Chapter 1. Paying for the Unexpected: Making the Case for a New Generation of Strategies to Boost Emergency Savings, Affording Contingencies, and Liquid Resources for Low-Income Families

Abstract

Access to liquidity is important for low-income households, especially as volatility in income and expenditures has grown over time. Liquidity can be provided by savings or credit, and often people use both simultaneously. Emergency savings is important because it provides for consumption smoothing when credit is constrained or expenses are immediate. Access to liquid savings has the potential to help households manage shocks and achieve greater financial well-being. Yet, there few policies or programs designed to help low-income households build liquidity in the form of unrestricted savings. If increasing the financial stability and resilience of families is a goal, then more effective emergency savings innovations need to be developed at a sustainable scale, and barriers to unrestricted savings need to be reduced. This chapter provides an overview of the role of savings for low-income families, including insights from existing studies and a framework for considering policy and program innovations aimed at improving access to liquidity for low-income families.

Introduction

Low-income households' accumulation of liquid savings is an important, and growing, issue, and one that has not yet attracted significant attention. Financial advisors commonly recommend that people have three to six months of income as liquid savings, stored as cash, demand deposits, or other funds that can be accessed within a few days. This rule of thumb is based at least in part on the fact that it could take three to six months to find a new job in case of unemployment, and liquid funds can provide an emergency safety net for this period (Chang, Hanna, and Fan 1997). However, for lower-income families, a three-month savings cushion is difficult to accumulate. As these households face lower incomes and higher relative costs for housing, transportation, food, and other essentials, just making ends meet is a challenge.

In surveys, low-income households report being worried about their ability to respond to financial emergencies (Lusardi, Schneider, and Tufano 2011). It is important to note that "emergencies" encompass a wide range of situations, not just job loss. For low-income households, even relatively small unexpected expenses can have significant impacts on financial stability (Abbi 2012). A lack of resources can result in material hardships such as housing instability or food insecurity (McKernan, Ratcliffe, and Vinopal 2009). And a lack of financial flexibility can leave households unable to take advantage of opportunities for upward economic mobility, such as job training or enrichment activities for children. In fact, "emergency savings" might better be labeled "contingency savings" since it is a pool of resources used to manage unexpected, extraordinary expenses that current income cannot accommodate.

Without savings, low-income households may have no choice but to turn to credit to make ends meet. For example, Babiarz, Widdows, and Yilmazer (2013) show that households, especially low-wealth households, take on debt following an illness or health difficulty. Demand for short-term, high-cost credit suggests an underlying need for liquidity. In theory, this sort of borrowing is a reasonable substitute for savings. However,

emerging research suggests that using high-cost credit could make families worse off overall, relative to using other forms of financial support or savings (Carrell and Zinman 2014; Melzer 2011). Emergency savings may not just be a recommended practice among financial experts; it may actually have a material impact on the quality of life of low-income families. In fact, Xiao (2013), in a broad review of literature, concludes that having an emergency fund is a key factor in overall financial satisfaction and well-being (see also Gjertson, this volume). Yet, low-income families lack much in the way of savings of any kind, including savings to cover unexpected expenses or income shortfalls (Scholz, Seshadri, and Khitatrakun 2006).

The Failure of Precautionary Savings for Low-Income Families

In a review of the literature, Chase, Gjertson, and Collins (2011) identify studies on emergency savings and alternative sources of liquidity for households in times of unexpected income shortages or expenditure shocks. About 30 of these articles focus on forms of precautionary savings, and 5 focus specifically on emergency savings. This set of papers highlights the emerging interest in this area among researchers and policy makers, as well as its potential for growth as an area of study.

The economics literature generally defines savings as the accumulation of financial assets to store resources for future consumption--that is, the intertemporal substitution of income now for income later. These might be in the form of long-term savings, such as a retirement account, or more liquid funds to provide short-run consumption smoothing. This form of savings is unrestricted in its use but intended to accommodate variability in income and expenses. The life-cycle hypothesis commonly used in economics (Ando and Modigliani 1963) suggests people will save less (and borrow more) when their earnings are lower relative to their future earning potential. This implies that younger people with expectations of income growth will save less and borrow more, using their future income to pay down debt. In old age, as incomes decline, people tend to consume savings. Likewise, people will recognize that if they have short run fluctuations in income, they should save in peak earnings periods to prepare for less prosperous periods.

