

Spikes and Dips:

How Income Uncertainty Affects Households

U.S.
Financial
Diaries

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When asked whether “financial stability” or “moving up the income ladder” is more important, 77% of the participants in the U.S. Financial Diaries (USFD) research study chose “financial stability.”¹ This response illustrates the high level of financial uncertainty and unpredictability that these households face. Many factors contribute to feelings of financial instability: insufficient income, unpredictable expenses, a lack of savings, inadequate financial management, and reliance on complicated or poorly designed financial products and services. This research note focuses on how people earn and receive income.

Preliminary USFD data reveal that household incomes are complex. Incomes often fluctuate from month to month in both amount and timing, and in ways that are often outside of the households’ control. Income fluctuations create problems even for households whose finances are adequate on average over the course of the year. Households regularly experience swings in their ability to cover basic expenses, pay down debt or save for the future. In this context, budgeting and planning become quite difficult.

New financial services cannot increase household incomes. However, there is tremendous potential for high-quality financial services to help households achieve greater financial health and better manage income uncertainty.

In this research note, we explore the concept of uncertain incomes through the stories of two households: the Garzas and the Taylors (names and details have been changed to protect the anonymity of the participants). Both households use a variety of financial instruments and other strategies to manage uncertainty in their incomes.

This note provides an early glimpse at USFD findings. At the time of this writing (October 2013), data collection for the USFD is complete in some regions of the country and ongoing in others. We are conducting an extensive process of data cleaning and validation that will continue over the next several months. As a result, the sample-wide data presented show patterns and trends that we believe to be accurate, but the specific numbers will likely change in the final data set. In addition to sample-wide data, we focus on a deeper analysis of data from Kentucky, where we have had more time to clean the data. All the data are self-reported.

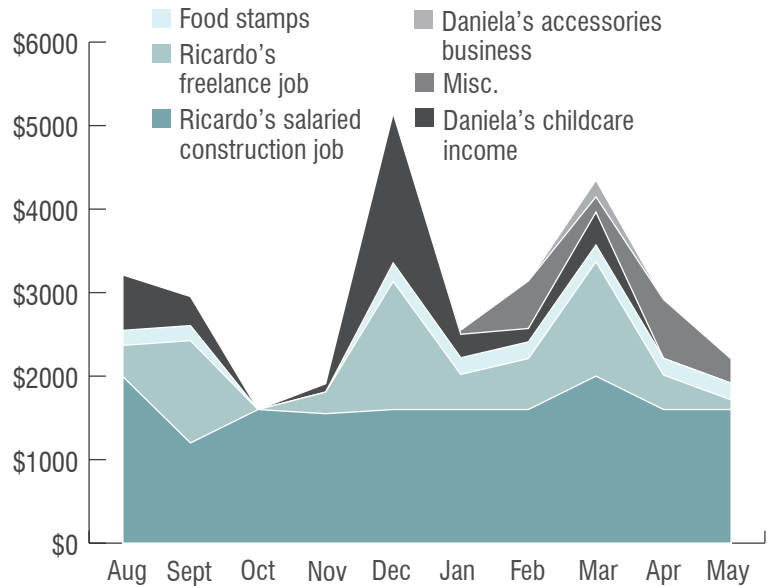
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Meet the Garzas

Ricardo and Daniela are a couple in their mid-20s who live in northern California with their three-year-old daughter. Ricardo holds two jobs. One of Ricardo's jobs is a salaried position in construction that pays a steady \$400/week. Most months, he earns \$1,600 from this job, but occasionally, he earns \$2,000 depending on how the calendar falls. In addition, he works for a friend who has a home remodeling business; for this work, he earns anywhere from a few hundred dollars to more than \$1,000/month. In total, Ricardo's median monthly income is \$2,115, but it ranged from \$1,600-\$3,370 between August 2012 and May 2013.

Daniela earns income from several sources. She provides childcare services. She sometimes sells clothing, jewelry, and flowers. In order to generate the cash flow necessary to purchase inventory for her business, she pre-sells items, and then purchases them wholesale to distribute to her customers. Her median monthly income is \$350 and ranges from \$0-\$1,740. Daniela has tried to secure a job in the past, but her immigration status has been a hurdle.² A final income stream of \$200/month comes from food stamps.

FIGURE 2: The Garzas' Income Sources³



Income comes from many sources, with different pay cycles and levels of consistency

Many USFD families manage multiple jobs and income streams: in the Garzas' case, four streams for a family with two working adults. One income stream comes from food stamps. Three income streams come from jobs, one of which is part-time, with variable hours, and one of which requires ongoing entrepreneurial energy. Just one job pays the same amount repeatedly on a consistent interval. Each source of income has a different pay cycle (weekly, biweekly, occasional, monthly, etc.) and level of consistency.

