  $p = .001$ ).

*Net worth accumulation (including student loans).* Results for young adults' net worth accumulation including student loans are available in Table 8. Model 9 examines IHS-transformed net worth amounts with multiple regression and Model 10 examines categorical net worth amounts with ordered logistic regression. In Model 9, young adults accumulate higher net worth when they are white ( $\beta = 2.203$ ,  $p = .046$ ) and male ( $\beta = 2.890$ ,  $p = .019$ ), compared to their counterparts. They accumulate significantly more net worth for every point increase in their households' high accumulating net worth ( $\beta = 2.585$ ,  $p < .001$ ). Young adults accumulate significantly less net worth when they are enrolled in college compared to not enrolled ( $\beta = -5.970$ ,  $p < .001$ ). For every additional year's increase in head's education level ( $\beta = -.631$ ,  $p = .048$ ) and households' accumulating moderate net worth ( $\beta = -1.333$ ,  $p = .098$ ), there is a decrease in young adults' net worth accumulation. For the most part, the same variables are significant in Model 10. The odds of accumulating net worth at higher percentiles are about two times greater for young adults who are white ( $\beta = .538$ ,  $OR = 1.713$ ,  $p = .024$ ) and male ( $\beta = .710$ ,  $OR = 2.034$ ,  $p = .004$ ) compared to their counterparts. For every point increase in households' zero and negative (as net worth becomes more negative;  $\beta = .176$ ,  $OR = 1.192$ ,  $p = .046$ ) and high net worth ( $\beta = .675$ ,  $OR = 1.964$ ,  $p < .001$ ), there are respectively 19 percent and 96 percent increases in the odds of young adults accumulating net worth at higher percentiles. For every point increase in household income ( $\beta = .126$ ,  $OR = .882$ ,  $p = .063$ ) and moderate net worth ( $\beta = .338$ ,  $OR = .717$ ,  $p = .032$ ), there are respectively 12 and 28 percent decreases in the odds of accumulating higher percentiles of net worth as young adults. There is a 15 percent decrease in the odds of accumulating higher percentiles of net worth for each additional year of head's education level ( $\beta = -.159$ ,  $OR = .853$ ,  $p = .031$ ).

*Net worth accumulation (excluding student loans).* Results for young adults' net worth accumulation excluding student loans are available in Table 9. Model 11 examines IHS-transformed net worth amounts with multiple regression and Model 12 examines categorical net worth amounts with ordered logistic regression. In Model 11, young adults accumulate higher net worth when they are employed compared to not employed ( $\beta = 1.458$ ,  $p = .075$ ), enrolled in college compared to not enrolled ( $\beta = 1.852$ ,  $p = .021$ ), and have households that are accumulating high net worth ( $\beta = .834$ ,  $p = .059$ ). Additional variables emerge as significant predictors of young adults' net worth in Model 12. The odds of accumulating net worth at higher percentiles are about two times greater for young adults who are white ( $\beta = .647$ ,  $OR = 1.910$ ,  $p = .025$ ), employed ( $\beta = .797$ ,  $OR = 2.219$ ,  $p = .012$ ), and enrolled in college ( $\beta = .670$ ,  $OR = 1.954$ ,  $p = .010$ ) compared to their counterparts. There is a 67 percent increase in the odds of accumulating net worth at higher percentiles in young adulthood for every point increase of households' higher net worth ( $\beta = .510$ ,  $OR = 1.665$ ,  $p = .001$ ). For every point increase in household income, there is a 16 percent decrease in the odds of young adults' accumulated net worth at higher percentiles.

TABLE 4—Multiple and ordered logistic regression results: Predicting young adults' *savings accumulation* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 1 <sup>a</sup>		Model 2 <sup>b</sup>		
	IHS transformed		Categorical Transformed		
	□	SE	□	SE	OR
<i>Child and Young Adult Variables</i>					
White	1.054*	.442	.698*	.291	2.010
Male	□ .282	.360	□ .163	.291	--
Employed	.760	.514	.289	.322	--
Enrolled in college	2.358***	.431	1.382***	.299	3.983
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	.610	.396	.467†	.240	1.595
Heads' education level	.115	.103	.070	.088	--
Log of household income	□ .181†	.092	□ .141†	.080	.868
IHS of household net worth: Splines					
≤ 0: Zero and negative net worth	.056	.191	.029	.133	--
> 0 to < 10: Moderate net worth	□ .067	.350	.004	.250	--
≥ 10: High net worth	.516*	.245	.268	.197	--
Parents have savings for child	.264	.382	.092	.288	--
<i>Variable of Interest</i>					
Child has savings account	1.028**	.326	.807**	.275	2.241
Constant	1.695	2.017	$p = .401$		
R <sup>2</sup> (Psuedo)			.368		
			.118		

