

Emergency Savings

**U.S.
Financial
Diaries**

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■ Introduction

One of the core findings of the US Financial Diaries is the prevalence of income volatility. On average, our households experience six months when income is 20% above or below their typical monthly income.¹ In theory, households should react to volatile incomes by building up savings in months where income is higher than normal and using that cushion to smooth consumption during the months where income is lower. The very nature of volatile and unpredictable incomes, however, may make this strategy difficult to implement.

Households should have at least three months of income set aside in emergency savings, according to standard financial literacy curricula. Most snapshot surveys of American households' actual emergency savings paint a dire picture against this standard. For example, Pew Charitable Trusts recently found that less than half of households have more than one month of income set aside in liquid savings.²

Volatile incomes could explain some of the gap. The assumed "emergency" in emergency savings advice is usually the loss of a steady job, by implication an infrequent occurrence. But households in our survey experience smaller, more frequent, shortfalls in income. These smaller "emergencies" may require them to regularly draw down emergency savings. This could have several effects. First, it could make it hard to accumulate a large lump sum in emergency savings. Second, emergency savings balances could be quite low at any given point-in-time and not reflect how much households are setting aside (and then spending within a year). Third, it may cause households to set emergency savings goals at less than three months, since losing a job and having no income for three months is a less salient emergency than bridging monthly shortfalls in income.

In summary:

- » Households see a need for emergency savings.
- » Their emergency savings goals range widely, but most have a goal of less than three months of income.

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Note on Methodology

To gather this data, we asked households specifically about savings for emergencies, as opposed to general savings. We asked about dollar amounts for both emergency savings goals and current balances. From these dollar figures, we calculated monthly income equivalents. We exclude the top 1% of accounts and/or households in our analysis, and where noted, other outliers.

- » Only 7% of households had met their emergency savings goals.
- » On average, households' current emergency savings balance was only 22% of their goal.
- » More than 40% of households have no emergency savings.
- » The poorest households are least likely to have emergency savings. But some do save, and the amount of cushion savers have does not increase as incomes rise.
- » Households with high financial literacy have slightly higher emergency savings goals, but are no closer to reaching those goals than households with low financial literacy.

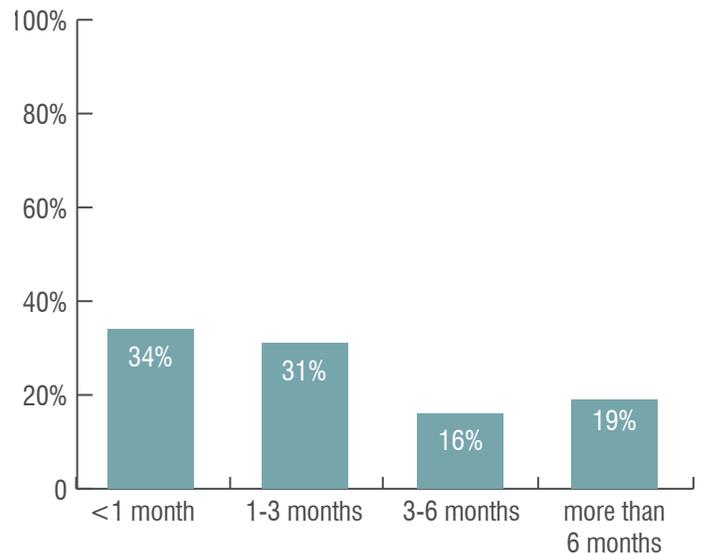
■ Emergency Savings Goals

Households in the USFD sample understand the general personal finance advice about the need for emergency savings. The median household goal for emergency savings was \$5000. The average goal was \$8115. In terms of months of income, 65% of households aim to have less than three months saved, while 34% have a goal of less than one month of income (Figure 1). The median households goal was only 1.7 months of income—well below the three-month rule-of-thumb. The average goal is much higher than the median; this is because some households set very high goals, above 12 months of income in some cases.

“The median household goal for emergency savings was \$5000—1.7 months of income.”

We break down our households into four income groups based on the Supplemental Poverty Measure (SPM).³ Unsurprisingly, emergency savings goals rise with income, but at a slower pace.⁴ In terms of months of income, there is a slight decline as incomes rise (see Figure 2). This decline may have multiple causes,

FIGURE 1: **Emergency Savings Goals in Months of Income**



including the fact that households with higher incomes likely have more ways to either finance spending in an emergency with credit or to cut spending without serious consequences (for instance, a lower income household may not be able to materially cut spending on food or transportation, while a higher income household may be able to forego dining out or entertainment expenses).

