Can the Poor Save?

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Using the 1998 Survey of Consumer Finances, we explore the asset holdings of poor and low income households, their available resources for meeting short-term emergencies, and the determinants of being a "saver" as defined here. We find that socioeconomic and demographic characteristics as well as expectations and motivations, access to resources, and the institutional environment are significantly associated with poor and low-income households being able to save.

Key words: *Saving, low income households*

Introduction

Initiatives such as Individual Development Accounts (IDAs; see, for example, Sherraden, 1991) and America Saves (Consumer Federation of America, 2001) are targeted to helping low-to-moderate income households save and build wealth. Support for these initiatives comes from policy makers, community educators, financial institutions, community development professionals, and civic leaders. Beyond the obvious economic benefits of having an emergency cushion and savings to fall back on, there are other community benefits when low-income families accumulate assets: community involvement increases, women's status improves, and well being of children improves (Page-Adams & Sherraden, 1996).

However, the question remains, *can* the poor and low income save?[a] In other words, is it practical to devote resources to these initiatives? In this paper, we use the 1998 Survey of Consumer Finances to explore several key questions about savings and poor families: 1) Can poor and low-income people save? More specifically, do they save? 2) What financial assets do they have? 3) Do poor households have quick access to cash to meet short-term emergencies? 4) What are the determinants of being a saver among poor and low-income households? How does knowing these determinants help us target programs and policies to help these households save?

Low Income Households and Savings

Within the past decade, asset accumulation for low-income families has become a popular policy topic. Beginning in the early 1990's, attention focused on evidence showing that the distribution of assets was far more skewed than the income distribution in the U.S. (Sherraden, 1991). Shifting the focus of welfare and poverty policies away from income maintenance programs to asset building – and thus, self sufficiency – has been a popular approach at both the state and federal levels (Corporation for Enterprise Development, 2001; Schreiner, Sherraden, Clancy, Johnson, Cruley, Grinstein-Weiss, Zhan, and Beverly, 2001).

Some researchers have explored saving as it represents quick access to reserves to meet short-term needs (emergencies). In the family financial management field, saving for and level of emergency funds was found to be related to a precautionary motive for saving (see work by Johnson and Widdows, 1985; Widdows and Johnson, 1986; Huston and Chang, 1997; Chang, Hanna, and Fan, 1997). Hatcher (2000) posits that emergencies would have to occur very frequently for an emergency fund to be an optimal choice relative to holding funds in less-liquid but higher-return investments. However, Hatcher's work may only be relevant for households with higher asset levels who can meet the minimum balance requirements for some investments. The relative importance of community and kin networks as sources of emergency funds (informal loans among family members) was explored by Rhine and

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The analysis and conclusions set forth in this paper represent the work of the authors and do not indicate concurrence of the Federal Reserve Board, the Federal Reserve Banks, or their staff.

Toussaint (1999) and Chiteji and Hamilton (2000). These studies also discussed the importance of emergency reserves – that is, small amounts of savings – to lower income households.

For other researchers, the concept of saving goes beyond these small emergency reserves to saving for retirement, homes, education expenses, and business start-up seed money. Some researchers have differentiated building net worth from accumulating financial assets, especially with respect to low-income households. For example, Carney and Gale (2000) showed that accumulations in net worth differed from accumulations of financial assets, specifically with respect to income, age, education, and marital status. They also posited differences in time orientations (valuing the future relative to the present) and community influences. Other researchers have explored a savings hierarchy relative to motives for saving (see, for example, Xiao and Noring, 1994). Most personal finance texts and financial planners have an implicit hierarchy of having an emergency fund, saving for short-term and mid-term goals (cars, homes, vacations), and saving for longer term goals (children's college education, retirement), although little other research has explored whether families actually follow such a hierarchy.

Wolff (2000) explored how long households could live off their wealth. His estimates using the 1998 Survey of Consumer Finances show that middle class families could sustain their current level of consumption for about 3½ months or could sustain a level of consumption based on 125 percent of the poverty level for about 9 months. Interestingly, even the top income quintile could only sustain their current level of consumption for about 2 years. Households in the lowest income quintile could not live off their wealth at all (that is, the number of months they could sustain themselves was 0). In other words, most households do not have the levels of wealth and assets needed to sustain them for very long, if at all.

Dunham (2001) explored formal and informal savings among lower income, largely unbanked households. She defined formal savings as money in financial institutions; informal savings were held in cash, jewelry, and gold. She found that three-fourths (78%) of banked households had savings, and 94 percent held these savings in formal accounts. Interestingly, she also found that one-third (30%) of unbanked households had savings, but only 40 percent held these in formal accounts, typically in a bank account of another person. Among the banked households, about half added to their savings on a monthly basis, compared with 14 percent of the unbanked who regularly added to their savings. Not surprisingly, she found that higher income households were more likely to save than lower income households, regardless of whether they were banked.

Hogarth and O'Donnell (1999) reported that relative to the total population, low proportions of lower income households held savings or investment instruments. For example, while 36 percent of the population held savings accounts in 1995, only 25 percent of lower income households had such accounts. Furthermore, they found if unbanked households were to become banked, the ownership rate among low income households for selected savings products (such as CDs and IRAs) would double, but that the proportion of households holding such assets would still remain low (Hogarth and O'Donnell, 2000).

Beverly (1997) and Beverly and Sherraden (1999) have developed a substantial body of work in the area of low income savings. They posit a model in which savings is a function of demographic, sociological, psychological and institutional variables. Their work includes not only evaluation of ongoing initiatives (Moore, Beverly, Sherraden, Sherraden, Johnson, and Schreiner, 2000; Schreiner et al., 2001; Schreiner, Clancy, and Sherraden, 2002) but also theory development relative to asset accumulation strategies for low-income households (Beverly, Moore, and Schreiner, 2001).

Sherraden (1999) and Brobeck (1999) both point out some of the obstacles for low income savings: poor families don't have access to mainstream financial institutions for savings nor access to appropriate financial instruments (why should poor people be confined to a savings account earning 2 percent when others are earning double-digits in the stock market?); they don't have the same incentives and financial subsidies for asset accumulation (e.g. mortgage interest deductions, 401k matched savings); they lack information needed to make sound investment decisions; and they need a social support network to encourage and facilitate the saving habit.

There is some evidence that despite the absolute resource constraints of being low income and the institutional obstacles they face, 70 percent of poor households (those with income under $10,000 in 1998) do in fact have some financial assets and these must, by definition, be the result of saving (see Kennickell, Starr-McCluer, and Surette, 2000). The

goal of this study is to bring additional empirical evidence to bear on the ability of poor families to save, the financial assets they have, their ability to meet short-term emergencies, and the determinants of being able to save among poor households in order to target programs and policies to help poor households save.

Conceptual Model

Borrowing from the work of Beverly (1997) and Beverly and Sherraden (1999), we propose a model of being able to save that is a function of the household's socioeconomic and demographic characteristics; their experiences, expectations and motivations; their access to resources to meet financial emergencies and other household demands; and the institutional environment in which they operate. These concepts are further developed in the discussion of the empirical model.