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Savings amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Savings amount was transformed into an ordered categorical variable based on amount percentiles: \$0 = 0 (reference); > \$0 < \$200 = 1; ≥ \$200 < \$1,000 = 2; ≥ \$1,000 < \$4,000 = 3; ≥ \$4,000 = 4. Confidence intervals for variables significant at  $p < .05$  do not cross zero; however, confidence intervals for variables significant at  $p < .10$  cross zero and should be interpreted cautiously. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings. □ = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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

TABLE 5—Multiple and ordered logistic regression results: Predicting young adults' *asset accumulation* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 3 <sup>a</sup>		Model 4 <sup>b</sup>		
	IHS Transformed		Categorical Transformed		
	□	SE	□	SE	OR
<i>Child and Young Adult Variables</i>					
White	.877†	.495	.716*	.302	2.046
Male	.025	.371	.157	.246	--
Employed	1.536**	.583	.879**	.317	2.408
Enrolled in college	2.119***	.532	.917**	.297	2.502
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	.830	.551	.589*	.262	1.802
Heads' education level	.069	.095	□ .007	.069	--
Log of household income	□ .200†	.096	□ .201**	.071	.818
IHS of household net worth: Splines					
≤ 0: Zero and negative net worth	.026	.246	.026	.136	--
> 0 to < 10: Moderate net worth	□ .035	.430	□ .026	.228	--
≥ 10: High net worth	.433	.266	.427**	.156	1.533
Parents have savings for child	.075	.392	.176	.251	--
<i>Variable of Interest</i>					
Child has savings account	.809*	.320	.463*	.223	1.589
Constant	3.727	2.072	$p = .073$		
R <sup>2</sup> (Psuedo)			.280		
			.119		

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Asset accumulation amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Asset accumulation amount was transformed into an ordered categorical variable based on amount percentiles: \$0 = 0 (reference); > \$0 < \$1,000 = 1; ≥ \$1,000 < \$4,600 = 2; ≥ \$4,600 < \$11,200 = 3; ≥ \$11,200 = 4. Confidence intervals for variables significant at  $p < .05$  do not cross zero; however, confidence intervals for variables significant at  $p < .10$  cross zero and should be interpreted cautiously. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings. □ = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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



TABLE 6—Multiple and ordered logistic regression results: Predicting young adults' *debt accumulation including student loans* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 5 <sup>a</sup>		Model 6 <sup>b</sup>		
	IHS Transformed		Categorical Transformed		
	$\square$	SE	$\square$	SE	OR
<i>Child and Young Adult Variables</i>					
White	$\square$ .305	.636	$\square$ .105	.301	--
Male	$\square$ 2.131***	.549	$\square$ 1.002***	.264	.367
Employed	1.538*	.728	.674†	.365	1.926
Enrolled in college	4.845***	.549	2.395***	.320	10.968
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	.322	.562	.133	.274	--
Heads' education level	.382**	.142	.143*	.070	1.154
Log of household income	.053	.175	.026	.084	--
IHS of household net worth: Splines					
$\leq 0$ : Zero and negative net worth	$\square$ .153	.219	$\square$ .248	.175	--
$> 0$ to $< 10$ : Moderate net worth	.330	.404	.495	.322	--
$\geq 10$ : High net worth	$\square$ .698*	.339	$\square$ .578**	.216	.561
Parents have savings for child	$\square$ .520	.584	$\square$ .233	.292	--
<i>Variable of Interest</i>					
Child has savings account	$\square$ .227	.525	$\square$ .052	.253	--
Constant	$\square$ 4.244	2.785			$p = .128$
R <sup>2</sup> (Psuedo)					.249
					.114

