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# The Role of Savings and Wealth in Reducing “Wilt” between Expectations and College Attendance

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# The Role of Savings and Wealth in Reducing “Wilt” between Expectations and College Attendance

*“Wilt” occurs when a young person who expects to attend college while in high school does not attend college shortly after graduating. In this study we find that youth with no account in their own name are more likely to experience wilt than any other group examined. In multivariate analysis, youth who expect to graduate from a four-year college and have an account are approximately seven times more likely to attend college than youth who have no account. Youth who expect to graduate from a four-year college and have designated a portion of their savings for college are approximately four times more likely to attend college than youth who have no account. Additionally, when savings is taken into account, academic achievement is no longer a significant predictor of college attendance. Policy implications are discussed.*

**Key words:** *Wealth, assets, college attendance, savings, Child Development Accounts (CDAs), college expectations, wilt, PSID, Child Savings Accounts (CSAs)*

In a speech to the Democratic Leadership Council in 1993, President Bill Clinton expresses the spirit of the American Dream and its importance to Americans (Clinton, 1993, paragraph 6) when he says,

The American Dream that we were all raised on is a simple but powerful one – if you work hard and play by the rules you should be given a chance to go as far as your God-given ability will take you.

The perception that those who have sufficient effort and ability will be able to achieve the American Dream is a commonly held belief (Hochschild, 1995; MetLife, 2009; New York Times, 2005). For example, in a survey conducted by the *New York Times* (2005), almost 80% of Americans believed that it is possible to achieve the Dream through hard work.

The assumption of equality of opportunity is justified to many because of their belief that everyone has access to public education, and that education is an important path for achieving the Dream (Hochschild & Scovronick, 2003). Horace Mann (1848) referred to education as the “great equalizer” in American society. Immerwahr (2004), who studies public attitudes about higher education, asks a nationally representative sample of Americans, “If you had to choose one thing that can most help a young person succeed in the world today,” what would it be? Having a college education (35%) is selected more than any other option, even over having a good work ethic (26%). More Blacks (47%) and Hispanics (65%) than Whites (33%) view receiving a college education as the most important factor in helping young people succeed. Further, 76% of Americans say that a college education is more important today than it was ten years ago (Immerwahr, 2004).

However, for many youth, especially youth from economically disadvantaged households, attending college is a genuinely desired, but elusive, goal. Rising college costs are a key reason why college may

be nothing more than a dream for many economically disadvantaged youth. The total cost of college attendance, which includes room and board, for an in-state student at a public four-year college for the 2007-08 school year is \$13,589 (College Board, 2007). This is an increase of 5.9% from the prior school year (College Board, 2007). The cost of a four-year private college also rose by 5.9% in 2007-08, up to \$32,307 (College Board, 2007).

Rising college costs result in high unmet need for many economically disadvantaged youth. According to the 2002 Advisory Committee on Student Financial Assistance (ACSFA), a group charged by Congress with enhancing access to postsecondary education for low-income youth, unmet need is “the portion of college expense not covered by the expected family contribution and student aid, including work-study and loans” (ACSFA, 2002, p. 5). Choy and Carroll (2003) find that, during the 1999-2000 school year, the average unmet need for low-income students was between \$4,000 and \$9,300, depending on the type of college (Choy & Carroll, 2003). Further, ACSFA (2006) estimates that over the next decade, two million college-qualified students from low-to-modest-income households will not be able to attend any college due to high unmet need, while four million will be resigned to attending two-year colleges.<sup>1</sup>

High unmet need results in concerns by economically disadvantaged youth and their families about their ability to finance college. ACSFA finds that among low-income parents, 80% are “very concerned” about the cost of college, compared to 19% of high-income parents. Further, they find that 71% of low-income youth say they are very concerned about the cost of college (ACSFA, 2006, p. 13). According to ACSFA (2006), concerns about the cost of college “can undercut plans to attend a 4-year college and actual enrollment” (p. 13). A way to capture the effect that financial constraints have on actual college attendance is to identify the youth who expect to attend college but do not soon after graduating from high school. ACSFA (2006) refers to the difference between the percentage of youth who expect to attend a four-year college and the percentage who actually do attend a four-year college as “melt” (p. 13). They find that 70% of low-income youth plan in tenth grade to enroll in college but only 54% of low-income youth actually enroll in college upon graduating from high school. Thus, by their calculation, 23% of low-income youth experience melt.<sup>2</sup>

This study builds on ACSFA’s (2006) finding that high unmet need leads to melt among economically disadvantaged youth in three important ways. First, while the ACSFA (2006) study on melt uses aggregate-level cross-sectional data gathered at different points in time, we use individual-level longitudinal data. These data allow us to observe whether individuals who expected to graduate from a four-year college actually attend a four-year college and thus give a more accurate measure of melt. Second, we examine whether wealth, in addition to income, reduces melt. If, as Oliver and Shapiro (1995) suggest, high unmet need for college among low-income families is largely the result of low wealth accumulation, then there is reason to believe that wealth may reduce melt. ACSFA’s (2001, 2002, 2006) reports do not include wealth. Finally, the ACSFA studies are primarily descriptive. This study, in addition to conducting descriptive analyses, also uses logistic regression to help identify factors that may reduce melt while controlling for such things as race, academic achievement, and parent’s education.

