New Savings from Old Innovations: Asset Building for the Less Affluent

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In this paper, we review data on U.S. household savings, especially by less-affluent households, discuss theories of savings, and the impediments to savings. These impediments are a combination of factors that influence behavior by households and financial service firms. We discuss a number of innovations, largely adapted from experience with more-affluent financial service consumers, that might increase savings. These innovations either stimulate the demand for savings by providing incentives for families to save or making it easier for them to save; or they stimulate the supply of savings by making it easier or more cost effective for business organizations to serve this population.

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"(We should) focus on the 100 million who are investors and not try to cover "pre-investors" who should focus on saving…"

Private Communication with Author, Summer 2004

While the rich and poor both have the need and the desire to build financial assets to enable them to meet important life goals, there is a false dichotomy that is captured in the quote above. Taken from an exchange with a successful financial services executive, it signifies the perception that the rich "invest," but the masses, at best, "save." What differentiates the wealth building activities of the rich and the rest of society to justify this use of different language? Is it because the less affluent tend to "save" in banks and the rich "invest" in mutual funds and hedge funds? Or because the less affluent tend to buy low-risk products and the rich buy higher risk products? If so, then would a rich person's holdings in bank products or money market mutual funds not constitute part of their "investing" strategy? Is planning for short-horizon goals just "savings" and long-horizon goals "investing?" Trying to differentiate savings and investment based on institutional features seems to be an impossible task.

This is because, in the financial system, a dizzying number of terms describe the same function and seemingly different products and institutions often serve identical needs. To see past these institutional definitions, the functional approach to defining the financial system (Crane et al. (1995)) suggests that activities can be decomposed into the set of core functions that they perform. Saving (or investing) addresses two core functions: moving money across time/space and risk management. In either activity, the saver/investor moves money across time because the she reduces her consumption today to consume more tomorrow, perhaps when it is necessary to fund a child's education or to retire. By saving/investing, she engages in risk management to protect herself from various risks (unemployment, poor health, etc) or to diversify her investments.

Along these dimensions, savings by the poor and investing by the rich are identical. These functions (moving money across time and space and managing risk) are timeless and common to all people. In part, this likely explains why some prefer to use the broader term

"asset building," although even this term ignores important risk-management motives for savings.[1]

Adopting a "functional approach" to understanding the problems of helping less affluent families to save leads us to consider a broad range of institutions and possible solutions. Supporting savings for the less affluent is not a "banking" problem or a "mutual fund" problem; it is not merely about time deposits or about stocks and bonds. Rather, it is a generic problem which can be best understood in terms of simple root causes: diseconomies of small scale and poor information flows. It is a problem whose solution is likely to be found in many different institutions and products.

Adopting a functional approach might mistakenly seem to suggest a naiveté about institutional details or an ignorance of the differences between savings by the more and less affluent. To the contrary, we recognize that while the need to save may be common to rich and poor, their specific preferences—and the institutions that vie to serve them—are not alike. As we will discuss, government policies differentially encourage asset building among the more and less affluent, financial service firms have distinct preferences between serving them, and these families may have different risk tolerances which lead to different goals and practices.

This chapter surveys a wide range of material, providing data on savings activities, summarizing theories of savings, and hypothesizing why financial institutions have little interest in low-income families. However, our ultimate goal in this chapter is to be prescriptive. In the financial sector, financial innovation has been a powerful engine of change and growth.[2] Many financial innovations—in both policy and business practice—primarily serve more well-to-do families. We discuss a number of innovations or practices that might be re-adapted to support asset building by low income families. Thus, while the financial service sector has been

[1] For the sake of clarity, we use the term "saving" for the remainder of the paper.
[2] Merton, R.C., (1992), Financial innovation and economic performance, Journal of Applied Corporate Finance 4(4), 12-22.

enamored with the “truly affluent” and recently-dubbed the “mass affluent,” we seek to address the real mass of society: the less affluent who are make up most American families.

Basic Savings Facts

The two primary measures used in discussions of asset building are new savings, as a percent of income, and total wealth, as a dollar amount saved. New savings represents the flow of money that accumulates to create the stock of total wealth. Wealth, or net worth, is the difference between assets (financial plus nonfinancial assets) and liabilities (debt.)

To begin this discussion, we ask three basic questions about savings and assets 1) who saves and holds assets?, 2) in what form do people save and hold assets?, and 3) how do US savings rates and wealth holdings compare internationally?

Savings Outcomes: Who Saves? Who Holds Wealth? Over the past fifty years, researchers have developed a relatively large literature on the determinants of saving and asset holdings. This body of work examines the demographic and financial characteristics of savers and those who have wealth.

Income, perhaps more than any other factor, has been shown to determine both savings and asset holdings. Early work by Friend and Schor (1959) and Projector (1968) documents a link between household savings rate and current income. Later studies (Avery and Kennickell (1991), Browning and Lusardi (1996), and Hugget and Venture (1996)) confirm this association. Projector and Weiss (1966) find a similar association between income and asset holdings, showing that households with higher income levels accumulated more wealth. Hurst, Luoh, and Stafford (1998) also detail the wealth-income association using data from the 1990s.

The 2001 wave of the Survey of Consumer Finances provides additional evidence of these relationships through basic bivariate comparisons between income and savings rates and asset holdings. Families in the lowest income quintile, with average income of $10,000, were far less likely to save at all than families in higher income brackets. Only 30% of families in the

lowest income bracket, and only 53% of families in the second lowest bracket, saved at all as opposed to 84% of the highest income families. However, while the correlation between savings rates and income is fairly clear in the literature, this is not to say that low-income families cannot save. Recent evidence from the American Dream Demonstration project shows that low-income families, particularly when given incentives and provided with financial education, can save (Schreiner, Clancy, and Sherraden (2002); Mills (2004)).

This savings gap is accompanied by a gap in asset ownership. Families in the three highest income quintiles were 33% more likely to hold any kind of financial asset than families in the lowest income quintile. Higher income families were also more likely to hold non-financial assets. Those in the top two quintiles of income were more than twice as likely to own their own home as families in the bottom quintile and were also more likely to hold other real estate equity, own a car, or have equity in a business.

Household income can be dynamic, shifting as household members age and change jobs, and a number of studies have attempted to take this into account by substituting current income with proxies for permanent income. Dynan, Skinner, and Zeldes (2000), find that higher levels of permanent income, derived using education, consumption, and past and future earnings, were also associated with higher rates of saving. Blau and Graham (1990), also proxy for permanent income and find a similar relationship between income and asset holdings. Measured on its own and not as a proxy component, education also has an effect on savings rate (Bernheim and Scholz (1993) and Attanasio (1994)) and on wealth (Keister (2000)) with higher levels of education associated with larger amounts of wealth and higher rates of savings.

Age also exerts a significant effect on savings and wealth. Older households tend to have more assets (Hurst, Luoh, and Stafford (1998) and Blau and Graham (1990)), though only to a point, as households begin to spend down assets in retirement (Friend (1952)). Older households save at higher rates as well, though this relationship also follows a “hump backed”

curve, with savings rates lowest for the youngest and oldest households (Attanasio (1993) and Bosworth, Burtless, and Sabelhaus (1991)).

While there is an intuitive relationship between income and age and savings and asset-holding that is bolstered by the literature, other factors also influence wealth and savings rates. Oliver and Shapiro (1997) discuss the role of race in asset holdings, pointing to 1988 data from the Survey of Income and Program Participation (SIPP) on the substantial gap between the net worth of black and white families. This gap persists. Data from the 2001 SCF places median white net worth at $120,900 as compared to only $19,000 for black families. The literature on the effects of race on saving and asset holdings suggests that, while income has some explanatory effect (Barsky, Bound, Charles, and Lupton 2001), black households have lower levels of wealth even controlling for other demographic and financial variables (Blau and Graham 1990, Oliver and Shapiro, 1995, Hurst, Luoh, and Stafford 1998, and Chetiji and Hamiltion, 2000). Earlier studies (Galenson 1972) find that black households did not necessarily have lower savings rates than white households of the same income. Attanasio (1994) finds continued support for this position.

Oliver and Shapiro (1997) offer one explanation for this disjuncture between very unequal asset holdings and fairly similar savings rates. They posit that this wealth gap is attributable in part to other demographic differences between whites and blacks; income, occupation, and education, but that much of this difference is due to a history of restricted access to homeownership for blacks and the limited degree to which blacks have been able to transfer wealth to succeeding generations. We will more fully examine the extent to which government has differentially helped some to build assets later in this chapter. While the various studies on race and wealth are generally not at odds, this area is quite complicated and Scholz and Leveine (2002) are right to conclude that “there is no consensus on this issue.”

The composition and structure of households has also been identified as a determinant of savings and wealth. Smith and Lupton (2003) and Chetiji and Hamilton (2000) find that

married couples have higher levels of assets than individuals living in other types of households, even when controlling for the income and wealth aggregation effects of marriage. Bosworth, Burtless, and Sabelhaus (1991) find that married couples also save at higher rates. Though most studies confine their analysis to the household unit, Chetiji and Hamilton (2000) take a broader perspective and find that having members of one's extended family living in poverty has a negative impact on the wealth holdings of middle-income households, presumably because the better to-do family members find themselves assisting their poorer relatives. Similarly, Keister (2000) finds that a larger family size and family disruption in childhood (through divorce or separation) also leads to lower wealth holdings in adulthood. Bird and Hagstrom (1999) buttress this finding in part, by arguing that, rather than poor family members directly depleting their relatives' savings, large families function as a form of insurance, decreasing the motive to hold emergency savings at all. (Social insurance, or public benefits, also may have an effect on savings.

How do People Save? When Americans do build wealth, they hold both financial and nonfinancial assets, and homeownership plays an important role. In 2001, 66% of households owned their own home and, in the aggregate, home equity made up 27% of total assets for all households (Aizcorbe, Kennickell, and Moore (2003) and Di (2003)). Home equity was particularly important for low-income families and minority families. Though fewer of these families owned their own homes, for those that did, home equity made up 77% and 55% of total household assets respectively (Di (2003)). While home equity is the single largest component of household wealth, large shares of households maintain assets in checking and savings accounts (91%), stocks (21%), and retirement accounts (52%) (Aizcorbe, Kennickell, and Moore (2003)). Together, financial assets made up 42% of total household assets (Di (2003)). Ownership of these assets, as well as of other non-financial assets, was not equal across households of different incomes. Compared to those households in the top decile of income, households in the bottom income quintile were far less likely to own stock (4% vs. 61%)

retirement accounts (13% vs. 88%), transaction accounts (71% vs. 99%), and vehicles (57% vs. 93%) (Aizcorbe, Kennickell, and Moore (2003)). Tables 1 and 2 present additional data on asset holdings by income quintile.

Americans also hold substantial amounts of debt. 75% of all households held some kind of debt in 2001, with roughly equal shares having home-equity loans, installment loans, or credit card balances (about 45%). Among those families holding any debt, the median value was $38,800, with home equity comprising the majority of that total. While on first glance, low-income families appear less likely to hold debt than families in higher income quintiles, these figures are slightly misleading (Aizcorbe, Kennickell, and Moore (2003)). Though only 30% of families in the lowest income quintile had credit card balances as opposed to nearly fifty percent of families in the 20^{th} – 90^{th} percentiles, the low-income families who had credit cards were much more likely to have outstanding balances. More than two thirds of families who had credit cards and made less than $10,000 had credit card debt as opposed to 55% of all card holding families. Low-income families have seen their credit card debt burden rise dramatically over the past 15 years, up 184% since 1989 to $1,837 (Draut and Silva (2003)).

