

Children's College As A Saving Goal

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This study investigates determinants of having saving for children's education as a goal. Based on 1992 Survey of Consumer Finance data, 28% of the households with children under 18 have saving for children's education as a goal. More educated parents are more likely to have college saving as a goal than otherwise similar less educated parents. Asian and Hispanic parents were more likely to have college saving as a goal than similar White non-Hispanic parents. Parents with a retirement account were more likely to have college saving as a goal, but no other financial variables were significant.

Key Words: College saving, Saving, Financial planning, Survey of Consumer Finances

Introduction

For most families, higher education is the most expensive service they will ever buy (Wingert, McCormic, Levinson & Biddle, 1996). The cost of college depends on the type of institution and living arrangement, with the average annual cost of college including tuition, fees, and living expenses ranging from \$6,410 for public 2-year institutions to \$17,301 for private 4-year institutions during the 1992-93 academic year (National Center for Education Statistics, 1995). A substantial portion of cost of college must be financed by parents and students. The net costs of college attendance (total cost minus total financial aid) ranges from 89% of the total cost for those attending public 2-year institution to 67% for those attending private 4-year institutions (National Center for Education Statistics, 1995). The issue of helping families with college costs is a policy as well as a family financial issue, and was debated in the U.S. Congress in 1997 (Chandler, 1997).

Wealthy families may have personal resources to finance college and lower income families may qualify for financial aid, but middle income families may face the greatest challenge in financing college (Loewe, 1986). For families in the middle income group, money set aside in advance may make the difference between attending college and not attending college. These are the people who have to be especially careful in planning every aspects of college financing (Loewe, 1986).

The standard advice is to start saving as early as possible to take advantage of compound interest (Hanna & Chen, 1995). However, as this article will demonstrate, most

parents do not report that saving for their children's education is an important goal. Exploring the determinants of college as a saving goal may be useful for considering policy issues, as well as for marketing financial planning and education. This article provides a preliminary investigation of factors related to parent saving for children's education. The results should assist financial planners and educators in helping families to save for college.

Literature Review

Research has shown that most parents do not save for college. Lansing, Lorimer and Moriguchi (1960) found that 37% of parents with children under 15 who were expected to attend college had money set aside especially for education. In 1980, only 40% of parents of seniors were doing anything specific in order to have some money for their children's education after high school (Olson, 1982). The amount saved for children's education was related to parent's income, net worth and attitudes regarding saving. In 1987, 14% of two parent households, 11% of male single parent households, and 8% of female single-parent households had saved for children's college education (Churaman, 1992b). Only 12% of Native American, 11% of Asian, 8% of Black, 11% of Hispanic, and 14% of White parents had saved specifically for college (Churaman, 1992a). In both studies, parental saving behavior appeared to be a significant determinant of the parent contribution to their children's education costs.

Using data from the 1986 Survey of Consumer Finance (SCF), Chang(1995) investigated the impact of college

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expectations on parent non-retirement asset accumulation. While educational expectation had no significant effect on the level of non-retirement asset accumulation, household income, net home equity, and pension plan participation were found to influence the accumulation significantly.

Lee (1997) used a sample from the 1992 SCF of two-parent households with children under age 18 and a parent between age 35 and 64 to analyze college saving. Although 64% of the sample said they felt an obligation to finance their children's education, only 34% reported that saving for college was an important goal. A multivariate logit analysis found that feeling an obligation to pay for college, being in the top quintile of family assets, and saving for retirement were positively related to saving for college. Saving for emergencies and having more than 3 children were negatively related to saving for college. The education of the mother (but not the education of the father) was related to having education as a saving goal, but not in a consistent way.

Todd and DeVaney (1997) surveyed 181 parents of college students, and found that most had saved for college, but 41% felt they should have annually contributed more to a college saving plan. Todd and DeVaney also found that 24% of the parents used a retirement saving plan to help pay for college costs of their children.

Previous studies obtained different results, which may be due to using different survey instruments and different time periods. Lansing (1960) and Olson (1981) analyzed information from parents who expected their children to attend college while Churaman used a sample of the parents of college students. Chang (1995) used households with children aged under 18 and who had no children attending college.

While previous studies reported percentages of households who saved for children's college education, they did not report which factors were associated with household saving for children's college education. The purpose of this study is to investigate how many parents with children aged below 18 report saving for education as an important goal, and which households characteristics have significant effects on having this goal.