<sup>1</sup> According to ACSFA (2006), youth are college qualified if they have taken advanced math classes, such as Algebra and Trigonometry, while in high school.

<sup>2</sup> ACSFA (2006) calculates melt by subtracting the percentage of students that attend from the percentage that expected to graduate and then dividing by the percentage that expected to graduate.

In the remainder of this manuscript, we use the term “wilt” in place of “melt.” This change highlights the fact that our measure differs from that used by ACSFA. We also believe “wilt” conjures up a more fitting image—that of a growing plant losing vitality due to a lack of resources.<sup>3</sup>

### **Research on Wealth and College Attendance**

A number of studies examine the relationship between household wealth and postsecondary education outcomes (Charles, Roscigno, & Torres, 2007; Conley, 2001; Destin, 2009; Haveman & Wolff, 2005; Jez, 2008; Nam & Huang, 2009; Williams Shanks & Destin, 2009). Charles, Roscigno, and Torres (2007) is the only study of the seven to examine the relationship between parent school savings and college attendance. They find that having savings for college is significantly related to both two-year college attendance and four-year college attendance, while the amount of school savings is significantly related only to whether youth attend a four-year college. These findings suggest that the process of accumulating school savings may have effects apart from financing school.

Conley (2001) finds that a doubling of net worth results in an 8.3% increase in the probability of attending college. Further, when net worth is included in the model, Black youth are more likely to attend college than White youth (Conley, 2001). In addition, Destin (2009), Williams-Shanks and Destin (2009), and Haveman and Wilson (2007) find that net worth has a significant positive relationship with college attendance. However, Jez (2008) and Nam and Huang (2009) find that net worth is not significantly related to college attendance. More specifically, Jez (2008) finds that while net worth is significant in the basic model, once academic achievement is controlled for it is no longer significant.

In addition to net worth, Nam and Huang (2009) include liquid assets (sum of financial assets minus unsecured debt) and homeownership. They find that net worth is significant at the .10 level. However, once they control for whether youth are ever in a gifted program or ever repeated a grade, net worth becomes non-significant. Only liquid wealth is significant in the full model.

In sum, relatively little research examines the relationship between different forms of wealth and college attendance. Most of the existing research focuses on net worth. The evidence is mixed with respect to net worth and college attendance. There is some evidence to suggest that liquid forms of wealth may have a stronger relationship with college attendance than net worth. None of the existing research examines the effect of youth savings on college attendance, and only one study examines the relationship between parent school savings and college attendance.

### **Theoretical Framework**

Evidence in behavioral economics suggests people use mental and physical accounting techniques to think about different pots of money in ways that affect when and how they use money (Kahneman & Tversky, 1979; Lea, Tarpy, & Webley, 1987; Thaler, 1985; Winnett & Lewis, 1995; Xiao & Anderson, 1997). In other words, money is not entirely fungible, with different accounts holding different purposes and meanings. These meanings affect how people deposit money into accounts and how they use the money (Winnett & Lewis, 1995). Families, especially those with children and

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<sup>3</sup> Our thanks to Michael Sherraden for suggesting this term.

youth, may have numerous household accounts that are designated for certain purposes and are subject to negotiation within the family (Winnett & Lewis, 1995). Some examples of these different accounts are Christmas accounts, vacation accounts, home repair accounts, school expense accounts for such things as clothing and books, college tuition accounts, new home purchase accounts, and so on. Further, parents are typically designated as the primary decision makers over these family accounts and thus maintain power over how they are used.

Some evidence suggests, however, that youth are given latitude over their *own* money to spend and save it as they see fit (Meeks, 1998). This latitude may result in an increased sense of perceived control, which is one of the most robust predictors of student resilience and academic success (Skinner, Wellborn, & Connell, 1990). According to Skinner, Simmer-Gembeck, Connell, Eccles, and Wellborn (2008), perceived control can be thought of as the perception that one has the ability, resources, or opportunities to achieve positive outcomes or avoid negative effects through one's own actions.

We propose that having savings increases a young person's perceived control over financing college, which in turn leads to improved academic performance. We also suggest that a young person perceives more control over savings in his or her name than savings in a parent's name. That is, it may not be enough to have savings in the household; additional benefits may accrue by having savings in the young person's control.

Youth savings may have two main effects on educational outcomes. One effect is direct and mainly financial. In the short run, savings may increase ability to solve school-related problems such as buying books or a computer or paying fees related to school activities. In the long run, savings may increase the means to afford college.

The other effect is indirect and mainly attitudinal. Having savings over a period of years may raise a young person's educational expectations (Elliott, 2008; Sherraden, Johnson, Elliott, Porterfield, & Rainford, 2007). Higher expectations may lead to increased academic efforts and achievement (Cook, et al., 1996; Marjoribanks, 1984; Mau, 1995; Mau & Bikos, 2000; Mickelson, 1990). In other words, if youth grow up knowing they have financial resources to help pay for current and future schooling, they may be more likely to have higher educational expectations, which in turn may foster educational engagement. Greater engagement may lead to better academic preparation and achievement. This attitudinal and behavioral effect of having savings could be as important as or more important than the money itself in affecting the transition from high school to college.