FIGURE 3: Number of Jobs Held by Each Adult on January 1, 2013⁴

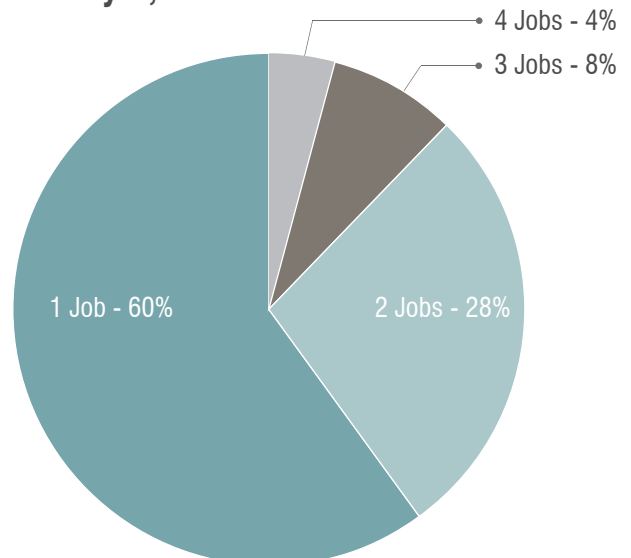
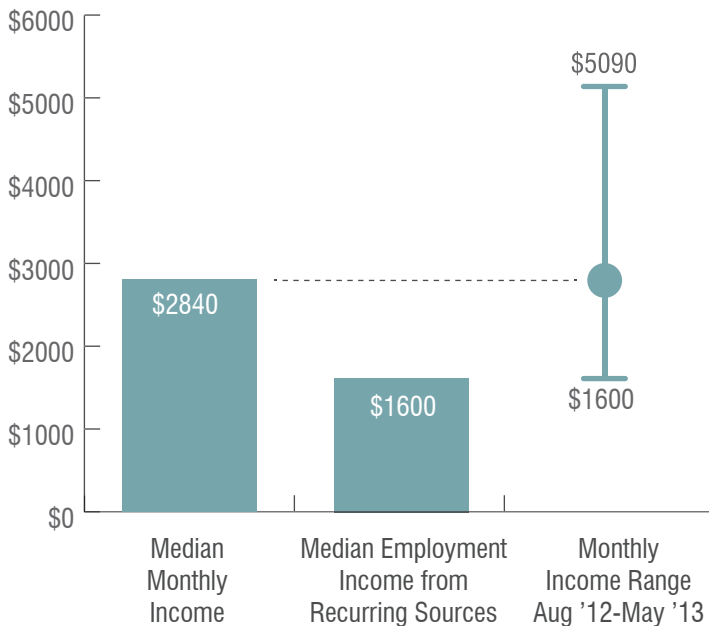


FIGURE 1: Garza Family Income



DEFINING INCOME

To account for the variety of ways in which people earn money, we describe employment income within three different categories: (1) self-employment income; (2) casual income (earned from one-off or irregular jobs); and (3) recurring income earned from work done for a third party (including salaried jobs, as well as those paying in tips, commissions or bonuses). These categories are imperfect, as casual or self-employment may also be recurring, and recurring income may be in variable amounts, but they provide a way to define the ways in which households earn and receive income.

Preliminary USFD data shows that the Garzas' experience is typical in many ways. Low-income households often juggle multiple jobs and incomes. As a result, they often have numerous pay cycles and pay structures to manage, all of which contribute to uncertainty about how much income they will have and when it will arrive. As Figure 3 shows, 40% of adults in the most common type of USFD households – those with one or two adults – held more than one job on January 1, 2013, including self-employment, casual jobs, and jobs with recurring income.

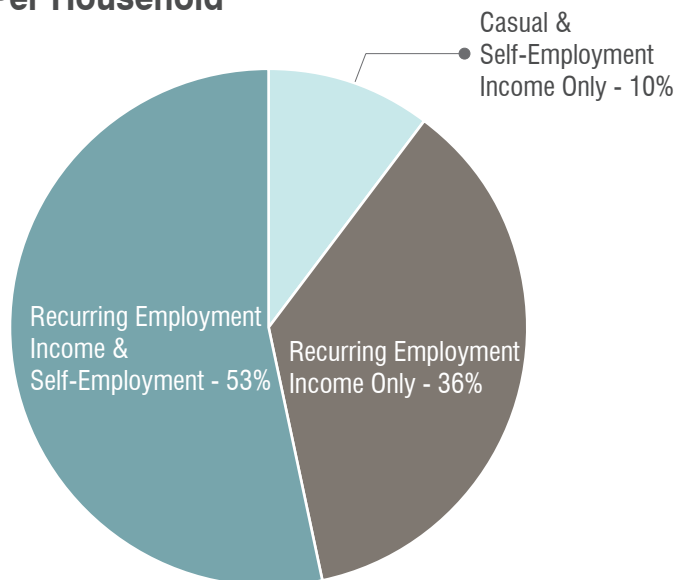
Different Types of Income

Reviewing all sources of income across the USFD population, including employment income (casual, self-employment, and recurring) and non-employment sources such as federal benefits payments, the median percentage of total income from a job with recurring income is 68%.⁵ Thus for half of the people in the sample, nearly a third of monthly income comes from sources other than a job with recurring wages.

