

## ■ Introduction

Saving plays a central role in conversations about American household finance, often prodded by worries about America's low saving rate. Surveys suggest that few American households save enough for retirement, nor are Americans adequately prepared for emergencies. Recent reports from the Pew Charitable Trusts and the Federal Reserve Board, for example, find that less than half of American households have three months of income saved for emergencies. (For more on emergency savings in the US Financial Diaries and other national surveys, see our Emergency Savings issue brief.)

Conversations about savings are hampered, however, by the fact that key concepts are fuzzy. How long does money have to be set aside before it is spent to count as savings? A month? A year? Longer? Does the type of account—e.g. checking, savings, prepaid card—where money is stored matter for calculating savings? Should saving be measured only as a balance at a given date (what economists call a “stock”), or should we also view saving as an activity (a “flow”) over time?

The US Financial Diaries methodology has two features that allow us to better understand household saving behavior. First, because we track flows into and out of accounts, not just balances at a single point-in-time, we are able to see saving activity over a year. As income and spending needs rise and fall, households save, draw down, and build up their savings again, leaving average balances that do not fully capture the extent of saving behavior. Second, because we followed households for a full year we have the opportunity to both discuss with households their expectations for the use of savings and track the actual uses of those savings. As a result, we gained new insight into how households thought about and used savings and how they used the variety of financial tools available.

In this brief, we focus on when households plan to spend their savings—or what we call “savings horizons.” In summary, we find:

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## Note on Methodology

In this analysis we consider all household accounts. We separate accounts into transactional (checking, payroll cards, government benefit cards, prepaid cards, etc.), savings and restricted savings (bank savings accounts, savings groups, health savings accounts, saving at home, etc.) and retirement savings. To categorize accounts by horizon, we asked households for the primary use of the account, though this does not capture accounts or balances with multiple uses. We exclude accounts with a balance of less than \$100, households and/or accounts in the top 1% of distributions, and where noted, other outliers. Balances and horizons were not captured for all accounts and therefore the number of households or accounts varies slightly between analyses.

- » Households use savings vehicles intensively with multiple deposits and withdrawals each month.
- » Short-term savings dominate longer-term savings—largely due to the ups and downs of income and spending needs.
- » Less than 10% of account balances are targeted for needs more than three years in the future. Even when including retirement accounts, where long-term balances are higher than in other savings vehicles, less than 25% of balances are targeted for needs more than three years in the future.
- » While empirically very important, short-term saving has not received adequate attention in programs and policies for lower-income households.

## ■ Use of Accounts

First, we take a look at how accounts are used. Do the findings in other research of low savings rates and low balances in savings vehicles mean that savings accounts are dormant or are not being used? How often do households save and withdraw? How does the use of transactional accounts compare to the use of savings accounts?

End-of-year balances are typically used to measure savings. But we see that the flow of deposits into accounts of all types dwarf the end-of-year balances.<sup>1</sup> Looking specifically at savings and restricted savings accounts (e.g. health savings accounts or Christmas club accounts), over the course of the year we followed households, the median household deposited three times more money than the total balance at the end of the year (see Table 1). Averages are much higher and are skewed by very active accounts. To better understand typical households, the second column in Table 1 excludes the most active 10% of accounts. Using these figures, we see households depositing five times more money on average than is reflected in the year-end balance.<sup>2</sup> These deposit-to-balance ratios suggest that looking at a point-in-time savings balance misses a great deal of saving activity.

As expected, savings and restricted savings accounts have lower deposit-to-balance ratios than transactional accounts. Unsurprisingly, the one type of account where we don't see high ratios is in retirement accounts, which we'll return to later in the brief.

The ratios in Table 1 are based on the aggregated behavior of households including all accounts in the household.<sup>3</sup> Because of our approach to data

TABLE 1: **Deposit-to-Balance Ratios for Households with over \$100 in Savings**

	Mean	Mean below 90th Percentile	25th Percentile	50th Percentile (Median)	75th Percentile
<b>All Household Accounts (321 accounts)</b>	<b>174</b>	<b>27</b>	<b>3</b>	<b>17</b>	<b>53</b>
<b>Transactional Accounts (148 accounts)</b>	<b>47</b>	<b>33</b>	<b>16</b>	<b>29</b>	<b>60</b>
<b>Savings &amp; Restricted Savings (95 accounts)</b>	<b>14</b>	<b>5</b>	<b>1</b>	<b>3</b>	<b>10</b>
<b>Retirement Accounts (26 accounts)</b>	<b>0.2</b>	<b>0.1</b>	<b>0.04</b>	<b>0.09</b>	<b>0.3</b>