Data, Model, and Methodology

The data for this study are from the Federal Reserve Board's 1998 Survey of Consumer Finances (SCF). The SCF is a triennial survey of U.S. families' financial portfolios sponsored by the Federal Reserve with the cooperation of the Statistics of Income Division of the Internal Revenue Service (Kennickell, McManus and Woodburn, 1996). It is designed to provide detailed information on U.S. families' balance sheets, their use of financial services, demographics, and labor participation. In 1998, 4,309 households were interviewed and the data were collected by the National Opinion Research Center at the University of Chicago. Respondents were encouraged to consult their records as necessary during the interviews.

To provide information that is both representative of total population and reliable for those assets concentrated in affluent households, the SCF employs dual-frame sample design consisting of both a standard, geographically based random sample and an over-sample of affluent households. Weights are used to combine information from two samples. The dual-sampling frame employed in the survey requires that data be weighted in descriptive analyses (see Kennickell, McManus and Woodburn (1996) and Kennickell and Woodburn (1997) for detailed discussion of weight design).

The SCF also uses multiple imputation techniques to deal with missing data. This procedure creates five data sets (called "implicate" data sets) that require special handling in any multivariate analyses (see Kennickell, Starr-McCluer & Sunden, 1997; and Kennickell, 1997). In this study, we used all five implicates with appropriate weights for descriptive analyses. For the multivariate analysis, we used all five implicates with a repeated imputation inference (RII) technique (Rubin, 1987; Montalto and Sung, 1996; Montalto and Yuh, 1998) in a logit model.

Because we were interested in studying the poor and low income, we limited the sample to those households with income less than 3 times the poverty threshold. We opted to define poverty based on the ratio of household income relative to the U.S. Census Bureau's poverty threshold. The threshold incorporates family size, number of related children under 18 years, and whether the householder is over 65, along with income as criteria (note that the poverty threshold will generate slightly different statistics than the poverty guidelines used to administer most means-tested programs). We categorized households at the poverty threshold (less than or equal to 100% of the threshold, ranging from $1 to $35,700, depending on family size and composition; the $35,700 level was the maximum amount in 1997, associated with a 9-person household), 101 to 150% of the threshold (ranging from $7,700 to $53,550), 151 to 200% of the threshold (ranging from $11,600 to $71,400), and 200 to 300% of the threshold (ranging from $15,500 to $107,100).

Variables Studied

Measuring Savers

Our first task was to explore whether the poor save. At first glance, it might seem that we need panel data to compute a measure of savings over time (the difference in net worth, controlling for a variety of factors such as investment in housing or increases/decreases in stock market values). However, Kennickell has shown "the value of using relatively simple indicators to model saving in a way that avoids some strong criticisms of the use of cross-section data" (Kennickell, 1995, p. 3). Following his model, we make use of the two "relatively simple" savings measures included in the SCF.

The first was whether, over the past year, consumers' spending exceeded income, was about the same as income, or was less than income. Those whose spending was less than income were defined as a *current saver* in our study. The second measure was a description of consumers' usual savings habits: whether they usually put aside money regularly, save out of "other income," save the income from one family member while spending the other's income, save what is "left over at the end of the month," or don't save at all. Those who responded that they saved in any of the first four ways listed were defined

as *usual savers* in our study. For our multivariate analysis, our dependent variable, *saver*, was a binary variable with a value of 1 if a consumer was *either* a current saver *or* a usual saver.

It is also important to note that our measure of saving focuses on the process of saving – income exceeding spending or usual saving habits – and not on simply possessing a savings or investment account. Having a savings account could be considered as a proxy for saving behavior (that is, households have a savings account, therefore they must be savers). However, for low income households, saving may be cyclical – households may save for a goal (for example, save $500 for a used car), reach the goal and spend the money (buy the car, depleting their savings), and then begin saving for another goal (Vermont Development Credit Union, 2001). Thus, at any point in time, a low income household may perceive that they are saving even though they have no money in a savings account. We hope that our measure – albeit psychological in nature – will more directly capture household saving behaviors better than other proxies.

Analysis Variables

To answer the question of what assets poor and low income people had, we explored asset holdings including overall net worth, financial assets (money in checking, savings, money markets, call accounts, CDs, savings bonds, stocks, bonds, mutual funds, cash value of life insurance, other managed assets, other financial assets, IRAs, 401k/403b plans, and other thrift type retirement plans) and non-financial assets (net value of houses, vehicles, and other real property).

To explore access to emergency funds and the liquidity of consumers' financial assets, we created five categories of liquidity: immediately liquid (checking, savings, money market accounts); liquid in about 24 hours, even if there is a penalty (CDs, savings bonds); liquid in about 2 to 4 days (stocks, bonds, mutual funds; we realize that there are some bond funds that have check-writing privileges that make these "immediately liquid"); liquid in 7 to 14 days (cash value of life insurance, other managed assets, other financial assets); and liquid in 7 to 14 days but with a penalty (funds in IRAs, 401k/403b plans, and other thrift-type retirement plans).

Multivariate Empirical Model and Independent Variables

To explore the determinants of saving among poor households in a multivariate framework, we included a set of independent variables that measured their socioeconomic and demographic characteristics; their experiences, expectations and motivations; their access to other resources to meet financial emergencies; and the institutional environment in which they operate.

Socioeconomic and Demographic Variables

As found in previous research, we expect higher income and higher levels of education will be associated with an increased likelihood of being a saver. With respect to demographic characteristics, again as found in previous research, we expect that being unmarried, younger, out of the labor force, or a minority will be associated with a decreased likelihood of being a saver.

As described above, we included households at or below three times the poverty threshold in this study. Furthermore, we created "poverty categories" as our income measures (see Table 1); this has several advantages over using income as a continuous variable. First, measuring income directly is problematic due to heteroscadasticity (unequal variances) problems. The usual "fix" for this is to use the natural log of income to reduce this problem with variances, but this fix still leaves us with a continuous variable. A categorical income variable will allow us to explore differences that may not be evident in a continuous measure, even one that is "corrected" via conversion to natural logs. Since the poor are of particular interest in this study, it made sense to use the poverty threshold as our baseline, rather than simply a set dollar amount, income quintiles, or other potential ways to categorize income.

While using the poverty threshold, we recognize the various limitations of this measure. The threshold does not take into account any locational variation in the cost of living. However, we can include regional control variables as a means of mitigating the measurement error related to locational variation. Others assert that the poverty threshold underestimates the minimum amounts needed for a sustainable level of living (see, for example, Boushey, Brocht, Gundersen and Bernstein, 2001). Nonetheless, the poverty threshold is used in most policy development at the federal and state level, and therefore provides a justifiable baseline for this study.

Education was included as a set of four binary variables with high school graduates as the reference category. Race/ethnicity was a set of four binary variables with whites as the reference category. In the SCF, gender is tied with marital status; all married couple households are considered as headed by the male. A meaningful gender distinction can be made

between single-female and single-male headed households. Our measure was a set of three binary variables with married as the reference category. Age was included as a continuous variable. Work status was included as a set of five binary variables, with "unemployed – not looking for a job" as the reference category.