## Methods

### Data

This study uses longitudinal data from the Panel Study of Income Dynamics (PSID) and its supplements, the Child Development Supplement (CDS) and the Transition into Adulthood supplement (TA). The PSID is a nationally representative longitudinal survey of U.S. individuals and families that began in 1968. The PSID collects data on such things as employment, income, wealth and marital status.

In 1997, a supplemental survey was administered to 3,563 PSID respondents to collect a wide range of data on parents and their children, aged birth to 12 years. In this sample, the number of children is fairly evenly distributed across all ages. There are 1,642 Whites and 1,455 Blacks. There are also Hispanics, Asians, Native Americans, and people of other races and ethnicities in the sample, but the frequencies are much smaller. Because the PSID initially over-sampled low-income families, there is a greater percentage of Blacks than would be expected in the U.S. population. Weights adjust for oversampling of Blacks.

The TA survey, administered in 2005, measures outcomes for youth who participated in earlier waves of the CDS and are at least 18 years old by 2005. The final TA sample consists of 745 participants. The three data sets are linked using PSID, CDS, and TA map files containing family and personal ID numbers. The linked data sets provide a rich opportunity for analyses in which data collected at one point in time (2002) can be used to predict outcomes at a later point in time (2005) and stable background characteristics can be used as covariates.

### Study Sample

The sample in this study is restricted to youth who received either a high school diploma or a General Equivalency Diploma (GED). The sample also includes only Black and White youth because only small numbers of other racial groups exist in the TA. Moreover, only youth aged 15 or older in 2002 are included, so that by 2005, youth are at least 18 years old.<sup>4</sup> These restrictions reduce the sample from 745 to 494.

By our definition, wilt occurs when youth who have not yet graduated from high school in 2002, but who expect to graduate from a four-year college sometime in the future, do not attend a four-year college by 2005. We examine attendance at four-year colleges rather than two-year colleges because youth who obtain a four-year degree earn more, are less likely to be unemployed, and are less likely to be poor (Baum & Ma, 2009). In order to investigate wilt, the sample is further restricted to youth who report in 2002 that they expect to graduate from a four-year college at some point in the future. Specifically, youth are asked what they think the chances are that they will graduate from a four-year college. They can respond by saying no chance, some chance (about 50:50), pretty likely, or it will happen. Youth who choose either of the latter two responses are defined as “certain” youth, and there are 333 youth in the final weighted sample of certain youth. Youth who respond that their chances of attending a four-year college are 50% or less are defined as “uncertain.” There are 120 youth in this sample, and 453 in the combined (certain and uncertain) sample.<sup>5</sup>

### Variables

In this section, variables of interest and control variables are described. All except the outcome variable are measured in 2002 or prior, depending on availability.

### Variables of Interest

We examine three different types of wealth: net worth, parent savings for youth, and youth savings.

<sup>4</sup> In 2002, youth age ranges from 15 to 18, with a mean age of 17. In 2005, youth age ranges from 19 to 22, with a mean age of 20.

<sup>5</sup> Data on college expectations are missing for 41 youth, reducing the sample from 494 to 453.

*Net worth.* Net worth in the PSID is a continuous variable that sums separate values for a business, checking or savings accounts, real estate, stocks, and other assets, and subtracts out credit card and other debt. In this analysis, net worth does not include home equity. Net worth is averaged for 1999 and 2001, after 1999 net worth is inflated to 2001 price levels. Because net worth is skewed, the log form of net worth is used for regression analyses. A categorical net worth variable is also used. The trichotomous variable has the following categories: negative net worth (< \$0), modest net worth (\$0~\$10,000), and high net worth (>\$10,000) households. High net worth households serve as the reference group.

*Parent savings for youth.* Heads of households were asked in 2002 whether they (or another caregiver) had any money put aside for their youth in a bank account that is separate from other types of savings. They were also asked whether they (or another caregiver) had any money put aside specifically for their youth's college or future schooling, separate from other types of savings they may have for him or her. Responses to these two questions are combined to create a dichotomous variable indicating whether parents had any money put aside separately for their youth.

*Youth savings.* Youth were asked in 2002 whether they had a savings or bank account in their name. If they had an account, they were also asked whether they were saving some of this money for future school, like college. The youth savings variable divides youth into three categories: those who in 2002 had an account but did not designate a portion of the savings in the account for school (youth account), those who had an account *and* designated a portion of the savings in the account for school (youth school savings), and those with no account (the reference group).

## **Outcome Variable**

*Ever attended a 4-year college.* This variable combines two variables from the TA. First youth were asked if they had ever attended college. If they answered yes, they were asked whether they attend or had attended a two-year college, a four-year college, or graduate school. We created a dichotomous variable indicating whether youth had ever attended a four-year college. These data were collected in 2005.