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Debt accumulation amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Debt accumulation amount was transformed into an ordered categorical variable based on amount percentiles: \$0 = 0 (reference);  $> \$0 < \$1,000 = 1$ ;  $\geq \$1,000 < \$12,935 = 2$ ;  $\geq \$12,935 = 3$ . Confidence intervals for variables significant at  $p < .05$  do not cross zero; however, confidence intervals for variables significant at  $p < .10$  cross zero and should be interpreted cautiously. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings.  $\square$  = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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

TABLE 7—Multiple and ordered logistic regression results: Predicting young adults' *debt accumulation excluding student loans* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 7 <sup>a</sup>		Model 8 <sup>b</sup>		
	IHS Transformed		Categorical Transformed		
	$\square$	SE	$\square$	SE	OR
<i>Child and Young Adult Variables</i>					
White	$\square$ .009	.440	$\square$ .108	.321	--
Male	$\square$ 1.636**	.496	$\square$ 1.103**	.331	.332
Employed	.831†	.457	.574†	.322	1.775
Enrolled in college	.312	.449	.229	.357	--
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	$\square$ .288	.459	$\square$ .139	.314	--
Heads' education level	.312*	.128	.214*	.084	1.239
Log of household income	$\square$ .056	.140	$\square$ .055	.091	--
IHS of household net worth: Splines					
$\leq 0$ : Zero and negative net worth	.092	.158	.062	.136	--
$> 0$ to $< 10$ : Moderate net worth	$\square$ .136	.316	$\square$ .077	.259	--
$\geq 10$ : High net worth	.087	.361	.047	.218	--
Parents have savings for child	$\square$ .078	.471	$\square$ .095	.325	--
<i>Variable of Interest</i>					
Child has savings account	.489	.486	.423	.292	--
Constant	$\square$ 1.220	2.245	$p = .587$		
R <sup>2</sup> (Psuedo)			.101		
			.059		

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Debt accumulation amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Debt accumulation amount was transformed into an ordered categorical variable based on amount percentiles: \$0 = 0 (reference);  $> \$0 < \$300 = 1$ ;  $\geq \$300 < \$3,000 = 2$ ;  $\geq \$3,000 = 3$ . Confidence intervals for variables significant at  $p < .05$  do not cross zero; however, confidence intervals for variables significant at  $p < .10$  cross zero and should be interpreted cautiously. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings.  $\square$  = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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

TABLE 8—Multiple and ordered logistic regression results: Predicting young adults' *net worth accumulation including student loans* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 9 <sup>a</sup>		Model 10 <sup>b</sup>		
	IHS Transformed		Categorical Transformed		
	□	SE	□	SE	OR
<i>Child and Young Adult Variables</i>					
White	2.203*	1.100	.538*	.239	1.713
Male	2.890*	1.228	.710**	.246	2.034
Employed	.524	1.176	.229	.239	--
Enrolled in college	□ 5.970***	1.053	□ 1.088***	.248	.337
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	.970	1.114	.216	.245	--
Heads' education level	□ .632*	.319	□ .159*	.073	.853
Log of household income	□ .272	.334	□ .126†	.068	.882
IHS of household net worth: Splines					
≤ 0: Zero and negative net worth	.676	.439	.176*	.088	1.192
> 0 to < 10: Moderate net worth	□ 1.333†	.803	□ .338*	.157	.717
≥ 10: High net worth	2.585***	.729	.675***	.156	1.964
Parents have savings for child	.727	1.132	.195	.274	--
<i>Variable of Interest</i>					
Child has savings account	.840	1.195	.280	.234	--
Constant	14.436	5.640	$p = .011$		
R <sup>2</sup> (Psuedo)			.159		
			.071		

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Net worth accumulation amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Net worth accumulation amount was transformed into an ordered categorical variable based on amount percentiles: < -\$6,500 = 0 (reference); ≥ -\$6,500 < \$300 = 1; ≥ \$300 < \$8,000 = 2; ≥ \$8,000 = 3. Confidence intervals for variables significant at  $p < .05$  do not cross zero; however, confidence intervals for variables significant at  $p < .10$  cross zero and should be interpreted cautiously. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings. □ = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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

TABLE 9—Multiple and ordered logistic regression results: Predicting young adults' *net worth accumulation excluding student loans* in 2009 in the full sample ( $N = 425$ ; ATT weighted).