Low-income families have also had to contend with a range of debt products that bear very high interest rates and extract high fees from borrowers. These include payday loans, generally with a maturity of two weeks and with effective APRs as high as 390%, and Refund Anticipation Loans, short term, high fee, loans offered by paid tax preparers that allow tax filers to receive their federal refunds several days faster than the IRS would send it (Barr (2004) and Berube and Kim (2003)). Additionally, low-income homebuyers and homeowners face predatory high-rate mortgages that are often targeted at low-income and minority communities (see Engel and McCoy (2004) this volume).

Economists and businesspeople often focus on net worth or wealth, which is defined as assets less liabilities,to provide the clearest picture of a household's financial health. The specific definition of net worth can vary, with some estimates taking into account all household

assets and all debts, while others, which may be more concerned with the short term ability of households to survive emergencies, may exclude home equity or other non-liquid assets. Based on the most expansive definition of net-worth, there is substantial inequality between households by income, age, race, education, and homeownership status.

Families in the lowest quintile of income had a median net worth of $7,900 in 2001, compared to more than $800,000 for families in the top decile of income. Older families also tended to have higher net worth as did homeowners, and families where the head of household had higher levels of education. White non-Hispanic families had median a median net worth of over $120,000 while nonwhite families had median net worth of only $17,000. The least affluent 25% of families had median net worth of only $1,100 and a mean net worth of $0 (Aizcorbe, Kennickell, and Moore (2003). During the 1980s and 1990s the top 20% of household by net worth posted the most substantial gains (increases in the mean net worth of 71%), while households in the bottom 40% actually experienced losses, with mean net worth declining 44% (Wolff (2004).

US Savings in the International Context. Compared to other nations, US households save less of their income and hold fewer assets. The US household savings rate (measured as a percentage of disposable household income) was 2.1% in 2003, well below that of other industrialized countries like Japan (6.4%), Italy (15%), the Netherlands (11.2%), Germany (10.8%), and the United Kingdom (5.7%) (OECD (2004)). See Table 3 for additional cross-national savings data. Borsch-Supan and Lusardi (2003)) find similar disparities using earlier OECD data. This is not a wholly new phenomenon. The US saving rate was below that of Japan, Germany, and Italy through the 1970s and 1990s, but has only recently dropped below that of the United Kingdom (Porteba (1994)). As a percentage of disposable income, in 2003, US households had lower levels of net wealth than households in Japan, German, Italy, and the United Kingdom. While US households also had the lowest level of non-financial assets relative to disposable income, they had one of the highest (second only to Japan) ratios of financial

wealth to disposable income (OECD (2004)). This difference may be attributable to homeownership patterns. In the UK, homeownership rates are higher than in the US, particularly among younger households, leading to greater non-financial asset holdings (Banks and Rohwedder (2003)). On a per-capita basis, these general trends hold. In 2001, US per-capita financial assets were higher than those of Japan and those of Germany, Italy, the UK, and France while the per-capita residential property assets of US households were the lowest of the six countries (Babeau and Sbano (2002)).

There is more scattered data available on the savings behavior and asset holdings of the poor in these countries. In Germany, low-income families in the bottom quartile of income tend to have much lower savings rates than better off families, with savings rates hovering between 0% and 5% over much of the life cycle as opposed to savings rates higher than 20% among families with incomes in the top quartile (Borsch-Supan, Reil-Held, and Schnabel (2003)). In Japan, low income households have lower savings rates than households with higher incomes, this difference manifests itself most clearly in the rates of dissaving among the elderly. While Japanese households over the age of 55 with incomes in the top three income quintiles continue to save at positive rates through old age, low income households dissave over this period (Kitamura, Takayama, and Arita (2003)).

Wolff (2002) tracks wealth inequality in the US, England, and Sweden and finds that the share of wealth held by the top 1% has been increasing since the 1970s in the US while declining fairly steadily in the UK and Sweden. He also calculates measures of wealth inequality in the US, France, Canada, Germany, Japan and Sweden for the 1980s and finds that the US has a greater degree of wealth inequality than the other countries in his sample by any measure.

How Much Wealth is "Too Little"? How Much is "Enough"?

Though US savings may be low by international standards, that does not necessarily suggest that Americans' savings are inadequate to meet national goals, such as having sufficient assets for capital formation, and personal goals, such as being able to fund retirement and survive emergencies. Below we address the question of how much wealth is "too little" and how much is "enough" to meet these national and personal purposes.

Macro-economic Approaches to Wealth and Savings Rates: Savings can have important effects on the national economy in two key ways. National saving (the sum of personal, corporate and government saving) represents the available stocks of capital for investment. That investment will ultimately determine the level of US income. Essentially, one sacrifices today to save in order to consume later.

Though personal savings rates have declined over the past 15 years, governmental saving (in the form of surpluses) compensated through the late 1990s. However, over the last several years, government saving has dropped significantly as federal deficits have risen. Net national savings (national savings less expected depreciation of capital stock) was 1.8% of net national income in 2003, a 70-year low (Orzsag (2004)). These low levels of national saving potentially threaten the ability of the US to provide capital for investment and thus to generate income in the future. Historically, the US has been able to turn to foreign markets for its capital formation needs. Consequentially, foreign ownership of the public debt has risen steeply since 2000 to a 40-year high of 37% (Gale (2004)). In the second quarter of 2004, foreign capital made up more than 66% of net domestic investment, more than 5% of GDP (Cooper and Madigan (2004)). Observers in government and business worry this imbalance is unsustainable and could lead to trouble for the US economy, possibly resulting in higher interest rates (Greenspan (2004) and Roach (2004)).

While the US appears to be saving too little from a macro-economic perspective, it is possible to save too much. By over-saving to the exclusion of being "consumers," individuals

can collectively depress consumption and spending to the point of economic recession. Japan may have run up against this problem in the late 1990s (Goad (1998)), but few are worried that the U.S. faces any real threats from a too-high savings rate.

Equity Approaches to Wealth and Savings. Equity concerns frame a second approach to US wealth and savings. Rather than examine the adequacy of personal savings to meet the requirements of the macro-economy, this perspective focuses on the distribution of wealth among households, particularly on the inequality of asset ownership between high income and low income and between African American and white households. This focus on equity arises from the idea that equal opportunity is tied closely to a diffusion of wealth throughout society. There is substantial wealth inequality among American households, which raises concerns about class mobility and democratic viability (Wolff (2002) and Sherraden (1991)).

Wolff (2002) tracks the share of total wealth held by the top 1% of households between the 1920s and the late 1990s. He finds that while the top 1 percent of the population owned 40% of US wealth (defined as net worth) in 1922, by the mid 1970s that figure had declined by half. Smith (1987) finds a similar decline in the share of assets held by the wealthiest 1% between 1972 and 1976. However, wealth inequality increased during the 1980s. By 1989, the top 1 percent of households again held nearly 40% of the wealth. The inequality in the distribution of wealth is neatly captured by the Gini Coefficient. When all wealth is held equally, the coefficient is equal to 0, the closer to 1, the more unequal the ownership of wealth. During the 1980s, the Gini coefficient rose sharply from 0.80 to 0.84 (Wolff (2002)). However, this trend did not continue through the 1990s, as the Gini co-efficient stabilized around 0.83 (Wolff (2004)). While the wealth position of minority households improved relative to white households during the 1990s, by 2001 African Americans still had only 16% of the wealth of white households (Kennickell (2003)).

Micro Benchmarks of Wealth and Savings. A third perspective on asset sufficiency concentrates on micro benchmarks of wealth. This literature considers wealth in terms of the

amounts necessary to sustain a certain level of life style. We identify three ways this concept has been applied.

First, a number of studies have generated calculations of how much families need to save for retirement. One common method for estimating the adequacy of retirement savings is to calculate the share of pre-retirement consumption expenses that could be maintained by drawing on assets in retirement. Using this methodology, several studies have documented an insufficiency in retirement savings. Mitchell and Moore (1997) find that the median household nearing retirement would need to save an additional 16% of income in order to retire at 62 without a drop in consumption and that households in the lowest decile of income would need to save an additional 40% of earnings. Two other studies, (Banks, Blundell, and Tanner (1998) and Bernheim, Skinner, and Weinberg (2001)), document a similar savings inadequacy and hypothesize that this shortfall is likely due to households not fully understanding their consumption needs in retirement. However, Hurd and Rohwedder (2003) use survey data from the Health and Retirement Study to find that 69% of households anticipated decreasing their expenditures in retirement. Waschawsky and Ameriks (2001) take a different approach in using financial planning software to estimate the share of households that will be able to retire with adequate savings. They find that more than half of middle-income households will not be able to fully fund their retirements. The extent to which households have adequate savings also varies by which assets are counted- including home equity increases the share which are prepared- and which segments of the population are examined- low-income households are much less likely to have sufficient savings. For a recent summary of the literature see CBO (2003).

Second, related to the literature on income poverty, there is a body of work which attempts to define and measure asset poverty. There are essentially two branches to this literature. The first of these branches incorporates household asset holdings into the measurement of income adequacy in order to gauge poverty. In this approach, assets are

generally annuitized and that flow is added to income. Murray (1964) and Weisbrod and Hanson (1968) are among the first to adopt this method and both find that this approach decreases the poverty rate but produces a greater inequality between households. More recently, Wolff and Zacharias (2003) undertake similar calculations using data from the 1990s. They too find that income adjusted for an annuitized asset stream is more unequally distributed than income alone. Generally, calculations performed using this method find that by including assets, fewer households are classified below the poverty line (Moon (1977), Steuerle and McClung (1977), Wolff (1990)). However, several studies including Radner and Vaughan (1987) and Wolff (1990) consider both income and assets, but do so separately, calculating the share of households falling below either an income or an asset poverty line. This approach tends to increase the share of households in poverty.

This two-part approach is closer to the method proposed by Oliver and Shapiro (1990) that considers asset poverty independently of income poverty. Using 1988 data, Oliver and Shapiro (1997) find that 44% of all households, and 78% of African American households, would be unable to survive at the poverty line for three months on their net financial assets alone. Havemann and Wolff (2001) adopt this definition and find that in 1998 more than 25 percent of families would be asset poor based on total household wealth and that nearly 40 percent would be asset poor based on financial wealth. Further, Havemann and Wolff show that the percentage of the population that was asset poor increased from the 1980's to the late 1990s. Caner and Wolff (2002) produce similar results, but also introduce an absolute asset "floor" of $5,000. Employing this minimum, they estimate an asset poverty rate based on financial assets of 46% in 1999. This asset-specific approach is perhaps more useful than the combined income-asset measures in that it recognizes a unique role for assets as a buffer against emergency. However, these asset poverty levels are not individualized to take into account the risks of income and expenditure shocks faced by particular households.

Finally, both the popular press and financial education professionals often use "rules of thumb" for asset sufficiency. Perhaps the most common of these is the maxim that families should keep 3-6 months of living expenses in reserve in case of emergency (Siskos (2001) and Barrett (2002)). This rule of thumb is quite similar to the asset-poverty measure used by Oliver and Shapiro (1990) and Havemann and Wolff (2001). However, it is simplified to not require individuals to calculate their monthly expenses at the poverty line, and tailored to each family's financial situation.

Why Do People Save? Why is Savings Important?

In the previous section we discussed several measures of savings adequacy, with particular focus on emergency and retirement needs. Here, we look more closely at the reasons people actually save and why savings is important. This classification is descriptive, not prescriptive. Rather than discussing what people "should" save for, we use survey data, economic models, and empirical studies to establish three primary motivations for what people actually save for: 1) emergencies, 2) family development and family support, and 3) retirement and bequests.