## **Control Variables**

There are seven control variables: family income, household size, head's education, head's marital status, youth's race, youth's gender, and youth's academic achievement. Head's education is a continuous variable (1 to 16), with each number representing a year of completed schooling. We also use a categorical variable, dividing heads into three groups: those with a high school degree or less, those with some college, and those with a four-year degree or more. These data are drawn from 2001 PSID data. Head's marital status (married or not married), youth's race (White or Black), and gender (male or female) are also controls. These data were collected in 2002.

Family income is calculated by averaging family income for 1997 and 2001. The 1997 income is inflated to 2001 price levels using the Consumer Price Index. Because family income is skewed, we use the log of family income in regression analyses. A three-level categorical family income variable

is used in descriptive analyses: low-income (< \$33,377), modest-income (\$33,377 to \$84,015), and high-income (\$84,016 or more).<sup>6</sup>

In addition, the regressions control for youth academic achievement. Academic achievement is a combined score of math and reading drawn from 2002 CDS data. The Woodcock Johnson (WJ-R), a well-respected measure, is used by the CDS to assess youth math and reading ability (Mainieri, 2006). This variable ranges from 129 to 339 in the aggregate sample of youth (certain and uncertain youth).

### **Analysis Plan**

In the case of survey data, common SAS syntax for analyzing logistical regression may not be appropriate (SAS Institute Inc., 2008). To account for the survey design of the PSID, we estimate a series of logistic regressions across seven models using PROC SURVEYLOGISTIC (SAS Institute Inc., 2008). Because a small portion of households have more than one young adult living in them, we adjust standard errors by clustering them into the same family unit with the CLUSTER statement (SAS Institute Inc., 2008). Further, both the descriptive and binary regression analyses are weighted using the last observed weight variable as recommended by the PSID manual (Gouskova, 2001).

The base model, model 1, contains the following variables: race, gender, academic achievement, head's marital status, head's education, log of family income, and household size. Subsequently, to determine whether each of the wealth variables has an independent effect on college attendance, we estimate four additional logistic regressions (models 2 – 5). Each model includes one form of wealth: log of net worth, categorical net worth, parent savings, or youth savings (youth account and youth school savings).

Model 6 includes the log of net worth, parent savings, and youth savings. Forthcoming research suggests household wealth may matter less when youth wealth is controlled (Elliott, Jung, & Friedline). Further, previous research suggests that different forms of household wealth may affect youth educational outcomes differently (Conley, 2001; Nam & Huang, 2009). In model 7, categorical net worth replaces the log of net worth.

### **Hypotheses**

Theory and research on the relationship between wealth and youth college attendance lead to two hypotheses. First, we hypothesize that log of net worth, parent savings, and youth savings are significant positive predictors of whether youth, who in 2002 expected to graduate from a four-year college, actually attend a four-year college by 2005. Second, we hypothesize that youth savings is more strongly associated with college attendance than the other wealth variables.

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<sup>6</sup> Category amounts are based on those used in the US Census Bureau's Current Population Report "Income in the United States: 2002" (De Navas-Walt, Cleveland, & Webster, 2002). De-Navas-Walt et al. used five income categories; we recoded into three categories to increase the sample size within each group.

## Results

### Descriptive Results

The first column of Table 1 shows the percentage of youth who in 2002 were certain they would graduate from a four-year college. Overall, more youth were certain (73%) than uncertain (27%). White youth (75%) and females (76%) were more likely than Black youth (65%) and males (70%) to expect to graduate from a four-year college. Further, youth with more educated household heads were more likely to be certain. Youth in married households and youth in unmarried households reported similar college expectations.

About 88% of youth who lived in high-income households expected to graduate from a four-year college in 2002. In comparison, 67% of modest-income youth and 64% of low-income youth expected to graduate. In the case of net worth, youth who lived in modest net worth households were less likely (59%) to be certain than either youth who lived in negative net worth households (63%) or youth who lived in high net worth households (79%). About 81% of youth with parents who had savings for them expected to graduate from a four-year college, compared to only 63% of youth whose parents did not have savings for them. About 81% of youth with some of their own savings designated for school were certain, compared to 68% who had an account but no money specifically designated for future schooling and 64% of youth who did not have an account. Finally, slicing the data a different way, we find a large difference in academic achievement between certain youth ( $\bar{x} = 223$ ,  $SD = 2.2$ ) and uncertain youth ( $\bar{x} = 201$ ,  $SD = 3.3$ ).

In sum, the overall pattern is that youth who are White and who live in more educated, higher-income, and wealthier households are more likely than others to expect to graduate from a four-year college. Youth with parents who have money set aside for them and youth with accounts and with school savings of their own are also more likely than others to be certain.

### Percentage Experiencing Wilt

The second and third columns of Table 1 show the percentages of certain youth attending and not attending a four-year college by 2005. The figures in the third column are our estimates of wilt. An estimated 32% of certain youth experiences wilt. In other words, almost one-third of youth ages 15 to 18 who expected to graduate from a four-year college do not attend college by the ages of 19 to 22. Black youth, males, youth with parents who have a high school degree or less, and youth living in families where the head is not married are more likely to experience wilt than White youth, females, youth living with more educated heads, and youth living in families where the head is married.