Covariates	Model 11 <sup>a</sup>		Model 12 <sup>b</sup>		
	IHS Transformed		Categorical Transformed		
	$\square$	SE	$\square$	SE	OR
<i>Child and Young Adult Variables</i>					
White	.986	.770	.647*	.289	1.910
Male	.838	.620	.258	.238	--
Employed	1.458†	.815	.797*	.318	2.219
Enrolled in college	1.852*	.796	.670*	.261	1.954
<i>Head and Household Socio-Economic Status (SES) Variables</i>					
Head is married	.343	.789	.310	.249	--
Heads' education level	$\square$ .212	.197	$\square$ .068	.069	--
Log of household income	$\square$ .217	.197	$\square$ .172*	.070	.842
IHS of household net worth: Splines					
$\leq 0$ : Zero and negative net worth	.087	.300	.038	.117	--
$> 0$ to $< 10$ : Moderate net worth	$\square$ .183	.538	$\square$ .081	.205	--
$\geq 10$ : High net worth	.834†	.441	.510**	.161	1.665
Parents have savings for child	.760	.795	.136	.267	--
<i>Variable of Interest</i>					
Child has savings account	.525	.573	.366	.221	--
Constant	6.681	3.452	$p = .054$		
R <sup>2</sup> (Psuedo)			.128		
			.103		

Source: Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

Notes: <sup>a</sup> Net worth accumulation amount was transformed using the inverse hyperbolic sine (IHS) transformation for multiple regression analysis. <sup>b</sup> Net worth accumulation amount was transformed into an ordered categorical variable based on amount percentiles:  $< \$300 = 0$  (reference);  $\geq \$300 < \$4,000 = 1$ ;  $\geq \$4,000 < \$10,432 = 2$ ;  $\geq \$10,432 = 3$ . ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings.  $\square$  = regression coefficients. Robust SE = robust standard error. OR = Odds ratio.

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

TABLE 10—Summary of regression results for young adults’ asset accumulation at ages 22 to 25 from the 2009 TA ( $N = 425$ ; ATT weighted).

	Savings Accumulation	Asset Accumulation	Debt Accumulation (Including Student Loans)	Debt Accumulation (Excluding Student Loans)	Net Worth Accumulation (Including Student Loans)	Net Worth Accumulation (Excluding Student Loans)
<i>Child and Young Adult Variables</i>						
White	+	+			+	+
Male			□	□	+	
Employed		+	+	+		+
Enrolled in college	+	+	+		□	+
<i>Head and Household Socio-Economic Status (SES) Variables</i>						
Head is married	+	+				
Heads’ education level			+	+	□	
Log of household income	□	□			□	□
<i>IHS of household net worth: Splines</i>						
≤ 0: Zero and negative net worth					+	
> 0 to < 10: Moderate net worth					□	
≥ 10: High net worth		+	□		+	+
<i>Parents have savings for child</i>						
<i>Variable of Interest</i>						
Child has savings account	+	+				

*Source:* Expectation-Maximization (EM) completed data from the Panel Study of Income Dynamics (PSID) and the 2002 Child Development Supplement (CDS) and the 2007 and 2009 Transition into Adulthood (TA) supplement.

*Notes:* Accumulation amounts were transformed using the inverse hyperbolic sine (IHS) transformation and transformed into ordered categorical variables based on percentiles. In some tables a covariate was significantly related in the multiple regression model but not the ordered logistic regression model, or vice versa. The summarized results in this table report significant findings if the covariate was significant at  $p < .10$  in either model. ATT = the average treatment effect for the treated using the weight of 1 for children with savings and  $p/(1-p)$  for children without savings.

## Summary of Results

Young adults accumulated more savings and total assets when they had savings accounts as children. They also accumulated more when they were enrolled in college. Male young adults tended to accumulate less debt than females, while those who were employed or enrolled in college accumulated more debt. Male young adults accumulated more net worth than female young adults, and those whose households had higher net worth were also at an advantage. White young adults accumulated significantly more savings, assets, and net worth compared to black young adults. Whites and blacks accumulated debt that was not statistically different from one another. Table 10 provides a summary of the findings.