Precautionary Motives. Maintaining a stock of assets for use in case of emergency is a key reason for saving. Survey data from the America Saves! Program indicates that having an emergency fund was the leading savings goal among the 15,000 program participants (American Saver (2004)). In a recent study of the savings behavior of low-income tax filers, Beverly, Schneider, and Tufano (2004) find that emergency savings is the second most common goal (with only "saving for an unspecified use" named more frequently). The 2001 Survey of Consumer Finances asked respondents what their most important reason for savings was and found that saving for "liquidity" was the second most frequent response, named by 31% of respondents (Aizcorbe, Kennickell, and Moore (2004)).

A growing economic literature has attempted to test the extent to which these precautionary savings motives explain wealth accumulation. Browning and Lusardi (1996) review the

literature on empirical tests of precautionary savings and find mixed support for its effect on household savings. However, several more recent studies have uncovered stronger evidence. Carroll and Samwick (1998) find that precautionary savings motives could explain as much as 45% of the wealth of households. Lusardi and Kennickell (2003) use survey responses to the SCF and find that most households desire precautionary savings and that the amounts desired are roughly 20% of financial net worth. However, they find that many households, particularly low-income households, have not reached their stated emergency savings goals.

While families plan to save for emergencies, and recent studies have documented the role that precautionary savings plays in household asset accumulation, the extent to which these savings actually succeed in helping low-income households to deal with emergencies is little studied. However, two papers consider this question and raise doubts about the extent to which existing stocks of emergency savings can be used to effectively deal with emergencies. Ruggles and Williams (1989) examine poverty spells, measuring the number of families who enter into poverty at least once during the year based on monthly income, even if their total annual income is above the official poverty line. They find that if the families which entered poverty had drawn down their assets during these periods, 40% of poverty entries would have been avoided. These findings fit with those of Havemann and Wolff (2001) and Wolff and Caner (2002) showing low levels of asset holdings among much of the population as well as with Lusardi and Kennickell (2003) who find that many households have not achieved their emergency savings goals.

Asset Development and Family Support. In addition to emergency saving, large numbers of Americans name savings goals such as education (11%), home purchase (4%), and savings for their family (5%) (Aizcorbe, Kennickell, and Moore (2003)). While any savings is an asset, investments in education, home purchase or small business development have been distinguished in the small, but growing, literature on asset-building for their potential to create additional assets and other personal advantages.

Specifically, Sherraden (1991) hypothesized that the ownership of assets would result in certain economic, social, and political benefits. It is important to note that Sherraden attributes these effects not to high levels of income which are associated with asset holding, but rather to the ownership of assets in of themselves. Table 4, adapted from Sherraden (1991) and Page-Adams, Scanlon, et al (2001), summarizes these findings, which are briefly discussed below.

The positive effects discussed by Sherraden have been documented in a number of studies. Assets in the form of homeownership have been shown to increase residential stability, lead to higher levels of property maintenance, increase social and political participation, and produce greater martial stability. Homeownership is also correlated with higher levels of family health. Assets have been shown to lead to greater economic security and to decreases in domestic violence (Adams, Scanlon, et. al. (2001)). Assets and homeownership benefit children through better educational outcomes and lower levels of teen pregnancy (Shobe (2002)).

Savings on the part of the poor can also lead to a number of positive psychological effects. These include feeling more confident about the future and more economically secure. Financial assets also appear to create the future orientation that Sherraden hypothesized, with low-income savers in a recent demonstration project reporting making plans for future education and for retirement (Moore, Beverly, et. al. (2001)).

Life-cycle Theories of Savings. Finally, SCF respondents most frequently cite retirement savings their primary reason for saving (32%) (Aizcrobe, Kennickell, and Moore (2003)). We have already considered a number of studies on the adequacy of retirement savings, below we briefly discuss the economic literature on retirement and bequest motives for saving. Beginning with Modigliani and Brumberg (1954) economic theories of saving have been modeled around retirement as the primary saving motive. This theory, the Life Cycle Hypothesis, holds that individuals will seek to smooth expenditure over time, with younger households compensating for low levels of current income by taking debt and then increasing saving through middle age before finally spending down savings at retirement. Friedman's (1957) permanent income

hypothesis is predicated on a similar set of assumptions. He argues that individuals will consume based on their permanent income, the income they can expect to have over their lifetime, as opposed to their current income, which may fluctuate over time. See Browning and Lusardi (1996) for a detailed explanation of the Life Cycle and Permanent Income Hypotheses.

Why Don't People Save?

Despite financial planners' advice, economic models, and their own good sense, many people, particularly many low-income people, don't save. There are a number of possible explanations for this behavior, and it seems likely that they work in concert, each playing a role in the lack of savings by many households.

Can't Save. Intuitively, the simplest explanation for low saving or no saving is that many households find such behavior beyond their means. Low-income households in particular may encounter a structural imbalance between basic consumption needs and income that leaves little room for savings.

The clearest evidence for this explanation is found in the census poverty data. In 2003, 12.5% of the population, more than 7 million families, lived in poverty (in the case of a four person household, these families had less than $18,700 in annual income) (Census (2004)). Further, it is often held that the current poverty measure underestimates the income required to meet basic consumption needs (Ruggles (1990)). It seems unrealistic to expect that families living in poverty would have much left over for savings. Beverly (1997) reviews several studies on the difficulties low-income families face in trying to save while struggling to meet basic consumption requirements. Beverly, Tescher, and Marzhal (2000) hypothesize that subsistence needs will take precedence over saving for very low-income households. Essentially, this perspective suggests that for the poorest families, the phenomenon of low or nonexistent saving is primarily a problem of low incomes compared with subsistence needs.

Won't Save. A second approach takes the view that low savings is the result of households having a strong preference for current consumption over future consumption. Laibson (1997) argues that consumers are impatient, they would rather consume in the present than save for the future. This suggests that savings is primarily a consumption problem, perhaps exacerbated by business and cultural forces that encourage greater consumption (Holt and Schorr (2000)). There is evidence of this to the extent that savings is low even among higher income families and credit card debt is significant across most income groups (Aizcorbe, Kennickell, and Moore (2003)).

In this scenario, households do not plan ahead and set savings targets. Rather, consumers decide short-run expenditures and, if there is excess income, it is briefly held as savings. If consumption exceeds income, consumers rely on credit. This behavior is akin to the pecking order theory in corporate finance under which firms do not plan their level of debt financing ahead of time, but instead undertake external borrowing when internal reserves are not adequate. For households and firms, savings and credit serve as the temporary "plug" in the budget.

Thaler and Schefrin (1981 and 1988) place this pattern of spending temptations and ad hoc savings decisions in a behavioral economic framework. Families have trouble saving, but can build assets when given the tools to do so. Thaler and Schefrin articulate three mechanisms that individuals use to resist spending temptations: self-control, mental accounting, and framing. In discussing self control the authors describe a solution of rules, both external (such as restricted withdrawal accounts) and internal (such as personal prohibitions on borrowing). Regarding "mental accounts," they proffer that individuals conceptually code various types of income, considering large bonuses as assets while smaller regular amounts are seen as income. This last notion taps into their final point, that of framing.

The Role of Incentives. While the Federal government provides substantial incentives for wealthier families to save, it provides inadequate or misdirected incentives for low-income

families to save. The focus of current federal asset building policy is on encouraging middle and upper income Americans to save and invest, while providing little incentive for poorer people to do so. It was not always this way. There is a long history of governmental involvement in encouraging savings and investing among all Americans. The passage of the Homestead Act in 1862 allowed hundreds of thousands of Americans to acquire land. Only minimal fees were imposed, with the only substantial financial barriers being sufficient capital to last until the homestead was self-sustaining. Williams (2000) estimates that tens of millions of Americans have benefited from the assets created through the Homestead Act.

Soldiers returning from World War II were the recipients of an asset building program on a similar scale. More than 2 million veterans took advantage of the GI Bill to pursue higher education (Olson (1973)). The GI bill also helped millions of veterans to purchase homes, building on changes in the structure of residential mortgages that had begun during the 1930s (Boshara (2001)). Prior to the depression, home mortgages were generally short term, required large down payments, and imposed substantial balloon payments at maturity. However, in the 1930s, the Federal Government's Home Owner's Loan Corporation (HOLC) began to offer longer term mortgages (Bartelt (1993)). This policy continued under the Federal Housing Administration (FHA) which "by changing the terms of mortgages, helped a great many people to become home owners" (Katz (1993)). However, while the FHA and HOLC brought home ownership opportunities to many families, these programs purposefully excluded millions through the use of strict criteria that disallowed mortgages in poor and minority areas, "redlining" whole neighborhoods (Sugrue (1993)).

The federal government continues to promote asset building. A recent report by Woo, Schwenke, and Bucholz (2004) concludes that in 2003, the government provided incentives worth some $335 billion dollars to encourage Americans to save. Of this $335 billion dollars, approximately one third was spent on homeownership programs, including tax deductions for mortgage interest and property taxes, an additional third on retirement programs, including the

tax privileged status granted to 401(k) and IRA plans, and a final third on policies to encourage saving and investment, including tax exemptions granted on capital gains. The large majority of these expenditures accrue to middle and upper middle income families. The authors estimate that the bottom 60% of households by income receives only 5% of these benefits.

Affirmative federal financial support for asset building by low-income families is weak, but further, federal policy often undermines whatever asset building low-income families might undertake on their own. First, a number of government programs appear to make personal savings less important. Several studies have examined the relationship between public assistance and savings and wealth. Hubbard, Skinner, and Zeldes (1995) argue that public assistance decreases the motive for households to build precautionary savings. Engen and Gruber (1995) find that unemployment insurance reduces individual savings and Bird and Hagstrom (1999) show that wealth can be predicted in part by the amount of benefits that a household could expect to receive given a shock to income.

Second, many income support programs have an asset test which limits eligibility to only those households holding less than a specified amount of wealth. Advocates of asset building for low-income families have argued that these asset tests unfairly penalize and depress saving by poor households (Sherrdaden, 1991) and a number of studies give credence to those claims. Gruber and Yelowitz (1997) find that asset tests for public health insurance discourages asset building, Powers (1998) finds a similar effect for AFDC asset limits, and Ziliak (2003) finds evidence that public assistance receipt depresses wealth holdings with or without an asset test. However, a more recent study by Hurst and Ziliak (2004) finds no connection between welfare asset limits and low savings among the poor.

Finally, the unintended consequences of some Federal policy may actively discourage the poor from saving. One recent example of this is the changes made to the United States Savings Bond program in 2003. Originally conceived in 1935 as a means “to promote nationwide thrift by providing small savers with a safe, liquid, and attractive investment…”

alterations to the program have effectively undercut its ability to meet this purpose (US Treasury Annual Report (1955)). In 2003, Congress eliminated the entire advertising budget for the savings bond program, ending a nearly 70 year history of encouraging "small savers" to invest. Additionally, the required minimum holding period for savings bonds was raised from 6 months, to one year (Tufano and Schneider (2004a)). By further restricting liquidity, the Government has imposed a heavy burden on low-income families who would like to save, but might need their reserves in the event of an emergency. The Treasury has also begun moving towards an online based purchasing system that would require the buyer to have internet access and a bank account.

Beverly and Sherraden (1999) place the savings situation of low-income people in an institutional context, arguing that savings is facilitated by formal savings plans, incentives, education, and pre-commitment, and that the poor have limited access to these supports. Sherraden and Barr (2004) add access, expectations, restrictions, and security. In the case of Savings Bonds, low-income families are losing one of the few institutional mechanisms they have to save. By cutting marketing, the Treasury decreases awareness and lowers expectations. By increasing the holding period, the Treasury makes it infeasible for many low-income families to take advantage of institutional mechanisms such as the savings bond payroll deduction. By moving purchasing online, the Treasury restricts the access to savings bonds, potentially depriving the millions of Americans without bank accounts or on the wrong side of the digital divide, of the ability to buy bonds.

