

The Financial Diaries

*How American Families Cope in
a World of Uncertainty*

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Introduction

A Hidden Inequality

An October Day

The afternoon was perfect—75 degrees and clear, not too hot and not too cold. But Becky Moore was complaining about the weather. This was the kind of weather she said was “killer” on her husband Jeremy’s paycheck. Jeremy, 38, worked full-time as a mechanic, repairing long-haul trucks on the evening shift at a service center on the interstate north of their Ohio town, earning a commission for each truck he fixed. Their children were still at school when Jeremy—usually dressed in a pair of Levi’s, a western shirt, and steel-toed boots—pulled his pickup out of the driveway to get to work by 2:00 PM. The children, and sometimes Becky, were fast asleep by the time Jeremy got back after midnight.

Jeremy’s biggest paychecks came during the hot weeks of summer, when the tar bubbles on the roads and the pavement is too hot to walk on with bare feet. The heat burns out truck tires, and Jeremy spent most of his summer shifts patching them. Icy chills weaken batteries and alternators, and the winter months brought big paychecks too. But during the fall and spring, Jeremy’s take-home pay could be as low as \$600 for two weeks of full-time work. The mechanics on the day shift kept busier, and Jeremy complained that there often

wasn't much left to do when he arrived at 2. Some mild-weather days, Jeremy had only one truck to work on during his entire eight-hour shift. For Becky, 34, the uncertainty of that weighed heavily, and it was only October. "I'm thinking that two weeks from now it will be crap," she said, imagining Jeremy's next paycheck.

For Jeremy, having a full-time job did not mean having a steady income. Like many of their friends, and a third of Ohio adults, neither Jeremy nor Becky has more than a high school diploma. But finishing high school used to be enough to land a solid factory job in southwest Ohio, one that came with guaranteed pay, benefits, and a pension.¹ General Motors had built cars in Norwood, about an hour away, since 1923, and for decades Norwood proudly turned out Camaros and Firebirds, America's muscle cars. When Jeremy was twelve, though, GM shut the Norwood plant along with ten others across the country, citing high costs and foreign competition. It's now more than a decade since Procter and Gamble closed the local plants that made Tide detergent, Crisco shortening, Crest toothpaste, Secret deodorant, and Head & Shoulders shampoo. This is not just an Ohio story. In August 1987, the month the last Camaro rolled off the Norwood line, about 18 percent of Americans nationwide worked in manufacturing. Since then, the percentage has been halved, as has the rate of union membership.² Office jobs and clerical jobs have given way to automation too, part of America's shift toward a service economy.

Fixing trucks on commission means that Jeremy, and not just his employer, bears the risks of weather, slow days, and business ups and downs. In the heat of July, Jeremy took home \$3,400 after taxes—in March he took home about half that, \$1,800. Now, October was threatening to be as bad as March.

Becky stood at the kitchen table, dressed in jeans, a T-shirt, and flip-flops, folding laundry in neat stacks as she talked. Her time was tight with Jeremy working the evening shift since she had to manage the household by herself. "It's hard on me mentally because I'm doing the sports, meals, school. So I have to do everything. And," Becky paused with a tight smile, "it's hard on him."

While the kids were at school, Becky also volunteered at a local animal shelter and sometimes worked cleaning neighbors' houses.

Most of the family budgeting fell to her, and her large green wallet was stuffed with receipts. Given the uncertainties of Jeremy's paychecks, Becky wasn't sure whether to pay her mortgage yet. The payment was not due for three weeks, but Becky already had the money in hand. Still, she was wavering. "I want to make sure I have enough money on hand, and I don't know what my husband will bring home this paycheck." She started talking herself into writing the check: "I just want to get it done." But then she decided to wait. Becky knew her bank account was almost empty. If she spent her remaining cash on the mortgage and Jeremy's next paycheck turned out to be as small as she feared, she would have to borrow from her older sister to make ends meet. Becky had borrowed \$200 from her not long before when Jeremy's paycheck was short and they had needed gas for their minivan. "That right there was \$75 alone," she said.

"I'm blessed with a sister with a guaranteed paycheck," Becky boasted, with a look that betrayed some envy. Her sister is unmarried and can usually help when money is tight. Becky pays off the debt by cleaning and doing yardwork for her. Becky knows that many others have to turn to payday lenders and other loan companies whose business models depend on trapping customers in cycles of debt. "Oh Lord no," she exclaimed when asked about those options. "I've seen so many people get in trouble."

The Long Arc

The story often told about financial success in America is that slow and steady saving over a lifetime, combined with consistent hard work and a little luck, will ensure financial security, a comfortable retirement, and better opportunities for one's children. But that is not Becky and Jeremy Moore's experience. The 2016 elections brought to the fore how frustrated so many Americans are about the fact that this is no longer, or never was, their experience either.

The often-told story is rooted in a world in which the norm is to gain education, move to better jobs, reach peak income in middle age, and then retire. Researchers call this basic arc the "life cycle," and it captures the life stages for which teachers and financial educators

try to prepare students. The idea underpins nearly all advice on managing wealth and how families should save and invest over time. It is the backbone of the life-cycle theory of saving, a framework so fundamental to economics that in 1985 the Nobel Memorial Prize in Economics was awarded to Franco Modigliani, the MIT professor who elaborated its consequences for families' financial choices.³ The advice to young families like that of Becky and Jeremy is to prepare for major life events early on: to start saving for a down payment on a house and to begin steadily saving for retirement. Later, as earnings rise, people should pay down their mortgages and set aside more for retirement. In this world, slow, steady, disciplined adherence to a budget and savings plan promises to conquer financial challenges. In the past fifty years, mastering the stages of the life cycle has become synonymous with being financially literate in America. And helping families achieve life-cycle goals drives hundreds of billions of dollars of government support for housing, education, and retirement.

Assuming that everyone can follow this trajectory is dangerous. Becky and Jeremy don't have the luxury to focus much on long-term plans. Without basic economic stability, their choices are often difficult, and they're forced to make them frequently. Short-term imperatives undermine long-term goals. Saving and borrowing need to be recalibrated with the spikes and dips of their income. The consequences of bad decisions can compound, and quickly. Stress and anxiety make it all harder.⁴ Seeing that, it's hard not to question basic assumptions about financial literacy and what governments and businesses should be doing to serve working families.

As we will see through the stories and data in this book, even if Becky and Jeremy were expert financial planners trained in the life-cycle model, they still would have found it nearly impossible to follow its prescriptions. In the past, Jeremy would contribute part of each paycheck to a 401(k) retirement plan, hoping he could keep it invested. Each time Jeremy switched jobs, however, he pulled all their money from the retirement plan, even though that meant extra taxes and penalties for early withdrawal. They simply needed the money sooner than at age sixty-five. Becky and Jeremy are in a position that's increasingly common in America. Why are so many families forced

to make such costly—and some might say self-destructive—choices? Why do so many families feel so financially insecure?

Becky and Jeremy

Becky lives in the same house she grew up in, a modest white bungalow in a row of similar houses, each with a square of grass in front and a cement driveway running up the side. A garden crowded with yellow flowers and a few knocked-over clay pots is tucked next to the front door. Children's pink and purple bicycles lean against the side of the house, next to an abandoned basketball and a Frisbee. Two chairs crowd the porch, where Becky chats with neighbors or just watches cars drive by.

Becky and Jeremy bought the house from Becky's mother soon after they married fifteen years earlier. The oldest of their four children is now in middle school, and Becky has placed wall hangings in the living room to remind the kids about the big things in life. One says "Family," another, "Belief."

The Moores' town could be any from a 1960s sitcom: it's nearly 90 percent white, neither very rich nor very poor. It feels safe. Both the bustle and the urban poverty of Cincinnati are an hour's drive away. The neighbors have known Becky or her mother for decades. From a distance, everything about Becky and Jeremy and their family suggests an archetypal middle-class American life.

But Becky and Jeremy's struggles indicate that things haven't worked out the way they should. When Becky is asked about their situation, she reveals how thin their margin is:

- If the main earner in her household stopped working, how many months does she think her household could manage without borrowing money? Zero.
- At what age does she believe she'll be able to retire and not have to work if she doesn't want to? Never.
- When her children are her age, does she think they'll have as much opportunity as she did? No.

- Does she believe her family's financial well-being depends on events within her control? Mostly not.

When asked if she'd rather be a little richer or have a steadier, more stable financial life, Becky doesn't hesitate: she wants more stability.

Out of Control

Becky isn't alone. In 2014, the Pew Charitable Trusts asked more than 7,000 Americans the same question, and, like Becky, 92 percent of respondents chose stability over mobility.⁵ The researchers were struck by the response and weren't sure what the answers meant. The American Dream has historically been about rags-to-riches mobility, about moving up the income ladder. Although the survey set up stability and mobility as competing goals, there's no reason why this should be an either-or proposition: the daydream about mobility *is* the daydream of the fatter paycheck that makes it easy to save and pay bills. But if most people saw moving up the income ladder as the ticket to financial stability, their answers would favor mobility. Seeing the clear preference for stability over mobility implies a fundamental shift in America.