## DISCUSSION

Child Development Accounts aim to lay a foundation for savings that children can build upon. Mainstream banking institutions may be important partners in this policy endeavor. The small dollar nature of these accounts may leave little obvious financial incentive for mainstream banks to encourage children's savings. However, banks stand to profit if children invest in their accounts and other banking products over time. A few studies have tested whether having savings accounts in childhood relates to their amounts saved in young adulthood. However, no known studies test whether children's savings accounts relate to asset accumulation more broadly or their debt accumulation. We examine young adults' savings, assets, debts, and net worth accumulation and explore whether accumulation varies by savings account ownership in childhood. To our knowledge, this is one of the first studies to test this assumption.

Banks stand to profit if children invest in their accounts and other banking products over time, which would justify their early investment in children's small dollar savings accounts.

## Accumulating Assets, Debts in Young Adulthood

Descriptively, young adults appear to invest more into their accounts over time, with a median of \$1,000 accumulated in their savings accounts by ages 22 to 25. Previous research has found that young adults ages 17 to 23 accumulate a median saved of \$500 (Friedline, Elliott, & Nam, 2011). The young adults in our sample were slightly older, which suggests that they may have doubled their savings in just a few short years. What were once children's small dollar accounts have grown into accounts that represent young adults' potential accumulated assets. The total median assets accumulated by young adults is \$4,600, which provides even further indication that young adults are investing and accumulating money in their accounts.

What were once children's small dollar accounts have grown into accounts that represent young adults' potential accumulated assets. The total median assets accumulated by young adults is \$4,600, which provides indication that young adults are investing in their accounts.

Some young adults appear to have an advantage over others with regards to the amounts they are able to accumulate. Young adults who are black, never enrolled in college, and did not have savings accounts as children all accumulate less than \$500 in their savings accounts. Those from households where the head is single-headed or from households with less income and net worth also save below \$500. This suggests that young adults from economically disadvantaged backgrounds may need additional subsidies in order to accumulate savings. Amounts of total assets accumulated are much higher for all groups of young adults, though disparities remain.



In addition to savings and assets, young adults also accumulate debts. The median amount is similar for those with (\$1,000) and without (\$965) student loans across the full sample; however, young adults who have enrolled in college accumulate a median of \$6,593 debt, which is about \$4,500 more debt than those who have never enrolled in college (\$2,135). The amount of debt (including student loans) held by young adults who have enrolled in college is not too far off from the median debt accumulated by those at public, two-year (\$7,700) or vocational / technical (\$11,900) post-secondary schools (Baum & O'Malley, 2002).

Young adults have a median net worth of \$300 when student loans are taken into consideration and \$4,000 when student loans are excluded.

When young adults' assets and debts are combined to measure their net worth, it is not surprising that the amounts are low. Previous research suggests that young adults' debts outweigh their assets (Modigliani & Brumberg, 1954), meaning that their net worth would be low, if not negative. Young adults have a median net worth of \$300 when student loans are taken into consideration and \$4,000 when student loans are excluded. While young adults have acquired debt by ages 22 to 25, we actually do not find any case where their median debt amounts—with or without student loans—outweigh their median asset amounts. Likely for this reason, the reported net worth accumulation is positive as opposed to negative. However, young adults in the 2009 TA are not asked about all the debts they may have accumulated such as borrowing from friends or family or purchasing a home. Given this, we cannot rule out the possibility that young adults' reported median net worth amounts may be biased upwards. Overall, young adults accumulate more savings, total assets, debts, and net worth when they have savings accounts as children. At least descriptively speaking, young adults invest greater amounts into mainstream banking institutions when they have savings accounts as children.

We also find some support in the regression results for the relationship between children's savings accounts and their amounts accumulated in young adulthood. Young adults who had savings accounts as children are over two times more likely to accumulate increasing percentiles of savings amounts, compared to those who did not have savings accounts as children. They are about one-and-a-half times more likely to accumulate increasing percentiles of total asset amounts. These findings are consistent with previous research (Friedline, Elliott, & Chowa, 2013). Using a sample of 530 young adults ages 18 to 22 from the PSID, Friedline and colleagues (2013) find that the odds of having the highest percentile of savings versus the combined lower percentiles in young adulthood were over two times greater when children had savings accounts compared to no savings accounts.