Saving for a potential income loss is the focus of studies of precautionary savings. Researchers often focus on savings that households accumulate based on expectations of future income losses. For example, Lusardi (1998) finds that people who have a higher risk of an income decline save more than those with more stable incomes; for example, individuals who work on commission may save more when their income is relatively higher to prepare for future periods when income could be lower. In the aggregate, households also respond to income uncertainty by increasing savings as the risk of an income shock rises, consistent with research findings regarding precautionary savings motives (Wilson 1998).

Acs, Loprest, and Nichols (2009) examine within-year income changes among individuals age 25–61 in families with children. They find highest incidence of substantial income declines (50 percent or more) among those initially in the lowest income quintile. Yet, savings levels are substantially lower for these households. Like all forms of savings, precautionary saving levels rise with income (Guiso, Jappelli, and Terlizzese 1992), and lower-income households save relatively less in precautionary funds. Thus, while overall savings is related to households anticipating income drops, among low-income households

often have little or no liquid reserves. The group that might most benefit from precautionary savings lacks access to that resource.

Precautionary savings can also be defined as funds stored in anticipation of increases in expenditures, in addition to anticipation of declines in income (see, for example, Nocetti and Smith 2010; Feigenbaum 2008; Browning and Lusardi 1996; Hubbard, Skinner, and Zeldes 1994a, 1994b). However, income shocks appear to be more widely studied than expenditure shocks (Gorbachev 2011). In part this is because there are a wide range of expenditure shocks--including medical costs, the costs of repairing or replacing durable goods, and other expenses that are outside of typical spending patterns. Most households will incur variable expenditures for which the exact timing is difficult to predict, such as car repairs, heating bills, or home maintenance expenses. Other expenditure shocks, such as medical expenses not covered by insurance, changes in family size or status, support for relatives, and costs of relocating or moving, are less predictable but can be large in magnitude. Even households who do not anticipate income drops may therefore prefer to have emergency savings to protect against some form of an expense shock.

Using data from the Survey of Consumer Finances, in which respondents were asked to estimate their own "optimal" savings amounts, Kennickell and Lusardi (2004) find that the vast majority of households report they in fact want to have precautionary savings funds. However, when subjective estimates for desired savings are compared to how much households report *actually* saving, it becomes evident that many households, particularly low-income households, are far below their stated savings goals. Furthermore, the amounts households say they need often fall below their actual emergency spending; Brobeck (2008) finds that among the lowest income quintile, households perceive annual emergency savings needs at about $1,500, yet these households typically spend around $2,000 on emergencies each year. Very few households approach even the perceived amount required; less than half the households studied by Kennickel and Lusardi (2004) had savings accounts, and less than half of those with a savings account had emergency savings of at least $500. It appears low-income families would prefer to save more but often fail to do so.

It is important to note that smaller irregular spending or income shocks might have amplified effects on lower-income families. A low-income family may be forced to cut back on essential expenses, while a higher-income family can reduce nonessential expenditures. Thus, poorer families may be more profoundly affected by a lack of emergency savings. Lack of liquidity can result in substantial and tangible hardships that threaten family well-being.

The Increasing Need for Emergency Savings

Increased volatility in both income and expenditures have heightened the need for precautionary savings among low-income households in recent decades. Gottschalk and Moffitt (2009) show increasing variance in income over the last few decades, especially for low-skilled, lower-wage workers. Dynan, Elmendorf, and Sichel (2012) also find that low-income people today face a greater likelihood of a drop in income than did prior generations. This change is due to several factors, including welfare reform that has reduced income supports, an increase in part-time employment, the decline of labor unions, and the greater use of contracting by employers. These factors, combined with

shifts in demand for both skilled and unskilled labor in international labor markets, mean that low-income households need to be prepared for greater income shocks than in prior generations.