**TABLE 2: Number of Monthly Deposits and Withdrawals**

	Mean # of Monthly Deposits	Mean # of Monthly Withdrawals
<b>Transactional Accts (219 accts)</b>	<b>4.2</b>	<b>19</b>
<b>Savings &amp; Restricted Savings (163 accts)</b>	<b>1.3</b>	<b>2.1</b>

collection, it's possible to look at a flow-to-balance ratio across individual accounts too.<sup>4</sup> In an analysis of accounts we see a similar pattern: relatively high flow-to-balance ratios even for savings-specific accounts.

Deposit-to-balance ratios are not the perfect measurement for this analysis. They risk being skewed upward by just a few large deposits and withdrawals. We therefore analyze intensity of account usage another way, by looking at how frequently households are making deposits into and withdrawals out of savings and restricted savings accounts (see Table 2).

Again, we see that while transactional accounts are used more intensively, households also make more than one deposit and around two withdrawals from savings and restricted savings accounts each month.<sup>5</sup>

We can also gain insight into saving behavior by examining the relative flows into transactional accounts versus savings and restricted savings accounts (see Table 3). On average, 17% of households' income is flowing into savings and restricted savings accounts, a figure roughly three times higher than the current national savings rate (which includes the entire income distribution, not just low- and moderate income households like those in the US Financial Diaries sample). This suggests that households are trying to save more than annual savings rates indicate.

The label on an account doesn't mean that it will be used in the expected way. Households may use checking accounts for savings and savings accounts for transactions.

**TABLE 3: Annual Deposits as a Percentage of Annual Income<sup>3</sup>**

	Mean deposits	Median deposits
<b>Transactional Accts (159 accts)</b>	<b>75%</b>	<b>77%</b>
<b>Savings &amp; Restricted Savings (161 accts)</b>	<b>17%</b>	<b>7%</b>

We gain additional perspective by looking not just at account type but at household expectations of when funds will be spent. This data gives us some additional insight into behavior.

## ■ Expectations of Savings Duration in Non-Retirement Accounts

Households in the USFD sample show a tendency both to think about most of their accounts for use within six months, and to hold most of their money in these near-term accounts. To understand this pattern,

### A Note about Christmas Club Accounts

Forty years ago, many households used Christmas clubs as savings vehicles. While their popularity plunged in the high-inflation years of the 1970's, they still exist, and seven of our households used them. They provide a useful lens into how households adapt financial products for their own purposes. While a Christmas club account is meant for spending at the end of the year, users can turn them into even shorter-term savings vehicles. For example, Karen (a pseudonym), is 52-years old and supports her 12-year-old daughter and three foster children aged 2 and 3. Almost every week, \$50 is automatically deducted from Karen's paycheck and deposited into her Christmas club account. She made three withdrawals from the account between June 2012 and July 2013, but only one was near Christmas: \$75 in July 2012, \$200 in August, and \$219 in November. Other households withdrew even more frequently: on average, households made six withdrawals per Christmas club account over the course of a year.

we asked households about the balances in each of the accounts (or informal places such as savings in their home) where they store money, and when they thought the money in those accounts would be spent.<sup>7</sup>

Since households may use transactional accounts for saving or savings accounts for transactional purchases, we begin by looking at all non-retirement account types. On average, households say most of their accounts will be spent down in the shortest time horizons: 73% of accounts are used for funds to be spent within six months and 84% of accounts are for funds to be spent in less than a year. When we examine balances, rather than accounts, the figures remain the same.<sup>8</sup>

Figure 1 shows the average percentage of savings balances that households hold in accounts designated for each time frame. On average, households keep the majority of their funds in accounts focused on spending within 6 months: 72% of balances are held in accounts designated to be spent within 6 months and 83% under one year. When we look only at savings accounts, we find that households expect nearly 50% of funds to be spent within six months, and 65% within the year.