Table 1: College expectations, college attendance, and wilt for youth

	Percent Certain	Percent of Certain Youth Attending 4-Year College by 2005	Percent of Certain Youth Not Attending 4-Year College by 2005 (Wilt)
Full Sample (N=453)	73	68	32
<i>Household variables</i>			
Married	73	70	30
Not married	75	64	36
Head has high school or less	60	60	40
Head has some college	77	63	37
Head has 4-year degree or more	85	77	23
Low-income (< \$33,377)	64	55	45
Modest-income (\$33,377 - \$84,015)	67	65	35
High-income (\$84,016 or more)	88	77	23
Negative net worth (<0)	63	79	21
Modest net worth (\$0 - \$10,000)	59	63	37
High net worth (>\$10,000)	79	68	32
Has no savings for youth	63	59	41
Has savings for youth	81	74	26
<i>Youth variables</i>			
White	75	69	31
Black	65	65	35
Male	70	62	38
Female	76	74	26
Has no account	64	45	55
Has an account	68	80	20
Has school savings	81	74	26

*Source:* Weighted data from the Panel Study of Income Dynamics and its supplements.

*Notes:* Certain youth are those who said in 2002 that they expected to graduate from a 4-year college (n=333).

Beyond these basic demographic factors, economic factors may also be important for explaining wilt. In the case of income, youth living in low-income households experience higher levels of wilt (45%) than youth living in either modest-income (35%) or high-income (23%) households. However, in the case of wealth, youth living in modest net worth (37%) households are more likely to experience wilt than either youth living in negative net worth (21%) or high net worth (32%) households. Perhaps youth in modest net worth households have less access to scholarships than youth in negative net worth households, while also having insufficient funds to pay for a four-year college. Also, youth in negative net worth households may be less likely to expect to go to college, so that only those most likely to go (because of such things as ability, motivation, and economic resources) are included in the sample of certain youth.

About 41% of youth with parents who do not have savings for them experience wilt. Youth who do not have an account in their own name experience the highest level of wilt of any group (55%). In

contrast, only 20% of youth who have an account, and 26% of youth with savings designated for school experience wilt.

### The Role of Savings and Wealth in Reducing Wilt

Table 2 presents logistic regression results estimating the effects of demographic, academic achievement, and wealth variables on college attendance for youth who expected to graduate from college.

*Model 1.* Approximately 17% of the variance in college attendance is explained in model 1 (base model). Race, gender, academic achievement, head's education level, and household size are all significant predictors of whether youth who are certain attend a four-year college. Black youth are over two and half times more likely than White youth to attend college when controlling for all other variables (*odds ratio* = 2.61,  $p = .04$ ). Girls are approximately two times more likely than boys to attend college when controlling for all other variables (*odds ratio* = 2.08,  $p = .02$ ). For each one point increase in academic achievement, the odds of attending a four-year college increase by 2% (*odds ratio* = 1.02,  $p = .04$ ). For each one year increase in head's education, the odds of attending a four-year college increase by 20% (*odds ratio* = 1.20,  $p = .008$ ). For each additional person in the household, the odds of attending a four-year college increase by 48% (*odds ratio* = 1.48,  $p = .03$ ).

This last finding is surprising. One might expect that, as household size increases, youth would be less likely to attend college due to the additional strain on family savings created by having multiple youth in college. This finding may be due to the fact that this study examines a sample of youth who expect to graduate from a four-year college. Alternatively, it may be that many of the youth in this study are the first youth in the family to attend college. As a result, more savings may be available for them to attend than may be available for younger youth in the family.

*Model 2.* When the log of net worth is added to the model, there is no change in the *pseudo R*<sup>2</sup>. Gender, academic achievement, head's education, and household size remain significant. There is no noticeable change from model 1 in the odds ratios for these variables, and therefore, they are not reported here. Race is no longer significant when the log of net worth is added in model 2, but it is very close to significance ( $p = .05$ ). In contrast, Conley (2001) finds that when net worth is added to the model, Black youth gain an advantage over White youth in the number of years of school they obtain. This difference may be due to the fact that the sample for this study is restricted to youth who expect to graduate from a four-year college. Further, we control for academic achievement, while Conley did not.

Also of note, the log of net worth is not significant ( $p = .67$ ). While this finding is not consistent with those of Conley (2001), Destin (2009), Williams-Shanks and Destin (2009), and Haveman and Wilson (2007), it is in line with findings by Jez (2008) and Nam and Huang (2009). Jez (2008) finds that net worth is not significantly related to college attendance when academic achievement is included in the model. Similarly, Nam and Huang (2009) find that net worth is not significant when controlling for whether children are in the gifted program or ever repeated a grade.

*Model 3.* We find a one percentage point increase in the amount of variance explained when categorical net worth replaces the log of net worth. Gender, academic achievement, head's education, and household size remain significant. Race remains nonsignificant ( $p = .08$ ). Consistent

with Nam and Huang (2009), youth who live in negative net worth households are not significantly different from youth who live in high net worth households in regard to attending college. Youth in modest net worth households are also not significantly different from youth in high net worth households. There is no noticeable change from model 2 in odds ratios for the significant variables.