Experiences, Expectations and Motivations

We posit that households' experiences, expectations and motivations influence their saving. As a practical matter, if household income has outpaced inflation, the household may be more likely to be a saver than those whose income has stayed even or fallen behind inflation. These households may have developed a set of expectations about their future income (with respect to the pace of inflation) that may also influence their saving behaviors. Such expectations may be proxies for measuring real income. Also, if households expect things to be worse in the near future (e.g. they expect spells of unemployment), they may be more likely to save as a precautionary measure (that is, to build up emergency reserves). On the other hand, if they expect things to be better in the future, they may postpone saving now in anticipation of being more able to save in the future. Households whose planning horizon and time preferences extend toward the long term may also be more likely to save than those with shorter-term planning horizons. Households who are motivated to save – for example, those who expect some major expense in the near future or who are able to identify some tangible reason to save – should be more likely to be savers.

Measures of expectations included whether the household expected the economy to be better over the next 5 years, whether they expected higher interest rates over the next 5 years, whether they expected a major expense in the next 5 to 10 years, and whether they expected their income to rise more than prices in the next year. Expectations may be influenced by experience, and we included a measure of the household's past experience with increases in income (income rising more than prices over the last 5 years).

Motivations were measured by whether the household indicated they had a reason to save. Respondents were asked about their "family's most important reasons for saving;" responses included a range of reasons such as saving for education, saving for a home, emergencies, and "force of habit." If a household gave *any* reason for saving, they were counted as having a reason to save.

The SCF also asks about the time periods families use for planning their saving and spending; we used this as our planning horizon variable. It was included as a set of three binary variables; households with a long term planning horizon (more than 10 years) were the reference category. This planning horizon variable, as well as the variable regarding expecting a major expense, may also serve as proxies for risk; households who are more risk averse probably plan ahead more and plan farther ahead than those willing to take more risk.

Access to Resources and Demands on Resources

In addition to financial resources to meet emergencies, households may have access to other resources that may be substitutes, thus freeing up funds that become available for saving. For example, households with access to health insurance may not need to use savings to meet medical emergencies. We expect poor and low income households to be less likely to have health insurance and thus may be less able to save. In a similar vein, community and kin networks may serve as resources to meet family and financial demands on the household (for example, in an emergency, a household may be able to borrow from other family members). Previous research has shown that poor and low income households rely more on kin networks for informal loans, which may be an indication that households with these networks are less likely to be savers.

Households may also hold some assets that serve as either resources to meet demands or that may become demands themselves.[b] For example, a vehicle may be either a resource to enable transportation to a better-paying job or it may be a "demand" for funds for repair and maintenance. If the former, households may be more likely to be savers; if the later, households may be less likely to be savers. Likewise, having a home may be a resource whose equity can be tapped in an emergency. Households who own their own home may be more likely to say they are savers if they consider the equity in their home as "savings."[c]

Measures of access to resources included whether the household owned their own home and whether they had health insurance coverage. We also included a set of binary variables measuring vehicle ownership; vehicles may represent resources in that they can enable households to commute to jobs that may not be reachable by other modes of transportation. However, older cars that require a lot of maintenance and repairs may actually be a resource drain (a "demand") on the household. We compare older

Table 1.
Variable Measures and Descriptive Statistics
(observations are weighted for analysis)

	How Measured	Full Sample	Saver	Non-saver
Number of observations		1683	1183	500
SOCIOECONOMIC & DEMOGRAPHIC CHARACTERISTICS				
Income				
Mean	*Means and medians provided for descriptive purposes*	*$18,868*	*$19,907*	*$16,402*
Median	*only*	*17,000*	*19,000*	*14,000*
100% of poverty or less	= 1 if at 100% of poverty threshold or less, 0 otherwise; used as base	28.7	24.6	38.3
101-150% of poverty	= 1 if at 101 to 150% of poverty threshold, 0 otherwise	19.8	19.7	20.2
151-200% of poverty	= 1 if at 151 to 200% of poverty threshold, 0 otherwise	16.9	17.5	15.6
201-300% of poverty	= 1 if at 201 to 300% of poverty threshold, 0 otherwise	34.6	38.2	25.9
Education				
Mean	*Means and medians provided for descriptive purposes*	*11.9*	*12.2*	*11.3*
Median	*only*	*12.0*	*12.0*	*12.0*
Less than high school	= 1 if less than high school, 0 otherwise	26.9	23.1	35.9
High school graduates	= 1 if have only high school diploma or GED, 0 otherwise; used as base	37.3	38.6	34.1
Some college	= 1 if have some college, 0 otherwise	18.2	18.6	17.3
College degree or more	= 1 if have college or postgraduate degree, 0 otherwise	17.6	19.8	12.6
Race/ethnicity				
White	= 1 if white, 0 otherwise; used as base	69.8	71.0	66.9
Black	= 1 if African American, 0 otherwise	16.7	15.1	20.5
Hispanic	= 1 if Hispanic, 0 otherwise	10.6	11.0	9.8
Other race	= 1 if Asian or other race, 0 otherwise	2.9	3.0	2.8
Marital status/gender				
Married	= 1 if married couple, 0 otherwise; used as base	47.1	49.1	42.3
Single male	= 1 if single male, 0 otherwise	15.3	15.0	16.1
Single female	= 1 if single female, 0 otherwise	37.6	35.9	41.5
Age	Age in years, measured as continuous	48.8	48.5	49.3
18-34		*28.5*	*28.5*	*28.5*
35-49		*28.4*	*29.2*	*26.4*
50-64		*17.1*	*16.8*	*17.9*
65 & over	*Categories provided for descriptive purposes only*	*26.0*	*25.5*	*27.3*
Working status				
White collar	= 1 if head is working in a white collar-type job, 0 otherwise	23.1	24.9	18.8
Blue collar	= 1 if head is working in a blue collar-type job, 0 otherwise	35.4	35.3	35.9
Retired	= 1 if head is retired, 0 otherwise	23.3	23.6	22.6
Unemployed, looking for a job	= 1 if head is unemployed but looking for a job, 0 otherwise	6.0	5.8	6.6
Unemployed, not looking	= 1 if head is unemployed and not looking for a job, 0 otherwise; used as base	12.2	10.5	16.1
EXPECTATIONS & MOTIVATIONS				
Expect economy to be better over next 5 years	= 1 if expect economy to be better over next 5 years, 0 otherwise	27.0	26.7	27.6
Expect higher interest rates over next 5 years	= 1 if expect interest rates to be higher over next 5 years, 0 otherwise	63.6	63.6	63.5
Income rose more than prices over last 5 years	= 1 if income outpaced inflation over past 5 years, 0 otherwise	11.3	13.2	6.7
Expect income will rise more than prices next year	= 1 if expect income to outpace inflation next year, 0 otherwise	22.6	24.2	18.9
Expect a major expense in next 5-10 years	= 1 if expect to have major expense in nest 5-10 years (car, major appliance, college, etc.), 0 otherwise	48.9	51.6	42.4
Have a reason to save	= 1 if gave reason to save (college, retirement, emergencies, etc.), 0 otherwise	92.4	97.2	80.9