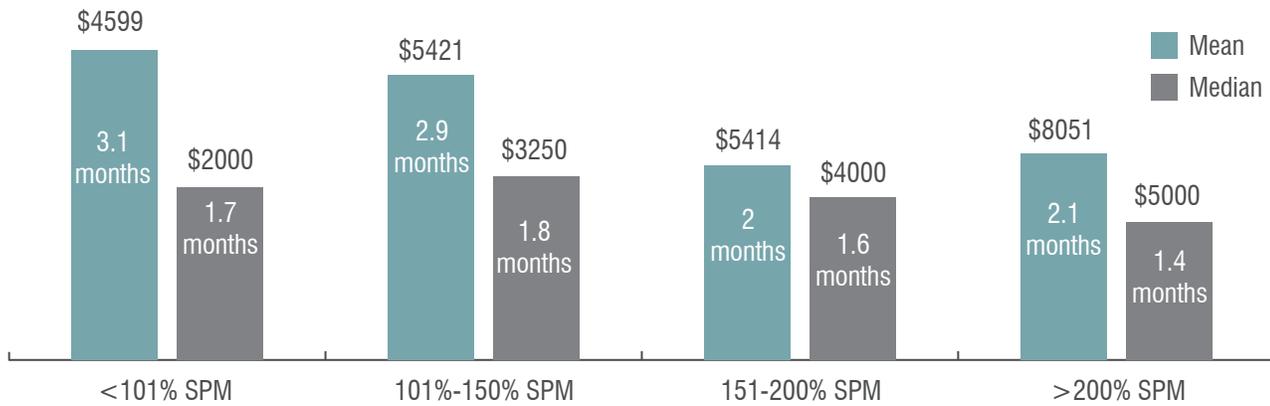
Despite having emergency savings goals below what conventional wisdom recommends, only 7% of households had managed to set aside an amount equal to or more than their perceived need.⁵

■ Emergency Savings Balances

Nearly half of USFD's sample reports holding nothing in emergency savings. Households living below the SPM threshold, controlling for region, site, and immigration background, are especially likely to report no emergency savings. However, roughly 40% of households above the threshold also hold no emergency savings—that percentage does not decline among higher-earning households (see Figure 3).

The sample's average household has \$1155 in emergency savings. When households with no savings are excluded, over half of the remaining households report no more than \$1000 saved (see Figure 4).⁶ As

FIGURE 2: Emergency Savings Goals in Months, and in Dollars, by Income Level (only HHs with Savings)



a result, when households with no emergency savings are excluded, the average emergency savings balance rises to \$2656.

Judged by how many months of income savings could cover, households with higher incomes do not seem to have higher savings balances (see Figure 4).⁷ In other words, when poorer households are able to save, they save roughly as many months of income as higher-earning households.

These values do not change significantly when households with retirement accounts are excluded, so it does not appear that households adjust their emergency savings behavior based on having retirement savings.⁸

“Only 7% of households have managed to meet their emergency savings goals.”