We also see evidence of short-term savings behavior in the frequency of deposits into and withdrawals

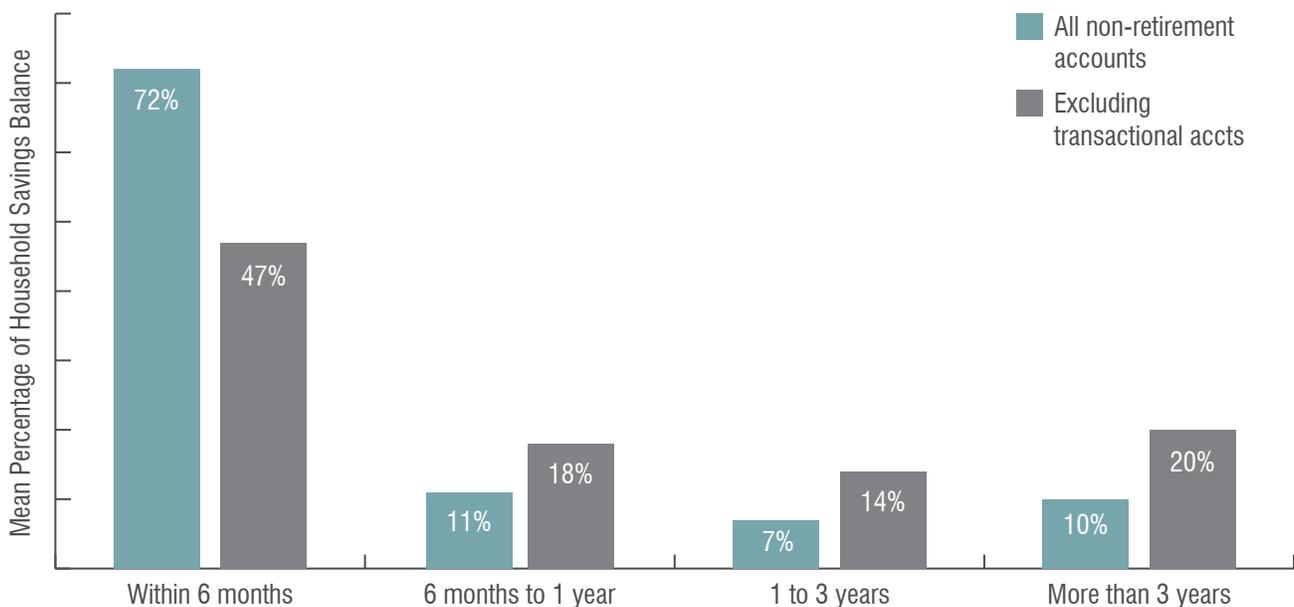
out of non-retirement accounts. Even the accounts designated for savings earmarked to be spent more than a year into the future see a great deal of activity. These accounts see one deposit and three withdrawals in an average month (see Figure 2).

Nearly 20% of balances in savings accounts, and 10% of balances in all accounts are set aside for spending more than six months but less than a year in the future. The figures reinforce the finding that (1) households are not simply living paycheck to paycheck, and (2) annual savings rates miss a substantial amount of saving behavior.

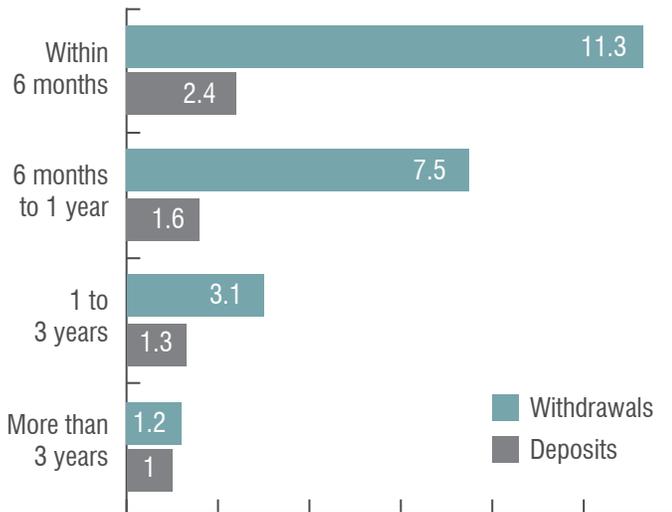
## ■ Savings Horizons by Income Level

Short-term savings dominate long-term savings, even for better-off households. We break down our households into four income levels. We divide households based on the ratio of annual income to thresholds developed for the US Census Supplemental Poverty Measure (SPM). This measure allows us to control for differences in regional prices.<sup>9</sup> In each income group, more than 80% of balances in non-retirement accounts are expected to be spent within 12 months; more than half of balances in savings and restricted savings accounts are expected to be spent within the year (see Figures 4a and 4b on page 6).