Gorbachev (2011) shows expenditures have also become more volatile. Household-level volatility in the consumption of nondurable goods has increased by at least a quarter since the 1970s, with much of the effect among households with lower incomes, such as minorities and those with lower education levels.

These two trends combine to make cash-flow management more challenging for low-income families. Households today are more likely to experience drops in income and increases in expenses. Emergency savings can provide liquidity to bridge these fluctuations, but low-income households have limited emergency savings available.

Measuring Emergency Savings

Lusardi (1998) notes that estimating precautionary savings is complex, requiring detailed information about current net wealth, lifetime income, spending, and the relative risk of an income shortfall. As a result of this complexity, studies of emergency savings use a wide variety of definitions of emergency funds. Some are based on a benchmark relative to income. For example, a benchmark of three months of income would suggest that someone who earns $36,000 per year should have an emergency fund of at least $9,000. Other approaches might be based on a portion of current consumption, such as three months' rent or housing payments.

Often, studies define emergency funds based on how they are stored; cash and savings accounts that are accessible in short order are considered "emergency liquid funds" (Bhargava and Lown 2006). Of course, even equities and personal property can often be liquidated in a few days, potentially resulting in a larger range of assets that could be included. Other studies rely on subjective assessments of emergency funds, rather than labeling financial accounts. For example, Babiarz and Robb (2014) use a survey question: "Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?" This approach has the advantage of incorporating the context of the family given their stage in the life course, as well as geographic cost of living differences, but becomes more challenging to quantify in terms of savings levels.

Finally, some studies ask people if they can access a fixed dollar amount, such as $500 or $2000, within a set time period (see, for example, Mills and Amick 2010). In this vein, Lusardi, Schneider, and Tufano (2011) define liquidity as "coping capacity" and link it to the family's ability to come up with funds from any source in short order. Both assets owned by the household and the household's perceived ability to access credit or tap into resources provided by family or other networks may be included. The amount of funds and the number of days required to acquire funds both seem likely to be important. Smaller amounts could more likely be accessed via the most informal and liquid means, often in a few days. Larger amounts might require working with financial institutions or liquidating assets, taking a few weeks. Both may be of interest for practice, research, and policy, but these measures are likely to be distinct constructs depending on the amounts and time frames involved.

Barriers to Emergency Savings

While economic theory would suggest that households should save based on expectations regarding future income and expenses, numerous studies show many people lack liquid savings, especially low- and moderate-income households (see Gjertson, this volume). Without easy access to liquid savings, people turn to other alternatives, including short-term credit, friends and family, and potentially even public subsidy programs. Why do people fail to save even small amounts for contingencies? The literature suggests a range of reasons, from program rules to a lack of knowledge. Ultimately, a lack of resources is a major factor, along with behavioral biases such as procrastination.

Some researchers suggest that the existence of public assistance might reduce savings motivations (Carter and Barrett 2006). This discussion focuses on whether welfare and unemployment policies might inhibit savings, since people facing an income loss could claim unemployment benefits rather than having to rely on precautionary savings (Lise 2013). Unemployment insurance does not cover unexpected expenses in the absence of a loss of employment, however, and access to unemployment insurance is not universal (Ben-Shalom, Moffitt, and Scholz 2011). Thus, the existence of unemployment coverage is not sufficient to explain the lack of emergency savings.

Another potential barrier to saving is that public assistance programs may include asset tests, which could preclude people who have emergency savings from accessing benefits. For example, Supplemental Social Security (SSI) benefits restrict a single person to a savings balance below $2,000 and a married couple to a balance below $3,000. In some states, Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) have asset tests, typically around $3,000. However, the connection between asset tests and savings is unclear. Hurst and Ziliak (2006) find no connection between asset limits and low savings rates among low-income households, but O'Brien (2008) suggests that even the perception that savings may make a household potentially ineligible for welfare supports may discourage some savings. It seems asset tests are worthy of scrutiny, but they are not the only barrier to emergency savings.