Table 1 (continued). Variable Measures and Descriptive Statistics
(observations are weighted for analysis)

EXPECTATIONS & MOTIVATIONS (continued)		Full Sample	Saver	Non-saver
Planning horizon				
Short term (<= 1 year)	= 1 if household plans for a few months or next year, 0 otherwise	43.3	38.4	54.9
Medium term (2 -10 years)	= 1 if said household plans ahead a few years to 10 years, 0 otherwise	47.0	51.2	37.2
Long term (10+ years)	= 1 if said household plans ahead more than 10 years, 0 otherwise; used as base	9.6	10.4	7.9
RESOURCE ACCESS/DEMANDS				
Home ownership	= 1 if own home, 0 otherwise	52.9	55.9	45.7
Household size				
1	= 1 if single person household, 0 otherwise	28.5	27.6	30.6
2	= 1 if 2 person household, 0 otherwise; used as base	29.1	30.0	26.9
3 or more	= 1 if 3 or more people in household, 0 otherwise	42.5	42.5	42.5
Have children under 18	= 1 if household has children under 18 present, 0 otherwise	40.1	39.1	42.4
Have health insurance coverage	= 1 if head and household are covered by health insurance of some type (can include Medicare), 0 otherwise	79.5	81.7	74.3
Vehicles				
No car	= 1 if have no car, 0 otherwise; used as base	24.7	21.2	33.2
Old car (6 years old or more)	= 1 if have car that is 6 years old or more, 0 otherwise	48.6	48.7	48.5
New car (5 years old or less)	= 1 if have car that is 5 years old or less, 0 otherwise	26.6	30.1	18.3
INSTITUTIONAL ENVIRONMENT				
Region				
New England	= 1 if live in CT, ME, NH, RI, VT, 0 otherwise	3.6	4.2	2.2
Mid-Atlantic	= 1 if live in NJ, NY, PA, 0 otherwise; used as base	14.7	13.6	17.3
South Atlantic	= 1 if live in DE, DC, FL, GA, MD, NC, SC, VA, WV, 0 otherwise	17.8	17.5	18.5
East S. Central	= 1 if live in AL, KY, MS, TN, 0 otherwise	8.9	7.9	11.2
East N. Central	= 1 if live in IL, IN, MI, OH, WI, 0 otherwise	16.8	18.2	13.4
West N. Central	= 1 if live in IA, KS, MN, MO, NE, ND, SD, 0 otherwise	8.4	8.5	8.0
West S. Central	= 1 if live in AR, LA OK, TX, 0 otherwise	10.6	10.1	11.8
Mountain	= 1 if live in AZ, CO, ID, MT, NM, NV, UT, WY, 0 otherwise	7.0	6.8	7.4
Pacific	= 1 if live in AK, CA, HI, OR, WA, 0 otherwise	12.3	13.2	10.3
Credit history				
Did not apply	= 1 if did not apply for credit in last 5 years because thought would be turned down, 0 otherwise	47.3	45.8	50.8
Rejected	= 1 if rejected for credit or given less credit than applied for in last 5 years, 0 otherwise	24.1	22.5	27.7
No bad credit history	= 1 if did not apply for credit in last 5 years, or received credit applied for, 0 otherwise; used as base	28.6	31.7	21.5
Bank account ownership	= 1 if have checking , savings or money market account, 0 otherwise	82.2	87.2	70.3

Table 2.
Type of Saver by Income Group

	Percent of households in income category		
	Current Saver (income greater than spending)	Usual Saver*	Saver (*either* current or usual savers)
Total sample**	28.4%	68.2%	70.3%
Income 100% of poverty or less	23.2	57.9	60.9
101-150% of poverty	24.4	66.9	69.5
151-200% of poverty	28.4	70.7	72.8
201-300% of poverty	35.3	76.6	77.8
Provided for comparison only (not used in analysis)			
All U.S. households	41.7%	77.9%	79.6%
Over 300% of poverty	56.0%	88.3%	89.5%

* Usual saver = usually put aside money regularly, save out of other income, save the income from one family member while spending the other's income, save what is left over at the end of the month

**Among the poor and low income sample, 26.2% were *both* current *and* usual savers, 42.0% were usual savers only, 2.1% were current savers only, and 29.7% did not save.

(more than 5 years old) and newer cars to the reference category of having no car.

Family members also may be both resources and demands for households. We include a set of binary measures of family size, with a two-person household as our reference category. We also include a measure of whether there are children under 18 in the household.

Institutional Environment

As posed by Brobeck (1999) and Sherraden (1999), households with access to financial institutions, such as banks and credit unions, and appropriate financial instruments (for example, basic banking accounts or other accounts with low minimum balances to open and maintain) may be more likely to be savers than those without such access.

Region is included primarily as a control for the locational effects related to the poverty threshold measures. However, region also provides some measure of the institutional environment. For example, in the Mid-Atlantic states (New York, New Jersey, Pennsylvania), both New York and New Jersey have basic banking laws that enable low income households with low levels of assets to obtain bank accounts. Region was included as a set of 9 binary variables with the Mid-Atlantic as the reference category. We also measure bank account ownership directly as a binary variable.

Credit history serves as a proxy for business policies that enable low-income households access to mainstream financial markets. Having a poor credit history is evidence of prior experience with financial institutions and markets but it also can be evidence of a lack of human capital to deal effectively with these institutions and markets. Households may be willing to deal with financial institutions, but the institutions may not want these consumers as customers. In fact, many financial institutions run credit checks on households applying for checking or savings accounts. Households may be denied an account if they have a poor credit history. The SCF includes a measure of whether or not a household applied for a loan, and then, if so, whether they were accepted, rejected, or received a lesser loan amount. Households who did not apply for a loan fall into two groups: those who never applied for a loan because they didn't need a loan and those who did not apply because they thought they wouldn't get the loan due to poor credit records. We use these variables to create a set of three binary variables: those who did not apply because they thought they would be rejected; those who applied and were rejected or given less credit than applied for (a rejection of sorts); and those who give no indication of having bad credit history experiences (they applied for and received their loan or they did not apply for a loan).

Analysis

We began with simple descriptive statistics, looking at proportions of households in different income groups who were current savers, usual savers, and savers, per our definition (current *or* usual saver). Next we calculated the asset holdings among households by their income relative to the poverty threshold. We then explored the liquidity of their financial assets by looking at assets that were immediately liquid and moving along the liquidity continuum to assets that would require up to two weeks to become liquid (note that we deal only with financial assets, not real property that might take longer to liquidate). In this descriptive analysis, we use all five implicates in the SCF and apply appropriate weights.