The lopsided response to the question signaled that there was a bigger, more complicated story about economic insecurity. Participants in a focus group revealed that they had opted for stability over mobility simply because they had given up on ever moving ahead. From where they stood, what they really wanted was greater control over their financial situations. Their expectations were ratcheted down to what they thought was possible. Why, though, do so many Americans feel out of control?

That question leads to other questions that also lack complete answers: when we read about families with middle-class incomes just scraping by, it is hard not to wonder why they don't budget better and save more. Why are so many poor families unable to get on a better path? Why do families continue to build mountains of debt that they then sink beneath? Why does financial education do so little to improve financial outcomes?

Part of the story is surely connected to widening inequalities of income and wealth—the frustration of seeing a small part of the population rocket ahead while the rest struggle to keep their place—but inequality alone cannot account for problems that have to do with saving, debt, and budgeting. The available explanations for those problems tend to come down to failures of personal responsibility, lack of knowledge, or insufficient willpower. Yet those explanations don't reveal why Becky and Jeremy are struggling. Like so many others, they work hard. Becky aced a standard test for financial literacy, and she never goes shopping without a handful of coupons. Nor are their challenges a short-lived result of the Great Recession.

We have both spent our careers concerned with the finances of low-income families—Jonathan Morduch as an academic economist and Rachel Schneider as an expert on financial services—but in recent years we have found ourselves less and less able to answer basic questions about American households today. Normally we would turn to government reports and surveys for perspective, but they offer only high-altitude views. Even the most detailed national surveys are usually only collected once a year, and they seldom follow the same families over time. When researchers track families, they usually do so with a year's gap between surveys. We suspected, though, that a vital part of the action was happening from week to week and getting lost in the annual sums. Moreover, surveys only showed what families were earning, spending, or investing, not what they were wrestling with during the year, what they were going without, or, most important, why they were making the choices they did. The only way we knew of to find the missing pieces was to spend time with Becky and Jeremy and households like theirs.

One of us (Morduch) had previously been part of a research project designed to understand the financial lives of families, though in a very different context. That project took place in the slums of Delhi and Dhaka, and the townships outside of Johannesburg, places far removed from communities in the United States. Most of the families involved in that study lived on less than two dollars a day per person, a sum so small that it is hard to imagine how they survived through the year, much less moved forward economically. To understand how they did, the research team developed an approach based on

“financial diaries” that gave a day-by-day picture of financial choices made over the course of a year.⁶

The goal was to take a sustained look inside families’ lives by tracking everything they earned, spent, borrowed, saved, and shared in careful detail over time. We have adapted that same approach for this book. The resulting “diaries” are not diaries in the usual sense—the data were recorded by our team of researchers during conversations with the families—but, like traditional diaries, they capture the personal, sometimes intimate records of daily experiences, mundane and profound, week after week.

Year-to-Year Instability: The Tightrope

When we started this project, most evidence on the insecurity of American families was drawn from a single research project, the Panel Study of Income Dynamics (PSID), run by the University of Michigan.⁷ The power of the PSID lies in its extraordinary longevity. Starting in the late 1960s, researchers began following the same households year after year. As the years went on, the survey included data on the respondents’ children, who were also followed, and then their grandchildren. The data that emerged challenged fundamental assumptions about how Americans earn and spend. By turning attention away from the life-cycle arc, with its implications for managing long-term wealth, researchers began to realize why so many people were finding the commonsense advice spun from the life-cycle arc impossible to follow.

The evidence supporting the slow rise and fall of income as depicted by the life-cycle arc came from plotting the earnings of different people, arranged from youngest to oldest, in a given year. This kind of “age-earning profile” is constructed using a snapshot of all earners at a moment in time, grouped by age and education. According to national data for 2013, for example, men like Jeremy in their late twenties and early thirties who did not attend college earned about \$37,000 a year on average. The same data show that men in their late fifties with a similar education earned around \$50,000 on average. And, turning to older men, similarly educated retirees earned several

thousand dollars less. This same kind of up-and-down arc of annual earnings holds for other groups as well. (Average income for men with college degrees, for example, peaked above \$80,000 in 2013.) No matter the level of schooling, an arc emerges from cross-sectional snapshots of the average earnings of people at different ages.⁸

These averages, though, can mislead. One problem is that the age-earning profiles conflate the effect of age and the effect of birth year: men who were thirty in 2013 were born in 1983, while men who were sixty-five in 2013 were born in 1948. The earning differences between the two groups likely involve more than their age differences. The averages also make it impossible to see variation within the groups. The PSID instead allowed a view of the changing incomes of the *same* people over time, and the new pictures it provided often diverged widely from conclusions drawn from the cross-sections underpinning the life-cycle arc.⁹

Finding “a striking degree of economic turbulence,” the Michigan-based researchers saw that for many families the pattern of income was hardly a smooth upward glide.¹⁰ Incomes were volatile, sometimes rising or falling sharply from one year to the next. A report described economic and social trajectories as “disparate and chaotic” relative to the life-cycle arc.¹¹ Most of the poor weren’t poor forever. And people who weren’t poor most of the time sometimes had stints of poverty. Even the rich took their share of hits. The turbulence showed that economic life in postwar America was far from static. Some families were experiencing mobility, moving up or down the income ladder in permanent ways. But many families were simply getting knocked around.¹²

The patterns were dutifully reported in academic papers, reports, and books. By 2015, the PSID had been the basis of a remarkable amount of analysis, filling 2,601 academic studies, 68 books, and 492 book chapters. Yet the thousands of figures and tables did little to shift the popular narrative about what it takes to be financially successful in America: the image of a slow and steady upward progression over a lifetime was hard to dislodge in favor of an image of turbulence. We found when talking to families, however, that the kind of year-to-year income volatility revealed in the PSID was usually a critical context for their stories.

The PSID highlights major misfortunes, the kinds of large swings that show up in annual data: jobs lost and marriages unraveled, illnesses and disabilities. These are the kinds of catastrophic losses that transform lives, and they are one part of the stories in this book. The Yale political scientist Jacob Hacker calls the challenges revealed by the PSID “the new insecurity,” writing that incomes have been “rising and falling much more sharply from year to year than they did a generation ago. Indeed, the *instability* of families’ incomes has risen faster than the *inequality* of families’ incomes.”¹³ The economic journalist Peter Gosselin likens the instability to balancing on a high wire without much of a safety net.¹⁴ His book *High Wire: The Precarious Financial Lives of American Families* was published in 2008, just as the recession hammered the nation, wiping out wealth and housing investments. The recession reminded Americans that we can no longer take for granted the promise of stability, security, and continual progress.

The word “precarious” now arises often when Americans talk about their financial lives. It captures a heightened sense of anxiety, a feeling of walking a tightrope with a fear that the next misstep or piece of bad luck could be the one that knocks a family off course, perhaps irretrievably. The sense of precariousness has led to the creation of a new word, “precarity,” to describe the condition of living a precarious existence. Related conversations are active all around the world, and especially in Europe, where precarity has become *precariedad*, *precariedade*, *précarité*, *precarietà*, and *prekarität* in Spanish, Portuguese, French, Italian, and German, respectively. Alongside fast-food workers, janitors, and maids with contingent jobs and variable hours, the European idea of precarity is often applied to web designers, freelance journalists, and other professionals making a living without the stability of 9-to-5 days and forty-hour weeks. In Japan, the word is applied to “freeters”—a phrase formed from the German *frei arbeiters*, free workers—young people who are unable to secure steady full-time work and find themselves forced into unemployment or strings of part-time jobs.¹⁵

As more data accumulate, views of Americans’ growing insecurity are coming into focus.¹⁶ Using an updated version of the PSID, researchers found a 30 percent increase in year-to-year income volatility

between 1971 and 2008.¹⁷ A 2015 update by the Pew Charitable Trusts found that, on average, nearly half of households had a gain or loss of income by 25 percent or more from one year to the next.¹⁸ The insecurity is not a product of the 2007–9 recession. Instead, the Pew team found that this level of volatility emerged in the 1980s and has persisted through several economic cycles.

Moreover, the probability of large financial losses has increased over time.¹⁹ Some households bounce back from their losses, but others don’t. Looking back to households whose income dropped by more than 25 percent in 1994, a third had failed to regain that ground a decade later.²⁰ The year-to-year income volatility seen in the PSID cannot be dismissed simply as “noise” or statistical outliers around the arc of the life cycle from youth to retirement. For many families, the noise *is* the story.