*Model 4.* The amount of variance explained in model 4 is two percentage points higher than in the base model. Gender, academic achievement, and head's education remain significant. There are no noticeable changes from model 3 in odds ratios for these variables. However, race is significant in model 4. Black youth are approximately three times more likely than White youth to attend college (*odds ratio* = 2.95,  $p = .03$ ). Parent savings for youth is not significant ( $p = .12$ ). This last finding differs from that of Charles, Roscigno, and Torres (2007), who report that parent school savings is significantly related to attending a four-year college. This difference may be due to different data sets (NLSY vs. PSID/CDS/TA); model specification (inclusion of academic achievement); sample compositions (youth who expect to graduate from a four-year college vs. both youth who do and do not expect to graduate from a four-year college); different racial/ethnic groupings (Black youth and White youth vs. Non-Hispanic White, Non-Hispanic Black, Hispanic, Asian, and Native American youth), and/or different observation periods (2002 and 2005 vs. 1988 and 1994).

*Model 5.* The *pseudo R*<sup>2</sup> of model 5, when youth savings is added, is six percentage points higher than that of the base model. Race, gender, head's education and household size remain significant. There are no noticeable changes in odds ratios for these variables. With the addition of youth savings, academic achievement is no longer a significant predictor of attending a four-year college ( $p = .08$ ). Youth who have an account but no savings specifically designated for school are nearly seven times more likely to attend a four-year college than youth who have no account (*odds ratio* = 6.76,  $p = .0003$ ). Youth who have designated some savings for school are nearly four times more likely to attend a four-year college than youth with no account (*odds ratio* = 3.63,  $p = .002$ ).

*Model 6.* All savings variables are included in model six with log of net worth as the measure of net worth. The *pseudo R*<sup>2</sup> of model 6 is seven percentage points higher than that of the base model. Race, gender, head's education, and household size remain significant with no noticeable change in odds ratios. Youth savings is also significant. Again, youth who have an account are approximately seven times more likely to attend a four-year college than youth with no account (*odds ratio* = 6.97,  $p = .0004$ ). Moreover, youth who have savings designated for school are almost four times more likely to attend a four-year college than youth with no account (*odds ratio* = 3.77,  $p = .002$ ).

*Model 7.* Model 7 again includes all wealth variables, but categorical net worth replaces log of net worth. This model has the highest *pseudo R*<sup>2</sup> of all models (.26). Race, gender, head's education, and household size remain significant with no noticeable change in odds ratios. Again, youth who own accounts are approximately seven times more likely to attend a four-year college than youth with no account (*odds ratio* = 7.29,  $p = .0003$ ). Youth who have school savings are almost four times more likely to attend a four-year college than youth with no account (*odds ratio* = 3.75,  $p = .0018$ ).

REDUCING WILT

Table 2: The effects of demographic, academic achievement, net worth, parent savings, and youth savings on college attendance for certain youth (N=333)

Item	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	Base		Log of Net Worth		Categorical Net Worth		Parent Savings		Youth Savings		All Wealth w/Log of Net Worth		All Wealth w/Categorical Net Worth	
	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.	<i>b</i>	S.E.
Black	0.958	0.472*	0.928	0.474	0.753	0.426	1.083	0.484*	1.260	0.477**	1.280	0.483**	1.066	0.438*
Female	0.730	0.318*	0.724	0.318*	0.734	0.321*	0.773	0.323*	0.789	0.339*	0.797	0.345*	0.797	0.344*
Academic Achievement	0.023	0.011*	0.023	0.011*	0.021	0.011*	0.022	0.011*	0.019	0.010	0.019	0.011	0.017	0.011
Married	-0.423	0.521	-0.357	0.541	-0.255	0.552	-0.407	0.527	-0.421	0.484	-0.167	0.518	-0.019	0.531
Head's education	0.183	0.069**	0.192	0.074**	0.214	0.075**	0.169	0.070*	0.137	0.069*	0.485	0.191*	0.182	0.074*
Household size	0.395	0.183*	0.380	0.183*	0.355	0.171*	0.414	0.182*	0.522	0.191**	0.162	0.073*	0.437	0.177*
Log of family income	0.035	0.094	0.037	0.094	0.034	0.099	0.035	0.010	0.013	0.091	0.019	0.093	0.002	0.098
Log of net worth			-0.022	0.052							-0.081	0.051		
<sup>a</sup> Negative net worth					1.060	0.972							1.846	1.124
<sup>a</sup> Modest net worth					-0.022	0.464							0.578	0.487
Parent savings for youth							0.558	0.360			0.433	0.391		0.372
<sup>b</sup> Youth account										0.414***	1.327	0.434**	1.321	0.423**
<sup>b</sup> Youth school savings									1.289	0.532**	1.941	0.546***	1.987	0.544***
<i>Pseudo R</i> <sup>2</sup>		.17		.17		.18		.19		.23		.24		.26
<i>N</i>		311		311		311		311		305		305		305

Source: Weighted data from the Panel Study of Income Dynamics and its supplements.

Note: S.E. = robust standard error.