For the multivariate model, given our binary dependent variable, we used logit to estimate the determinants of being a saver. In order to work with the five implicate data sets of the SCF, we used a Repeated Imputation Inferences (RII) technique developed by Rubin (1987) for analysis of multiply imputed data (see Montalto and Sung, 1996). The RII "averages" the parameter estimates and standard errors across the five implicate data sets, providing a more stringent test of significance. Montalto and Yuh (1998) have developed a SAS application for nonlinear models and multiply-imputed data. Although the SAS RII procedure produces a single parameter estimate, it does not calculate an averaged odds ratio; rather odds ratios for each implicate data set are reported. Furthermore, the parameter estimates and accompanying range of odds ratios are not particularly "user friendly" when interpreting the effects of a given variable. Therefore, as a second step, we used Stata to repeat the logistic regressions and generate the marginal effects of the variables in each of the five implicates. We report the RII parameter estimates, the range of odds ratios produced by the five logit estimations, and range of marginal effects for the five estimations.

Table 3.
Assets of Households, by Relationship to Poverty Level
(for all households; means and medians include households with no asset holdings)

	All U.S. Households	100% of poverty or less	101-150% of poverty	151-200% of poverty	201-300% of poverty
Net worth					
Mean	$282,450	$46,251	$63,005	$85,761	$116,378
Median	71,700	4,260	16,700	27,510	50,400
Financial assets*					
Mean	134,070	14,134	19,135	32,523	46,540
Median	17,320	350	1,480	3,700	12,730
Non-financial assets**					
Mean	195,928	41,811	59,257	76,259	98,452
Median	84,600	4,200	16,800	41,300	70,800
Non-financial assets, homeowners					
Mean	285,135	109,434	110,169	123,887	140,302
Median	130,900	63,600	82,300	90,000	98,300
Non-financial assets, non-homeowners					
Mean	20,692	4,303	9,094	8,445	14,415
Median	4,200	0	3,000	3,900	6,400

* Financial assets = Checking, savings, money market accounts, call accounts, certificates of deposit, mutual funds, stocks, bonds, IRAs, thrift-type plans, savings bonds, cash value of whole life insurance, annuities, trusts, other financial assets
** Non-financial assets = Vehicles, houses, other residential real estate, nonresidential debts held, business interests, other non-financial (boats, art, jewelry, etc.); these are gross values (not net of debt).

Results

Saving Behaviors of the Poor

Among the poor and low income in our sample, 28 percent said their income exceeded their expenses last year, and 68 percent said they usually save (Table 2). Seven out of ten (70%) poor and low-income households indicated that they were *either* current *or* usual savers—our definition of saver for this study. It is important to keep in mind that some households may be purposefully setting aside money in savings and counting that as an expense; thus, they would report their income is equal to their expenses (counting savings as an expense) and they would not be considered a current saver by our definition. However, these same households would probably report that they "put aside money regularly" and they would be counted as a usual saver by our definition. Although not shown in Table 2, 26% of all households indicated they were *both* current *and* usual savers, 42% were usual savers only, 2% were current savers only, and 30% did not save.

Not surprisingly, the proportion of savers increased with income. Among the poorest households, those at or below the poverty threshold, 23 percent indicated that they were current savers and 58 percent indicated they usually save. The proportion of current savers changed only slightly in the next income category (24%), while the proportion of usual savers rose to 67 percent. Even at incomes of two to three times the poverty threshold, only 35 percent said they were current savers, while 77 percent said they usually save.

Thus, it seems that the poor can save. About one fourth of the poorest of the poor indicated they spent less than their income. Furthermore, three-fifths of these households indicated they usually save. Overall, between 60 and 70 percent of poor and low income households could be classified as savers under our definition.

What Are the Financial Assets of the Poor?

Even though the poor may save, we would not expect them to have large pools of assets, and in fact this is the case (Table 3). While the median net worth for all households was $71,700, the median net worth for households at or below poverty was only $4,260. Net worth is clearly correlated with income, rising steadily across the income categories.

The assets included in net worth may not be very liquid, however, and many financial planners and educators advocate looking at *financial* assets (versus nonfinancial assets, such as real property) as a measure of economic well-being. Among households at or below poverty, the median value of financial assets was $350. This may be enough to help out a household with a small emergency (replacing a car battery or a tire), but it may not cover other shocks to the budget such as medical bills or a spell of

unemployment. Even for households in the next category above poverty, the median financial asset level was only $1,480.

Given these very low levels of financial assets, we explored non-financial assets that might be available to families. In most cases, the value of non-financial assets closely paralleled the net worth values for the income groups. We separated homeowners from non-owners to further understand the role of non-financial assets in the savings portfolio of poor households, and it is here that the largest differences occur. For the poorest households, the median value of non-financial assets for homeowners was $63,600 while for non-owners it was zero. In fact, for households at or below 150 percent of poverty, the value of homes seems to be the driving force in the calculation of their net worth. While this is not surprising, it is hard to make a more compelling case for the role that home ownership plays in the financial well being of low income families – if you have a home, you have something to fall back on; if you don't, you have nothing.

Can the Poor Meet Short-Term Emergencies?

With only $350 to $1,480 in financial resources, the most obvious answer to this question is "probably not." However, there is not only a level of resource question but also a liquidity question implicit in meeting emergencies (see Table 4). If an emergency requires immediate liquidity, the picture is even bleaker – among households at or below poverty, the median amount immediately available for meeting emergencies is $100. It is worth noting that 38 percent of these households have no immediately liquid funds; for those that do, the median value is $530. Families in the next income group (101 to 150 percent of poverty) have a few more liquid resources; 83 percent have some immediately liquid funds, and the median value for these households is $980.

Table 4.
Liquidity of Asset Holdings by Poverty Level

	All U.S. households	100% of poverty or less	101-150% of poverty	151-200% of poverty	201-300% of poverty
Immediately liquid					
Mean	$15,231	$2,151	$4,184	$6,037	$8,409
Median	2,500	100	600	1,100	1,800
% Holding	90%	62%	83%	90%	95%
Mean*	16,869	3,464	5,041	6,686	8,867
Median*	3,100	530	980	1,500	2,000
Liquid in 24 hours					
Mean	6,674	1,446	3,576	4,697	5,312
Median	0	0	0	0	0
% Holding	30%	10%	22%	28%	30%
Mean*	22,029	14,801	16,063	16,880	16,607
Median*	4,350	5,000	5,000	4,000	3,100
Liquid in 2-4 days					
Mean	52,800	2,653	3,588	8,999	11,094
Median	0	0	0	0	0
% Holding	29%	5%	11%	16%	22%
Mean*	179,493	53,316	34,153	56,706	50,516
Median*	26,000	16,000	11,000	13,000	11,000
Liquid in 7-14 days					
Mean	22,615	5,380	5,634	5,746	9,307
Median	0	0	0	0	0
% Holding	39%	22%	31%	33%	35%
Mean*	58,572	24,235	18,209	17,332	26,410
Median*	8,500	2,700	4,000	3,200	6,400
Liquid in 7-14 days but with penalty					
Mean	35,426	1,953	1,982	6,158	12,043
Median	0	0	0	0	0
% Holding	48%	9%	15%	32%	46%
Mean*	73,341	21,644	13,314	19,045	26,111
Median*	23,000	5,000	4,500	5,000	10,000