A Lack of Financial Literacy: Recent survey results testing the financial knowledge of American youth and adults show a general lack of financial competence on the part of Americans. A series of studies of the financial literacy of young adults including high school and college students find very low levels of financial knowledge (JumpStart (2002), Chen and Volpe (1998) and Markovich and DeVaney (1997)). Studies commissioned by the SEC, Vanguard, and the Investor Protection Trust find similarly low levels of financial literacy among adult

investors (Alexander, Jones, and Nigro (1997), Princeton Survey Research Associates (1996), Vanguard (2002)) . Finally, surveys of adults have also uncovered a more general lack of financial knowledge with only 25% of adults scoring a grade of "B" or higher on a Bankrate.com test of financial literacy (Bankrate.com (2003)).

Evaluations of financial education programs suggest that this paucity of financial knowledge may depress savings. Bayer, Bernheim, and Scholz (1996) find that employees who received financial education were more likely to participate in a company pension plan and generally contributed a larger share of their salaries. Lusardi (2002) finds a similar effect with seminar attendance boosting financial wealth and total net worth for those in the bottom quartile of wealth. Bernheim, Garret, and Maki (2001) find that some high school financial education mandates increased personal savings rates and net worth.

The Role of Financial Service Firms

While the discussion above focuses primarily on household decisions and government incentives, financial institutions surely play a critical role in savings activities. Delegated asset management takes place within a host of organizations, including banks, mutual funds, hedge funds, trust companies, insurance firms, brokerage firms, and securities exchanges. These institutions not only hold and invest savings, but also provide advice, education, recordkeeping, and other services. And in order to thrive, they must also perform the function of marketing. Our simple thesis is that the need for these private-sector entities to maintain acceptable levels of profitability leads to their relative disinterest in low-income savers.

At the outset, it is important, but probably obvious, to point out that without the private financial service sector, savings would likely be considerably lower. How much savings would take place without the panoply of products, the almost daily reminders of financial decisions in advertisements and storefronts, the explicit and implicit education provided by financial service firms? In a consumerist world with strong incentives to spend, these firms compete to try to

capture some of our dollars as investments. But this competition seems less strong for low-income consumers, which may contribute to lower savings by these families.[3]

On the product-side of the ledger, we have witnessed an explosion in the number and type of investment products. Investors can not only choose from among stocks, bonds or bank accounts, but also mutual funds, non-bank savings products, sweep accounts, derivatives including futures and options, guaranteed investment contracts, annuities, exchange traded funds, venture funds, private equity funds, hedge funds, folio products, structured bonds, etc.[4] There are more financial products to choose from today than there were half a century ago. Furthermore, process innovation has lead to dramatically lower costs of operations for financial service firms. Improvements in hardware, software, and communications have dramatically lowered the costs of processing transactions.

In principle, process innovations should make it even cheaper—rather than more expensive—to serve poor customers who have small balances. This should encourage firms to serve the poor. Falling transaction costs would enable families to create highly customized savings programs on their own. Furthermore, the product innovation would seem to make it easier for families to construct an ideal savings vehicle, one more closely tied to their individual needs.

In practice, this optimism might not be so well founded. With respect to product variety, the wide range of choices could have the perverse impact of decision paralysis as families face the problem of having too many choices, a phenomenon first named the "overchoice" problem by Toffler (1970) and documented by a variety of scholars.[5] This overchoice problem might be

[3] There is competition among lenders to offer subprime, and predatory, mortgage loans in LMI communities. But, these loans may result in asset drain, rather than asset creation.
[4] This is not to argue that innovation is a recent phenomenon. See Tufano (1995) for a discussion of the history of financial innovation. Graham and Dodd's (1934) investing classic contains a long list of quite innovative securities from the first part of the twentieth century.
[5] Most recently, Iyenger and Lepper (2000) show that consumers are more likely to make a choice when they are presented with a limited number of options and more likely to defer when faced with many alternatives. Chernev (2003) finds that having many choices can make decisions harder for consumers,

most severe among those least comfortable in choosing among the many different investing alternatives and where products vary along multiple dimensions. In addition, while there has been a tremendous amount of product innovation, much has yielded complex, higher-risk products, such as hedge funds, private equity funds, venture funds, derivatives, or actively managed equity mutual funds. Far fewer new products have been aimed at the needs of investors who likely have relatively low tolerance for risk and the high potential needs for liquidity due to emergencies. The exceptions might include developments of bond and money market funds, principal protected products (popular in Europe), and perhaps, Series I savings bonds.

Why aren't financial institutions rushing to develop a stream of products customized to the needs of less affluent savers? More generally, why aren't more financial institutions clamoring to sell savings products to low income savers? We offer a number of hypotheses, based on observations and limited data.

Historically, there was a congruence between institutions that performed payment system functions—demanded by all consumers—and savings. Depository institutions—banks, thrifts, savings and loans, credit unions—performed both these functions. Increasingly, the link between payment systems and savings has been broken, especially for low-income consumers. For these consumers, payment systems functions are served by check cashing outlets or non-banks, as described by Stegman in this book. Millions of consumers consider a check cashing outlet as their primary financial institution.[6] Whether this development is good or bad, because

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particularly for consumers who do not begin the selection process with a clear idea of their desired product. Dhar (1997) argues that consumers have more difficulty deciding and are more likely to defer their choice when the alternatives presented are similar and equally attractive.

[6] Estimates of number of consumers who consider check cashing outlets their primary financial institution vary. Dylla (2003) suggests that all unbanked households use check cashers as the primary financial service provider, about 10% of the population. Barr (2004) summarizes a number of studies that suggest lower estimates, including one that finds 70% and one finds 17% of the unbanked primarily use check cashers, with the numbers varying widely depending on the area studied. Many banked individuals, particularly those with low-incomes, also used check cashers as their primary financial institution. Dunham (2001) estimates that as many as one quarter of banked individuals in low-income New York and Los Angeles neighborhoods primarily rely on check cashers.

these entities are set up neither as brokers nor as bank branches, they do not have the authority to sell investments or accept deposits without gaining regulatory approval or working in conjunction with a regulated broker or bank. This breaks the historical link between payments and savings.

More generally, lower income areas are less blanketed by place-based financial institutions—physical offices of banks and other financial service firms—that receive savings and in turn, make investments has increased. Research shows that high income neighborhoods still had far more commercial banks and savings and loans per 10,000 residents than low-income areas (Avery, Bostic, Calem, and Canner (1997)). With extensive place-based financial institutions, would-be savers are implicitly reminded to save and the process of savings can be made easier. Because of the persistently low number of branches in low income neighborhoods, LMI residents are least likely to enjoy these benefits.

The newer institutions that receive savings and make investments, led by mutual funds, are not primarily place-based. Direct sellers, like Vanguard or Fidelity, depend on investors seeking them out, which puts a premium on investor motivation, education and confidence in decision making. Others, like Putnam or American Funds, depend on compensated sales forces to sell their products, who have strong reasons to target more affluent customers.

Sales and marketing are expensive activities. We posit that current financial services marketing is geared toward reaching sophisticated consumers with the greatest profit potential and largest balances. While financial institutions would not be so insensitive as to say they are uninterested in low-end consumers, they make clear their interest in high-end consumers, and subtly act to divert marketing attention away from less affluent consumers. Surely, there is a lively battle for affluent, near affluent and mass affluent consumers as financial service firms aspire to more “upmarket” positions. While the battle for the truly affluent is not new, the new emphasis on the battle for the “mass affluent” demarcates the customers that most financial service firms hope to serve. Nunes, Johnson and Breene (2004) identify the mass affluent as

those earning at least $60,000. Wall Street observers peg this population as having wealth of $100,000 to $1,000,000.[7] Regardless of where the lower limit of this group is, it is considerably in excess of the income or wealth of the most Americans.

The mainstream desire to serve the more affluent is not necessarily a sign of discrimination; rather it reflects the costs faced by financial service firms. If the cost to acquire and serve two customers is similar, despite the fact that they have very different balances, on the margin it would make sense to purse the larger balance customer. A broker, trying to decide whether to make a call to someone with a few hundred dollars to invest or a few million to invest, will surely prefer the latter. While recent data might suggest that income and wealth is increasingly skewed (Piketty and Saez (2001) and Wolff (2002)), marketers see the aggregate consumption of the mass affluent (and their investments) as representing a meaningful business opportunity, giving rise to a host of products like Swiffers, SpinBrushes, and Whitestrips.

Returning to the functional perspective and financial services, poorer consumers are worse marketing targets because of two related problems: small balances and less information. Acquiring new customers is an expensive proposition, with financial service firms publicly reporting per customer acquisition costs from $109 to $195 and one article citing an industry-wide average of $200 (TD Waterhouse (2001), T Rowe Price (2003), Stone (2004)). In contemplating how to direct these activities, a profit-maximizing business will naturally consider the profits it can earn from subsequent activities of the new customer, calculating what is sometimes called the "lifetime value of a customer." (Donkers, Verhoef, and de Jong (2003), Winer (2001), and Berger and Nasr (1998)) Almost by definition, the lifetime value of a poorer consumer is smaller than that of a more affluent customer: they will surely invest less, may borrow less, write smaller insurance policies, or take out smaller mortgages than more affluent consumers. Furthermore, firms cannot count on a ready stream of cross-sold products from

[7] The subject of reaching the mass affluent is the subject of a number of market research studies. For a journalistic review of some of these studies, see Schmerken (2002).

these or any consumers to provide future profits to justify high current acquisition costs. Finally, these customers may be least interested in the most complicated, highest margin products. Facing high costs of customer acquisition, customers with small scale simply look less attractive.[8] Financial institutions are not unlike the bank robber, Willie Sutton, who, when asked why he robbed banks is alleged to have replied, "Because that's where the money is."[9]

At *best*, the cost to market to the poor is the same as for more affluent consumers—but in practice, it may be more expensive to market to low-income consumers. Potential low income financial service consumers may be less informed about the financial service world and its offerings, be less trustful of financial service firms, and may require customized advertising and marketing. These efforts might require additional effort and expense on the part of would-be marketers to low-income consumers. Furthermore, the basic marketing research used to identify valuable market segments is less available for low-income families and communities. While there are many market research firms that specialize in profiling high-net worth customers, there is a relative dearth of data about low-net worth customers.[10]

Finally, one has to consider the impact of competition among financial institutions—and regulation. Perhaps the lower profitability of less affluent consumers would give rise to a valuable business opportunity, so we would observe massive competition for low income consumers. Indeed, we do see extensive competition for low income payments services in the form of alternative financial service (AFS) firms like check-cashers, as described elsewhere in this volume. AFS providers deliver payment services, but can do so without getting the

[8] This argument does not take into account the level of competition, which would affect the likelihood of acquiring a customer, given a certain level of marketing activity.
[9] While this quote has been used in banking circles extensively, apparently, it's attribution to Sutton is problematic. See http://www.banking.com/aba/profile_0397.htm, visited 10/27/2004 for an amusing history of Sutton and this quote.
[10] As examples of the types of market research directed at understanding high net worth customers, see http://www.hnw.com, http://www.spectrem.com/, and http://www.ixicorp.com. A few recent projects are attempting to amass new data on low-wealth customers: the Initiative for a Competitive Inner City has a project to provide a picture of low income neighborhoods (www.icic.org, accessed October 29th, 2004) and ShoreBank Advisory Service's MetroEdge services provide businesses with market research of underserved communities. (http://www.metro-edge.com/, visited 10/27/2004).

extensive regulatory clearances or capital requirements faced by banks, brokers or securities dealers.