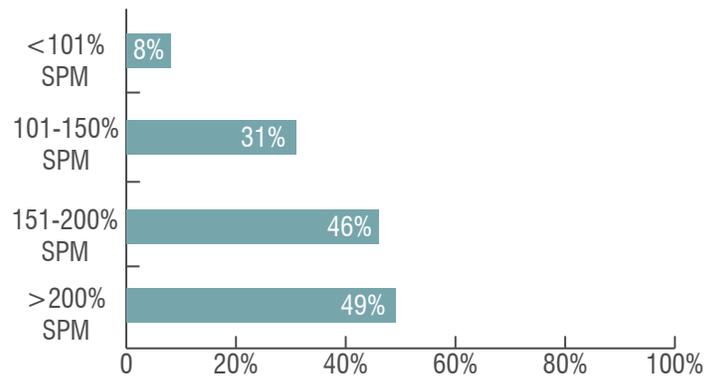
FIGURE 1: **Account Balances and Spending Plans**



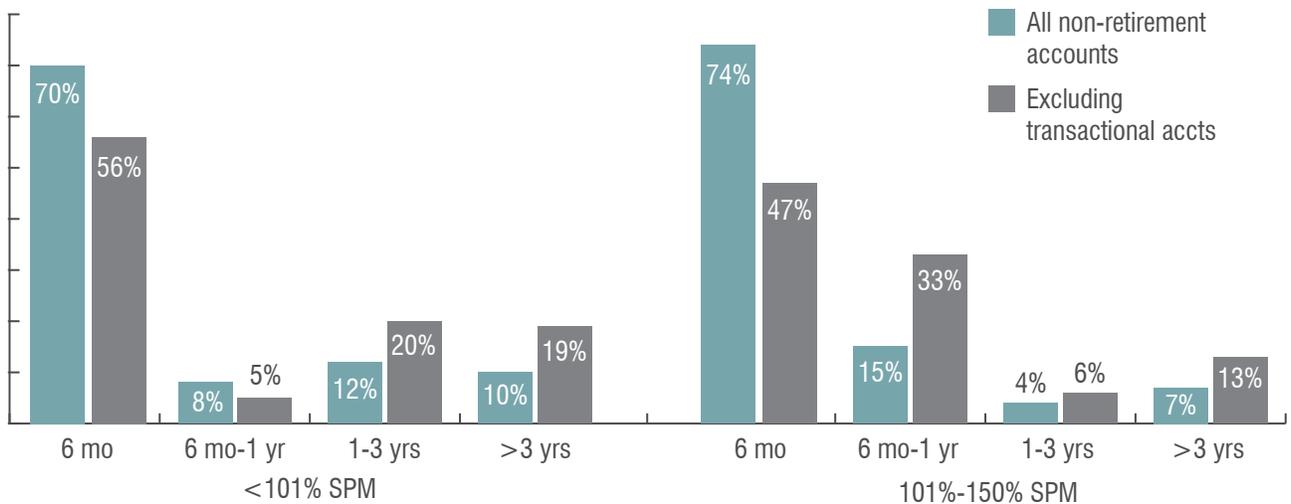
**FIGURE 2: Mean Number of Monthly Withdrawals and Deposits, by Account Time Horizon<sup>10</sup>**



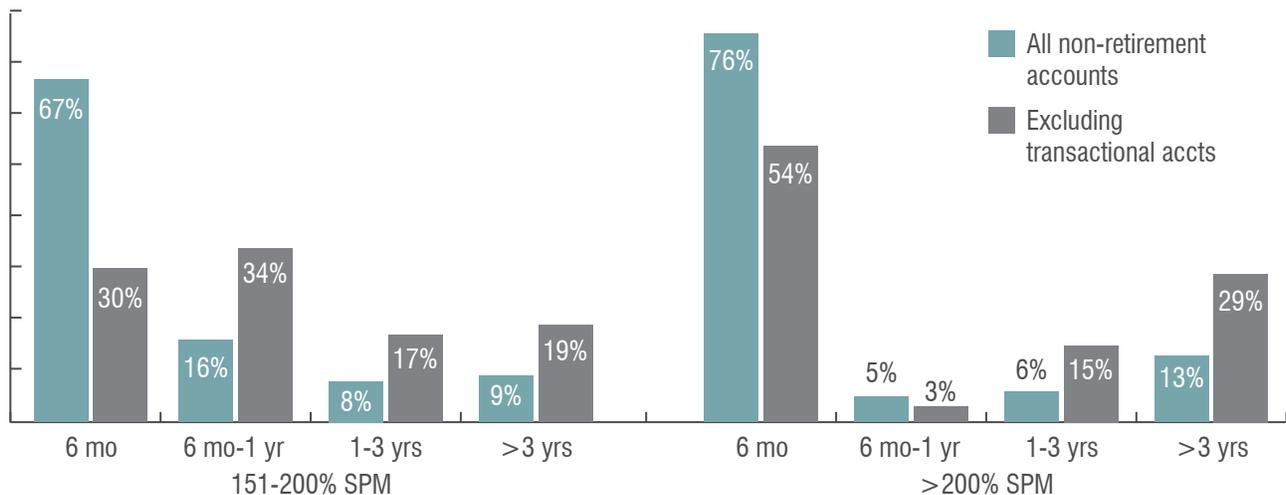
**FIGURE 3: Retirement Accounts Among USFD Households**