We find no statistically significant relationship between children's savings accounts and their debts or net worth in young adulthood. Instead, we find that variables like employment, college enrollment, and household net worth are statistically significant. Young adults accumulate greater amounts of debt when they are employed and have enrolled in college. This suggests that young adults who are employed may have greater leverage to acquire debts since they have an income source. Those who have enrolled in college likely acquire debts to fund their education. However, they also accumulate significantly less debt when their households have high accumulating net worth. If their households have high net worth, then young adults may have little need to borrow from other sources. Notably, household net worth is not significantly related to debt accumulation when student loans are excluded. This suggests that being enrolled in college and having households with high net worth may significantly contribute to accumulating student loan debt but not other types of debt.

Young adults accumulate greater net worth when they grew up in households that were accumulating higher net worth. In part, this suggests that households transfer some of their actual wealth to young adults. Intergenerational wealth transfers are common and likely contribute to young adults' asset accumulation (Gale & Scholz, 1994;

Modigliani, 1988). However, if intergenerational transfers were the sole explanation, then we might expect household net worth and young adults' net worth to be highly correlated. The correlation between young adults' and households' net worth is  $r = .140$ ,  $p = .004$  when student loans are included. Without student loans, the correlation is  $r = .015$ ,  $p = .764$ . Though young adults' and households' net worth are significantly correlated when taking student loans into consideration, about 86 percent of the variance remains unexplained. Even less is explained when student loans are excluded. One reason for the small variance explained may be that household net worth and young adults' net worth are calculated from different assets and debts, so a low correlation is not entirely unexpected. Another reason may have to do with when net worth is measured. Intergenerational transfers tend to occur through bequests made from households to their adult children later in life, not to their children in young adulthood early in life (Gale & Scholz, 1994). We may be measuring young adults' net worth before intergenerational transfers from households take place. This may also help to explain why households' and young adults' net worth are not more highly correlated.

## CONCLUSION

This study lends support for the assumption that having savings accounts in childhood may help building assets in young adulthood. It is noteworthy that the savings accounts in this study represented accounts at mainstream banking institutions, which served as a proxy for CDAs. This suggests that children with savings accounts at mainstream banks invest more into their accounts in young adulthood. Mainstream banks that foster this early relationship may stand to gain from children's increasing investments.

Young adults who have savings accounts in childhood may leverage their accumulated savings and assets to ease their transition into financial independence and create a foundation upon which they can build throughout their life course. For young adults from lower income backgrounds whose families are unable to provide a financial safety net, their accumulated savings and assets may be vital for affording expenses when their incomes are unreliable.

Young adults may leverage their accumulated savings and assets to ease their transition into financial independence and create a foundation upon which they can build throughout their life course. This may be especially important for young adults struggling to gain financial footing in a tough economy and in light of findings that young adults have a high likelihood of experiencing asset poverty. For young adults from lower income backgrounds whose families are unable to provide a financial safety net, their accumulated savings and assets may be vital for affording expenses when their incomes are unreliable.

Notably, we also find that young adults accumulate more net worth when they grew up in households that were in the process of accumulating net worth. This may mean that children and young adults can benefit from building assets in tandem with their families. Child Development Accounts (CDAs) may be particularly beneficial when paired with Individual Development Accounts (IDAs), which are similar to CDAs and tailored for lower income adults. Pairing CDAs with IDAs may leverage families' and households' asset-building to improve children's own savings (Friedline, 2012). Children's and young adults' savings may be enhanced when their families and households simultaneously engage in asset building, perhaps improving financial outcomes in the long run for everyone involved. This is *not* to say that asset-building for families and households takes precedence over children's savings. Rather, this is to recognize that lower income households typically have fewer assets and may benefit from building assets themselves. Meanwhile, children may benefit from sharing a common goal with their families and households who are simultaneously engaged in saving and accumulating assets. Programs and policies like IDAs that are geared toward families and households may consider expanding to include children's savings.