The PSID findings have helped researchers see how ideas about America have been stuck in the past. Ways of thinking that were adopted at a time when middle-class jobs came with steady paychecks and benefits no longer make as much sense in today’s economy. The income swings revealed by the PSID are big, and, not surprisingly, the proposed solutions are big as well. Experts have proposed rescuing families from the tightrope by strengthening the safety net, patching America’s retirement system, creating new laws with stronger workplace protections, rethinking trade policy, and reforming financing for housing and education. For families, proposed solutions center on building big reserves of savings for emergencies.

Many of the families we met in the Diaries project have experienced the year-to-year instability documented in the PSID. But their diaries also show how ideas of “precariousness” and precarity are incomplete and sometimes misleading, and they point to fundamentally new ways of tackling economic instability.

Month-to-Month Instability: The Rocky Road

After spending a year with Becky and Jeremy Moore and the other Financial Diaries households, it became clear that they face challenges beyond the big ones that show up in the year-to-year data of

the PSID. During our year of data collection, spanning 2012–13, the Moores, for example, lived in the same house, drove the same cars, had the same jobs, remained married, and were basically healthy. Yet they felt financially insecure. The tightrope metaphor captures only part of their situation. The families we met are not balancing on a high-wire so much as driving on a very rocky road, hitting bumps and potholes, getting slowed down, knocked off course, and sometimes stopped entirely. Things are already out of control. Families are dealing with today's hazards while also trying to prepare for whatever might be waiting around the bend.

The PSID allowed researchers to take a big step into people's lives by viewing events year by year.²¹ The Financial Diaries get even closer. By following Becky's cash flows (in addition to her overall income and wealth), we zoom in from a year to a month, a week, and, in some cases, a day. The Diaries allowed us to create a moving picture of her life—one that reveals the costs of instability.

In getting to know families over a year, we collected data on more than income, spending, and wealth. We also tracked households' situations, and we documented why they made the choices they did. When Jeremy changed jobs, we learned why. We watched as Becky tried to save money by not purchasing a prescribed medicine, and we saw how Becky and Jeremy stretched to give their children a "normal" Christmas.

Unless you track Becky's occasional earnings from cleaning houses and Jeremy's biweekly paychecks week by week, the extent of their financial instability is hard to see. Of course, Becky and Jeremy would benefit from higher incomes, but if those incomes came with the same uncertainties as today, the Moores would still face basic challenges. The Financial Diaries reveal that a fundamental financial challenge for them and so many other American families—regardless of their income level—is coping with moments when expenses must be paid but income is not yet in hand. The Diaries make salient the critical distinction between not having money at the right time versus *never* having the money, or in more academic terms, illiquidity versus insolvency. Too often illiquidity is mistaken for insolvency (or, not having money at the right time is mistaken for never having money). One consequence is that it becomes much harder to recognize the

fundamental problems created by uncertainty, and to identify solutions. The Diaries reveal the volatility in sharp relief. They also show the strategies that families create to limit the impact of volatility, sometimes at high cost. In doing so, the data and stories challenge common assumptions about how a large segment of American households earns, spends, borrows, saves, shares, and plans.

The stories show how families often must navigate toward seemingly contradictory goals. Families work hard to stabilize their month-to-month spending while also needing moments when they can spend in large spikes. They seek ways to maintain the strict discipline of saving while simultaneously permitting flexibility in case of emergencies. They save actively but do not build balances that last over time. They grasp for middle-class lives but sometimes find themselves in periods of poverty. By following their dilemmas, and seeing their responses, we can begin to discover ways to address America's hidden inequality—an inequality in exposure to risk and in access to dependable ways to cope.

How the Financial Diaries Work

Our main aim was to see families through a lens that extended beyond measuring yearly income, spending, and wealth. The key shift was to follow cash flows. By watching the movement of money in and out of households, we aimed to see exactly where and when families got tripped up or succeeded. To do that, we designed surveys to record every dollar each household earned and spent. The surveys also tracked all funds saved and borrowed, any donations made to charity or friends, gifts given or received, and government transfers. To the extent possible, we noted every financial exchange, whether it was paid electronically or in cash, even if it was simply a gift of time (as when Becky cleaned her sister's home) or if it was paid in kind (such as preparing a meal for a sick friend). We also captured the time of each transaction and where it occurred.

Our team of ten researchers lived in the Ohio, Kentucky, California, Mississippi, and New York communities where the studies took place. Researchers often met families in their homes, sitting in the

living room or at the kitchen table; other times, they met at a local library or restaurant. It sometimes took months to build trust and fill in gaps in the stories we heard. Some details were too painful or embarrassing for participants to reveal at first. Sometimes life was just too hectic to keep track of everything. But we were ultimately able to see parts of a household's economic life that sometimes even close friends and relatives could not. We occasionally made discoveries that even members of the household were unaware of. From the 235 households surveyed in the final sample, we collected records of just under 300,000 cash flows over the course of 2012 and 2013, including everything from buying a pack of gum at the local convenience store to making a down payment on a newly purchased car.²²

One thing we could not figure out was how to be invisible in family members' lives. We knew that our presence surely had an effect on the people we got to know, at least some of the time. Some were happy to see us go at the end of the year; the meetings could be tedious for households and researchers alike, since we insisted, as professionally as possible, on noting all relevant specifics of every financial transaction. Others wished we could stay longer. Meeting with researchers had helped them stay focused on their finances, and some were motivated simply by the chance to have outsiders get a close-up sense of the challenges they faced every day. In the end, we simply accepted that participating in the study had consequences for the households. In the final interview, researchers asked members of each household how they thought their lives had changed as a result of their involvement in the project. About a quarter said the experience was neutral, while the rest said that it had affected some of their choices. Sometimes we distracted them from precious family time or took up time that would otherwise have been used for chores. But most said that our presence helped them pay more attention to their finances and see things as part of a bigger picture. For them, we likely saw a better version of what might have happened had we not been there. In light of that admission, we were struck even more by the crises, moments of regret, and persistent struggles that we observed.

The intensive nature of the Diaries meant that forming a nationally representative sample was impossible. Instead, we aimed for the richest, most complete stories we could glean from a select group of

households. We had long conversations about the kinds of households to include in the study, debating whether to aim for a broad sample that reflected a wide variety of communities, or whether we should spend a lot of time in only a few. In the end, the sample was restricted to households with at least one working member, but otherwise the households were diverse—they included recent immigrants, members of families that had been in the United States for generations, single mothers, grandparents, agricultural workers, salespeople, office workers, and traditional nuclear families. Participants were Hispanic, non-Hispanic white, South Asian, and African American. None of the households was among the richest or the poorest in their communities. Focusing on working households came with certain restrictions, though. Others, for instance, are better placed to speak to particular issues faced by retirees or those who survive largely on public assistance.

For our research, we settled on four sites: communities in southwest Ohio and northern Kentucky; the San Jose, California, region; eastern Mississippi; and, closer to home for us, Queens and Brooklyn in New York City. The choice of locations shaped our window. The towns where we worked in Mississippi are several hours removed from the well-photographed hamlets and “wrong side of the tracks” neighborhoods of the high-poverty Mississippi River Delta. Our site was to the east, closer to the Alabama border, where the region still boasts a range of manufacturing jobs and benefits from its proximity to Mississippi State University in Starkville. Similarly, the site we chose in San Jose abuts Silicon Valley's technology corridor, differentiating it from inner-city Los Angeles or the heart of the agricultural Central Valley, two California sites with persistently high rates of poverty. In Ohio and Kentucky, we worked in and around Cincinnati, where factory jobs have steadily given way to positions in the retail and service sectors. The communities in New York reflect the city's diversity: we spent time with African American families with generations of history in the United States, and with recent immigrants from Ecuador, Colombia, India, and Bangladesh. None of the sites we chose was thriving, but all had opportunities.

We knew that understanding the struggles of poverty and near-poverty would be an important part of the story. With that in mind,

we subdivided the households into income groups based on the U.S. Bureau of the Census's Supplemental Poverty Measure (SPM), which adjusts for, among other things, regional variation in cost of living—that is, the fact that Becky's dollars go a lot further in her Ohio town than they would in Brooklyn or San Jose.²³ Just under a quarter (23 percent) of households were poor; they had resources during the year that placed them below the SPM poverty line. We grouped another 31 percent as “near-poor”: above the SPM poverty line but below 150 percent of the line. Twenty percent had income during the year that placed them a notch above that; we label them as “low-income” and include households with annual resources between 150 percent and 200 percent of the SPM line. And the remaining 26 percent are labeled “moderate income”; they earned at least twice the amount defined by the SPM line.²⁴ Twice the local poverty line tends to be close to the median household income in many areas—for example, the poverty line in the Cincinnati metro area for a family with two adults and two children was \$23,415 in 2012, while the median household income was just above \$54,000—so our sample includes both poor families and families safely in the middle class.²⁵

Local organizations put us in contact with families, and those families introduced us to other families. More than 400 households initially agreed to take part in the Diaries, but not all stuck with it. The project required intense commitment from very busy people.²⁶ Some dropped out as soon as they realized how deep the questions would go; others simply left when participating in the U.S. Financial Diaries no longer fit with their other obligations. In the end, the members of 235 households opened their lives to us for a full twelve months.²⁷ They entrusted us with their stories—and sometimes their secrets—and we have aimed to be as accurate as possible in sharing the truths revealed within them. To maintain their confidentiality, we have changed names and identifying details in this book.