<sup>a</sup> Negative net worth (<\$0) and modest net worth (\$0 - \$10,000) households are compared to high net worth (>\$10,000) households.

<sup>b</sup>Youth who have an account but no savings specifically set aside for school and youth who have designated some savings for school are compared to youth with no account.

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

In summary, findings indicate gender, household size, and head's education are consistent predictors of college attendance among youth who expect to graduate from a four-year college. While race is a significant predictor in five of the seven models, with Blacks having an advantage over Whites, it is less consistent than gender, household size, and head's education. Also of note, among the traditional variables, family income is not significant in any of the models. This is consistent with previous studies that include measures of cognitive ability, such as academic achievement (Cameron & Heckman, 1998; Ellwood & Kane, 2000).

Contrary to our first hypothesis, two of the wealth variables, net worth and parent savings, are not significant predictors of college attendance for certain youth. Consistent with both hypotheses, youth savings is a consistent, significant, and powerful predictor of college attendance. Youth who have an account are three to seven times more likely to attend college than youth who do not have an account. The size of the effect depends on whether a youth has also designated a portion of the savings in that account for school and whether log of net worth or categorical net worth is included in the model. Moreover, when youth savings is included in regression models, academic achievement is no longer a significant predictor of college attendance.

### Discussion

The belief that an ordinary citizen can turn the America Dream into reality is embedded in the history and culture of America. The public education system has been seen as a key instrument for making the American Dream a reality (Hochschild & Scovronick, 2003). However, in a highly technical global economy, turning the Dream into reality often requires a college education. Access to college in America is commonly believed to be based on merit, but soaring college costs and high unmet need have made college a genuinely desired, but elusive goal for many Americans.

Our results suggest that the majority (73%) of youth expect to graduate from a four-year college. This finding is similar to previous findings on youth college expectations that use different data sets. For example, using the National Longitudinal Surveys of Youth, Reynolds and Pemberton (2001) find that 70% of youth ages 15 to 16 in 1997 expect to graduate from college.<sup>7</sup>

Not surprisingly, privilege appears to affect college expectations. Youth who are White and who live in more educated, higher-income, and wealthier households are more likely than others to expect to graduate from a four-year college. Youth with parents who have money set aside for them and youth with accounts and with school savings of their own are also more likely than others to be certain. If college expectations are a type of calculation youth make about the opportunities they have for achieving a desired outcome (Cook, et al., 1996; Mickelson, 1990; Reynolds & Pemberton, 2001), such as attending college, then changes in their opportunity structure could lead to higher expectations (Elliott, 2008).

“Wilt” is a way of measuring the degree to which the path to the American Dream (in this discussion, attending college) remains—or does not remain—a viable path for youth. Wilt occurs when a youth who expects to graduate from a four-year college (prior to graduating from high

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<sup>7</sup>Our findings regarding expectations for race and gender subgroups are also very similar to Reynolds and Pemberton (2001).

school) has not attended a four-year college by the ages of 19 to 22. According to our estimates, almost one-third of youth who expect to attend a four-year college experience wilt.

Wilt occurs disproportionately. Black youth, males, youth with parents who have a high school degree or less, youth living in unmarried households, and youth living in low-income households experience high levels of wilt. In multivariate analyses, youth's gender and head's education remain important predictors of wilt. Race is significant in some models (with Blacks having an advantage) but not others. Somewhat surprisingly, income is never significant. Also, when youth savings is included in the regressions, academic achievement is not a significant predictor of college attendance. This finding suggests that, beyond desire and ability, economic resources may play an important role in determining whether attending a four-year college is within reach for many youth.

Having an account appears to be a particularly important predictor of wilt. A remarkable 55% of youth with no account of their own experience wilt, the highest level of wilt among all groups examined. In logistic regression models, youth who expect to graduate from a four-year college and have an account are about seven times more likely to attend college than youth who expect to graduate from a four-year college but do not have an account. Youth who have an account and have also designated a portion of the savings in that account for school are almost four times more likely to attend than those without an account. While it is somewhat surprising that account ownership has a larger effect on college attendance than school savings, in a practical sense, the distinction may not be that important. In this study, both variables had large effects, and it is hard to imagine program and policy interventions that promote savings accounts without encouraging saving or promote saving without encouraging account ownership.

If our findings regarding youth account ownership and savings are confirmed in future research, then policies that promote both may reduce wilt. One policy tool designed to provide every youth in the United States with an account is the Child Development Account (CDA). In their simplest form, CDAs are incentivized savings accounts that can be used for long-term investments, such as education, home and business ownership, and retirement. CDAs have been proposed as a way to help students finance college (Boshara, 2003; Goldberg & Cohen, 2000; Sherraden, 1991).<sup>8</sup> An example of a CDA policy is the America Saving for Personal Investment, Retirement, and Education (ASPIRE) Act. ASPIRE would create "KIDS Accounts," or a savings account for every newborn, with an initial \$500 deposit, along with opportunities for financial education.<sup>9</sup> Youth living in households with incomes below the national median would be eligible for an additional contribution of up to \$500 at birth and a savings incentive of \$500 per year in matching funds for amounts saved in accounts. When account holders turn 18, they would be permitted to make tax-free withdrawals for costs associated with post-secondary education, first-time home purchase, and retirement security. Other examples of youth wealth-building policies are the Young Saver's Accounts, 401Kids, Baby Bonds, and Plus Accounts.<sup>10</sup>

Our hypothesis that youth savings would have a stronger association with college attendance than net worth or parent savings was based on the assumption that youth perceive that they have greater

<sup>8</sup> In this paper, we use the shorthand "college" to refer to all accredited post-secondary education and training.