FIGURE 3: Percentage of Households with \$0 Emergency Savings, by Income Level

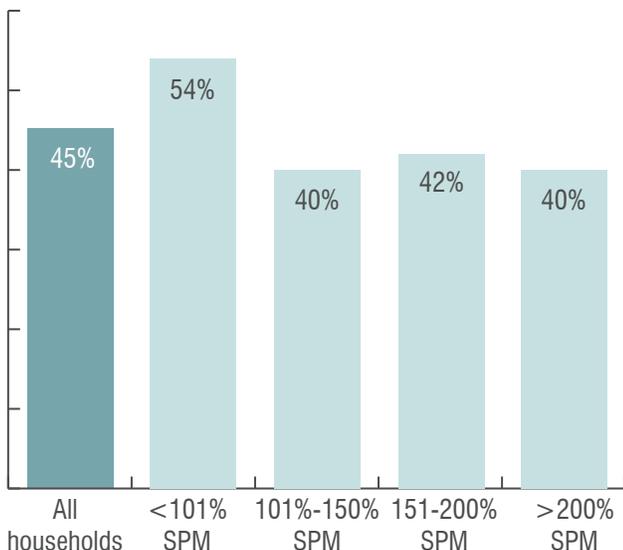
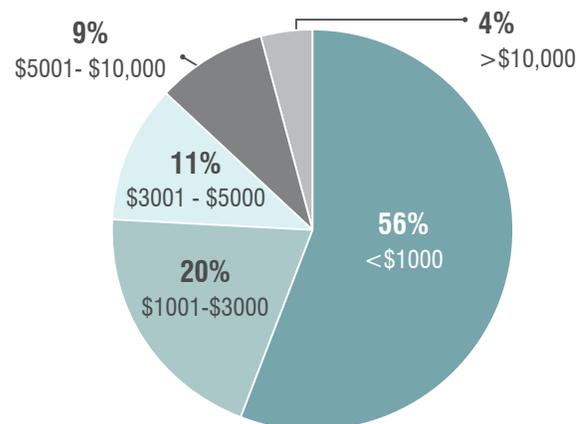


FIGURE 4: Distribution of Emergency Savings Value (only HHs with Savings)



Comparison to National Data

The Pew Charitable Trusts has been tracking US household finances for many years. In a 2015 report, Pew draws from the Survey of Consumer Finances to understand how many days of income households hold in liquid form—that is, funds in cash, checking, or savings accounts.⁹ It finds that over half of American households have less than one month of income in liquid savings, and that low-income households have less than two weeks of income saved.

Another national survey, the 2013 Survey of Household Economics and Decision-Making (SHED), asks households to quantify savings in terms of monthly expenses.¹⁰ Respondents self-report whether or not they have three months of expenses in an emergency fund at the time of the survey. Only 39% of respondents said that they could cover three months with their emergency savings. Responses differed by income level, with lower income households least likely to report having a three-month buffer.

FIGURE 5: SHED - Percentage of HHs with 3-Month Emergency Fund



How Much Cushion Do Households Have?

As noted, USFD households are not reaching their emergency savings goals. When asked about emergency savings balances, households on average had only saved 23% of their goal. These real emergency savings balances would provide only 1.2 months of income. When we include households with no emergency savings, the average declines to 18 days of income. Among these households that are saving something for emergencies, there is no meaningful income-related trend—measured in days of income, poorer households are saving as much as higher-earning households (see Figure 6).

The standard three-months-of-income advice about emergency savings balances is based on the amount of time necessary on average for someone who loses a job to find new employment. This recommendation makes intuitive sense if jobs are generally steady and provide a consistent monthly income. However, USFD analysis shows that the spikes and dips in income that many households in the sample experience within a year are not necessarily related to gaining or losing a job. Given this, it is plausible that households are setting emergency savings goals based on the reality of constant income volatility, not the possibility of losing a steady job.

To test this idea, we compared household emergency savings goals to the amount required to fully cover the typical income dips experienced during the course of the study. We find that 86% of households have a *goal* that would fully cover one average income dip, and 71% have a goal that would cover all income dips during the year. When we look at *actual* household emergency savings balances in comparison to the income dips experienced during the study, we find that just 38% have an emergency savings balance at the time we asked that would cover an average dip in income. (See the USFD Brief on Savings Horizons for an exploration of why such point-in-time balances may

FIGURE 6: Months of Income in Savings, by Income Level (only HHs with Savings)