Immediately liquid: checking, savings, money market accounts, call accounts.
Liquid in 24 hours: CDs, savings bonds.
Liquid in 2-4 days: stocks, bonds, mutual funds.
Liquid in 7-14 days: cash value of life insurance, other managed assets, other financial assets.
Liquid in 7-14 days but with penalty: IRA and thrift-type retirement plans.
* Mean and median of those holding the asset

If a household has a bit more time to respond to an emergency, do they have access to more funds? The answer for households at or below 150 percent of poverty again seems to be "no." The numbers in Table 4 are depressingly consistent – the median value for all poor households for assets such as CDs, savings bonds, stocks, bonds, mutual funds, and so forth is zero. The median values of these assets for those holding such funds is fairly reasonable -- $5,000 for assets that can be liquid in 24 hours and$11,000 to $16,000 for assets that can become liquid in 2 to 4 days. However, it is important to note that low proportions of poor households hold these assets – only 10 percent of households at or below poverty have assets that can be liquid in 24 hours and only 5 percent have assets that can be liquid in 2 to 4 days.

The picture is very much the same for assets that can be liquid in one to two weeks. Here, however, 22 to 31 percent of households hold such assets. The driving force in this category is life insurance, which even most low-income households have in one form or another.

What Are the Determinants of Being a Saver among Poor Households?

Socioeconomic and demographic characteristics of the households were significant determinants of being a saver, as were measures of expectations and motivations, access to resources and demands on the households, and the institutional environment Descriptive statistics for the regressors are given in Table 1; the regression parameters, range odds ratios and marginal effects are given in Table 5.

Socioeconomic and Demographic Characteristics

Not surprisingly, as income goes up, the likelihood of being a saver goes up. Households with incomes between 101 and 200 percent of the poverty threshold were no different from those at or below poverty. However, households between 201 percent and 300 percent of the poverty threshold were 1.4 times as likely to be savers. This finding only confirms what others have found – there is some absolute minimum level of income – at least twice the poverty threshold – needed to meet expenses before households can begin to save.

Compared with high school graduates, households with less than a high school education were only 70 percent as likely to be savers. Many researchers make the extension from education to financial education, implying that more educated households somehow have more financial savvy. We wish that were the case. It is more likely that education here is simply a proxy for general economic awareness and exposure.

Hispanic households were more likely to be savers than whites. There were no differences between Blacks and whites or other races and whites. This finding is intriguing for the cultural differences it implies, and needs further exploration, perhaps with some qualitative research.

Expectations and Motivations Households who experienced raises in income that outpaced inflation were 1.5 times more likely to be savers than those whose income kept pace with or fell behind price increases. Those who expected their incomes to continue to outpace inflation over the next year were 1.6 times as likely to be savers, while families who expected a major expense in the next 5 to 10 years were 1.2 times as likely to be savers. Those who reported having some reason for saving were over 6 times more likely to be savers; this was the largest effect found in the study.

Households with short-term planning horizons (a year or less) were only half as likely to be savers as those with long-term planning horizons. This finding complements much of the anecdotal evidence in the personal finance counseling field that many households lack a long-term perspective.

Resource Access and Demands Households with younger children were only half as likely to be savers as those with no children under 18 in the household, an indication that children in the household function more as demands on the household than as resources for the household to draw upon. Households with access to some type of health insurance coverage were 1.4 times as likely to be savers, evidence of the importance of this coverage for low income households. Households with a newer car were 1.6 times more likely to be savers than those with no car, indicating that vehicles may be serving more as a resource than a drain on household savings.

Institutional Environment Among the regional variables, only those living in the East-Northcentral states (IL, IN, MI, OH, WI) were significantly different from those in the Mid-Atlantic. Thus, while basic banking policies may influence access to bank accounts, further research is needed to verify and clarify these relationships. Households who were rejected for credit or did not get as much credit as they applied for were half as likely as those with no bad credit history to be savers. It is tempting to say

Table 5.
RII Logistic Regression Parameters, Odds Ratios and Marginal Effects for Being a Saver
(1= current or usual saver; significant results appear in **bold**)

	RII parameter estimate	Probability/ significance level	Range of odds ratios	Range of marginal effects
Intercept	-1.70	0.001	--	--
SOCIOECONOMIC & DEMOGRAPHIC CHARACTERISTICS				
Income				
100% of poverty or less	Base			
101-150% of poverty	0.26	0.15	1.2-1.3	0.040-0.054
151-200% of poverty	0.23	0.30	1.1-1.4	0.018-0.066
201-300% of poverty	**0.40**	**0.04**	**1.3-1.6**	**0.060-0.094**
Education				
Less than high school	**-0.36**	**0.02**	**.67-.71**	**-0.080-0.067**
High school graduates	Base			
Some college	-0.22	0.21	.75-.83	-0.058-0.036
BS or more	-0.09	0.64	.87-.96	-0.027-0.006
Race/ethnicity				
White	Base			
Black	0.23	0.22	1.2	0.035-0.049
Hispanic	**0.55**	**0.01**	**1.7**	**0.094-0.103**
Other race	0.29	0.46	1.1-1.4	0.018-0.068
Marital status				
Married	Base			
Single male	-0.13	0.54	.85-.91	-0.031-0.018
Single female	0.01	0.96	.97-1.0	-0.005-0.008
Age	-0.01	0.31	.99	-0.001
Working status				
White collar	0.05	0.84	.98-1.0	-0.003-0.012
Blue collar	-0.08	0.70	.88-.93	-0.025-0.013
Retired	0.10	0.69	1.0-1.1	0.010-0.026
Unemployed-looking for a job	0.23	0.43	1.2-1.3	0.037-0.049
Unemployed – not looking	Base			
EXPECTATIONS & MOTIVATIONS				
Expect economy to be better over next 5 years	0.02	0.86	1.0	0.001-0.008
Expect higher interest rates over next 5 years	0.10	0.43	1.0-1.1	0.015-0.024
Income rose more than prices over last 5 years	**0.45**	**0.04**	**1.4-1.6**	**0.073-0.092**
Expect income will go up more than prices next year	**0.51**	**0.001**	**1.6-1.7**	**0.090-0.102**
Expect a major expense in next 5-10 years	**0.28**	**0.03**	**1.2-1.3**	**0.051-0.059**
Have a reason to save	**1.86**	**0.001**	**6.2-6.6**	**0.422-0.436**
Planning horizon				
Short term (<= 1 year)	**-0.58**	**0.01**	**.53-.57**	**-0.124 -0.111**
Medium term (2 -10 years)	-0.08	0.73	.87-.96	-0.026 -0.006
Long term (10+ years)	Base			

Table 5 (continued).
RII Logistic Regression Parameters, Odds Ratios and Marginal Effects for Being a Saver
(1= current or usual saver; significant results appear in **bold**)