“At first it seemed to be kind of a hassle,” Taisha Blake, a nurse's aide from Cincinnati, complained about the project. “I have to write down all that I spend and set out these blocks of time to meet.” Gradually, though, she shifted her view: “But then, to know that maybe, just maybe, things that I'm going through financially could help some-

one else not have to experience that payday loan cycle, maybe my experience could help someone else, that's what kept me going.”

The Price of Steadiness

The last time we met with Becky, on a visit to Ohio after the formal record keeping of the Financial Diaries was complete, her mood had lightened. Jeremy had found a new job. His old position was closer to home, but he was fed up working the evening shift with all the uncertainties, volatility, and family disruption that came with it. After he gave notice, his boss had tried to keep Jeremy by offering him daytime hours. But Jeremy had grown so frustrated that he worked his final two weeks, collected his last paycheck, and left.

Jeremy was still a mechanic fixing the trailers of 18-wheel trucks, but he was no longer on commission. Now he was working hourly and getting overtime: \$17.50 an hour before taxes, paid weekly. He was guaranteed a minimum of forty hours a week. The yearly pay *was lower* than that of his old job, and Jeremy now had to commute up to forty-five minutes each way. But Becky and Jeremy felt that they were in a better situation; the newfound stability had lifted a weight from their shoulders.

When a longer commute for less pay for the same work is a step up, it's time to fundamentally rethink our understanding of the challenges facing working Americans.

Chapter 1

Earning

Janice

Seven nights a week, the buses rumble more than three hours from Alabama into Mississippi to deposit gamblers in the sprawling parking lot of the Pearl River Resort. By about 9:30, the gamblers, mostly from Birmingham and Tuscaloosa, slowly file out of the buses and head inside, some to the blackjack and poker tables, others to the blinking and beeping slot machines.

Double Diamond Haywire!
Triple-Double Red White & Blue.
The Best Things in Life.

The slot machines hunch shoulder to shoulder in rows across the casino's carpeted floor, and the gamblers, many beyond retirement age, scatter among them. Most of the players sit by themselves, some in wheelchairs or with walkers beside them. Some puff on cigarettes. Some nurse drinks. All steadily, quietly feed the noisy machines.

Pearl River bills itself as "Vegas with Sweet Tea," a family-friendly destination on the Choctaw reservation in central Mississippi with water slides, a spa, two golf courses, a high-end steakhouse, and more

than a thousand rooms. But the clear centerpiece at Pearl River is gambling. Running twenty-four-hour slots and table games has turned the Mississippi Band of Choctaw Indians into one of the state's biggest employers.

Janice Evans works the night shift, beginning at 8:00 in the evening and clocking out at 4:00 AM. She has been dealing cards at Pearl River for close to twenty years, since starting in her mid-thirties. A single, African American mother with a high school degree, Janice was searching for a steady job. There weren't a lot of options.

One day she noticed an ad for classes on how to become a card dealer at the casino and signed up. "Anyone could do it," she told us matter-of-factly. Janice's quiet manner and kind smile are nothing like the depictions of card dealers in James Bond movies, outfitted in bow ties and reeling off practiced patter. But Janice's customers, too, are more sweet tea than Vegas, and they settle in at her card table for long, low-key evenings.

On this night in Mississippi, Janice stands at her table in her Pearl River casino dealer uniform: black slacks, black shoes, and a black shirt open at the neck, adorned with a simple gold stripe. Her hair is parted on the side, straightened and falling to her shoulders in bleached wisps. Her red nail polish, with two nails painted deep purple and appliquéd with small stars and hearts, is starting to chip.

Janice quietly roots for the people at her table, encouraging winning hands with a smile. A hint of a grimace crosses her face when a hand is a tough loser, more so when a regular is having a bad run. The gamblers know she likes to see them win, and they appreciate it, even though they know they're expected to tip her more if they do.

Janice is guaranteed \$8.35 an hour, but in a good week she can double that in tips. Customers share their winnings with Janice by adding chips to her "toke" box—shorthand for tokens of gratitude. At the end of each shift, the tokes are collected and counted, and the equivalent in dollars is added to Janice's next paycheck. When gamblers are on a lucky streak, the tokes pile up. The more gamblers, the more lucky streaks, and the more tips. Janice does well when the tables are full, especially during the hot summer months when the air-conditioned comfort draws crowds. Fall, especially, can be slow.

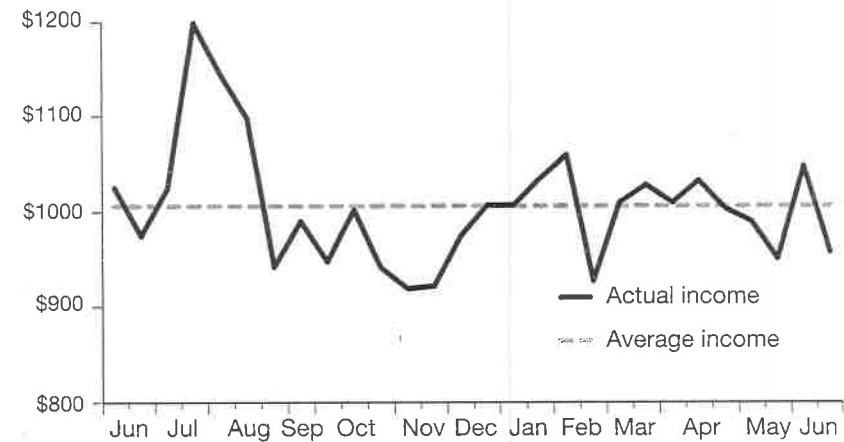


Figure 1.1. Janice's biweekly paychecks, June 2012–June 2013. The dashed line gives her average paycheck value over the period. Paychecks are net of taxes and medical insurance premiums. August and April are three-paycheck months.

Janice gets a paycheck every two weeks. The money isn't great, but she is proud of working her way up, and the benefits, especially health insurance, are good. Over the course of the year, Janice takes home just over \$26,000 from her job at the casino.¹

The yearly total means that Janice averages about \$2,200 each month, or just over \$1,000 each biweekly paycheck. But as Figure 1.1 shows, the size of those paychecks varied widely. Over the course of the year, her highest was \$1,200; her lowest, \$900. As a percent of the average of \$1,000, that's a nearly 30 percent swing between those two paychecks.

Just before the study began, Janice's son, Marcus, was laid off from his maintenance job after his employer lost a contract. He and his three-year-old daughter moved in with Janice. Without income, Marcus now qualified for food stamps, an average of about \$125 a month. But there were big swings here, too. At one point the local social services agency mistook Janice's income for Marcus's and canceled his food stamps. It took two months to get them back. And while Marcus also qualified for unemployment benefits, several months

passed before his checks began to arrive. In a way, that was a blessing because they started in the fall, a season when Janice's paychecks were low. But while the benefits helped boost the household's net income to about \$33,000, they added to the monthly volatility: the household's income swung 70 percent from high to low months.

Given the nature of Janice's work in a seasonal, low-skill, tipped job and the unreliability of Marcus's benefits, it's reasonable to assume that her family's income would be among the more volatile of the 235 households in the U.S. Financial Diaries. It's not. The degree of volatility Janice and her family experienced was on par with that of most families we got to know. It is hard enough to provide for a family of three on just \$33,000; doing so with an unsteady income is even harder.

Constants

Work, family, and church are the constants in Janice's life. And worry. There are always worries. At fifty-five, she worries about her health. Her doctor has told her to lose weight. She wishes she could do more for her church and for her friends. Her home always needs something.

Janice's parents still live in the area. Her father leads a small Pentecostal church in town, and her mother makes sure Janice attends every Sunday. Janice notes proudly that she is part of the "first family," and church members always provide a good meal after worship services. The membership numbers about fifty, including children, and everybody knows everybody. If you miss church, Janice said with a laugh, "you're gonna hear it."

Going to church helps assuage Janice's nagging ambivalence about working in a casino. She doesn't gamble herself, but she still worries that her role as a dealer enables others. "If I didn't go to church, I couldn't do the job," Janice said. "It keeps me grounded." She repeated the thought, as if to reinforce the power of the protection she receives: "It keeps me grounded." Contributing to the church is important to Janice. Like the rest of her finances, though, her ability to tithe—give 10 percent of her income to the church—depends on how many people come to the casino and how much they leave in tips.