Looking at employment income alone (and excluding income such as federal benefits payments) across the entire USFD sample, 36% of the households in the study exclusively received employment income from a job with recurring wages. For the remaining households, 53% supplement their employment income with earnings from casual jobs or self-employment, and 10% have no recurring employment income at all, and rely exclusively on other sources (see Figure 4).

Ricardo and Daniela can't cover their expenses with Ricardo's \$400/week earnings, nor are they able to time Daniela's income "spikes" with Ricardo's income "dips." Nonetheless, most months they come out slightly ahead. Some months, either or both of them have particularly high earnings from their businesses.

FIGURE 4: Combinations of Income Per Household⁶



To compensate for the irregularity in their income over time, the Garzas use a variety of financial instruments. They use four credit cards, and they have pawned household items in exchange for cash. Both Ricardo and Daniela participate in savings groups. Daniela also occasionally uses the money that her customers give her for sales orders to cover household expenses; she postpones placing the order until she has funds from other sources to pay for the purchases.

Even jobs provide irregular income

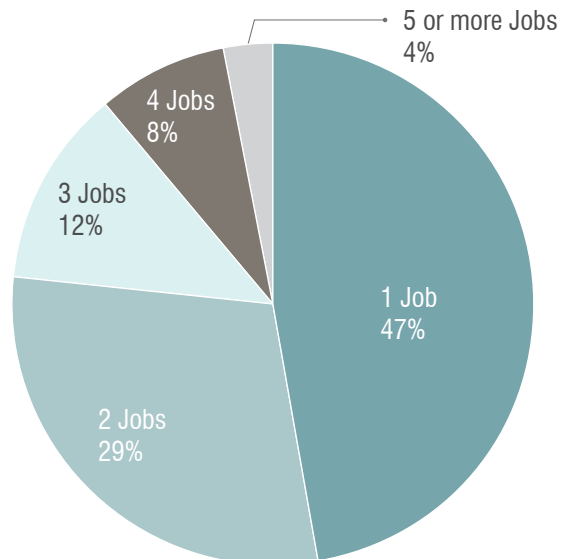
An additional source of income uncertainty among USFD households comes from the fact that jobs for which they receive recurring wages can provide variable amounts of income. As a result, households find themselves making choices about which bills to pay each month, how much to pay, and when to pay. Figure 6 (page 4) and Figure 7 (page 5) show payment amounts for 24 jobs in Kentucky, and how pay can vary substantially from check to check.

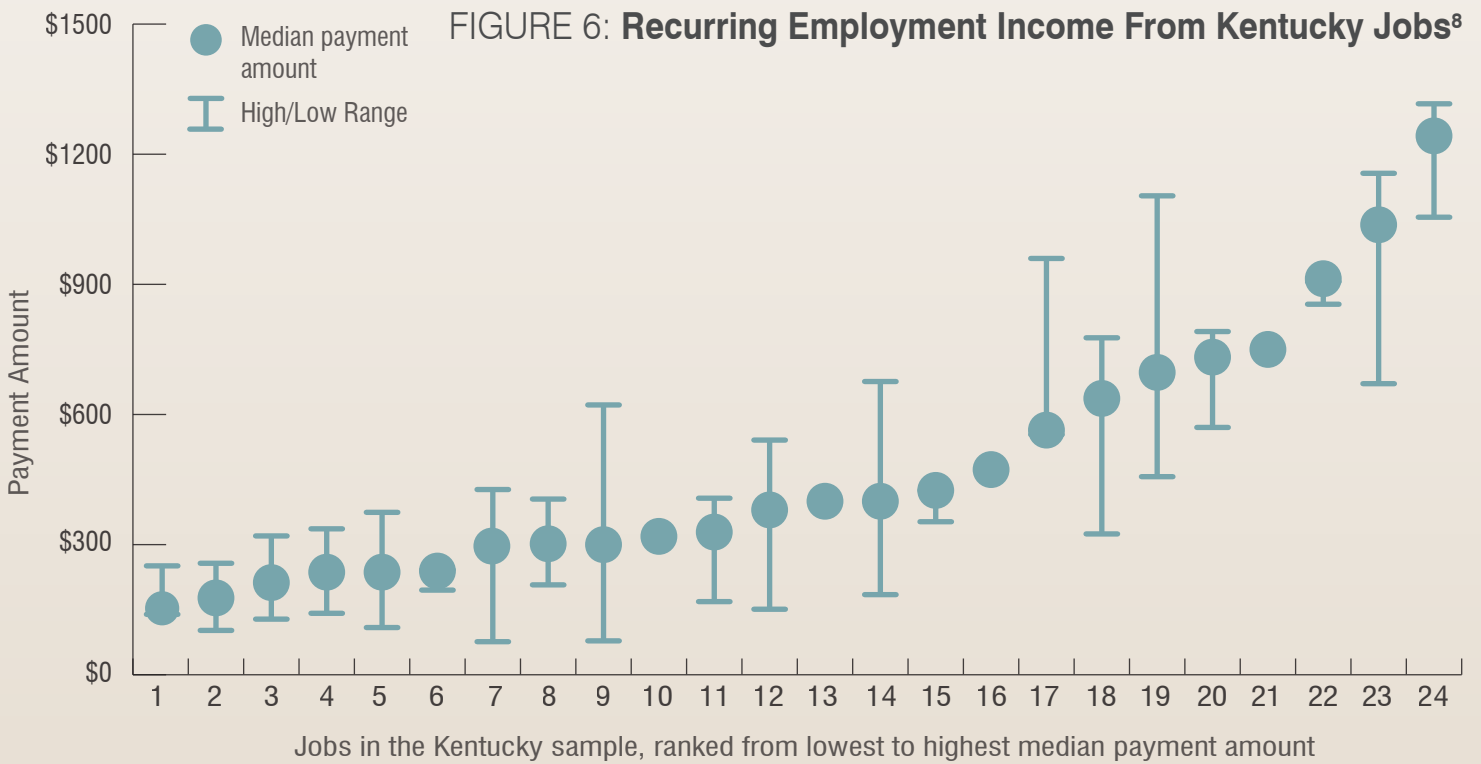
Jobs often don't last long or are seasonal