RESOURCE ACCESS/DEMANDS				
Home ownership	0.15	0.31	1.1-1.2	0.019-0.037
Household size				
1	0.07	0.70	.99-1.1	-0.001-0.027
2	Base			
3 or more	0.13	0.49	1.1	0.019-0.034
Have children under 18	**-0.53**	**0.01**	**.55-.64**	**-0.119-0.107**
Have health insurance coverage	**0.39**	**0.01**	**1.4-1.5**	**0.072-0.094**
Vehicles				
No car	Base			
Old car (6 years old or more)	0.24	0.12	1.2-1.3	0.038-0.053
New car (5 years old or less)	**0.52**	**0.01**	**1.5-1.8**	**0.079-0.110**
INSTITUTIONAL ENVIRONMENT				
Region				
New England	0.28	0.44	1.2-1.4	0.038-0.062
Mid-Atlantic	Base			
South Atlantic	-0.02	0.92	.90-1.0	-0.019-0.012
East S. Central	-0.15	0.56	.76-.91	-0.055-0.018
East N. Central	**0.39**	**0.08**	**1.3-1.5**	**0.058-0.078**
West N. Central	0.09	0.74	1.0-1.1	0.003-0.028
West S. Central	0.11	0.65	1.0-1.2	0.004-0.035
Mountain	-0.29	0.31	.65-.85	-0.091-0.032
Pacific	0.24	0.30	1.2-1.3	0.036-0.061
Credit history				
Did not apply	0.02	0.88	1.0	0.001-0.007
Rejected	**-0.60**	**0.0004**	**.54-.57**	**-0.129-0.116**
No bad credit history	Base			
Bank account ownership	**0.62**	**0.0002**	**1.7-1.9**	**0.123-0.146**
N Saver	1183			
Non-Saver	500			

RII Model F Statistic 37.459 (10,1915), significant at .001
Range of Pseudo R^2 = 0.13-0.14
Range of predicted probabilities = 0.7268 to 0.7323

that a poor credit record is evidence of poor financial management and thus it is not surprising to find out these consumers are not savers. However, another explanation is that many financial institutions now perform credit checks on consumers who want to open up deposit accounts. Thus, it may be difficult for consumers with a bad credit record to become savers if they cannot open an account.

Not surprisingly, households with some type of bank account were 1.8 times as likely to be savers as those without a bank account. Of concern here is that savers have access to a safe place to keep their savings; merely setting money aside (the proverbial "money under the mattress") not only is unsafe but also causes the household to miss out on interest income and the effects of compounding.

Marginal Effects and Simulations of the Probability of Being a Saver The marginal effects generated by Stata give an indication of the magnitude of change in the probability of being a saver that is associated with a change in the independent variables. For example, the largest marginal effect was for having a reason to save, which increased the probability of being a saver by about 42 basis points. A problem with these marginal effects is that they cannot simply be applied to the mean probability (in this case, predicted by the Stata models to be in the range of .72 to .73). However, it is possible to construct simulated probabilities of being a saver using the RII logistic regression parameters and manipulating the values of the variables of interest. There are at least two possible ways to do this (see Greene, 2000, Chapter 19). One is to use the regression parameters with the individual respondent's values, calculate individual probabilities, and then look at the mean probability among the subgroups of interest (for example, calculate the probability of each individual being a saver, and then compute the mean probability for those with and without a reason to save).This technique allows the researcher to answer the question, "If I were to make a random draw among all households without a reason to save (or the variable of interest), what is the expected value of the 'probability of being a saver' I would find?" An advantage of this technique is that it is based on the actual values of the individual's variables and does not force people to be "average." However, to the extent that some variables are highly correlated with each other (for example, having a reason to save and having children under 18 [who may go to college]), it really does not hold "all else constant" (that is, the average probabilities may really reflect the effects of children rather than having a reason to save).

Another technique is to use the regression parameters and the mean values of the independent variables to calculate the probability of being a saver. Then, holding all else constant, various values for the variable of interest can be substituted into the equation (for example, substituting values of 1 and 0 for having a reason to save to compare the probability of being a saver for those with and without a reason, all else constant). This technique allows the researcher to answer the question, "Holding all else constant, what difference does having a reason to save make on the probability of being a saver?" The advantage of this technique over the one above is that it is based on the "all else constant" premise, which allows a slightly better estimation of the variables' effects. A disadvantage is that it makes use of mean values which may not really be present in the data (people either have health insurance or they don't [observed as a 0 or a 1]; they do not have ".79" health insurance). Nonetheless, because this technique allows us to evaluate effects holding all else constant, we have opted to use it. Overall, the models' predicted probability of being a saver evaluated at the means was 0.702 (the actual proportion of savers in the sample was 0.703; see Table 2).

The central focus of this paper is whether the poor can save, and, as a corollary, how behaviors can be changed to increase the proportion of savers. The simulations provide some guidance on where changes – whether education or policy-based – may make a difference. Clearly, one way to help increase saving among the poor is to make them less poor -- moving from the poverty threshold to over 200 percent of the poverty threshold increases the probability of being a saver by 8 basis points (from .653 to .737, see Table 6). Education also seems to help people become savers; moving from not having a high school diploma to having a diploma or GED increases the probability of saving by 7 basis points (from .66 to .73).

The largest potential effects seem to be associated with motivating people to save by helping them identify a goal or a reason for savings – moving from having no reason to save to having a reason to save increases the probability of being a saver by 43 basis points (from .30 to .73). Encouraging people to think into the longer-run future also may increase the probability of being a saver; moving from a short-term time frame to a long-term time frame increases the probability by 12 basis points (from .64 to .76).

Table 6.
Simulation of Being a Saver, by Selected Attributes

Variable	Probability of being a saver*
Full model	0.702
SOCIOECONOMIC & DEMOGRAPHIC CHARACTERISTICS	
Income	
100% of poverty or less	0.653
201-300% of poverty	0.737
Education	
Less than high school	0.657
High school graduates	0.733
Race/ethnicity	
White	0.680
Hispanic	0.786
EXPECTATIONS & MOTIVATIONS	
Income rose more than prices over last 5 years	0.779
Income did **not** rise more than prices over last 5 years	0.692
Expect income will go up more than prices next year	0.778
Expect income will **not** go up more than prices next year	0.678
Expect a major expense in next 5-10 years	0.731
Do not expect a major expense in next 5-10 years	0.673
Have a reason to save	0.731
Have **no** reason to save	0.297
Planning horizon	
Short term (<= 1 year)	0.638
Long term (10+ years)	0.759
RESOURCE ACCESS/DEMANDS	
Have children under 18	0.632
Have **no** children under 18	0.745
Have health insurance coverage	0.719
Have **no** health insurance coverage	0.634
Vehicles	
No car	0.647
New car (5 years old or less)	0.755
INSTITUTIONAL ENVIRONMENT	
Region Mid-Atlantic	0.664
East N. Central	0.745
Credit history Rejected	0.597
No bad credit history	0.730
Have bank account	0.725
Have **no** bank account	0.586

*Evaluated at the means for all variables; discrete changes in binary variables from 0 to 1 were made for each comparison. For example, to evaluate the effects of income, the model was evaluated at the means for all variables except for income, where 0-1 values were used first for 100% of poverty and then for 201-300% of poverty. Only significant variables were evaluated.