Theoretical Perspectives

Parents who want their children to attend college have a many choices in helping with the costs, including

investing in a variety of financial assets, paying out of current income, and parent loans (Hanna & Chen, 1996). In terms of the life cycle savings model, saving is not necessarily superior to parent loans (Hanna, Fan & Chang, 1995). For instance, if parents plan to retire many years after their children have graduated from college, and their real incomes are very likely to keep increasing, parent loans may be a more rational way to pay for college expenses than saving. Based on the college aid incentive structure, Feldstein (1995) suggested that reliance on loans may be more rational than saving. However, for many families, saving may be the only way to ensure that their children have choices on which college to attend.

Methodology

Data and Sample

Data used in this study were drawn from the public use tape of the 1992 Survey of Consumer Finances (SCF). The sample for this study consisted of 1,124 households with at least one child under age 18.

Variables

Dependent Variable The dependent variable is based on the answer to the question:

"What are your family's most important reasons for saving?"

In this article, households who answered "children's education" to the question are considered as having children's education as a saving goal. (This alternative also included saving for grandchildren's education, but presumably parents with children under 18 would not be saving for grandchildren.) Households saving for children's education were coded 1, otherwise 0.

Independent Variables The explanatory variables include socio-demographic factors and financial factors. The socio-demographic factors consist of demographic characteristics of children and parents. The demographic characteristics of children include the number, age and gender of children and those of parent include marital status, race/ethnicity, age, education, and employment status. The financial factors include home ownership, having a retirement account, having life insurance, the amount of financial assets excluding the amounts in retirement accounts and the cash value of life insurance. The retirement accounts and life insurance amounts were excluded from the amount of financial assets, because they are made for the specific financial goals-for retirement and emergency. The number, age and gender of children, marital status, race/ethnicity, age and education of parent, household income, home ownership,

employment status, ownership of a retirement account of life insurance, and the amount of financial asset were categorical variables, as indicated in the Appendix.

Analysis

Since the dependent variable was dichotomous, a logistic analysis was used to examine the probability of having college as a saving goal. The 1992 SCF consists of five complete data sets as a result of the procedure used to handle missing data. The repeated-imputation inference(RII), a technique which uses information from all five imputations, was applied following the procedure proposed by Montalto and Sung (1996).

Results

Descriptive statistics are presented in the Appendix. About 28% of sample reported saving for children's education to be an important goal. One third of father-only households reported this goal, compared to 26% of mother-only households and 29% of married-couple households. Categories with relatively high rates with the goal included 39% of the parents aged 50 and above, about 42% of parents having more than college education, 32% of home owners with no mortgage, 38% of those having a retirement account, 48% of those with mutual funds, 36% of those owning bonds, and 41% of those with financial assets more than \$50,000. The mean values of parents' age, education, household income, and the amount of financial assets were higher for the households having children's education as a saving goal than for those did not.

In the logit, parents' age, race/ethnicity, education, and having a retirement account were significant (Table 1). Households with a Hispanic or Asian/American Indian respondent were significantly more likely to have college saving as a goal than similar White, non-Hispanic respondents. Having college saving as a goal generally increased with age. The predicted saving rate was higher for respondents with at least a high school degree than for those with less than a high school degree. Those with a retirement account were more likely to have a college saving goal than otherwise similar households

Conclusions

Only 28% of households with children under 18 reported saving for college, which does not seem to be high considering the importance of higher education. However the model developed in this study does not consider the effect of the educational expectation for children (whether they plan to attend college) or the

expected cost. It is likely that highly educated parents are likely to want their children to attend college. Moreover the dependent variable was whether the households saved for children's education, and not how much they saved. Results from this study need to be compared with those from using the amount of saving for children as the dependent variable in the further study.

Financial planners might use these results to target parents in their 30s or 50s, Asians, Hispanics, and highly educated parents for college saving plans. The fact that income and levels of financial assets are not significant when other factors have been controlled suggests that resources are not as important as aspirations in determining whether parents save for college.