Looking again at the working adults in the most common type of households in the USFD sample – those containing one or two adults – more than half of these adults had two or more jobs over the course of the study, sometimes simultaneously (see Figure 5).⁹ Twenty-four percent of working adults in these households had three or more jobs during the study. And 12% had four or more jobs.

Data from households in the USFD's Kentucky sample¹⁰ suggest that short-term jobs are common in this group: 16% of the jobs in Kentucky reported only a single paycheck, and a third (34%) of jobs in the same sample reported four or fewer paychecks.¹¹ It is too early to say how and if this phenomenon will be evident in other sub-samples or across the entire USFD population, but it suggests that an important facet of income uncertainty relates to jobs being held for short periods of time.

FIGURE 5: Number of Jobs Held By Each Adult Over the Course of the Study⁷





Meet the Taylors

The Taylors experience a great deal of variability and uncertainty in their incomes. **Molly and Dustin Taylor** are a Northern Kentucky couple in their mid-30s with a seven-year-old daughter, Caitlin, and an 11-year-old foster son, Jesse. Dustin works odd jobs and scraps metal and electronics for cash; health problems make it difficult for him to work a steady job. Molly works in the cafeteria at a local elementary school; she earns a relatively consistent amount during the school year, but she does not earn income over the summer. The family receives food stamps and SSI benefits because of Caitlin, who has cerebral palsy. They receive regular financial help from Dustin's mom, including free rent and utilities in a home that she owns. Molly and Dustin also share resources, including funds from food stamps and SSI, with family and friends: for example, Molly occasionally gives the EBT card on which the family receives food stamps to her parents to take to the grocery store, with the understanding that they will later pay her back in cash.

The Taylors' total monthly income varies within a wide range – from as little as \$1,390 to as much as \$4,560 per month. Molly's wages from her hourly job provide a baseline income that is relatively consistent at \$1,000-1,400/month (beginning in November 2012; see Figure 9). Additional income comes from SSI and food stamps, which generally bring in around \$800/month. Dustin's occasional earnings, resources received from family and friends, and bingo and lottery winnings regularly feature in the family's income