Most of the year, Janice can pay all the bills on time, but barely. During the most difficult stretch, from September to November, she had to cut back on food purchases. Four years before we got to know her, during a particularly bad dip, she turned to payday loans. It's easy to find payday and other "short-term" or "small-dollar" lenders in Janice's town (and nationally there are more "small-dollar" credit storefronts than McDonald's or Starbucks).² Borrowers head to Cash Inc. on the commercial strip, Car Title Loans on a nearby street, Cash Xpress and Express Check Advance near the highway entrance, and a dozen national lenders available by telephone. CashNetUSA runs an ad in Janice's regional Yellow Pages that boasts of its "Easy five-minute application; Cash next business day; 4 out of 5 applications approved; nothing to fax, no paperwork."³ Janice borrowed from a payday lender for a couple of cycles, but she knew she had to get out of the trap. "You borrow \$60 and you pay back \$75. If you borrow \$200, you pay back \$250," she recounted. "But what if you then don't have the \$250?"

When Janice wrote the last check in her checkbook, she didn't order another box. The local payday lenders require that, as security, borrowers hand over a signed check in the amount of the loan, dated for the next payday. If she didn't have any checks, Janice figured, she couldn't be tempted by the payday lender's quick money. Since then, Janice pays bills by money order and uses only a debit card to make purchases. Giving up her checkbook creates headaches, but it avoids the payday loan trap: "It's like an addiction if you have a checking account," she said.

When we sat down with her after church one Sunday afternoon in October, Janice told us she wouldn't be getting many tips that night. When fall arrives, children go back to school and parents who gamble in the summer hold onto their money for school supplies and clothes for the kids. Janice knew that they're "doing what they're supposed to," but it was a blow to her paycheck. Perhaps even more significantly, it was football season, and that meant instead of playing cards many gamblers were watching games on weekends. "Southern people love their football," Janice said. During the fall, Friday nights are high school football games, Saturdays are for college football, and Sundays are for the NFL.

Janice's tips also depend on whether it's an odd-numbered or even-numbered year. In odd-numbered years, the University of Alabama and LSU football teams head to Starkville, just over an hour's drive north of the resort, to play Mississippi State. Fans often visit the casino on their way home from the games. "Oh Lord from Zion!" Janice exclaimed. "They're going to stop at the casino, and they're going to be drunk, and they're going to play a lot." But the year we got to know Janice was an even-numbered one; both games were away, and her paychecks suffered.

On this particular Sunday, though, Janice didn't mind that many of her regulars would be home in front of the TV instead of at her card table. "You know Monday they got to go to work. That makes me so happy. Because I know if they go home, they're going to go to work. People need to work." Still, she worried about how she would get through the fall. Janice has lived with a volatile income for years, and she knew what was coming. By Christmas, money would be tight, not only for Janice but for others in her family, and they'd all struggle to come up with the extra needed for Christmas gifts. To save money, they draw names for Christmas presents so everyone doesn't have to buy gifts for everyone else. The previous year, Janice had drawn her aunt's name and gave her dishwashing detergent, toilet tissue, and other "useful things like that."

A Bundle of Worries

Janice, her son, and granddaughter share a single-wide trailer on a dirt road ten minutes from the center of town, about two miles from where she grew up. She's been there for almost thirty years. She owns the land where her trailer rests, plus another plot down the road (her monthly mortgage payment is about \$400). The trailer is decorated with homey touches. Velvet curtains hang above a velvet-covered couch on the long wall of the sitting area. They form a cozy space with a television and coffee table, squeezed in beside the kitchen. On the adjoining wall is her favorite possession, a reproduction of an oil painting of magnolia blossoms, framed in thick gold-painted wood, flanked by two wall-mounted brass lamps.

In some ways, much has changed since Janice was a child. During the "Freedom Summer" of 1964, the year Janice was seven, hundreds of political organizers from across the country flooded to her part of central Mississippi to register voters and integrate schools. In June of that year, the Ku Klux Klan and local police murdered three of the activists after ambushing them along a county road fifteen miles from where Janice's casino now stands.⁴ The killings of James Chaney, Andrew Goodman, and Michael Schwerner became part of the story of Janice's childhood, just as they became part of the story of America's struggle for civil rights, leading up to Martin Luther King's march in Selma and the passage of the Voting Rights Act of 1965.

In 1969, when Janice was in seventh grade, her school district, along with a few others nearby, became the first in the area to integrate, some fifteen years after the Supreme Court's ruling in *Brown v. Board of Education* that school segregation was unconstitutional.⁵ "We didn't know we were trailblazers," Janice said with a laugh. "We were just going to school." Her parents were not "crazy about it, but they were more *worried* than they were anything else," she recalled. "But they knew times were changing." The teenage boys worked out their frustrations playing sports, Janice remembers, but the girls would sometimes fight, white girls versus black girls.

Racial divisions persist today. Black students have held reunions over the years, but it wasn't until 2015, forty years after Janice's graduation, that all of the students, regardless of race, met for a joint high school reunion. And, for all intents and purposes, this year's graduating class will still have largely segregated class reunions. While the county population is split nearly evenly between black and white, the schools aren't. The public schools are largely black, the private schools almost all white. Local churches are de facto segregated as well. The local White Pages lists more than forty churches in Janice's town of seven thousand, but it is difficult to find a local church that, as they say in Mississippi, is "blended."

The racial divide—and its consequences for education, housing, income, wealth, and jobs—is in large measure responsible for the situation that Janice finds herself in. But it is not all that preoccupies her.

To understand Janice's everyday worries, we have to zoom in closer. When we do, her week-to-week finances loom large. As Figure 1.1 shows,

Janice's paychecks rose and fell with the seasons; Marcus's benefits were somewhat erratic, sometimes cushioning a low paycheck, sometimes amplifying a large paycheck. Some of these ups and downs were predictable—Janice knew that the football schedule was not in her favor so the fall would be especially bad—but much was not. Certainly Janice had no way of predicting the exact amounts of her paychecks and no way of knowing what was going to happen with Marcus's benefits. The volatility and unpredictability of her income is not the only challenge that Janice faces—and perhaps not the most fundamental—but it is a large part of her bundle of worries, and one that has been very hard for anyone outside her household to fully see or understand.

Spikes and Dips

There are some obvious causes of the swings in monthly income. At tax time, more than half of American households receive a refund, causing their income to spike. Twice a year, people who are paid every two weeks receive three paychecks in a month.⁶ But neither explains the total amount of volatility we saw from month to month. In our analysis, we removed tax refunds from the calculations in order to isolate spikes and dips that reflected income from earnings.⁷

There are several ways to measure the remaining income volatility. One is to calculate the swing between the highest month and the lowest month as a percentage of average household income. Janice's monthly swing was about 70 percent (30 percent when looking only at biweekly paychecks as noted above). The average swing for households with comparable annual income to hers was actually higher, at 116 percent. For poorer households it was higher still, as high as 126 percent (meaning that if average monthly income was \$1,000, families saw at least one month with income of, for instance, \$1,730 and one month with income of \$470).

A second measure of variability is the CV or coefficient of variation. CV takes a measure of the variability of monthly income (the standard deviation for a household during the year) and expresses that

measure as a fraction of the household's mean monthly income. The advantage is that the CV can compare the volatility of households with different levels of average income. The disadvantage is that CV measures aren't intuitive. Comparing the CVs of different people's income provides context: a person who earns a \$50,000 annual salary, paid every two weeks (and so having two months a year with three paychecks), with a \$500 year-end bonus would be 0.18. Janice had a CV of about 0.21. The median for the entire U.S. Financial Diaries sample was about 0.34, nearly double that of our imagined salaried worker with a steady job.