Indeed, it might not be an exaggeration to assert that the asset-gathering arms of the financial service sector would be happy to "fire" many low-wealth customers. The concept of "firing" customers has gained some prominence in the business world (Johnson (2002)). Generally, the idea is to rid yourself of unprofitable customers (or to keep them away at the outset) to maximize profitability. While it is difficult to prove that this attitude characterizes financial service firms, it appears to be well-accepted. In a story about a retailer "firing" unprofitable customers, it was taken as a given that financial service firms follow this strategy: "The financial services industry has used a variation of (the fire your customer) approach for years, lavishing attention on its best customers and penalizing its unprofitable customers with fees for using ATMs and tellers or for obtaining bank records."[11] Given the fiduciary duties financial institutions have to their shareholders and other investors, the decision to avoid expensive, money-losing customers is not nefarious, but rather appeals to basic business sense. Would-be low-income savers are "fired" in a variety of ways:

- By imposing minimum initial investment restrictions at mutual funds. While there are some funds that will accept small initial deposits, some of the largest fund sponsors impose substantial minimum initial investment restrictions. In particular, among the top ten mutual funds in the country, eight impose minimum balance restrictions upwards of $250. Among the top 500 mutual funds, only 11% had minimum initial purchase requirements of less than $100 (Morningstar (2004)). Furthermore, while others may passively accept small accounts, we have seen no evidence that they actively solicit them, either through advertising or direct sales. See Table 5 for data on minimum initial purchase requirements at various large mutual funds.

- By maintaining fewer physical locations in low income communities. Avery, Bostic, and Caner (1997) find that low-income neighborhoods have the fewest banks per capita. In a study of 5 large US cities, Caskey (1994) finds that neighborhoods with large African American or Hispanic populations are less likely to have a bank branch and that in several of the cities, "low-income communities are significantly less likely to have a local bank than are other communities."

[11] Gary McWilliams, "Analyzing Customers, Best Buy Decides Not All are Welcome." Wall Street Journal, Nov 8, 2004. p. A1.

- By establishing fees for low-balance accounts (or alternatively waiving them for high balance accounts). Banks routinely set minimum balance requirements or charge fees on low balances, in effect discouraging smaller savers. Nationally, minimum opening balance requirements for statement savings accounts averaged $97, and required a balance of at least $158 to avoid average yearly fees of $26. These fees were equal to 27% of the minimum opening balance. Fees were higher in the ten largest Metropolitan Statistical Areas (MSAs), (detailed in Table 6) with average minimum opening requirements of $179 and an average minimum balance to avoid fees of $268 (Federal Reserve (2003)).

- By having relatively little marketing and sales efforts in low-income communities. While financial service providers may target these communities for advertising relating to sub-prime (and predatory) credit products, there seems less, if any, marketing relating to asset-building products. Unfortunately, we cannot observe these activities easily, so this assertion cannot be directly tested.

- By using credit scoring tools, like ChexSystems, not to just screen out customers who might give rise to credit losses, but also to screen out customers who might merely be unprofitable to serve. ChexSystems enables banks to screen prospective clients for problems with prior bank accounts and to report current clients who overdraw accounts or engage in fraud. It is not uncommon for banks to deny consumers with poor credit records the right to open even a *savings* account. Over 90% of bank branches in the US use the systems and approximately 7 million people have ChexSystems records (Quinn (2001) and Barr (2004)).

- By implicitly redefining their mandates. Most banks define their "low income" activities in the context of meeting Community Reinvestment Act (CRA) mandates, not as part of the core strategies of their banks. Most credit unions, while ostensibly receiving special tax treatment because of their unique service role, eagerly serve more affluent customers. While this tactic may be profitable, credit unions enjoy tax free status by virtue of provisions in the Federal Credit Union Act, the text of which mandates that credit unions provide credit to "to people of small means" (Federal Credit Union Act (1989)). Given their legislative background, it is interesting that the median income of credit union members is approximately $10,000 higher than that of the median income of all Americans (SCF (2001)) and that only 10% of credit unions classify themselves as "low income," defined as half members having incomes of less than 80% of the area median household income (NCUA (2004) and Tansey (2001)).

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This litany obviously ignores the important work of some groups, including community development banks and low-income and community development credit unions discussed elsewhere in this volume. It also does not elaborate on the various "trickle up/down" theories in which by making financial services (or other products) less expensive for the more well-to-do, there are benefits for others. See Nunes, Johnson, and Breene (2004) for this argument. Merely, it expresses a hypothesis that the bulk of the financial service sector would not be

troubled if low-income would-be savers and investors were simply not part of the picture. Indeed, for many of these financial institutions they are not. Like the financial services executive cited at the beginning of this chapter, many others in the financial services sector would be content to treat "pre-investors" as someone else's problem.

Adopting Policy and Business Innovations to Increase Asset Building

Summarizing the "bad news" up to this point, savings by low income families is inherently difficult, receives relatively little government incentives, and is—at best—tolerated by the financial sector. But there is potentially better news, in the form of various innovations. Policy innovations have begun to recognize the importance of savings among low income families. Business innovations can make gathering savings more cost effective and may introduce new means to educate and mobilize low-income consumers. The spirit of this approach is captured in C. K. Prahalad's 2004 book, *The Fortune at the Bottom of the Pyramid,* which argues that business can profit by using innovations to serve poor consumers, the so-called "bottom of the pyramid."

We do not presume to identify which of the impediments to savings catalogued thus far are the most important, or even their relative effects. The data and literature do not allow for a specific accounting of the effect on savings from limited financial knowledge, disinterest from financial service firms, or any of the host of factors so far identified. Rather, in the following section we think about each of these barriers to savings and various ways to surmount them.

Stepping back, to increase savings and asset building, one can (a) change the ability and willingness of families to save (stimulating demand); and (b) change the willingness and interest in financial institutions to acquire and hold savings by the less affluent (stimulating supply.) By leveraging innovations developed elsewhere, one can stimulate supply and demand.

To stimulate demand, we have learned from previous government programs that providing families with incentives to save increases savings, and we discuss a variety of programs that can increase families' motivations to save.[12] In addition, by recognizing the savings potential of tax refunds received by the poor—and implementing long-known maxims of financial planning, we can potentially divert billions from consumption to savings. Finally, we can borrow an innovation from the technology sector to provide new forms of financial education and advice for low income families.

On the supply side, by asking "Which organizations already have strong distribution channels among less affluent consumers?" we can fashion new methods of reaching these potential savers. One of these, an old innovation, savings bonds, can be reinvigorated to serve again as a meaningful savings vehicle for American families. Second, by exploiting known innovations to efficiently pool accounts and the associated information systems infrastructure, we can drive down the cost of serving small balance accounts. These two ideas are closely related, new pooling vehicles—such as tapping into tax refunds—may create cost effective ways to acquire customers. There is an ample literature which posits that a vibrant financial services sector leads to a stronger economic sector (King and Levine (1993) and Levine (1997)). Much of that literature is concerned with the creation of financial institutions that will allow households and businesses to obtain capital. In that spirit, we examine several innovations that could encourage a more vibrant financial services sector with regard to less affluent families. And, while following the same logic as this literature, we examine the potential of these innovations to aid in the development of savings instead of the availability of credit.

[12] Hubbard and Skinner (1996) provide an overview of the literature on the effectiveness of IRA and 401(k) savings incentives. They report evidence that these incentives generate new savings, but also findings that raise doubts about the effectiveness of these policies. Sherraden and Barr (2004) consider these results and argue that incentives targeted at low-income families will be more likely to be successful given the limited likelihood that these wealth-poor households could transfer assets from standard accounts to tax privileged or otherwise advantaged accounts.

Stimulating Demand: Giving Families Incentives to Save

The vast sums spent to encourage savings and investing by more affluent Americans seem to have yielded some increases in savings. Homeownership rates are at historical highs of 66% (Aizcorbe, Kennickell, and Moore (2003)) and the most affluent members of the baby boom generation are expected to retire with higher levels of savings than the previous generation (CBO (2003)), More recently, various political initiatives (e.g., the Clinton Administration's plans for Universal Savings Accounts or the Bush Administration's "ownership society" concept) have sought to create even more incentives for savings, although some argue that those proposed by the Bush Administration will continue to appeal most strongly to the more affluent, as the incentives come from reductions in taxes. Over the last few years, there have been programs and proposals to target some asset building incentives directly at low income families. These include the Savers Credit, the pilots of Individual Development Accounts, and proposals to adapt 529 savings plans to encourage low income families to save for college and to establish accounts for all children.[13]

USAs, RSAs, and the Saver's Credit. Beginning with Universal Savings Accounts (USAs) in 1999, a number of programs designed to provide more progressive retirement savings incentives have been proposed. Had President Clinton's USA program been enacted, it would have matched contributions to retirement savings for Americans ages 18-70 with incomes between $5,000 and $100,000. Low-income account holders were slated to receive an annual automatic contribution from the government worth several hundred dollars and LMI account holders would have benefited from a refundable tax credit that matched personal or employer

[13] Below, we primarily discuss programs that provide incentives for LMI families to build financial assets. In addition, the federal government also encourages low-income families to seek education and homeownership through programs that are not based around personal savings accounts A number of federal loans and grants (including Perkins and Stafford loans and Pell grants) assist students with educational expenses and educational Savings Bonds and Coverdall Education Savings Accounts are designed to provide tax incentives for saving for pre-college and college expenses (New America Foundation (2004)). Support for low-income homeownership is provided through grants for down payment, affordable mortgages with below-market rates, mortgage insurance, and assistance with homeowner expenses (NLIHC (2004)).

401(k) contributions and decreased with income (Perun (1999)). However, in 2000, facing opposition from Congress and concerns over the cost of USAs, a revised program, Retirement Savings Accounts (RSAs) was substituted (Gale, Iwry, and Orszag (2004)). RSAs dropped the USA automatic contribution provision and restructured the match as a tax credit refunded to individuals through financial institutions and employers. RSAs were then in turn re-worked as a simpler tax credit for contributions to personal retirement accounts, the "Saver's Credit" (Gale, Iwry, and Orszag (2004)).

Passed in 2001 as part of President Bush's tax cuts, the Saver's Credit provides a tax credit to low-income filers who contribute to a personal retirement account. The credit increases in value as income declines and is worth 10%, 20% or 50% of contributions up to $2,000 for low and moderate income individuals (Orszag and Greenstein (2003)). However, the credit is not refundable and so those filers without an income tax liability do not receive any match from the Saver's Credit. Essentially, a filer making a $1,000 contribution to a retirement account would be eligible for a $100, $200, or $500 tax credit (depending on filing status and income) that could only be used towards the reduction of a tax burden. A low-income filer who did not owe any tax would not receive the benefit. Orszag and Hall (2004) find that because of its non-refundability, just 20% of filers eligible for the 50% credit would receive any benefit. Legislation sponsored by Senator Edwards (D-NC) proposes to extend the savers credit passed its current 2006 expiration and make the credit refundable, allowing low-income families without a tax liability to receive the retirement savings incentives (S.2303 (2004)).

USAs, RSAs, and the Savers Credit are all designed to create incentives for LMI families to save for retirement. A second set of proposals introduced over the past 5 years has focused on creating more incentives for high income individuals to save more for retirement.