<sup>9</sup> At this writing, the ASPIRE Act remains on the Congressional agenda ([http://www.assetbuilding.org/resources/the\\_aspire\\_act\\_of\\_2004\\_kids\\_accounts\\_s\\_2751\\_hr\\_4939](http://www.assetbuilding.org/resources/the_aspire_act_of_2004_kids_accounts_s_2751_hr_4939)).

<sup>10</sup> More information on these policies can be found at: [http://www.assetbuilding.org/resources/childrens\\_savings\\_accounts](http://www.assetbuilding.org/resources/childrens_savings_accounts).

latitude over savings in their own name, which leads to greater perceived control. Contrary to our first hypothesis, we find that net worth and parent savings are not significantly related to youth attendance at a four-year college. However, youth account ownership and savings are significantly and strongly related to attendance. These findings may suggest that CDAs will be more effective if the accounts are owned by the youth rather than the parent, in the case of youth who expect to graduate from a four-year college.

However, current financial aid policies complicate matters. Accounts held in a youth's name result in a much higher reduction in federal financial aid than accounts held in a parent's name.<sup>11</sup> An alternative to account ownership by the youth is state ownership, where the account resides with the youth who is named as the irrevocable account beneficiary. CDAs that are in the state's name with the youth as the beneficiary are being tested in a large experiment in Oklahoma called SEED for Oklahoma Kids (SEED OK).<sup>12</sup> However, because the accounts were issued at birth in 2004, it will be a number of years before researchers will be able to test this design as it relates to college enrollment.

More generally, our findings suggest that liquid forms of wealth, like savings, that can be used for immediate expenses may be more effective at increasing college attendance than net worth. This is supported by previous research. Liquid forms of wealth have been more predictive of youth college attendance than illiquid forms of wealth, particularly when researchers control for youth cognitive ability (Jez, 2008; Nam & Huang, 2009). However, current CDA policy proposals do not reflect these findings. Typically, CDAs have been developed to solve the long-term problem of financing college; however, a better design might allow youth to access a portion of their savings on a more regular basis. In addition to direct effects (helping to pay for day-to-day expenses), liquid wealth in a youth's name may help to build a sense of perceived control among youth.

## Limitations

A limitation of this study is the uncertainty of omitted variable bias. Youth who have accounts and savings may differ from other youth in other ways that affect college attendance (e.g., motivation or self-discipline). Thus, it could be that the significant effect of account ownership or savings is spurious. This is dealt with, in part, by controlling for various factors that are commonly associated with college attendance, including academic achievement, but this alternative explanation cannot be fully ruled out.

Another limitation is the mean age of youth, age 20. While age 20 is old enough for youth to attend college, some youth may not attend for several years after graduating from high school. Therefore, wilt may decline over time. However, more 18 to 21 year olds are enrolled in college than any other age group. Approximately 50% of youth 18 to 21 are enrolled in college. In comparison, only about 30% of 22 to 24 year olds are enrolled, and just over 10% of 25 to 29 year olds are enrolled (Baum & Ma, 2009). Therefore, if youth have not attended college by age 20, the likelihood of ever attending is greatly reduced.

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<sup>11</sup> For more information on savings and federal financial aid reductions, see Executive Office of the President, Office of Management and Budget. (2009). *Simplifying student aid: The case for an easier, faster, and more accurate FAFSA*.

<sup>12</sup> For more information on SEED OK, see <http://csd.wustl.edu/AssetBuilding/SEEDOK/>.

Further, it is impossible in this study to measure whether youth *grow up* with knowledge that they have financial means to help pay for current and future schooling. In this study, savings is only measured at a single, rather late, point in time—age 15 or older. Finally, we do not claim that having savings is the most important factor for understanding college attendance. Savings appears to matter and is an understudied factor. More research is needed to determine the importance of youth savings for understanding college attendance.

### Conclusion

Findings from this study suggest that factors other than desire and ability play an important role in determining whether attending a four-year college is more than a dream for many American youth. Somewhat surprisingly, family income, household net worth, and parent savings for youth are not significant predictors of college attendance for youth who expect to graduate from college. However, whether or not youth have accounts and whether or not they have savings set aside for school are important predictors. These findings bring to mind lyrics from the Billie Holiday song, *God Bless the Child*: “Mama may have, Papa may have, but God bless the child that's got his own.” Policies that are designed to increase youth account ownership and savings may play an important role in helping to restore the American Dream of attending college. Because this research finding has simple, doable, and measurable policy implications, further policy testing of savings accounts for children and youth may be particularly worthwhile.

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