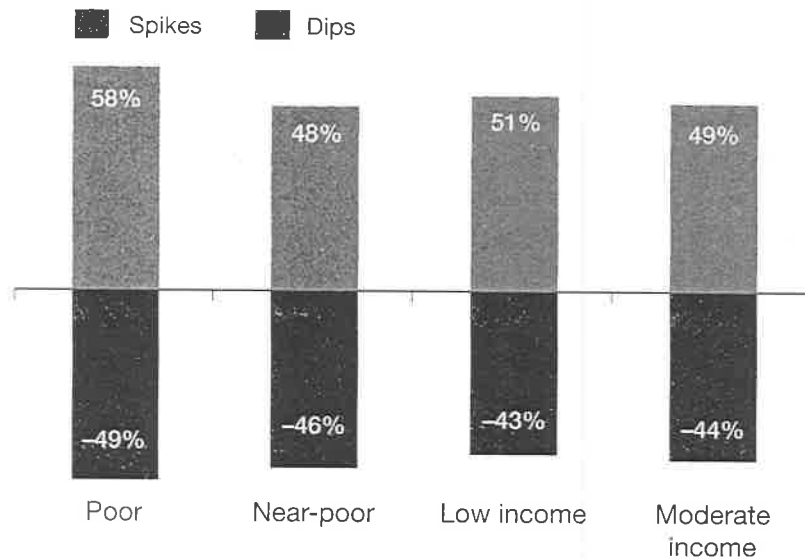
Figure 1.2 shows a third way to measure income volatility: by counting the months when income is a certain amount above or below the average.⁸ We chose to look at variations of 25 percent above or 25 percent below the average. This benchmark is consistent with other researchers' measurements of year-to-year volatility, enabling us to compare what we were seeing with other research. It's also easy to imagine how a spike or dip of that magnitude could affect a household's spending and ability to plan. Counting spikes and dips gives a more conservative view than tracking the size of swings—which can be exaggerated by a few outlier months while most of the year is steady. Its advantage over the CV calculation is mostly in its simplicity.

The numbers of spikes and dips are striking. Households in the Diaries sample experienced, on average, 2.2 months with spikes and 2.4 months with dips in income over the year. Put another way, for about five months a year, household incomes weren't even close to average. Across the whole sample, virtually no one—just 2 percent—got through the year without any spikes or dips in income.

As is often the case, the averages don't tell the whole story. There was substantial variation within our sample. When we split the sample in half by level of volatility, the higher-volatility group had an average of 6.6 months where income was either spiking or dipping while the lower-volatility group had an average of 2.5 months.

Income level only roughly predicts which households faced high or low volatility. While poorer households generally had more volatility (as you can see in Figure 1.2), even the best-off families we followed saw a surprising amount of income volatility. This "moderate-income

Size of spikes & dips as a percentage of income



Number of spikes & dips by income level

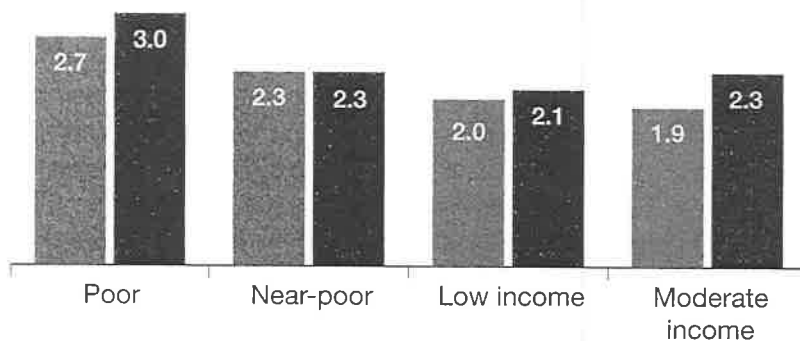


Figure 1.2. Income volatility in the U.S. Financial Diaries. Here are two ways to look at income volatility. On top we calculate the size of income spikes and dips by comparing them to the households' monthly average income; below we look at the number of months when income was 25 percent above or below average.

group earned more than two times the poverty threshold and included households around the local median income in their region. These middle-class households experienced, on average, 1.9 spikes and 2.3 dips during the year, which meant that even they spent a third of the year with earnings far from average. Many of these households also fell into the high-volatility group: moderate-income households made up 26 percent of our sample and 22 percent of high-volatility households.

For all families in the sample, the spikes and dips are often large in size: the average spike in income was in fact 52 percent above the household's average monthly income. The dips, similarly, were substantial hits to income: the average dip was 46 percent below average.

For households below the poverty line, it was worse.⁹ Poor households in the Diaries project faced, on average, 2.7 spikes and 3.0 dips over the year. In total, then, they spent nearly half the year with income far from average. Their poverty was deeply bound up with the instability of their income. The poorest families struggle even more than Janice and Marcus, whose household income is well above the supplemental poverty threshold (their total annual income is 177 percent of the poverty threshold). It's not just that the poor earn less, it's that income volatility compounds their struggles.

135 Million Transactions

Our early work documenting household income volatility helped inspire another research group. The newly formed JPMorgan Chase Institute (JPMCI) had access to a very different set of data: as one of America's largest banks, Chase processes many of the financial transactions of its 27 million customers. The researchers at JPMCI created a sample of 100,000 randomly chosen account holders, with a total of 135 million transactions.¹⁰ The sample includes only people who banked intensively with Chase products: they had Chase checking accounts and Chase credit cards, deposited at least \$500 every month into an account, and made at least five payments or other withdrawals each month. Their data thus includes a much smaller percentage of people at the lower end of the income distribution, like Janice, and misses any income that doesn't flow through a Chase account.

but it is a far larger number of households than we were able to track in the U.S. Financial Diaries.¹¹

The Chase researchers examined whether their customers were also subject to significant month-to-month income volatility. Like us, they found that income held fairly steady for just a minority. In the total sample, 55 percent saw a month-to-month change in total income of 30 percent or more. As in our data, the ups and downs were most pronounced for the poorest, but volatility extended across the income distribution. There was no meaningful difference in the prevalence, amount, or range of income volatility among households with annual income between \$23,000 and \$100,000.¹² Chase's data show that within-year income volatility affects a broad cross-section of American households.

A National View

Neither the Diaries data nor the Chase data are nationally representative. Five years after the recession of 2007–9, though, the Federal Reserve launched a new national survey, the Survey of Household Economics and Decisionmaking (SHED), to monitor how families were coping in the recession's aftermath. The survey was relatively brief (half of respondents completed the questions in nineteen minutes or less), but it covered a lot of ground. Of the ninety-nine questions, one was a simple query, in part inspired by our initial results, that zeroed in on income volatility: "Which one of the following best describes how your household's income changes from month to month, if at all?" The answers aren't detailed, but they provide a useful check on the broad patterns, and it comes from a nationally representative sample of 5,642 people.¹³

In the Fed's data, the reported incidence of income volatility was lower than in either our sample or the Chase study (see Figure 1.3).¹⁴ Two-thirds of the respondents reported that their income was "roughly the same" each month. In other words, many people reported that they were free from worry about large month-to-month spikes and dips of income. But 20 percent of respondents reported that they experienced

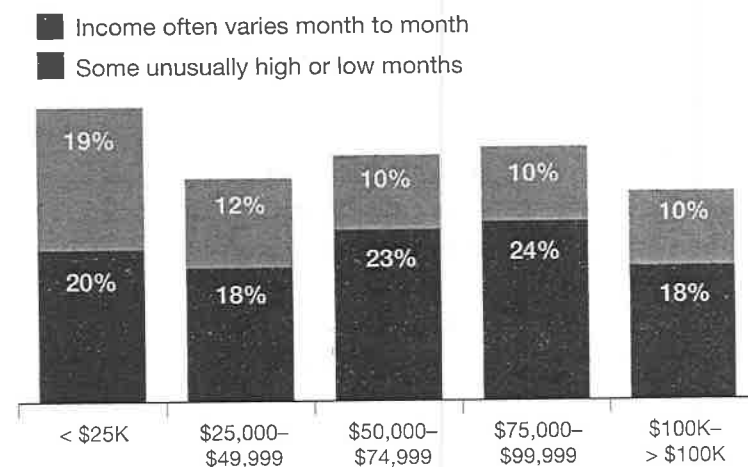


Figure 1.3. Income volatility in the Federal Reserve's Survey of Household Economics and Decisionmaking (SHED), 2015. About a third of all respondents reported volatile monthly incomes.

"some unusually high or low months." Another 12 percent saw even more volatility, reporting that their income "often varies quite a bit from one month to the next."

As with the U.S. Financial Diaries findings, the challenges were greater for the poorest. Among households earning less than \$25,000 for the year, almost 20 percent experienced extreme income volatility. For households earning at least \$50,000, that figure was 10 percent.

The differences among the three studies are worth noting. The Diaries and Chase analyses track income flows, while the Federal Reserve survey measures people's perceptions of their income volatility. In the Diaries study, we also asked participants how easy or difficult it was for them to estimate their future earnings. People expressed greater confidence in their ability to predict their future incomes than their measured volatility would have led us to expect. Of course, predictability and volatility are different things. Janice can predict her income fairly well. She knows she'll earn more in the summer and less in the fall. She knows she'll get a boost in the years when Alabama and LSU come to town. Her income is predictable but still

volatile. As Janice's story suggests, while predictability may make it easier to cope with volatility, it still doesn't make it easy.