In addition to the Saver's Credit, the 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA) included provisions raising the maximum allowable contribution to IRAs and 401(k)s. These accounts, including 401(k)s, 403(b)s, and IRAs, grant depositors tax

deferral benefits on their retirement savings (CBO (2003)). The increases in the allowable contributions are expected to mostly benefit high income filers. Only 1% of 401(k) holders making less than $40,000 contributed the maximum while 40% of making more than $160,000 did so (Orszag and Greenstein (2003)). In 2004, the Bush Administration proposed three new tax-privileged savings accounts, Lifetime Savings Accounts (LSAs), Retirement Savings Accounts (RSAs), and Employer Retirement Savings Accounts (ERSAs). Burman, Gale, and Orszag (2004) find that the large majority of the tax benefits of these accounts would go to high income households while potentially reducing government revenue, national saving, and employer contributions to lower income workers' pensions.

Individual Development Accounts. In 1991, Michael Sherraden proposed a system of Individual Development Accounts (IDAs) designed to offer savings incentives for low-income people. IDA programs are matched savings programs, similar somewhat to 401(k) programs, but aimed at pre-retirement savings goals. Over the past 15 years, IDAs have taken shape to provide for matched contributions to low-income people's deposits into independently administered savings accounts. These funds, deposits plus matches, are available for a number of specific uses, such as buying a home, starting a small business, or seeking additional education or training- in short, for creating more assets. IDAs work by taking an existing financial product, often a savings account, and linking it to new distribution channels, new incentives, and new sources of education. The accounts have primarily been marketed through social service and community based organizations, drawing in clients by offering matched savings incentives and requiring participants to take part in financial education. In 2003, there were approximately 250 IDA programs in existence around the United States serving more than 20,000 people (roughly 5,000 participants have already completed the program) (Glackin and Mahoney (2002) and IDAnetwork (2003)).

To date, two sets of programs have been studied, the American Dream Demonstration project, funded by several private foundations, and those established under the Assets for

Independence Act, passed by Congress in 1998. The ADD evaluation found that its low-income participants were capable of saving, though success varied. Participants saved an average of $19 per month (median of $10) and had average net deposits (total deposits less unmatched withdrawals) of $528. Of the 32 percent of participants who made a matched withdrawal from the program as of December 2001, the average value of that withdrawal was $2,586 (Sherraden, Clancy, and Schreiner (2002)). The most common use of matched withdrawals was for home purchase, with 28 percent of participants who made a matched withdrawal making one for that purpose with an average value of $2,416. Judging from this data, ADD posted encouraging, but mixed savings results (Scherraden, Clancy, and Schreiner (2002)).

More recently, Abt Associates completed a second evaluation of ADD, focused on an IDA program run by the Community Action Project of Tulsa County (CAPTC). Unlike the earlier CSD study, Abt Associates used a randomized experimental design to evaluate the effects of the IDA program. The researchers assigned approximately half of the study population to a treatment group (that were offered the IDA) and half to a control group. In additional to baseline data, the researchers collected information from members of both groups at 18 months and at 48 months (Abt Associates (2004)).

Abt Associates reports finding significant effects on homeownership at the 48 month mark, with the homeownership rate 6.2 percentage points higher for the treatment group than for the control and with this effect particularly pronounced among African Americans. In addition, members of the treatment group were significantly more likely to have sought out additional education. Some treatment effects appear only to be present for certain subgroups of participants. African Americans in the treatment group increased their retirement savings by more than $1,000 over members of the control group. Linked to homeownership outcomes, members of several subgroups experienced increases in real assets, decreases in liquid assets, decreases in financial assets, and increases in total liabilities. IDA advocates and researchers

have hypothesized that IDAs might also increase business ownership, home repair, and total net worth, but no such effects were detected by the Abt research team (Abt Associates (2004)).

The AFIA report found that, like the ADD population, most participants were female and low-income and the majority planned to save for home purchase. The study also found that many organizations had difficulty in recruiting potential IDA participants, and that participants needed personalized interaction and assistance to be successful savers. In addition the report argued that the "working poor" are the most suitable target population for IDA programs and that those in serious distress are not well situated for involvement (Mills et. al. (2002)).

Since 1999, IDA advocates have pressed for the passage of legislation to expand the program and make accounts available to hundreds of thousands more low-income families through a tax credit to financial institutions offering the accounts. Despite significant headway and bi-partisan support, the legislation has (so-far) been a victim of the political process. If the Savings for Working Families Act were to pass, it would face a set of administrative challenges. To date, IDA programs have been administered to a relatively small amount of participants through existing networks of not-for-profit organizations. At scale, the IDA program would be faced with financial education and account administration requirements that could not be easily handled by these organizations. However, it would be possible to address these concerns through "productizing" Individual Development Accounts, which is discussed below.

529s. IDAs are designed to encourage participants to save for three particular uses, homeownership, education, and small business development. Several other savings vehicles are also designed around specific dedicated uses. College Savings accounts, or 529s, are tax privileged savings vehicle designed to help parents save for their children's education. However, the accounts were not designed to benefit low-income families in particular and often have high management fees, negative effects on college financial aid, and tax benefits that are unlikely to accrue to low-income families (Clancy, Orszag, and Sherraden (2004)). Clancy and Sherraden (2003) recognize these drawbacks but have suggested that the centralized structure

and relatively simple design of 529s makes them an appealing base on which to build a system of accounts to help poor families save for college.

Children's Savings Accounts. In 2004, a bi-partisan Senate and House group introduced the America Saving for Personal Investment, Retirement, and Education (ASPIRE) Act in the Congress. The ASPIRE Act calls for the creation of a system of KIDS Accounts, endowed savings accounts established at birth for all children who are US citizens or legal residents. The federal government would make an initial $500 dollar deposit into each account with a supplemental deposit for low-income children. Family, friends, employers, and children themselves would be eligible to make subsequent contributions into the account which would be matched up to $500 per year at a one to one rate for children in families making less than 100% of the median income level. The funds in KIDS Accounts could be used for paying for higher education at any time, but would only be available for other uses after the account holder turned 18. At that time, the private deposits and government matches could be used without penalty for home purchase or retirement (S2791 (2004) and HR4939 (2004)).

The KIDS Accounts proposal builds on a number of similar initiatives. Curley and Sherraden (1988) trace the origins of children savings account proposals to "children's allowances," cash grants provided to families with children by many European countries. Cramer details the legislative history of a number of proposals to establish some form of children's savings accounts (CSAs) in the U.S. (Cramer (2004)). CFED, the Center for Social Development at Washington University in Saint Louis, and the University of Kansas are collaborating to run and evaluate the Savings for Education Entrepreneurship and Down payment (SEED) accounts program. The SEED program provides initial $1,000 dollar deposits for three cohorts of children, one that will receive the initial deposit at birth and be studied to age five, an older group that will receive the initial deposit at age six and be followed till eleven, and a final oldest group that will receive the deposit at age twelve and be followed to age eighteen. In addition to the initial deposit, the program will match subsequent deposits with the goal of

building assets for education, retirement, home purchase, or business development (SEED (2004)). Internationally, beginning in 2002, the United Kingdom funded accounts at birth for all children, with supplementary deposits for children from low-income families (Cramer (2004)). Like IDAs, these accounts aim to encourage asset building by developing new distribution channels, in this case by opening accounts for all children at birth, and new incentives, here through an initial grant and subsequent matches.

Removing Disincentives for Savings. The above policies, tax credits for retirement savings, IDAs, 529s, and children's savings accounts all create incentives for low-income families to save. However, to the extent that these families still face disincentives and restrictions on asset accumulation, the effect of these policies is circumscribed. Currently, only one state, Ohio, does not have an asset tests for TANF eligibility. Only 5 states allow assets up to $5,000 or more. Fewer states limit assets for Medicaid eligibility. 23 states allow Medicaid recipients to hold assets worth $5,000 or more and 18 have no asset test at all (CFED (2002)). To encourage the widest range of low-income families to save, all of these asset tests should be reviewed and eliminated.

Stimulating Demand: Making it Easier to Save

A variety of innovations make it convenient for more affluent households to invest. One way to simplify savings is to make it automatic. Automatic payroll deductions for 401k investments, automatic investment plans and sweep accounts all accomplish this end. Their structure is quite simple, in that the would-be saver precommits to divert part of their monies to savings. This simple innovation can be adapted to be more useful to low-income families.

Harnessing Tax Refunds for Asset Building. Federal tax policy encourages savings by tax*payers* by allowing them to reduce their tax liability when contributing to or receiving income in certain qualified accounts. Tax policy can also encourage savings among tax *refund recipients*, a group that includes less affluent Americans.

Federal tax refunds to low-income filers from the Earned Income Tax Credit (EITC), the Child Tax Credit (CTC), and other refunds are a promising source of savable funds. In 2001, households with incomes of less than $30,000 received more than $78 billion in federal tax refunds (IRS (2001)). The refunds received by these households were likely the largest single payment they received all year. If these refunds could be converted into savings, it would substantially increase the assets of low-income families. The notion of "paying yourself first" has been a staple of personal financial planning for at least a century, and applying this to the tax refunds is a promising way to increase savings by the poor. More recent research on behavioral elements of financial decision making can help to sharpen this common wisdom.

Thaler and Schefrin (1981 and 1988) identify two ways in which individuals can overcome the short-run temptations of spending. First, many people find it easier to save funds that are received as a lump-sum and are not part of their regular income flow. This hypothesis has been borne out in the case of tax refunds by findings that large shares of refund recipients plan to use these funds for savings and durable good purchases (Smeeding et al (2000) and Barrow and McGranahan (2000)). Second, by making the decision to save ahead of time and pre-committing to savings before funds are in-hand, individuals can also overcome temptations to spend. Thaler and Benartzi (2004) have tested this second proposition with the Save More Tomorrow (SMarT) Plan. They find that large shares of employees take-up the opportunity to pre-committ to save their annual raises in their company's retirement plan. This pre-commitment strategy raised savings rates more than 8% points (Thaler and Benrtzi (2004)).

Similar mental accounting and pre-commitment tactics have been applied by a number of free tax preparation sites run by community based organizations. These organizations have offered low-income tax filers the option of opening a savings account on-site and committing to have their entire refund direct deposited into the account. An evaluation of one such program, at the Center for Economic Progress and Shorebank in Chicago, found a take-up rate of 20% but that only 14% of account openers maintained balances (Beverly, Tescher, Romich, and

Marzhal (2002)). H&R Block, the largest paid retail tax-preparer in the country, offered a similar program in 2003 and opened 400 accounts, representing a 2% take-up rate (Tufano and Schneider (2004b)).

Taking these behavioral elements a bit further, a recent experiment attempted to offer refund recipients the functionality that wage earners enjoy—to pre-commit part, but not all, of their fund inflows to savings. A program run by the Community Action Project of Tulsa County (CAPTC) and the Doorways to Dreams Fund (D2D) in 2004 allowed refund recipients to split their refunds, sending one portion to a savings account and receiving the rest as a check. The service, Refunds to Assets (R2A), allowed participants to decide ahead of time how much of their refund they would save and how much they would have to spend, and then pre-commit to that allocation. Approximately 27% of filers expecting a refund who were approached wanted to participate in the program (21% wanted to split their refunds with the remainder only interested in opening a new account). Participants had average initial savings deposits of approximately $600 and 72% of those planning to save still had some of their refund saved 3-5 months later while only 42% of individuals in a comparison group still had savings (Beverly, Schneider, and Tufano (2004)). Refund splitting—in conjunction with new account opening—is a promising way to jump start savings by less affluent Americans. However, the future of the refund splitting program is uncertain. While additional pilots of refund splitting will be offered for tax season 2005, it is difficult for small community organizations to undertake the administrative and account processing challenges of splitting. The IRS is considering offering splitting as an option on the tax return but has not yet committed to a concrete plan to achieve this goal.

Stimulating Demand: Increasing Savings Awareness and Education

Another chapter in this volume addresses financial education. More broadly speaking, families need a combination of financial education and advice, but the economics of providing these services—even for customers having seemingly substantial wealth—is unattractive.