**FIGURE 4a: Non-Retirement Savings Spending Time Horizon for Lowest Income Households**



**FIGURE 4b: Non-Retirement Savings Spending Time Horizon for Upper Income Households**



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While saving for long-term needs is difficult for households at all income levels in the sample, lower income households tend to focus even fewer accounts and balances on later time horizons.

## ■ Retirement Accounts

Only 32% of USFD households have retirement accounts. The figure increases slightly to 34% if we include defined benefit pensions as a type of retirement savings account.<sup>11</sup> Households in higher income brackets are much more likely to have a retirement account. Still, half of those at over twice the SPM threshold do not have a retirement account (see Figure 3). As noted, these accounts see far less activity than other accounts. For households with a retirement account, the mean balance is just over \$13,500, with a median of \$7200.

## ■ Comparison with Other Data Sets

While USFD data provides highly detailed insights into savings behavior of households in the study, it is not a representative sample of the US population. Therefore, it's useful to compare our results to larger surveys which are more representative, such as the Federal Reserve's 2013 Survey of Household Economics and Decision-making (SHED), an online survey that probes how households make financial choices and navigate obstacles.<sup>12</sup> We see examples of saving for short-term needs across all income brackets, with remarkably little variation between lower- and higher-earning households. The one reason for saving where there is a clear influence of rising incomes is retirement, consistent with our data. It's notable that the most common reasons to save, other than retirement, across all income groups is for unexpected expenses and "just to save," consistent with a bias toward short-term saving.

Once the SHED identified respondents with any kind of savings, it followed up with a question asking what they were saving money for. We divided the response options into categories of typically short- and long-term time horizons, though the SHED did not prompt respondents to think of the selections in this way.

When responses are disaggregated by income and compared across these two time frames, the data show that respondents save for typically short-term needs at about the same rate across income levels (see Figure 5). In contrast, 40% of respondents in the lowest income bracket say they're saving for retirement, compared to 76% at the highest.

## ■ Conclusion

The USFD data indicate that despite the generally accepted narrative, households are saving. However, households are primarily saving for the short-term. Even when they have "emergency" or "rainy day funds," they are saving for an emergency or rainy day that will arrive within 12 months, and perhaps several times during that time frame. The typical process of measuring saving via a point-in-time balance or calculating an annual savings rate misses a substantial amount of funds that are set aside for spending "later" but still within the year.

Short-term savings behavior is quite distinct from not saving at all. Short-term savings are potentially a very useful building block for longer-term savings. Even more important, they provide a needed cushion against the income and spending volatility that households experience. On average, households face several months per year when their income is 25% below average and several months when expenses spike. Income and expense volatility may frequently require households to spend down what they have been able to build up. We are continuing our analysis to better understand the interaction between income and expense volatility and household savings horizons.

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## Notes:

1. We define savings and restricted savings as any activity or balances in the following tools: savings accounts, formal restricted savings accounts (e.g. health savings accounts and Christmas clubs), cash saved at home, savings groups, safe deposit boxes, using money guards, financial investments (other than retirement accounts), and loans made to friends and family. We define transactional accounts as any activity or balances in the following tools: checking accounts, EBT and other government benefits cards, prepaid and payroll cards, gift cards, and single-purpose value cards (e.g. laundry or public transportation cards).