Overall, while more study is needed of income volatility and people's perceptions of it, the results reinforce our finding of a hidden inequality in American earnings. A disproportionate share of low- and moderate-income families faces volatility. Meanwhile, better-off households not only earn more, they are much more likely to have steady earnings.¹⁵

Taken together, the Diaries and the Federal Reserve and Chase data reveal something new about the financial lives of families today. First, many households face significant unsteadiness within the year. Second, the cause is not infrequent disruptions to a basically steady income. Instead, many households face a very different reality: the base condition is unsteady. The spikes and dips in income make for a bumpy path for many households, especially, as we will see in the next two chapters, when those income fluctuations are exacerbated by spikes and dips in expenses. The road is rockiest for those at the bottom of the income distribution, as we will explore in greater detail in chapter 3 and chapter 7. But month-to-month ups and downs aren't limited to the poor or even the near-poor: instability is increasingly part of middle-class life too.

The All-Important Paycheck

We considered a number of possible causes of the unsteadiness of incomes. One obvious source was job loss, particularly since we gathered data at a time when unemployment remained relatively high. Another possibility was people moving into and out of the household—families today are less stable than they once were. If someone with a job moves into, or out of, the household, that contributes to volatility. Just over a quarter of our households saw members join or leave during the study. Perhaps households were engaged in more self-employment, earning a little extra income when they needed it, which could increase or decrease volatility (depending on whether they were creating a spike by working "overtime" or buffering a dip to cover for lost hours at a job). Many of the households qualify for public benefits such as food

stamps and public health insurance. The process of applying for benefits, and regularly recertifying one's eligibility, is much more time-consuming and uncertain than many realize. Perhaps people went on and off of these benefits more often than we had assumed.

To pull apart which of these factors was the biggest contributor to volatility for our households, we calculated the CV of all income within the sample. Then we smoothed out different kinds of income, essentially removing the volatility from a particular source, to see which variables had the biggest effect on the overall CV. If we treat all income that wasn't earned from a job (such as food stamps or unemployment benefits) as if it were the same each month, more than four-fifths of the volatility within the sample remains. Self-employment was an even smaller factor: treating all self-employment income as though it is constant decreases the CV by only 15 percent. If the majority of volatility is coming from sources other than benefits or self-employment, that still leaves the question of whether volatility was driven primarily by changes within a job (up-and-down income from the same job, like Janice's) or from changing jobs (losing, getting, or switching jobs). Job changing explains a third of the CV, but nearly half of overall income volatility was due to changes in income from the same job.¹⁶ Many households could not count on their jobs to provide a steady income from one month to the next.

Our analysis matched that of the Chase research team. Nearly all of the income volatility experienced by the households in their study (86 percent) could be explained by variation in pay for a given job, not from job loss or job changes. About a quarter of the volatility from wages was due to months when workers paid weekly received five checks (instead of four) or workers paid biweekly received three (instead of two). But about three-quarters of the volatility could be attributed to fluctuations from one paycheck to the next.¹⁷

The Great Job Shift

In 2006, political scientist Jacob Hacker described what he called the "Great Risk Shift" in a book by the same name. Over the half century following World War II, governments and businesses gradually

shifted financial risks from their ledgers onto the shoulders of individuals and families. Hacker's insight, which we'll explore in greater detail in chapter 2, is important to understanding the finances of American families and the instability we see in the Diaries. Our data revealed not only evidence of the shift in risk that Hacker describes, but also the impact of a parallel transformation, one occurring in the labor market. We've taken to calling it the Great Job Shift.

Since the 1970s, steady work that pays a predictable and living wage has become increasingly difficult to find. This shift has left many more families vulnerable to income volatility. While there are many factors, as with so many other features of modern life, the Great Job Shift is a story mostly about how technology has shifted power, in this case from workers to employers. And it is a story of how that power has shifted risk from employers onto workers.

A well-known example of this trend is the decline of manufacturing jobs in the United States, once a source of reliably middle-class, often unionized, work. While economists debate the relative importance of automation and globalization in this decline, no one disputes the numbers. In 1960, about a quarter of U.S. workers were employed in manufacturing. Now the share is less than 10 percent.¹⁸ As Figure 1.4 shows, jobs in production, crafts, and repair, as well as clerical, administrative, and some sales jobs, are shrinking.¹⁹ In contrast, jobs in the service sector—food service, home health assistance, personal care, and private police jobs, as well as professional, technical, and managerial jobs—are growing.²⁰

The shift away from manufacturing jobs can be seen in our Ohio and Kentucky sites, but the changing nature of work plays out in the New York, Mississippi, and California sites as well. For the families we met, the broad economic trend has real human consequences. Professionals and managers are seeing new opportunities, but those jobs are less available to less educated workers. The options available without a college degree are generally in the service sector, such as Janice's job dealing cards or Becky's work cleaning houses. But these jobs offer less stability.

As manufacturing jobs have declined, so too has the clout of unions. Some experts, including former labor secretary Robert Reich, place most of the blame for unions' problems on politics and the introduction

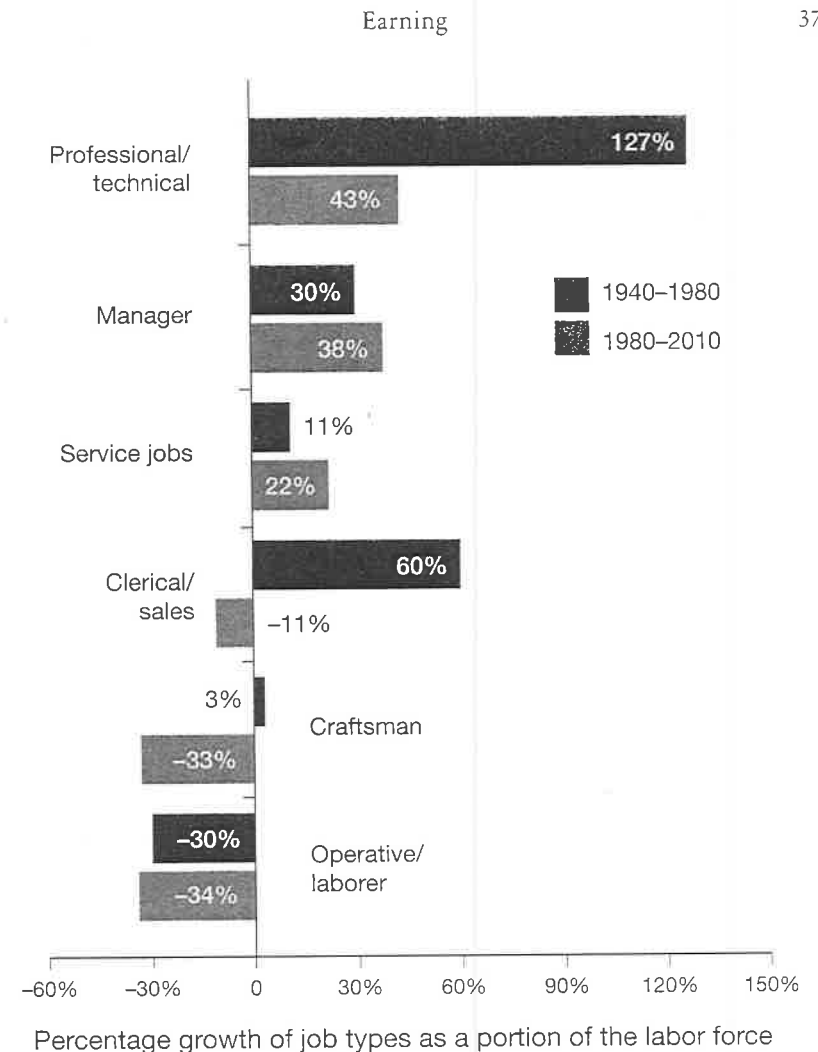


Figure 1.4. Changes in employment in the United States. Jobs that typically had steady wages and long-term security have been shrinking in recent decades while jobs associated with more variability have grown. Data from Lawrence Katz and Robert Margo, "Technical Change and the Relative Demand for Skilled Labor: The United States in Historical Perspective," via David H. Autor, "Why Are There Still So Many Jobs? The History and Future of Workplace Automation," *Journal of Economic Perspectives* 29, no. 3 (Summer 2015): 3–30.

of right-to-work laws and other limits on union influence in many states.²¹ But union membership is also declining because the kinds of jobs and sectors that were once unionized are shrinking. According to the Bureau of Labor Statistics, 20 percent of workers were union members in 1983, compared with 11 percent in 2014, and many of those are in the public sector. Union jobs make up just 7 percent of private sector workers today.²² Even within job categories, union membership has fallen: 21 percent of workers in installation, maintenance, and repair occupations were unionized in 2000, compared with just 15 percent in 2014.²³ Without unions, workers lack the ability to bargain collectively for higher wages and other attributes of quality work like being able to count on a stable number of hours each week.