Emergency savings can be stored in a variety of forms, including cash, but the prototypical form of savings is a demand deposit savings account at a financial institution. Since about one in ten households lacks a bank account, and an even higher share of low-income people lack savings or checking accounts, not being banked could be one barrier to saving for an emergency (Rhine and Greene 2013). An explicit link between the use of mainstream banking and the accumulation of emergency savings is unlikely, however, since even the unbanked can use alternative mechanisms to store funds. Nevertheless, the formality and safety of these savings accounts may be associated with accumulating emergency savings. However, there are not many savings products that are well designed for low-balance emergency savings. Even among banked households, fees for maintaining small-balance accounts might discourage using a savings account as a store of liquidity. Although inflation has not been a concern in recent years, low-yield accounts also run the risk that inflation could outpace the rate of return on the savings account. Moreover, many low-income households tend to use alternative financial services such as check cashers or payday lenders, and these providers may not offer any savings account option.

A barrier that is well supported in the literature, and obvious from our own experiences, is that people often fail to behave in ways that they know are beneficial. Karlan, Ratan, and Zinman (2014) discuss barriers to savings generally and conclude that behavioral biases and failures are central reasons people fail to save. We all tend to push off

difficult tasks with delayed rewards, even though we know that in the future we will regret not taking action today (Laibson 1997). Some people realize their self-control problem and correct for it using commitment devices (O'Donoghue and Rabin 1999). For example, using automatic deposit to transfer funds directly into a savings account allows individuals to commit today to saving in the future. Pre-commitments can be powerful, but the application depends on context . If a worker is self-aware and has a reliable paycheck and an employer that offers direct deposit, signing up for automatic savings is feasible. It may be much more difficult for those with irregular paychecks or no access to direct deposit. Another technique to reduce the temptation to divert savings to non-emergency uses is to use peer pressure to encourage people to set up and maintain accounts. If people know that their friends, family, or peers are monitoring their progress towards savings goals, they may be more likely to cooperate with a savings plan (see Karlan, Ratan, and Zinman 2014 for a discussion).

Mullainathan and Shafir (2009) describe the lack of financial liquidity as lacking financial "slack." Credit can provide financial slack today, at the expense of committing resources in the future to repay the debt. The authors observe that people often mistakenly expect slack to be greater in the future than in the present. This results in people systematically discounting how hard the debt they incur today will be to manage in the future--that anticipated slack fails to materialize. This bias results in people underestimating needed savings today and a tendency to use overuse credit.

A related behavioral bias is that people act as if they have only a limited supply of attention that can be applied to financial issues (for example, Stango and Zinman 2014). They neglect to pay attention to cash-flow management and consequently fail to save for an emergency. Savings does not become "top of mind" in the same way that bill payments, which have concrete due dates, dominate attention. Innovations like saving deadlines, penalties for undersaving, and simple reminders (for example, through mobile phone messaging) can all help to focus attention on savings that otherwise might be neglected.

Finally, a lack of financial knowledge may lead people to underestimate the need to set aside resources for unexpected emergencies or to overlook beneficial financial products or services. Many people--at all income levels--lack basic knowledge related to financial management and planning (Lusardi and Mitchell 2007). Despite these associations between knowledge and behavior, research on the effectiveness of financial literacy education interventions has been far from conclusive (Fernandes, Lynch, and Netemeyer 2014). In a literature review, Karlan, Ratan, and Zinman (2014) conclude there is little evidence that financial literacy education would substantially improve savings decisions, especially given the relative costs of delivering such education.

Overall, there are a number of potential barriers to emergency savings, including policies and regulations, poorly designed financial products, and behavioral biases. Well-designed innovations need to consider all of these factors; simply introducing an exciting new financial product is not sufficient. Behavioral issues may prove to be both the most challenging barrier to address and the one most likely to yield substantial gains.