FIGURE 8: The Taylor's Monthly Income

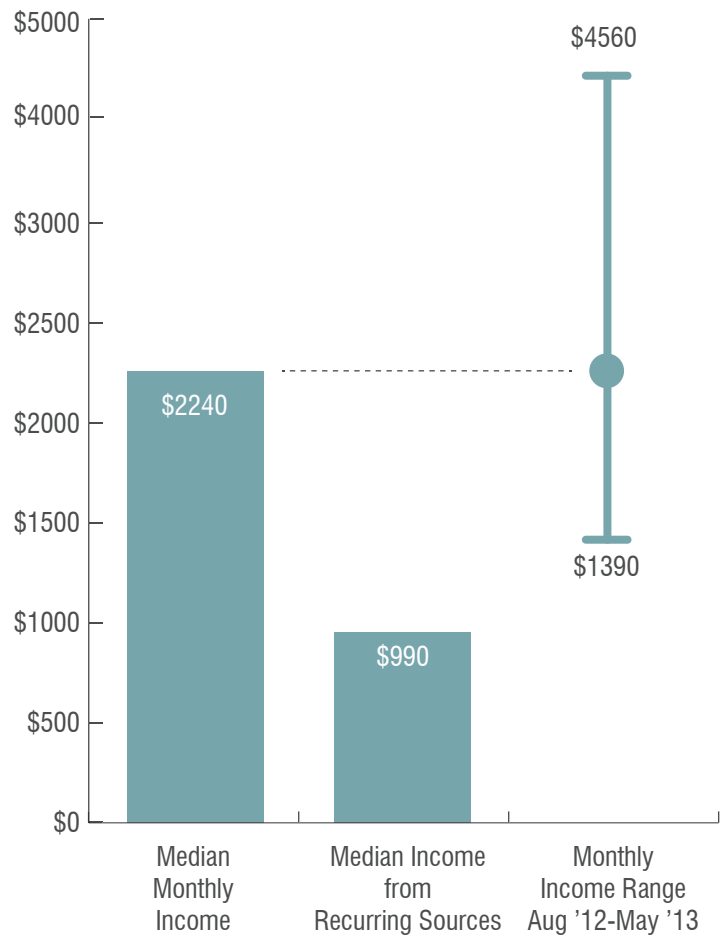
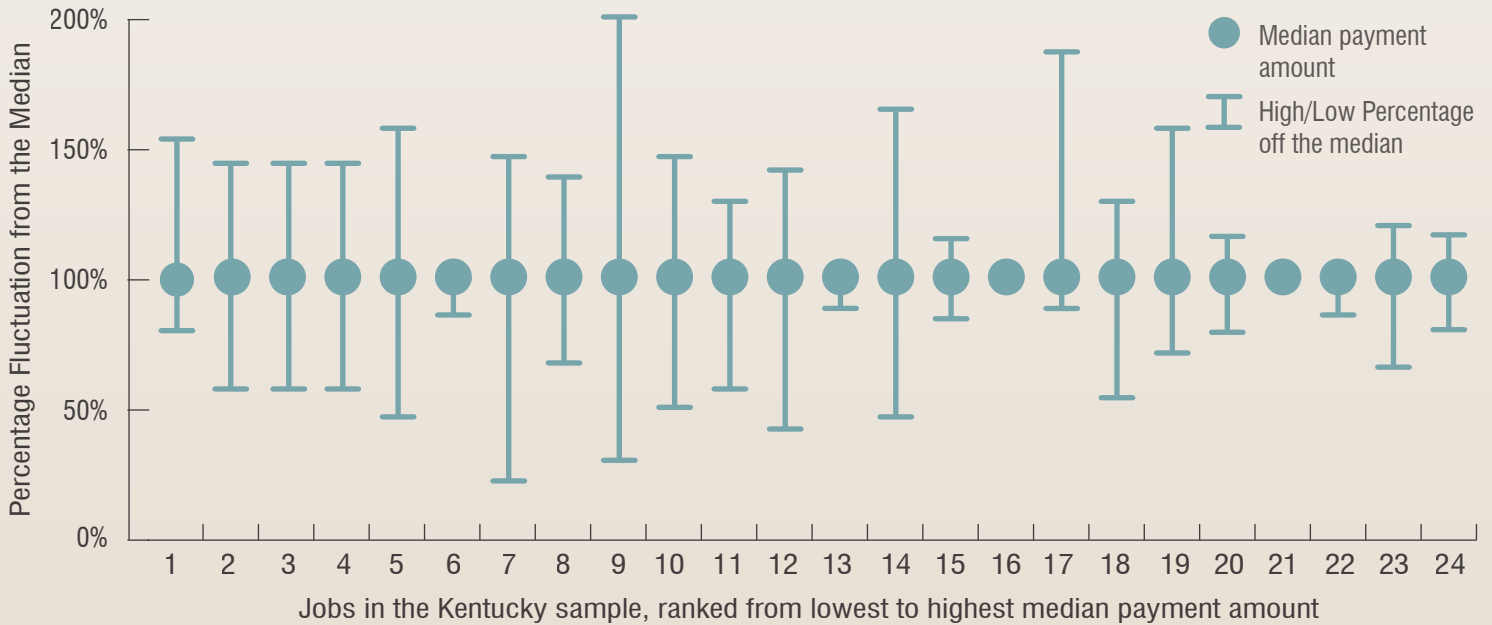