Table 1

Logistic analysis of saving for children's education

Variables	Coefficient	Standard Error
Number of children=1 (vs. more than 2)	-0.13	0.45
Number of children=2 (vs. more than 2)	-0.14	0.25
Eldest child aged 6-10 (vs. below 6)	-0.07	0.19
Eldest child aged 11-17 (vs. below 6)	-0.06	0.21
Gender of children (vs. only girl(s))		
Only boy(s)	-0.02	0.18
Boy(s) and girl(s)	0.35	0.21
Married Couple (vs. Mother only)	-0.25	0.24
Father Only (vs. Mother only)	0.26	0.42
Asian/American Indian‡ (vs. White)	0.67*	0.32
Black (vs. White)	0.21	0.22
Hispanic (vs. White)	0.79**	0.26
Age below 30 (vs. 30-39)	-0.61**	0.24
Age 40- 49 (vs. 30-39)	0.09	0.19
Age \$50 (vs. 30-39)	0.64*	0.31
Educational attainment (vs. <12 years)		
12 years	0.85**	0.30
13-15 years	1.33**	0.31
16 years	0.87**	0.34
More than 16 years	1.33**	0.36
Household income(pre tax)		
20,000-39,999 (vs. less than 20,000)	-0.20	0.26
40,000-69,000 (vs. less than 20,000)	0.06	0.29
>=70,000 (vs. less than 20,000)	0.38	0.35
Working full time	0.21	0.23
Own home, no mortgage (vs. not renting)	0.17	0.28
Own home, with mortgage (vs. not renting)	-0.17	0.19
Financial Assets (Excluding retirement accounts and life insurance)		
1,000-3,999 (vs. <1000)	-0.17	0.23
4,000-169,999 (vs. <1000)	-0.07	0.27
17,000-49,999 (vs. <1000)	0.21	0.30
>50,000 (vs. <1000)	-0.06	0.36
Have retirement account	0.58**	0.20
Have Life Insurance	0.04	0.22

* p<0.05 ** p<0.01

‡It was not possible to separate groups, but approximately 80% of category in Census are Asian/Pacific Island origin.

Pseudo R²=0.117 to 0.128. Concordant agreement=64.2 to 65.5%

Appendix

Descriptive Statistics (Weighted)

Variables	Total Sample N=1124 (100.0%)	Saving for Education N=319 (28.3%)
1 child	435 (38.7)	113 (26.0)
2 children	417 (37.1)	124 (29.7)
more than 2 children	272 (24.2)	80 (29.4)
Eldest child age<=7.4	352 (31.4)	95 (27.0)
Eldest age 7.5-12.4	310 (27.6)	91 (29.4)
Eldest age 12.5-17.4	462 (41.1)	131 (28.4)
Only girl(s)	371 (33.0)	98 (26.4)
Only boy(s)	344 (30.6)	89 (25.9)
Boy(s) and girl(s)	409 (36.4)	130 (31.8)
Married couple	879 (78.2)	252 (28.7)
Father only	36 (3.2)	12 (33.3)
Mother only	210 (18.6)	54 (25.7)
Asian/American Indian	59 (5.2)	20 (33.9)
Black	167 (14.8)	45 (26.9)
Hispanic	121 (10.8)	35 (28.9)
White	778 (69.2)	217 (27.9)
Male respondent	911 (81)	262 (28.8)
Female respondent	214 (19)	56 (26.2)
<=29	221 (19.6)	40 (18.1)
30-39	563 (50.1)	169 (30.0)
40-49	270 (24)	81 (30.0)
>=50	71 (6.3)	27 (38.5)
Less than 12 years ed.	172 (15.3)	23 (13.4)
12 years of education	364 (32.4)	89 (24.4)
13-15 years of education	245 (21.8)	86 (35.1)
16 years of education	197 (17.6)	58 (29.4)
More than 16 years of ed.	146 (12.9)	61 (41.8)
Pretax income<20,000	312 (27.7)	69 (22.1)
20,000-39,999	371 (33.0)	91 (24.5)
40,000-69,999	279 (24.8)	87 (31.2)
>=70,000	163 (14.5)	71 (43.6)
Working full time	922 (82.0)	277 (30.0)
Renter	430 (38.2)	106 (24.6)
Owner w/mortgage	602 (53.6)	181 (30.1)
Owner, w/o mortgage	93 (8.2)	30 (32.2)
Own retirement account	247 (22)	92 (27.2)
Own life insurance	854 (76)	262 (30.7)
Own CD	1007 (89.6)	279 (27.7)
Own money market	1029 (91.5)	283 (27.5)
Mutual Fund	89 (7.9)	43 (48.3)

Bond	390 (34.7)	140 (35.9)
Stock	942 (83.8)	246 (26.1)
Financial Assets (\$) (excluding retirement accounts, life insurance)		
<1000	432 (38.5)	99 (22.9)
1000-3999	255 (22.7)	67 (26.3)
4000-16999	233 (20.7)	71 (30.5)
17000-49999	113 (10)	44 (38.9)
>=50000	91 (8.1)	37 (40.6)

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