Credit Market Alternatives for Liquidity

Cash-flow management is a major task of any corporate financial officer. Firms use lines of credit, commercial paper, and other instruments to meet short-term expenses. Households manage cash flow in similar ways. Even low-income people can access a wide

array of credit instruments; the major factors being interest rates, fees, and other costs (see Chase, Gjertson, and Collins 2011 for a review of alternatives). One form of short-term liquidity is to delay or skip a payment on a bill that is due, redirecting the money to another use. This will incur fees, may result in service shut-offs or repossession, and could undermine an individual's credit history. An alternative is to borrow, for example in the form of a payday loan. These short-term loans can cost less than missed payments, but they can also become very expensive if the borrower extends the loan by rolling it over at the end of the initial period, resulting in additional fees and interest.

Pawn loans offer a similar way to borrow for a short term, but these are loans against property. Pawn loans allow people to borrow a portion of the value of an item for a short period, with the risk of losing the pledged possession in case of default. When the pawn loan involves an automobile title, failing to repay the loan may mean losing the vehicle, which may be the borrower's transportation to work and other important functions. Another example of short-term liquidity is a bank overdraft. Consumers can run a negative balance on a checking account to access short-term credit from the bank, for a fee. All of these instruments have features that are attractive to low-income households, such as convenience and accessibility. But they also come with significant costs, some of which may undermine long-run financial stability (see Carrell and Zinman 2014).

Traditional wisdom in personal finance is that households should pay off debt (which charges a higher interest rate) rather than holding savings (which pays a lower interest rate). In practice, however, saving and borrowing both provide liquidity, and both may be appropriate, depending on the consumption the household needs to cover (Chetty 2012). Savings amounts tend to be smaller and slower to accumulate, but they can be used more flexibly. Telyukova (2013) shows that consumers may carry credit card debt at high interest rates even when they have money in a bank account earning low yields because they anticipate needing that money to cover situations where credit cannot be used. Because the need for cash-only expenses can be uncertain, households may maintain high-cost revolving debt while holding low-yield liquid savings. Programs and products need to recognize the dual and complementary role that savings and credit play.

Developing New Models

The low levels of emergency savings among low-income households and the increased need for the liquidity offered by emergency savings represent opportunities for new financial products, innovative programs, and improved public policies. Currently there are no specific policies or programs to support the development of emergency savings (Lusardi, Schneider, and Tufano 2011). Innovative new approaches like those outlined in this volume have the potential to help low-income people better manage their cash flow in the modern economy. Entrepreneurs in the private sector, as well as social innovators, should find emergency savings a fertile ground for new ideas.

However, it is worth reflecting on the goals of any new approaches before investing public and private resources in a new idea. Several factors must be considered in evaluating new strategies. First, any new product or program needs to be effective at scale. Good ideas that cannot be widely replicated become more like a lottery, where a lucky few people benefit but a large portion of families gain little. Second, new products or programs must have an effective delivery mechanism to reach the target population. Too often, financial innovations aimed at low-income consumers are not sustainable because there is

not enough institutional capacity to expand them beyond an initial pilot. Innovations that leverage existing markets, systems, and infrastructure may be most successful. Third, any new approach must be developed with a keen eye towards regulatory feasibility. In the post–Dodd-Frank Act era, consumer credit products are under increased scrutiny, as are costs associated with transactions and payments. Regulators need to be included in the development process to aid in the design or propose new flexibility in existing rules to accommodate new approaches. Fourth, any new approach needs to take into account ideas emerging from behavioral economics and psychology. The use of commitment devices, reminders, and mechanisms to leverage peer and family relationships to encourage cooperation are all examples of tools that may facilitate savings. These features have the potential to help people adhere to their financial goals, reduce procrastination, and overcome limits to attention. Finally, before a new emergency savings strategy can be expanded or brought to market, there needs to be evidence of its effectiveness. Researchers need to develop evaluations that can show the impact of new approaches to emergency savings using randomized field experiments as appropriate and including cost-effectiveness measures.

Failure of Policy: Opportunities for Private Innovations

Encouraging saving and investment is a frequent topic of policy discussions, but typically the emphasis is on savings for a specific, restricted purpose, for example retirement or education savings. Most savings incentives provided by the government come in the form of tax subsidies for particular savings goals. Tax subsidies can be defined as either tax deductions or tax credits.