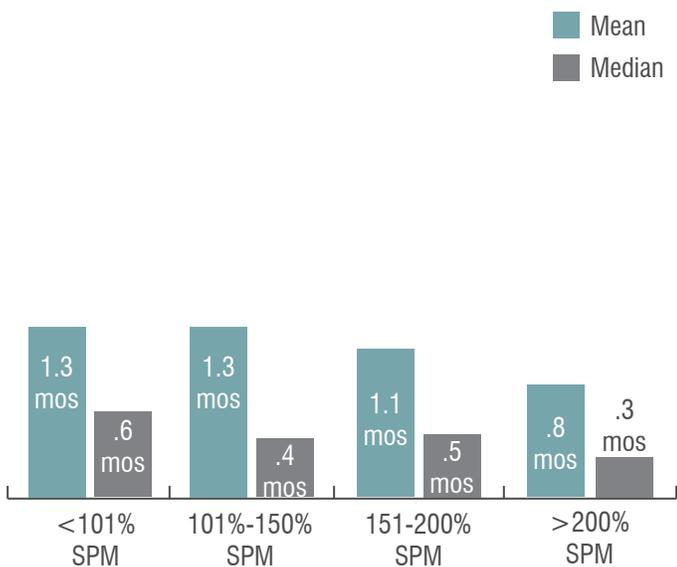
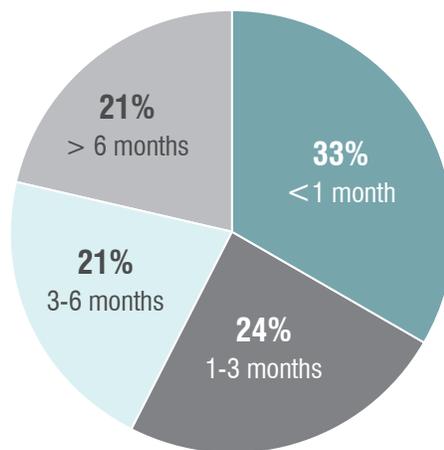


FIGURE 7: Months of Income that High Literacy Households Say they Need in Savings



not fully capture savings behavior.)

Emergency Savings and Financial Literacy

One theory as to why emergency savings balances are low is that people are not aware of how much emergency savings they need, and this inhibits them from accumulating the necessary sums. If true, one solution would be to provide financial literacy education. We tested the idea by asking households about their emergency savings goals and balances, and by asking participants to complete a simple financial literacy test.¹¹

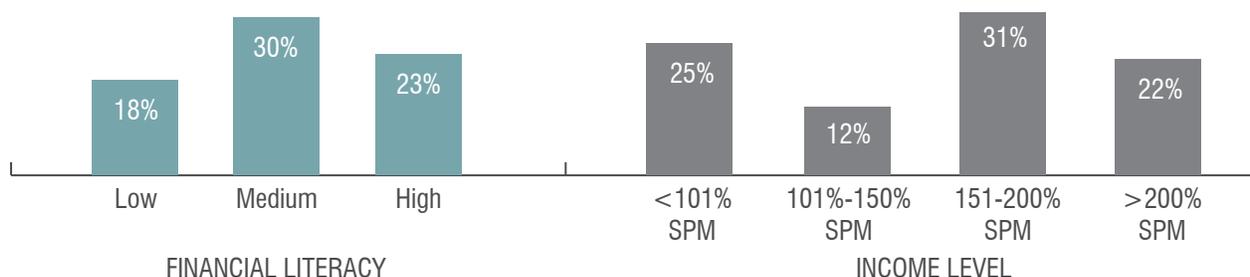
As noted, the median household reports an emergency savings goal of 1.7 months. The full

distribution is shown in Figure 1. While households with higher financial literacy report emergency savings goals higher than the overall household median, more than 50% of them still report emergency savings goals of less than three months (see Figure 7).

Figure 8 shows the percentage of low, intermediate, and high financial literacy households that have met their emergency savings goal, excluding households with a goal of more than 12 months (which most financial literacy curricula would discourage, instead teaching that such sums should be invested rather than maintained in easily accessible savings vehicles).

When it comes to how much of households' savings goals they actually have saved up, financial literacy does not appear to have an effect. Households with

FIGURE 8: Percentage of Households that Have Met their Savings Goals, by Literacy Level and Income Level



high financial literacy are not more likely to have reached their emergency savings goal, nor are they likely to be closer to their goal even if they haven't reached it. Importantly, household income level is not a predictor of reaching emergency savings goals either. A similar percent of higher income households are as far from their savings goals as the percent of lower income households.¹²

■ Conclusion

Our look into emergency savings among USFD households suggests that households' inability to accumulate emergency savings is not simply a matter of goal-setting, financial literacy, or income. Households are generally aware of the need for, and have goals for, emergency savings. However, neither financial literacy as currently conceived nor higher incomes (within the limited incomes of the households in the study) make a material difference in these households' ability to build up their emergency savings cushion.

Households are reaching just 23% of their emergency savings goal, and are not closing the gap as income increases. Only 38% of households have a savings balance that would cover an average dip in income. This suggests the need for short-term savings is acute. We explore the need for and use of short-term savings in more detail in our Savings Horizons Issue Brief.