In sum, the effects of children's savings go beyond their asset and debt accumulation in young adulthood and lend support for a broader rationale for children's savings. For instance, research has explored the effects of children's savings on domains other than asset ownership. Children with savings accounts tend to have better academic achievement scores and higher college enrollment and graduation rates compared to children without savings accounts (Elliott, Destin, et al., 2011). A policy like CDAs may be beneficial because a single action has the potential to simultaneously improve children's lives on a number of outcomes. Children's savings may be well worth the investment not only for mainstream banks, but society as a whole.

## REFERENCES

- Baum, S., & O'Malley, M. (2002). *College on credit: How borrowers perceive their education debt: Results of the 2002 National Student Loan Survey*. Braintree, MA: Nellie Mae Corporation. Retrieved from [http://www.nelliemae.com/library/nasls\\_2002.pdf](http://www.nelliemae.com/library/nasls_2002.pdf)
- Bell, D. N. F., & Blanchflower, D. G. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, 27(2), 241-267. doi:10.1093/oxrep/grr011
- Bell, L., Burtless, G., Gornick, J., & Smeeding, T. (2007). Failure to launch: Cross-national trends in the transition to economic independence. In S. Danziger & C. Rouse (Eds.), *The price of independence: The economics of early adulthood*. New York, NY: Russell Sage Foundation.
- Butrica, B. (2008). *What can we expect from Children's Savings Accounts?* Washington, DC: The Urban Institute, Opportunity and Ownership Project. Retrieved from [http://www.urban.org/UploadedPDF/411793\\_childrens\\_savings\\_expectations.pdf](http://www.urban.org/UploadedPDF/411793_childrens_savings_expectations.pdf)
- Butrica, B., Carasso, A., Steuerle, C. E., & Toohey, D. (2008). *Children's Savings Accounts: Why design matters*. Washington, DC: The Urban Institute, Opportunity and Ownership Project. Retrieved from [http://www.urban.org/UploadedPDF/411677\\_childrens\\_savings.pdf](http://www.urban.org/UploadedPDF/411677_childrens_savings.pdf)
- Center for Social Development. (2011). *Broad and deep: The extensive learning agenda in YouthSave*. St. Louis, MO: Center for Social Development, Washington University. Retrieved from <http://csd.wustl.edu/Publications/Documents/YouthSaveLearningAgenda.pdf>
- Cramer, R. (2010). The big lift: Federal policy efforts to create child development accounts. *Children and Youth Services Review*, 32(11), 1538-1543.
- Deshpande, R., & Zimmerman, J. (2010). *Youth savings in developing countries: Trends in practice, gaps in knowledge*. Washington, DC: Save the Children, Center for Social Development, New America Foundation, and Consultative Group to Assist the Poor. Retrieved from [http://gap.newamerica.net/sites/newamerica.net/files/policydocs/YouthSavingsMay2010Web\\_0.pdf](http://gap.newamerica.net/sites/newamerica.net/files/policydocs/YouthSavingsMay2010Web_0.pdf)
- Elliott, W., 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.
- Friedline, T., & Elliott, W. (2011). Predicting savings for black and white young adults: An early look at racial disparities in savings and the potential role of Children's Development Accounts (CDAs). *Race and Social Problems*, 3(2), 99-118. doi:10.1007/s12552-011-9046-2
- Friedline, T., & Elliott, W. (2013). *Children as potential future investors: Connections with banking institutions and diverse asset portfolios in young adulthood*. Lawrence, KS: University of Kansas, School of Social Welfare.
- Friedline, T., Elliott, W., & Chowa, G. (2013). Testing an asset-building approach for young people: Early access to savings predicts later savings. *Economics of Education Review*, 33, 31-51. doi: 10.1016/j.econedurev.2012.10.004