Most savings incentives are deductions--for example contributions for qualified retirement saving are deducted from taxable income in federal (and most state) tax calculations. Deductions are claimed by taxpayers on their tax returns to reduce the taxable income and hence the total tax due. The value of the deduction depends on the taxpayer's marginal tax bracket. Reducing taxable income by $1 is worth $0.33 to a taxpayer in a 33 percent marginal tax bracket, but only $0.15 to a taxpayer in a 15 percent bracket. Thus, higher-income households benefit more from tax deductions than do lower-income taxpayers. Low-income families generally lack the resources to save for retirement, but when they do try to save, they benefit less from current tax policy than higher-income families.

The alternative is a tax credit, which can be designed to offset the amount of total tax due rather than just reducing the amount of income subject to tax. Generally, tax credits can only be applied to the extent that they reduce the tax due to zero; that is, they are not refundable. Hence, standard tax credits may be of little value to low-income taxpayers, who often owe little in taxes, and may qualify for other credits as well. Tax credits can be made refundable, meaning that a taxpayer with little or no taxes due can receive a refund. However, refundable credits face significant opposition by policymakers due to concerns about fraud and abuse.

There are much smaller direct-subsidy programs that offer lower-income families matched savings, but these are generally restricted to savings for buying a home or starting a business. There are no major federal savings policies that facilitate unrestricted savings and are targeted to low-income families (see Lopez-Fernandini, 2010 for a discussion). This gap represents an opportunity for community-based organizations, private businesses, and entrepreneurial policy makers to develop new approaches to encouraging emergency

savings and increasing access to liquidity. Small-scale pilot programs and carefully designed models have the potential to both aid individual clients and provide replicable models that can be expanded on a state or national level.

Conclusions

Everyone faces some probability of a cash-flow shortfall in the future, but preparedness for a financial shock is uneven by socioeconomic status. People who do not have short-term savings reserved for such emergencies have limited choices when they need liquidity. In the absence of assets that can be accessed to ease the impact of a financial shock, there are only a finite set of avenues to provide the needed funds: decrease consumption, increase borrowing, or increase income. Having emergency savings extends the time a household can weather a negative financial shock. Not having such support to backstop the household budget could result in material hardship and exacerbate economic instability.

Especially for low-income households, the solution must extend beyond traditional savings accounts. Increasing saving behavior is not as simple as teaching people to save. Emergency savings is only one part of how households manage liquidity, in combination with credit, changes in employment, and resources provided through social networks. Prior studies suggest that the need for liquidity is growing, as volatility in both the incomes and consumption of low-income households has increased over time. New approaches are needed.

Often, discussions of financial literacy focus on savings for retirement or major financial decisions, such as taking out a mortgage. But for many households, the knowledge most needed is daily cash flow management--making ends meet given unpredictable patterns of income and expenses. Managing the timing of payments, especially without a sufficient liquidity cushion, is difficult and likely to be stressful for consumers. Savings for emergencies or contingencies lacks the gravity of large-scale, long-term savings, but accumulating assets that could be used to provide liquidity on a day-to-day basis may be just as important for economic security. Some observers may argue that low-income people should not save, since they need to spend income on important immediate consumption. But emergency savings is a different and more essential form of savings than longer-term savings. It is a way to smooth consumption and avoid expenditure deficiencies, reducing the risk of hardships and distress.

Any new program needs to be evaluated in terms of its ability to (1) reach an impactful scale, (2) utilize an effective delivery system, (3) accommodate regulatory constraints, (4) leverage insights from research to address behavioral biases, and (5) show evidence of effectiveness.

This volume provides descriptions of nine models for consideration. The approaches include programs integrated into housing, tax filing, and public assistance programs, as well as new financial products. Technology plays a key role in many of these models, as does the incorporation of intentional behavioral mechanisms designed to enhance cooperation and adherence. These programs are not the only innovations in the marketplace, but they are illustrative of the breadth of approaches possible. Low-income families can potentially benefit from well-designed approaches to facilitate savings. The hope of this volume is to generate interest in this topic and inspire new ideas that improve the well-being of families.

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