FIGURE 5: SHED - Saving for Soon

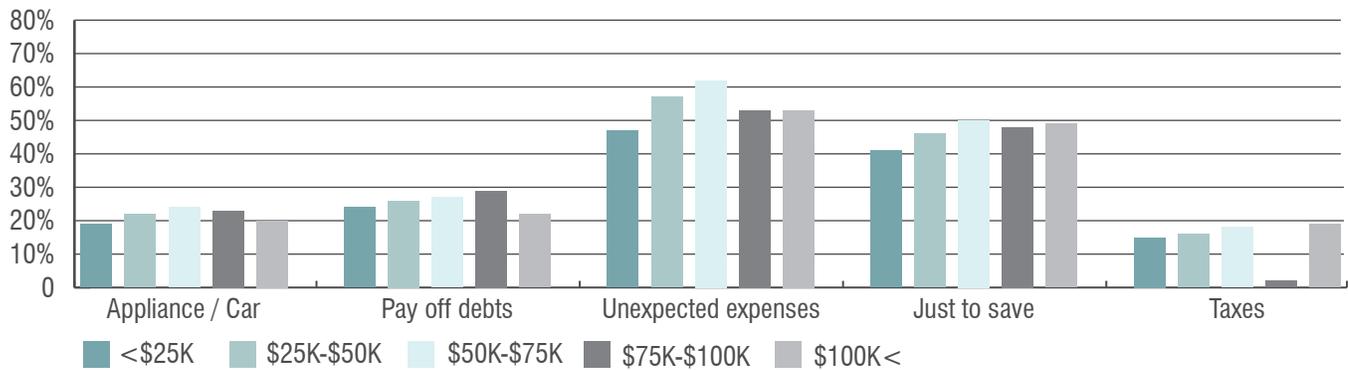
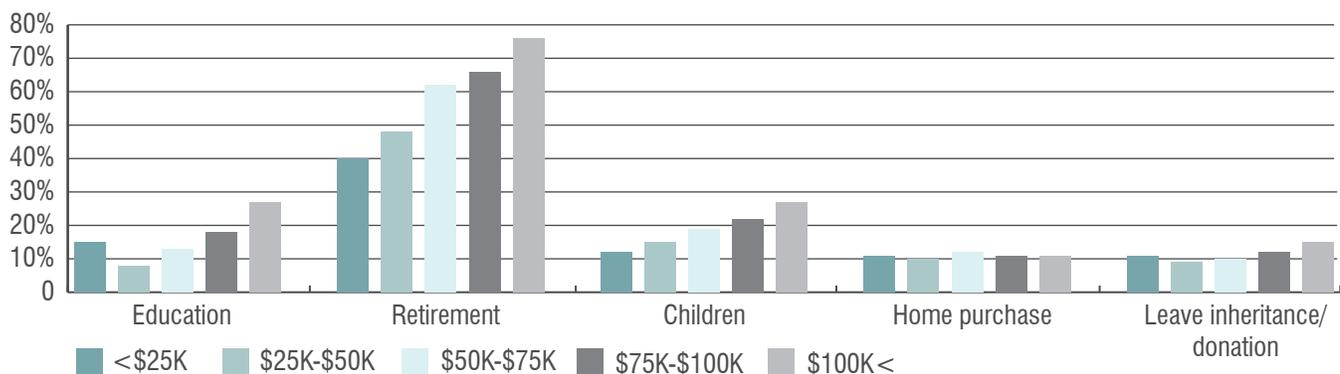


FIGURE 5: SHED - Saving for Later



2. This analysis excludes households and accounts with balances below \$100.

3. The numerator aggregates annual cash flows across a household's savings accounts or transactional accounts, and the denominator aggregates the balances in account type groupings for each household as well.

4. This measure doesn't aggregate annual cash flows or balances by household. Instead it leaves them separate to see whether balances and flows differ by individual account type.

5. This analysis excludes accounts without balance data and the 1% most active (N=4) accounts.

6. Flows into cash on hand are excluded from the measure of deposits in this note due to difficulty capturing them consistently. These flows, together with any error in measurement account for the average shortfall in annual deposits of 6% of income, in addition to any amount by which deposits or flows into cash on hand may have exceeded income during the year.

7. "When will most of the money in this account be spent?" Their four response options included within 6 months, between 6 months and 1 year from now, between 1 year and 3 years from now, and after 3 years from now.

8. We analyzed the response to these questions for 386 accounts held by 168 households. Many accounts have extremely small balances. We check whether these accounts are driving the near-term spending, and we find that they do not change the overall result. Results exclude accounts that have balances below \$100.

9. The Supplemental Poverty Measure or SPM adjusts federal poverty levels based on regional cost-of-living differences.

10. Figure 2 excludes the top 1% of observations. The sample is also limited to the accounts with responses to the question about how long- or short-term they are expected to be. It includes all account types in the tables above: retirement, savings/restricted savings, and transactional savings.

11. There are a total of seven households with a pension.

12. 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.



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](http://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](http://www.financialaccess.org)



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