While there is little data available on the cost of providing financial education, an estimated expense of $100 dollars per participant per seminar or class seems reasonable.[14] These costs can prove prohibitive, especially for small community based organizations. A survey by the Federal Deposit Insurance Corporation (FDIC) of 9,000 organizations that had requested its MoneySmart financial education curricula found that 41% of those not using the curricula were unable to do so because of cost concerns (FDIC (2004)).

A few business innovations have been adapted—and can be adopted more extensively—to stimulate demand through awareness and education. On the awareness side, there is a large body of work that details which marketing practices tend to be more effective; indeed, this topic is a staple of marketing offerings in MBA programs. One form of marketing is "social marketing," i.e., the use of marketing techniques not to induce purchasing, but to change individual behavior. Social marketing is used to change attitudes toward health issues (.e.g., anti-smoking, anti-drug or seat belt campaigns.) Social marketing has also been used to encourage savings, in the America Saves campaign. The campaign has enrolled over 20,000 people across the country, both through the national office and via local campaigns (America Saves (2004)). Henry Rowen and John Shoven (1993) have pressed for the creation of a national savings campaign, citing the success of energy and water conservation, safe sex, and as a more direct analog, the WWII savings bonds campaigns.

Businesses have found that the presence of cheap and powerful computing power has made possible realistic and powerful simulations. Simulation is used in a variety of settings where conducting actual experiments or training can be costly or dangerous, such as testing the reaction of various compounds in chemical processing plants, or training soldiers and pilots. Often these simulations incorporate decision support tools that assist the participant to make decisions (e.g., the avionics that a pilot might use to gauge progress and safety.) Simulation

[14] Benefit News quotes Thomas E. Garman, a board member of the InCharge Institute placing the cost of retirement planning sessions at $150 per year (Elswick (2004)). The IDA SWFA legislation provides a $50 tax credit for the cost of providing financial education and account administration (S. 476 (2003)).

combined with decision support tools is available for wealthier savers who seek to make asset allocation and portfolio decisions; see for example firms, such as Financial Engines (www.financialengines.com) developed by Nobel Laureate William Sharpe, that provide investors with the ability to see the distributions of returns for their portfolio over various time horizons.

Businesses have also found a ready market for very complex simulations cloaked within the guise of computer games. These games can simulate very complicated networks of effects, but do so in a manner that presents information to the player graphically. Some of the most popular games are indeed simulations, led by The Sims, a family of games developed and marketed by Electronic Arts. This game has reportedly sold over 36 million units since 2000 and has generated profits of roughly $498 million.[15] Games are increasingly used not just for enjoyment, but also to train adults; for example, games are used to train soldiers, academic administrators and health care professionals and a "serious games" initiative is exploring the potential of using gaming technology in education. D2D Fund, a nonprofit product development group aimed at serving low income financial consumers, is exploring the potential of marrying simulation, decision support tools and electronic gaming to create a product that could be used to provide low income families with financial education and decision support tools.

Stimulating Supply: Reinvigorating Distribution Channels and Products

As we describe above, one potential impediment to increasing savings is the fact that some of the institutions that have the strongest connections with less affluent families do not offer savings and investing products to them. One set of solutions would be to permit these institutions to offer savings and investing products.

[15] Calculation based on sales of 36 million copies of Sims, estimated retail price of $30, and estimated gross margins for Electronic Arts (the game publisher) and GameStop (the game retailer).

Alternative Financial Service Providers. AFS providers already have a large base of low income customers, so they do not face the costs of customer acquisition. The Financial Services Centers of America (FISCA), an industry association for the check cashing industry, reports that there are 11,000 neighborhood financial service centers across America (as compared with the 76,545 bank branches, 13,699 savings and loan branches, and 9,369 credit unions) (FDIC (2004) CUNA (2004)). While there are fewer financial service centers than depository branches, these organizations have strong penetration in low income communities (Sawyer and Temkin (2004)).

There are some partnerships between check cashers and banks, whereby the check cashing customer can obtain access to banking products, such as savings products. In some instances, banking entities are combining their physical locations with check cashers, or offering payroll card products.[16] If it were possible for check cashers to systematically offer a low cost savings product, this could potentially expand the supply of savings products for many low income families.

Non-Financial Service Firms. A number of firms have extensive contact with less affluent consumers through their existing businesses. For example, the estimated 100 million customers that shop at WalMart each week have mean incomes ($40,000) below those of most other chain-retailers (Krasney (2003) and Bloomberg (2004)). Almost 40% of Wal-Mart customers have household incomes of less than $30,000 (Hale (2004)).

WalMart , like many grocery and convenience stores, already provides check-cashing services for many consumers. In principle, facilitating ways for organizations like WalMart to offer savings products to their customers could substantially increase the effort devoted to helping the poor to save. As a simple example, WalMart could be allowed to offer consumers savings bonds. However, WalMart and other non-financial institutions have been unable to

[16] See http://www.fanniemaefoundation.org/programs/bb/v3i3-competition.shtml, visited October 30, 2004, for a discussion of these partnerships.

obtain licenses to operate as Industrial Loan Companies (ILCs) which function like banks. There has apparently been strong opposition by a number of groups which has prevented them from obtaining this regulatory clearance (Madaro (2002)). Without judging the full merits of this opposition, from the point of view of providing additional services to low-income consumers, it may be easier to put additional products into a channel that already reaches these families, rather than trying to convince existing financial service firms to serve those consumers whom they have evidenced relatively little interest in serving.

Social Intermediaries. South Central Los Angeles is a community with a large concentration of low income families. In 2000, 37% of individuals lived in poverty and nearly 70% had incomes that placed them below 200% of the poverty line. (US Census (2000)). A few years ago, one of us conducted an informal census of the area, which had over 600,000 residents. South Central had 17 bank branches, 122 check cashing outlets, and 518 Catholic, Baptist or Methodist Churches. While these numbers may have changed over time, the ratios are probably still about the same, attesting to the relative strength of social intermediaries in low income communities. While it would be imprudent to ask too much of these organizations, making it easier for them to make their congregations aware of simple savings products might be quite feasible. See Fondation, Tufano and Walker (1999) for a discussion of how social intermediaries might help to serve the financial needs of their low income members.

Tax preparers. Commercial and volunteer tax preparers have extensive contacts with low income families. The three largest retail tax preparation companies in the US, H&R Block, Jackson Hewitt, and Liberty Tax prepared tax returns for 20 million filers in 2003. Unbranded tax preparers completed more than 50 million returns (Tufano and Schneider (2004b)). Families trust these preparers with highly confidential information and they facilitate the flow of $78 billion in refunds, some of which can be diverted to savings. Some commercial preparers are aware to this opportunity. H&R Block is piloting a new product set called “Everyday Financial Services” which may connect Block’s low-income clients to transaction and savings products through the

use of card-based accounts. Block expects to deliver these financial services to low-income clients more cheaply than AFS providers, banks, or credit unions by virtue of its existing tax-preparation based client relationships, established network of retail locations, and business wide benefits of client retention flowing from cross-sells (Tufano and Schneider (2004b)).

While a commercial preparer like H&R Block can set up the type of business relationships with financial institutions to facilitate a refund-based savings program, organizing these programs is more difficult for the thousands of volunteer tax sites that serve 1.6 million taxpayers (IRS (2003)).[17] Unless they partner with a local financial institution which can open new accounts for refund recipients at the time of tax filing, these volunteer sites cannot assist less affluent families to build assets. To assist these families, it would be useful if there was a simple mechanism whereby accounts could be opened during, or even after, the time of tax preparation, but before the refunds were received. This could be solved with a relatively simple pooling facility, or even more simply by reinventing savings bonds as a savings alternative of last resort.

Re-inventing Savings Bonds. In 1935 Secretary of the Treasury Henry Morgenthau introduced the United States Savings Bond, "designed for the small investor – that he may be encouraged to save for the future and receive a fair return on his money" (Treasury (1935)). This bond offering built on a long history of selling US securities with the intention of helping small savers to invest and plan for the future. During World War I, Thrift Stamps were available in amounts as little as .10 cents, convertible into $5 dollar bonds (Tufano and Schneider (2004a)). After the War, the Treasury continued its campaign to help small savers, arguing the importance of making thrift a "happy habit" for all Americans and the benefits of savings in the event of "a rainy day or a sunny opportunity," and as a means of funding education and home ownership (Treasury (1918)).

[17] IRS supported Volunteer Income Tax Assistance (VITA) and Tax Counseling for the Elderly (TCE) free tax preparation sites prepared returns for 1.6 million individuals in 2003. This figure does not include those free tax preparation sites that are not funded through the VITA or TCE programs.

This purpose seems to have fallen by the wayside. As described above, the recent actions of members of Congress and the Treasury Department have resulted in the wholesale dismantling of the Savings Bonds marketing program, making it far more difficult for "small savers" to build assets through the purchase of these bonds. A recent consulting report on the Savings Bond program suggests that the distribution channels for bonds are dysfunctional, and our personal experience concurs with this finding, as we were shuttled from bank to bank before someone actually was able to provide the paperwork necessary to purchase a simple savings bond (Arnold Consultants (1999)).

However, we propose that a set of minor modifications to Savings Bonds policy can have a significant impact on the program. First, the Treasury should reduce the required minimum holding period from 1 year to allow small withdrawals for emergency purposes. Second, the Treasury should leverage the purchasing power of LMI tax refunds to allow taxpayers to purchase Savings Bonds directly, at the time of filing, with their federal tax refunds. In simplest terms, the IRS could add a line to the 1040 forms that allowed the filer to dedicate part of the refund to purchasing savings bonds. The remainder of the information needed to complete the transaction is contained on the tax form itself, and this would allow all families to divert money into savings. Congress should restore funding for Savings Bonds marketing and couple the tax-time bond-buy option with a simple social marketing campaign to encourage LMI families to save and purchase savings bonds with their tax refunds. Third, while the ability to purchase bonds at tax time would broaden distribution channels, the Treasury should explore ways to sell bonds through retail outlets like Walmart or alternative financial service firms that are far more prevalent in LMI communities than depository institutions. Finally, the Treasury should recognize that if low-income families are to purchase Savings Bonds, these families may reach a time when they feel able to purchase products with higher returns and more risk. The Treasury should plan for this by allowing "roll-overs" to other investment vehicles. See Tufano and Schneider (2004a) for a more complete discussion of Savings Bonds policy.

Stimulating Supply: Lowering the Cost to Serve Less Affluent Customers

Low-cost Accounts. Account ownership is highly correlated with savings and asset accumulation (Vermilyea and Wilcox (2002)). Holding a transaction account provides a valuable entry to traditional financial services, which offer more savings options than Alternative Financial Service (AFS) providers (Boshara (2001)). Bank accounts enable low-income families to increase their savings by using direct deposit which may decrease the temptation to spend (Beverly and Sherraden (1999)). However, an estimated 10 million households lack an account with a bank or credit union (Aizcorbe, Kennickell, and Moore (2003)). These households generally conduct their financial transactions through high cost AFS providers like check cashers. Both public and private sector initiatives have sought to move these unbanked AFS customers to account ownership and lower-cost financial services.

The 1996 Federal Debt Collection Improvement Act mandated that all Federal payments (including wages, vendor payments, and monthly public assistance benefits, but excluding tax refunds) be made by electronic funds transfer (EFT) by 1999 (Stegman (1999)). The rationale for this policy change was largely economic; by making payments electronically, rather than sending out paper checks, the Federal government could create significant cost savings (Stegman (1999)). Given that there were at least 10 million unbanked recipients of public assistance, the Treasury was faced with the formidable challenge of finding a cost-effective means of creating bank accounts (Stegman (1999)). However, the act also created a significant opportunity to help millions of low-income unbanked individuals to form banking relationships.