A clearer picture of flows into and out of emergency savings during the year is vital to understanding the true state of households' ability to withstand income dips and volatile spending needs. We will continue to analyze how income and expense volatility interact with the savings behavior of households and how they smooth consumption and manage emergencies.

Notes:

1. The measure of income is total household income, including government benefits, and excluding income from tax refunds or credits.

2. *The Precarious State of Family Balance Sheets*. January 2015. Pew documents annual trends in household income, spending, savings, and debt between the 1980s and today. http://www.pewtrusts.org/~media/Assets/2015/01/FSM_Balance_Sheet_Report.pdf.

3. The Supplemental Poverty Measure (SPM) adjusts federal poverty levels based on regional cost-of-living differences.

4. This analysis excludes households with emergency savings goals of more than 12 months of income.

5. See Table 3.1, Federal Reserve Bulletin June 2012, p 16, <http://www.federalreserve.gov/pubs/bulletin/2012/pdf/scf12.pdf>.

6. Excluding households with no savings, the sample size drops from 227 to 123.

7. Controlling for differences in geography the general trend in savings amounts across poverty levels is unclear, while preliminary analysis indicates that households below the poverty line have lower savings amounts on average.

8. Figure 5 excludes number of days outside the 99th percentile.

9. *The Precarious State of Family Balance Sheets*. January 2015. Pew documents annual trends in household income, spending, savings, and debt between the 1980s and today. http://www.pewtrusts.org/~media/Assets/2015/01/FSM_Balance_Sheet_Report.pdf.

10. The SHED was designed and implemented by the Consumer and Community Development Research Section of the Federal Reserve Board's Division of Consumer and Community Affairs. The SHED focuses on adults over age 18. The sample includes 4,134 respondents randomly selected from a group of KnowledgePanel respondents. To address potential non-representativeness, SHED then applied weights based on the Census Bureau's most recent Current Population Survey (August 2013). The SHED questioned households only once in 2013, and the Fed now collects similar data annually to gauge broad trends. For the full report, see "Report on the Economic Well-Being of U.S. Households in 2013," Board of Governors of the Federal Reserve System, July 2014, <http://www.federalreserve.gov/econresdata/2013-report-economic-well-being-us-households-201407.pdf>. For the web appendix, see "Supplemental Appendix to the Report on the Economic Well-Being of U.S. Households in 2013," Board of Governors of the Federal Reserve System, July 2014, <http://www.federalreserve.gov/econresdata/2013-report-economic-well-being-us-households-supplemental-appendix-201407.pdf>. We are grateful to David Buchholz, Arturo Gonzalez, and Jeff Larrimore for sharing unpublished information from the SHED. They are not responsible for the content of this note.

11. Our measure of financial literacy was based on questions taken from p. 6 of Lusardi & Mitchell (2007): "Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel." Available at:

http://www.dartmouth.edu/~alusardi/Papers/American_Life_Panel.pdf.

These questions do not measure anything about emergency savings directly but are likely a good proxy for exposure to standard financial literacy topics. They are:

- Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have on this account in total?

- Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- Assume a friend inherits \$10,000 today and his sibling inherits \$10,000 3 years from now. Who is richer because of the inheritance?

- Suppose that in the year 2015, your income has doubled and prices of all goods have doubled too. In 2015, how much will you be able to buy with your income?

12. Note that the sample size is smaller on the left side of Figure 8 compared to the right because there are more households excluded when we remove outliers above this ratio's 99th percentile. The sample size increases on the right side of Figure 8 because more households have income level data than those that have financial literacy level data.



The U.S. Financial Diaries Project collected detailed cash flow and financial data from more than 200 families over the course of a year. The data provide an unprecedented look at how low- and moderate-income families—in four regions and 10 distinct demographic profiles—manage their financial lives. USFD was designed and implemented by Jonathan Morduch of NYU Wagner's Financial Access Initiative, Rachel Schneider of the Center for Financial Services Innovation, and Daryl Collins of Bankable Frontier Associates. Morduch and Schneider are the Principal Investigators for the ongoing analysis of the data. For more information, please visit www.usfinancialdiaries.org.



The Financial Access Initiative is a research center housed at NYU Wagner focused on exploring how financial services can better meet the needs and improve the lives of poor households. www.financialaccess.org



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