FIGURE 7: Even Recurring Employment Income Can Fluctuate Widely⁸



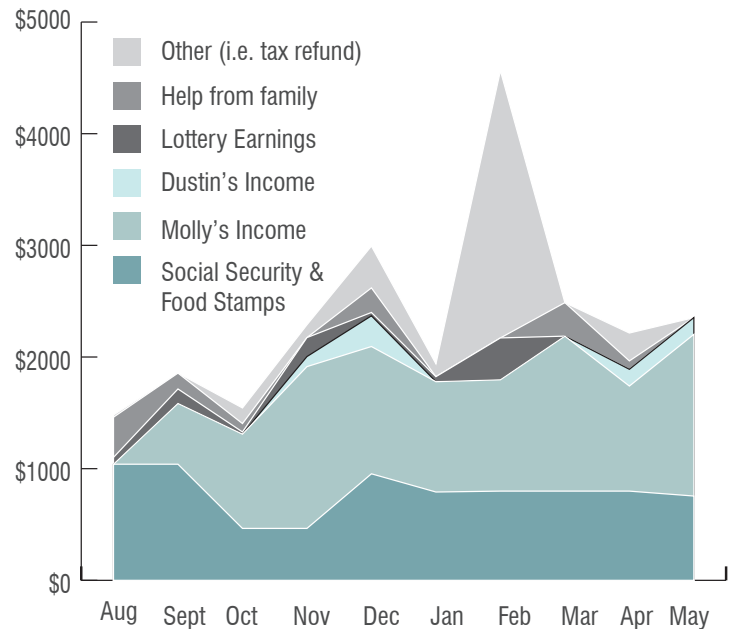
statement, in varying amounts. For the Taylors, as shown in Figure 10 (Page 6), every month is different when it comes to income.

Although the Taylors manage to cover expenses each month, they are living precariously. Food stamps and disability payments are a crucial component of their budget, but when Molly can't get to the benefits office for her monthly appointment to get recertified – which happened one month when the family car broke down and they couldn't afford to fix it right away – funds can arrive later than expected. The Taylors are heavily dependent on Dustin's mother for resources, including rent and utilities as well as things like school supplies, and they also rely on Molly's parents and other family members, with whom they have an ongoing exchange of food stamps via sharing of benefits debit cards.

■ Do Households Have Control?

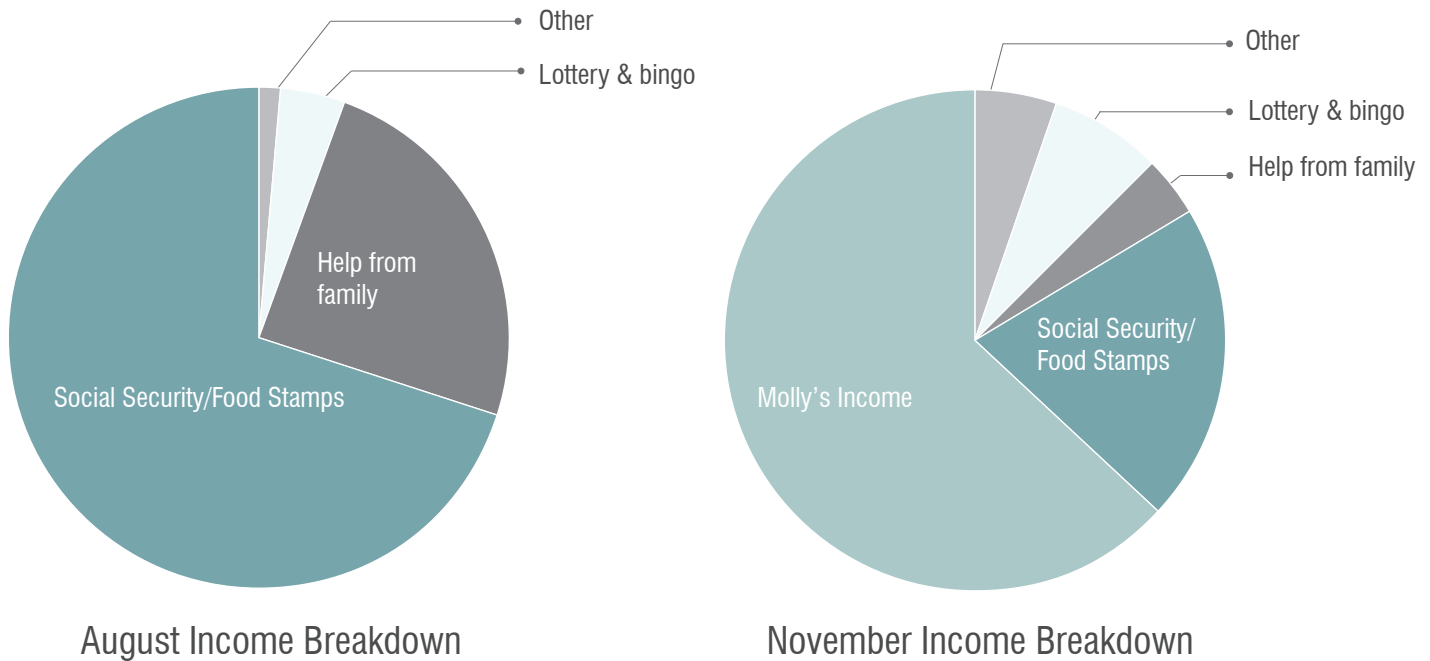
The Taylors' and Garzas' stories suggest that income uncertainty is related to many different factors. In many cases, income variability is driven by the dynamics of the broader economy and reflects the nature of low-wage work today. According to the Federal Reserve, for example, nearly 20% of employment in the U.S. economy is part-time.¹² Among USFD households, the incidence of part-time work is even higher, a fact that is not surprising given that the sample is weighted toward lower income brackets. Income variability is often caused by exogenous factors that are beyond people's control: transportation challenges that make it difficult to get to work in communities that lack