Access to health insurance coverage increases the probability of being a saver by over 8 basis points (from .63 to .72). Helping people clean up their credit records may also increase the probability of being a saver; moving from being rejected because of a bad credit record to having no bad credit record problems is associated with a 13 basis-point increase (from .60 to .73). Having a bank account is associated with a 14 basis-point increase in being a saver (from .59 to .73), all else constant.

Discussion and Conclusions

This paper explored four key questions about savings and poor families:

- *Can the poor save?* We found that 60 percent of households at or below poverty and 70 percent of household between 101 and 150 percent of poverty indicate that they save.

- *What are the financial assets of the poor?* Values of financial assets for poor households are quite low, ranging from $350 to $1,480 at the median. The value of net worth for the lowest income groups is driven almost entirely by being a homeowner and our data make a compelling case for home ownership programs for low-income families.

- *Can the poor meet short-term emergencies?* The answer here appears to be "probably not." Overall, poor households have low levels of financial assets that could be used to meet emergencies, although the assets they do have tend to be highly liquid (immediately liquid or liquid within a 4 day time frame). Furthermore, low proportions of poor households hold anything other than checking and savings accounts and life insurance.

- *What are the determinants of savings among poor households?* Income, education, race/ethnicity, expectations, motivations, planning horizon, presence of children, access to health insurance, vehicle ownership, region, credit history and bank account ownership were significant determinants of being a saver. Specifically, households are more likely to be saver if they:
  - Have income over twice the poverty threshold (relative to being at the poverty threshold or less)
  - Are high school graduates (relative to not having a high school degree)
  - Are Hispanic (relative to being white)
  - Had income that rose more than inflation over the past 5 years
  - Expect income will rise more than inflation
  - Expect a major expense in the next 5 to 10 years
  - Identify a reason to save

- Have a longer term (10 years or more) planning horizon (relative to a planning horizon of a year or less)
- Have no children under 18
- Have health insurance coverage
- Have a newer car (5 years old or less, relative to not having any car)
- Live in the East North-Central states (relative to the Mid-Atlantic)
- Have no bad credit history (relative to being rejected for credit)
- Have a bank account.

Among these, having a reason to save, planning horizon, credit history, and having a bank account had the largest effects.

Our findings indicate that there is willingness, if not an ability, to save among poor households. If 60 percent of households at the poverty level say they are saving, the potential exists to reach others. The task for policy makers and community educators is to find ways to help households become not only willing but also able to save. Certainly programs that support steady income will make a difference. It also appears that there may be a role for financial education, both in the schools and at the workplace. While work status was not significant in our analysis, there may still be a role that workplace policies and workplace financial education can play in encouraging savings by helping households identify reasons to save.

The results with respect to planning horizons pose significant implications for financial education. Financial educators and counselors have known for a long time that families who focus on short-term needs can get themselves into trouble with credit and often lack resources for longer term goals, whether it be money for a down payment on a home or for retirement. Helping families understand the consequences of short-term decisions on long-term outcomes may help them develop the motivation and discipline needed to become a saver.

Related to this, having a reason to save is clearly important. Financial educators can help families clearly identify their savings goals, as well as helping them identify a clear plan to achieve those goals. For example, if a family wants $8,000 for a down payment for a home in three years, and expects to earn 4% interest on their money, they would need to save $209 per month, or $48 per week, or $6.87 per day. Bringing savings down into concrete, manageable figures may help households not only set but also reach their goals.

There may be some institutional barriers in the financial services industry to overcome. Community development financial institutions may play an important role in helping poor households to save by improving access to financial institutions and making appropriate savings instruments available to these households. A special group of community development credit unions focus on serving low-income audiences. Financial educators may want to form partnerships with these institutions to develop and deliver financial education program related to savings.

We realize that our measure of saving can be criticized. Ideally, we would have actual measures of household saving. For example, it would be good to look at differences in account balances over a period of time, netting out effects of appreciation in real estate or rising prices for stocks. Information on contributions to savings accounts and retirement accounts would also be helpful. As with most research projects, however, we are limited by available data, although Kennickell's 1995 work provides some reinforcement for our measure.

This research did not address a number of issues raised by others that we believe are valid. For example, we had no way to explore the role played by community or kin support and encouragement – the social support network that Sherraden and Brobeck have incorporated into their savings demonstration programs. Such a support network may be especially important in helping people over the institutional hurdles they face.

In a similar vein, we were not able to address the effects of incentives – or disincentives -- on savings. Many of the poor families at or below 150 percent of poverty may also be on welfare. Although most families know there are asset limits for their state welfare programs, the chances are they do not know what these asset limits are, and, more importantly, they tend to underestimate these limits (see, for example, Marlowe, Godwin, and Maddux, 1996). Given an implicit 100 percent tax rate (a loss $1 of welfare benefits for every $1 over the asset limit), this underestimation is the perfectly understandable, risk-averse approach to take. However, the ultimate outcome is that families have lower levels of savings than they are allowed – the misperception of the barrier is as much a problem as the barrier itself.

A logical next step is to look at levels of savings among poor and low-income households in a multivariate framework. Such a model can help community educators identify ways to help people

accumulate enough funds to meet emergencies that may keep families on their feet. Ideally, the model would incorporate the demographic, sociological, psychological and institutional variables proposed by Beverly and Sherraden (1999).

Nonetheless, our model of the likelihood of being a saver has shed some light on factors affecting being able to save. Our results support and reinforce previous studies – if we want poor households to become savers, policy makers and educators need to keep in mind that income matters, other resources matter, education matters, race matters, expectations and motivations matter, access to health insurance matters, and the institutional environment matters. Policies that enable families to maintain labor force attachment and earn a livable income have the potential to foster savings. Policies that promote asset accumulation will facilitate savings, as will financial education that provides families with the tools to help them set financial goals, maintain solid credit records, and help them save.

Endnotes

a. *"Poor" is generally used in reference to the poverty threshold; in 1997 (the data used for this study), the weighted average poverty threshold for a 2-person household was $10,473 while for a 4-person household it was $16,400. In this study we generally use "poor" to refer to those at or below 150% of the poverty threshold (e.g. below $15,700 for a 2-person household and below $24,600 for a 4-person household) and "low income" to refer to others who are between 150% and 300% of the poverty threshold (e.g. between $15,700 and $31,400 for a 2 person household and $24,600 and $49,200 for a 4-person household). For ease of exposition, however, we tend to use these terms interchangeably.*

b. *The terminology of "resources" and "demands" is from the field of family resource management. Deacon and Firebaugh (1988) define "resources" as means capable of meeting demands and "demands" as goals and/or events requiring action. In this paper, a resource is a non-financial asset – such as having health insurance, a vehicle, a home, or family. Demands are events (illness, car problems, broken appliances, leaky roof) that may prevent households from being able to save.*

c. *Alternatively, owner-occupied housing is viewed by some as an investment or as a stream of housing services. While these households may recognize they are building equity in their homes, they may not view this as a form of saving to be tapped if needed.*

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