- Friedline, T., Elliott, W., & Nam, I. (2011). Predicting savings from adolescence to young adulthood: A propensity score approach. *Journal of the Society of Social Work and Research*, 2(1), 1-22. doi:10.5243/jsswr.2010.13
- Friedline, T., Masa, R., & Chowa, G. (2012). *Transforming wealth: Using the inverse hyperbolic sine (IHS) and splines to predict youth's math achievement*. Lawrence, KS: Assets & Education Initiative, School of Social Welfare.
- Gale, W., & Scholz, J. K. (1994). Intergenerational transfers and the accumulation of wealth. *Journal of Economic Perspectives*, 8(4), 145-160.
- Hirschland, M. (2009). *Youth Savings Accounts: A Financial Services Perspective* (microREPORT #163). US Agency for International Development, Office of Microenterprise Development, Washington, DC. Retrieved from <http://www.microfinancegateway.org/gm/document-1.9.50928/Youth%20Savings.pdf>
- Jacobsen, L., & Mather, M. (2011). *Population bulletin update: A post-recession update on U.S. social and economic trends*. Washington, DC: Population Reference Bureau. Retrieved from <http://www.prb.org/pdf11/us-economic-social-trends-update-2011.pdf>
- Kempson, E., Atkinson, A., & Collard, S. (2006). *Saving for children: A baseline survey at the inception of the Child Trust Fund*. London, UK: HM Revenue & Customs. Retrieved from [http://www.revenuebenefits.org.uk/pdf/saving\\_for\\_children\\_september\\_2006.pdf](http://www.revenuebenefits.org.uk/pdf/saving_for_children_september_2006.pdf)
- Kilara, T., & Latortue, A. (2012). *Emerging perspectives on youth savings*. Washington, DC: Consultative Group to Assist the Poor. Retrieved from <http://www.cgap.org/sites/default/files/CGAP-Focus-Note-Emerging-Perspectives-on-Youth-Savings-Aug-2012.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
- Mason, L. R., Nam, Y., Clancy, M., Kim, Y., & Loke, V. (2010). Child development accounts and saving for children's future: Do financial incentives matter? *Children and Youth Services Review*, 32(11), 1570-1576.
- Mensah, L., Schneider, R., & Aboufadi, M. (2004). *The Child Trust Fund: A universal long-term saving policy*. New York, NY: The Aspen Institute, Initiative on Financial Security. Retrieved from [http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/CTF\\_4-PAGER.pdf](http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/CTF_4-PAGER.pdf)
- Meyer, J., Masa, R. D., & Zimmerman, J. (2009). *Overview of Child Development Accounts in developing countries* (CSD Working Paper No. 09-55). St. Louis, MO: Center for Social Development, Washington University. Retrieved from [http://gap.newamerica.net/sites/newamerica.net/files/policydocs/MeyerMasaZimmerman%20Overview%20of%20CDAs%202009\\_0.pdf](http://gap.newamerica.net/sites/newamerica.net/files/policydocs/MeyerMasaZimmerman%20Overview%20of%20CDAs%202009_0.pdf)
- Modigliani, F. (1988). The role of intergenerational transfers and life cycle saving in the accumulation of wealth. *The Journal of Economic Perspectives*, 2(2), 15-40.
- Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function: An interpretation of cross-section data. In K. K. Kurihara (Ed.), *Post-Keynesian Economics* (pp. 388 - 436). New Brunswick, NJ: Rutgers University Press.

Rank, M., & Hirschl, T. (2010). *Estimating the life course dynamics of asset poverty* (CSD Working Paper No. 10-25). St. Louis, MO: Center for Social Development, Washington University. Retrieved from <http://csd.wustl.edu/Publications/Documents/WP10-25.pdf>

Taylor, P., Parker, K., Kochhar, R., Fry, R., Funk, C., Patten, E., & Motel, S. (2012). *Young, underemployed and optimistic: Coming of age, slowly, in a tough economy*. Washington, DC: Pew Research Center, Pew Social & Demographic Trends. Retrieved from <http://www.pewsocialtrends.org/files/2012/02/SDT-Youth-and-Economy.pdf>

Westley, G., & Palomas, X. M. (2010). *Is there a business case for small savers?* Washington, DC: Consultative Group to Assist the Poor. Retrieved from <http://www.cgap.org/sites/default/files/CGAP-Brief-Is-There-a-Business-Case-for-Small-Savers-Jan-2011.pdf>



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Report I: *Connections with banking institutions and diverse asset portfolios in young adulthood*

Report II: *Accumulating assets, debts in young adulthood*

Report III: *Do mainstream banks augment children's capacity to save?*



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