FIGURE 9: The Taylors' Income Sources



robust public transportation, chronic health issues among populations without cost-effective access to health care, or immigration status. Other lifestyle factors that contribute to income uncertainty fit within a murky area where people have control in theory but, in reality, face substantial barriers to overcoming them, such as lack of education.

FIGURE 10: The Taylors' Income Sources: August and November 2012



Though much of what drives income variability is attributable to factors beyond households' control, we see families like the Taylors and the Garzas taking control where they can through the use of a variety of financial management tactics. Daniela Garza's commingling of her business and personal finances is such a tactic. The Taylors employ various tactics to manage the erratic nature of their income as well. Molly often post-dates checks when she shops for groceries, and on the last day of the month, she does her grocery shopping at night because she knows that her checks won't be processed until the next day, when SSI income will be deposited into her bank account. The Taylors routinely overdraw their checking account, and a \$500 overdraft buffer offered through Molly's account is regularly used up and paid off with the next paycheck. They also take out payday loans most months. Molly knows that the family's use of overdraft and payday loans is destructive, but she feels that it is their only option.

Without a steady income, planning is much more complicated, and accumulating savings for unexpected expenses – not to mention major purchases such as a car or down payment on a home, or college or retirement – is quite difficult. At a more basic level, uncertainty about how often and how much income will arrive each month adds to the challenge of creating a basic spending plan for how to buy groceries and pay household bills. Not being able to count on a consistent income means that "budgeting" – however informal or ad hoc – becomes a constant activity, where families are continually making judgments about which non-discretionary items they can and can't afford and which bills they should pay or not pay this month.

In this context, it is easy to see why a third (34%) of the USFD participants say that it is "not easy," "difficult" or "very difficult" to predict their income.¹³ Households simply do not have enough information to assess their future accurately.

The collective stress that comes with low income and uncertainty may itself make it difficult for these households to plan and budget with the money they do have, as revealed by recent research.¹⁴ In other words, financial instability can drive people to make imperfect decisions that compound their financial troubles.

Conclusion

Income uncertainty is a complex problem, and one seemingly obvious solution would be to focus on helping people achieve higher incomes. After all, at higher income levels, households might be able to weather inevitable financial ups and downs with less trauma, because they could, in theory, more easily build a cushion of savings and get access to lower cost, better structured credit or a social network that could provide more help. However, it is worth going back to the point of view offered by USFD households themselves: 77% prioritized gaining "financial stability" over "moving up the income ladder." Underscoring this finding, when asked about their main financial goals, Molly and Dustin Taylor say that what they would like most is to be less financially reliant on family members, and to be freed from stress over how they will pay their next bill.

Financial services innovation, bolstered by good financial

services policies, can play a material role in supporting households in the quest for greater financial stability. A key goal should be to help people to make the most of their income spikes as opportunities to create cushion for the dips. Extensive work has been done to date on the idea of helping individuals set aside money received from a tax refund in a savings account or savings bond.¹⁵ There is more than can be done to advance this idea.

Tax time is not the only moment when people have a sudden surplus of funds to put aside. Spikes in income seem to occur for a variety of reasons: busy weeks at jobs that generate tips or are paid hourly; extra work around the holidays or at the beginning of the school year.

Innovation around how to use these additional, smaller spikes is needed. Enabling the pre-payment of bills is a route that could be explored further. Solutions may also come outside of financial services: employers could endeavor to smooth out irregular pay, for example, or they could direct deposit salaries into savings accounts as well as transactional accounts.

There are also clues to how to solve the challenge of uncertainty in the creative approaches of the USFD households themselves. For example, the Garzas are masters of cash management. Using the float from Daniela's self-employment income to time her own bill payment with when she has cash from her sale of goods allows the Garzas to make ends meet, but is also risky. Daniela must be resourceful and focused to make sure that this shifting of funds does not get out of control. Many USFD households are very cautious with their spending, postponing bill payments until the last minute and making small purchases often instead of larger purchases less often. Households need tools that will facilitate this type of day-to-day financial decision-making. Most budgeting tools today, as well as the design of many transactional products, assume that people are working with a cushion of some amount and can afford to have income or expenses estimated on a weekly or monthly basis. But, USFD households plan and spend based on a shorter time-scale: their budgeting is day-to-day, sometimes hour-to-hour as demonstrated by Molly Taylor's decisions on what time of day to grocery shop. Real-time balance information is crucial.