The Treasury faced two key sets of concerns in shaping the specifics of these Electronic Transfer Accounts (ETAs). Financial institutions expressed concerns about the profitability of the accounts and wanted to charge fees, limit services, and receive federal subsidies, while consumer advocates pressed for low fees, multiple account features, and a loosening of the requirement that all recipients of benefits open accounts (Stegman (1999)). The result was a

set of rules that, on the one hand, capped fees at $3 per month, waived minimum balance and ChexSystems requirements, required monthly statements, allowed for multiple free withdrawals and account balance inquiries, and, significantly, provided automatic waivers of the EFT requirement if benefits recipients did not sign up for an account. On the other hand, financial institutions were successful in obtaining permission to close an ETA if fraud was suspected and refuse to open an ETA if a prior ETA was closed due to fraud or other account problem, and in securing a subsidy from the Federal government of $12.60 per account opened (Stegman (1999)).

In January of 2005, approximately 79% of benefits recipients received payments by EFT, up from 56% in 1996 and 72% in 1999 (Treasury (2005)). Michael Barr reports that 98,000 ETAs had been opened by May of 2004 (Barr (2004b)).

The Treasury Department's First Accounts initiative seeks to subsidize organizations bringing low-income unbanked individuals into the financial mainstream. In the late 1990s, the Treasury department began researching the size and composition of the unbanked population and found that there was a large un-met demand for low-cost bank accounts. The Treasury designed the First Accounts program to encourage financial institutions to open accounts for these individuals. The First Accounts program was planned to support financial institutions and not for profit organizations that worked to open accounts, provide financial education, increase access to financial services in low income areas, and study new approaches to the provision of low-cost financial services (Barr (2004)).

In 2002, the Treasury allocated $8 million dollars to 15 projects across the country with the goal of banking 35,000 people (Treasury (2004)). The recipient included community based organizations, credit unions, and banks. The grant beneficiaries proposed a range of strategies for opening accounts, including tying account opening to Individual Development Accounts and to tax preparation. A number of the recipient organizations planned to offer financial education

in conjunction with the account opening and several intended to use the funds to expand ATM networks (Treasury (2004)).

Originally, over 230 organizations applied for the First Accounts funding, representing approximately $130 million in proposals. However, despite this un-met demand, the First Accounts program has not been expanded and no additional funds have been appropriated (Treasury (2004)). Barr (2004) has detailed a proposed expansion of the First Accounts program, with the Treasury providing a tax credit subsidy to financial institutions opening accounts for low-income unabanked individuals. Barr argues that with funding between $60 and $150 million, accounts could be opened for as many as 3 million unbanked individuals.

Processing Small Transactions in Big Pools. While the First Accounts program may subsidize the cost of low balance accounts, it does not address the inherent problem of diseconomies of small scale when dealing with less affluent consumers. While *in aggregate* they may have substantial resources, collecting and managing these funds *individually* is too costly. Fortunately, the financial services industry has found ways to deal with small transactions and accounts. Electronic funds transfer technology enables the economic transfer of extremely small transactions at low costs. Michael Stegman (1999) notes that EFT costs only $0.02 per payment versus $0.43 for a check. Web-based customer service can dramatically lower the cost of transacting by substituting customer labor for paid service labor. Though exact cost estimates vary, Forester Research reports that a self-service web inquiry costs the company just $1.17, significantly below the $32.74 cost for a customer service exchange by phone (Novak (2001)).

Finally, the cost of recordkeeping has been driven down by computing technologies, such as those used for 401(k) processors. A 401(k) system will keep track of the records of thousands if not millions of participants, while the asset manager may only see one omnibus account. D2D Fund, Inc. has incorporated these three elements (EFT, web-based service, and 401(k) recordkeeping) together to demonstrate how financial institutions can offer Individual

Development Accounts at low costs. See www.d2dfund.org. In general, there are many other ways to leverage these technologies to drive down the cost of serving small-balance accounts.

Conclusion

Economists often talk of "diminishing marginal returns." From the perspective of a financial service firm, the poor are beyond the profitable edge of these marginal returns. Costs exceed revenue potential for the poor, but not for the rich. But from the perspective of society, however, we may have the margin completely backwards. The marginal returns of increasing the financial assets of less affluent families must be higher than increasing the financial assets of the affluent. Adding $100 or $500 or $1,000 in savings to a low-income family living close to the edge will surely have a bigger impact on their lives—and on society—than adding the same amount to a wealthy family's balance sheet.

Unfortunately, helping less affluent families amass financial assets is not a simple problem, nor does it lend itself to a simple set of solutions. Fortunately, many solutions may be close at hand, products of ongoing innovation to serve more affluent customers and make the financial system operate more efficiently. Electronic funds transfers, 401(k) systems, video games, refund splitting, tax preparers, and other elements of the financial system were not designed primarily to help low income families save. However, once we recognize the potential of these innovations, we can begin to adapt them to serve the masses of Americans who would be most benefited by increased savings.

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Table 1 Percent Owning Select Financial Assets, by Income and Net Worth (2001)

	Savings Bonds	Certificates of Deposit	Mutual Funds	Stocks	Transaction Accounts	All Financial Assets
Percentile of Income						
Less than 20	3.8%	10.0%	3.6%	3.8%	70.9%	74.8%
20 - 39.9	11.0%	14.7%	9.5%	11.2%	89.4%	93.0%
40 - 59.9	14.1%	17.4%	15.0%	16.4%	96.1%	98.3%
60 - 79.9	24.4%	16.0%	20.6%	26.2%	99.8%	99.6%
80 - 89.9	30.3%	18.3%	29.0%	37.0%	99.7%	99.8%
90 - 100	29.7%	22.0%	48.8%	60.6%	99.2%	99.7&
Lowest quintile ownership rate as a percent of top decile ownership rate	12.8%	45.5%	7.4%	6.3%	71.5%	75.0%
Percentile of net worth						
Less than 25	4.3%	1.8%	2.5%	5.0%	72.4%	77.2%
25 - 49.9	12.8%	8.8%	7.2%	9.5%	93.6%	96.5%
50 - 74.9	23.5%	23.2%	17.5%	20.3%	98.2%	98.9%
75 - 89.9	25.9%	30.1%	35.9%	41.2%	99.6%	99.8%
90 - 100	26.3%	26.9%	54.8%	64.3%	99.6%	100%
Lowest quintile ownership rate as a percent of top decile ownership rate	16.3%	6.7%	4.6%	7.8%	72.7%	77.2%

Source: Aiozcorbe, Kennickell, and Moore (2003).

Table 2 Median value of Select Financial Assets among Asset Holders, by Income and Net Worth (2001)

	Savings Bonds	Certificates of Deposit	Mutual Funds	Stocks	Transaction Accounts	All Financial Assets
Percentile of Income						
Less than 20	$1,000	$10,000	$21,000	$7,500	$900	$2,000
20 - 39.9	$600	$14,000	$24,000	$10,000	$1,900	$8,000
40 - 59.9	$500	$13,000	$24,000	$7,000	$2,900	$17,100
60 - 79.9	$1,000	$15,000	$30,000	$17,000	$5,300	$55,500
80 - 89.9	$1,000	$13,000	$28,000	$20,000	$9,500	$97,100
90 - 100	$2,000	$25,000	$87,500	$50,000	$26,000	$364,000
Percentile of net worth						
Less than 25	$200	$1,500	$2,000	$1,300	$700	$1,300
25 - 49.9	$500	$500	$5,000	$3,200	$2,200	$10,600
50 - 74.9	$1,000	$11,500	$15,000	$8,300	$5,500	$53,100
75 - 89.9	$2,000	$20,000	$37,500	$25,600	$13,700	$201,700
90 - 100	$2,000	$40,000	$140,000	$122,000	$36,000	$707,400

Source: Aizcorbe, Kennickell, and Moore (2003).

Table 3 Household Savings a per cent of Disposable Income

	1999	2000	2001	2002	2003
Canada	4.0	4.6	4.5	4.2	2.0
France	10.4	11.0	11.5	12.1	11.1
Germany	9.8	9.8	10.3	10.6	10.8
Japan	10.7	9.5	6.6	6.4	6.4
Netherlands	9.6	6.8	9.0	8.6	11.2
United States	2.4	2.3	1.7	2.3	2.1
Belgium	14.1	13.1	13.8	15.1	14.3
Italy	15.2	14.6	15.8	16.0	15.0
Sweden	2.0	2.9	8.3	9.7	8.0
Switzerland	10.0	11.7	11.6	11.6	11.6
United Kingdom	5.3	5.5	6.7	5.5	5.7

Source: Adapted from the OECD Economic Outlook (2004).
Note**:** Data measurement varies across countries to some degree, see OECD Economic Outlook (2004) for a detailed explanation.

Table 4 Hypothesized and Observed Effects of Asset Holding

Asset Effects Hypothesized by Sherraden	Homeownership Effects	Financial Asset Effects
- Improve household stability - Create an orientation toward the future - Stimulate development of other assets - Enable focus and specialization - Provide a foundation for risk taking - Increase personal efficacy - Increase political participation - Enhance the welfare of offspring	- Decreases residential mobility - Raises property values - Increases home improvement, property maintenance - Increases involvement in neighborhood organizations - Decreases instances of domestic violence - Increases marital stability - Leads to better health outcomes - Leads to stronger economic position - Creates more favorable life outcomes for children	- Increases marital stability - Leads to better health outcomes - Leads to greater economic security - Raises educational attainment by children

Source: Table adapted from Sherraden (1991) and Page-Adams, Scanlon, et al (2001).

Table 5 Minimum Initial Purchase Requirements among Mutual Funds in the United States.

	No minimum initial purchase requirement	**Minimum initial purchase requirement ≤ $100**	**Minimum initial purchase requirement ≤ $250**
Among all Funds listed by Morningstar			
Number allowing	1,292	1,402	1,785
Percent allowing	7.9%	8.6%	11%
Among the top 500 mutual funds by net assets			
Number allowing	49	55	88
Percent allowing	9.8%	11%	17.6%
Among the top 100 index funds by net assets			
Number allowing	30	30	30
Percent allowing	30%	30%	30%
Among the top 100 domestic stock funds by net assets			
Number allowing	11	13	24
Percent allowing	11%	13%	24%

Source: Tufano and Schneider (2004a)

Table 6 Average Savings Account Fees and Minimum Balance Requirements, Nationally and in the Ten Largest Consolidated Metropolitan Statistical Areas (CMSAs) (2001)

	Minimum Balance to Open Account	Monthly Fee	Minimum Balance to Avoid Monthly Fee	Annual Fee	Annual Fee as a Percent of Min Balance Requirement
All Respondent Banks	$96.9	$2.2	$157.9	$25.8	27%
New York	$266.5	$3.1	$343.1	$37.1	14%
Los Angeles	$295.2	$2.8	$360.2	$33.6	11%
Chicago	$121.8	$3.5	$206.9	$42.5	35%
District of Columbia	$100.1	$3.2	$152.1	$37.8	38%
San Francisco	$274.7	$2.8	$486.3	$33.8	12%
Philadelphia	---	---	---	---	---
Boston	$44.0	$2.7	$235.2	$32.9	75%
Detroit	---	---	---	---	---
Dallas	$147.4	$3.2	$198.2	$37.8	26%
Houston	---	---	---	---	---
Average 10 Largest CMSAs	$178.5	$2.9	$267.5	$35.2	20%

Source: Tufano and Schneider (2004a)