Some of the financial tools that households use to manage instability have the potential to do more harm than good. The Taylors are in a cycle of overdraft and payday loan usage that is not helping them to manage uncertainty. It is possible that the first time they borrowed, they were able to cover an expense that they might not have otherwise had funds for. But now, paying off last month's debt is simply another item on their overwhelming budget.

For some households, such as the Garzas, credit cards are a valuable mechanism with which they can smooth out their income variability. Innovative, safe, affordable forms

of credit (structured to support repayment, incorporating a careful assessment of ability to repay, incorporating useful disclosure, allowing users to build a credit record to access additional or cheaper credit), must be designed and offered at scale if credit is to be a part of the constructive ways that people manage income uncertainty.

Many factors can contribute to a feeling of financial instability – unpredictable expenses, a lack of savings, insufficient knowledge about financial management, usage of complicated or poorly designed financial products and services. We expect to explore these dynamics further in future USFD analyses. In this first research note, we hope that the exploration of *the variability in income and the uncertainty that households manage against* inspires new and creative thinking about how to increase the financial health of households.

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1. This question was included in the Pew Economic Mobility Survey, where it generated similar results: 85% of the 2,000 survey respondents indicated that financial stability is more important, compared to 13% who chose moving up the income ladder. For more: www.pewstates.org/research/data-visualizations/poll-results-economic-mobility-and-the-american-dream-85899374448
 2. For most of the study period, the Garzas were undocumented immigrants. However, in the summer of 2013, they were granted deferred action status, which may make it easier for them to get better jobs.
 3. The Garza's income data for October 2012 is presumed to be incomplete as of the time of writing.
 4. The data for Figure 3 represents 231 households, analyzed September 2013.
 5. This excludes income earned from self-employment and casual work, which is defined as work that is not done on a regular basis, that is done for only one client, and/or with which minimal expenses are associated.
 6. The data for Figure 4 represents 247 households, analyzed September 2013.
 7. The data for Figure 5 represents 240 households, analyzed September 2013.
 8. Figures 6 and 7 reflect employment income received for 24 jobs, across 19 households in Kentucky; 12 jobs were excluded from this analysis due to unresolved data questions at the time of writing. The period of time reflected for each job varies based on the amount of time the job was held. The median reflects the median payment amount for each job during the time period.
 9. These households make up 72% of the total USFD sample.
 10. At the time of this writing, data collection for the USFD is complete in some regions of the country and ongoing in others. We are presenting findings from the Kentucky site because it was one of the first to come out of the field and is thus complete as a subsample.
 11. From a sample of 62 regular jobs documented in the Kentucky sample. This analysis excludes 5 regular jobs held by members of households whose incomes were not thoroughly documented.
 12. <http://www.frbsf.org/economic-research/publications/economic-letter/2013/august/part-time-work-employment-increase-recession/>
 13. This data point represents 287 households, analyzed September 2013.
 14. See Mullainathan, Sendhil and Shafir, Eldar (September 2013). Scarcity: Why Having too Little Means So Much. New York: Henry Holt, LLC.
 15. Several organizations have examined ways to help low and moderate-income consumers save at tax time. D2D Fund has done extensive research on the use of savings bonds at tax time (http://www.d2dfund.org/tax_time_savings). Others, such as NCTC, have offered free prepaid cards at tax time (http://www.financial-capability.org/success_stories/nctc), and others have recommended the use of IDA accounts to provide matching funds to kickstart savings.



The U.S. Financial Diaries Project was designed and implemented by Jonathan Morduch of New York University's Financial Access Initiative (FAI), Rachel Schneider of the Center for Financial Services Innovation (CFSI), and Daryl Collins of Bankable Frontier Associates (BFA). The project collected detailed cash flow and financial data from more than 200 families in the U.S. 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. Leadership support for the U.S. Financial Diaries Project is provided by the Ford Foundation and the Citi Foundation, with additional support and guidance from the Omidyar Network. For more information, please visit www.usfinancialdiaries.org.



The Financial Access Initiative (FAI) is a research center focused on exploring how financial services can better meet the needs and improve the lives of poor households. At FAI, we systematize evidence and communicate lessons, generate new evidence, and frame policy and regulatory issues. FAI is housed at NYU's Robert F. Wagner Graduate School of Public Service. Visit www.financialaccess.org; learn more about the Big Questions in financial access at www.financialaccess.org/big-questions; follow us [@financialaccess](https://twitter.com/financialaccess).



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