Meanwhile, technology has provided employers in all sectors with a host of new means to rapidly measure and adapt quickly to market conditions. These changes, which boost companies' efficiency and profitability, have consequences for how companies use workers. As early as the 1950s, for example, Japanese manufacturers such as Toyota began using a "just-in-time" system to scale production up or down quickly based on market demand.²⁴ The approach requires not only the technology to measure and understand shifting needs but the ability to rapidly change how much is being produced. That ability is not just technical; it means that workers absorb a portion of the ups and downs in demand by working overtime or reducing their hours. Just-in-time manufacturing has also meant a growing reliance on temporary workers. Even Toyota, which has a reputation for treating employees very well, employs temporary workers to fill gaps, sometimes for years. Last year, the U.S. Department of Commerce estimated that about 8 to 10 percent of production jobs in manufacturing were temporary.²⁵

Technology-enabled rapid adjustment has spread to many other sectors of the U.S. economy, too. In fact, it's often easier for service sector firms to rapidly adjust workers' hours, since there's no production line to worry about. Many large employers now have the technology to estimate precisely how many workers they'll need, down to the day and time. This can lead to dramatic swings in the number of hours that employees work, depending on the season, month, week, and even the

day. Smaller employers may not have all the same technological tools at their disposal, but they employ similar practices. Workers are sent home early if sales are slow. Their shifts are sometimes canceled with no warning, and, when things are busy, they're called in with little or no advance notice.²⁶

Elaine Sullivan, a middle-aged woman from California who was part of the study, lived the Great Job Shift. For more than fifteen years she worked as a cafeteria manager at an elementary school. Not only was her job unionized, but she was the local union representative. She was laid off in 2008 and was unable to find another job in the school system—in part, she believes, because of her role in the union. It took her a year and a half to find a new job. She started working hourly on the front lines of a quick-serve restaurant. It took her another year and a half to work her way up to a managerial position. She told us she pursued the promotion not just because of the higher pay but because managers don't get told to go home early. There's a catch, though: now, instead of being the union representative for her coworkers, she is the one who tells others that their shifts are being cut when traffic to the restaurant is slow. She doesn't like having to do it, but there is a strict algorithm the company uses to determine staffing levels based on hourly sales. If she lets "unneeded" workers stay on the clock, she gets an email from corporate headquarters within twenty-four hours asking for an explanation.

The rapid translation of rising and falling sales into worker salaries isn't unique to the restaurant industry. Using data collected directly from firms, economists at the Federal Reserve and Harvard Business School found that volatility in publicly traded firms' sales growth rates and profit-to-sales ratios has increased dramatically since 1970—and that the increased volatility is reflected directly in the wages of workers within the year. In other words, firms seem to be reacting more quickly to changes in the business environment by increasing or cutting what they are paying their existing workers (not by layoffs or new hires). This connection is most pronounced in the service sector and for low-wage workers.²⁷

Indeed, the Great Job Shift has not affected all workers equally. Using data from the U.S. Census Bureau and national unemployment insurance records, Michael Strain of the American Enterprise

Institute found that business downturns had bigger effects on the earnings of low-wage workers than of high-wage workers.²⁸ More than half (58.5 percent) of the U.S. workforce was paid hourly in 2015.²⁹ Low-skill, hourly positions are the easiest for companies to quickly scale up and down.³⁰

One recent national study by Susan Lambert, Peter Fugiel, and Julia Henly of the University of Chicago found that about 60 percent of “early career” workers, those between ages twenty-six and thirty-two, commonly had variable work hours.³¹ For these workers with unsteady hours, fluctuations averaged almost 50 percent.³² The fluctuations were greatest for part-time workers, but they were notable for full-time workers, too. Schedules were not just volatile but unpredictable, even a week in advance. Lambert, Fugiel, and Henly’s findings are in line with the experience of the households we met, for whom changes within jobs was the largest source of volatility.

Tipped workers are also subject to more income volatility than are salaried workers. Janice’s work at the casino shows the instability of a living earned through tips and commissions. Tipping is often seen as part of a well-functioning business—after all, when we tip, we reward hard work and good service. But the system of tipping also opens the door to inequality and uncertainty, and it can leave workers vulnerable to mistreatment and harassment by managers and customers. One of the origins of tipping in nineteenth-century America lies in the refusal of white business owners to pay newly freed, black workers a wage, and there are still documented differences in tips received by servers today based on their race.³³ Even when not guilty of these deep harms, tipping can be capricious, leaving the income of servers subject to factors outside of their control (a customer’s mood, how quickly the kitchen fills food orders—or, as in Janice’s case, if college football games will be played at home or away). Basing wages on tips places risk on workers’ shoulders. When a hotel can’t fill its rooms, maids share the loss too. Janice has to pay for groceries, diapers, and gas no matter how many gamblers emerge from the Tuscaloosa bus. Jeremy Moore, when he was working as a mechanic on commission, was in a similar position.

Because women and people of color are employed in tipped, low-wage, and hourly jobs in high numbers, they tend to be disproportionately

tionately affected by the volatile schedules and incomes resulting from the Great Job Shift. Nearly half of the women who work in the retail and restaurant industry, for example, are women of color.³⁴ About 40 percent of tipped workers are people of color, versus 32 percent of the general workforce.³⁵ In the summer of 2016, more than a quarter of black and Latino part-time workers were classified as “involuntarily part-time” (which means always pushing for more hours) by the Bureau of Labor Statistics, in comparison to only one in six among part-time white workers.³⁶

Another group especially vulnerable to income volatility is contingent workers, sometimes called freelancers, and known in regulatory terms as independent contractors. Estimates of the number of people working independently vary. According to a Government Accountability Office report, the figure ranges from less than 5 percent of American workers to more than a third, depending on how contingent work is defined. The Freelancers Union, an advocacy group that represents independent contractors, embraces the broader definition, reporting that more than a third of American workers, nearly 53 million, performed some freelance work in 2014. According to IRS data, the number of people filing 1099-MISC forms—indicative of receiving income from work that is not formal employment—has risen steadily since 1989 and at a faster pace than the number of people filing W-2s.³⁷

Contingent workers aren’t employees—and don’t have employee protections or benefits, particularly unemployment insurance, which dampens income volatility when a job is lost. If companies are passing on volatility to their employees, they pass it on even more to contingent workers. In addition, contingent workers don’t have the same recourse if they are not paid fully or promptly for their work. According to the Freelancers Union, roughly a third of those they count among contingent workers, over nineteen million people, have experienced this sort of wage theft.³⁸

Freelance work is a mixed bag when it comes to volatility. Promoters of the “gig economy”—the term used to describe freelance work enabled by technology platforms like AirBnB, Uber, and TaskRabbit—often argue that it can reduce financial instability. When workers’ income dips in their regular jobs, the argument goes, they can fill

the gap with short-term gigs. While that may be true in theory, how it works in practice is much less clear. Being a freelancer can be a symptom of instability as much as an answer to it, and not everyone has equal access to opportunities to supplement or smooth their income. Data from the Federal Reserve indicate that while 11 percent of adults earned freelance income in 2015, those with higher levels of education were more likely to have income from informal work. The indication is that participating in the gig economy requires either a base of capital (a vehicle, a room to rent) or technology skills—both of which are associated with higher levels of education—and less vulnerability to income volatility, since higher levels of education are correlated with salaried and non-tipped jobs.³⁹ The JP Morgan Chase Institute found that labor platforms like Uber and TaskRabbit sometimes supplemented income dips, while capital platforms like AirBnB were more often used to supplement relatively steady wage income.⁴⁰

Of course, there are other factors too. Age is one: the young are more likely to participate in technology-enabled freelance work. Another is geography (there is very little demand for Uber drivers in the small town where Becky and Jeremy live). Overall, it seems there's little evidence so far that the gig economy reduces income volatility by providing additional earning opportunities, rather than increasing the risk of volatility relative to traditional jobs.

While volatility in earnings within jobs is the biggest contributor to income volatility, between-job volatility was also important. That can mean losing a job and gaining a new one or having multiple jobs at the same time. Nationwide, according to the Bureau of Labor Statistics, 6.5 million workers wanted full-time jobs in 2015, or more hours from their part-time jobs, but couldn't find them.⁴¹ Among Diaries families, 38 percent of working adults had two, three, or four jobs during the year (some simultaneously, some sequentially). The other 62 percent were like Jeremy Moore, employed in a single job that accounted for their total earnings. But many of these adults were nonetheless part of households where someone else was working too: in most households where an adult had just a single income source, another working-age member also held a job. So while less than half of working adults worked more than one job, roughly two-thirds

of entire households did. Even if these multiple jobs added up to a living wage, the multiple jobs did little to dampen overall volatility. When there is a second earner in a household, their wages reduce household volatility only about 5 percent on average.⁴²

Stability's Benefits

The dispassionate economist would look at income volatility and say it's not necessarily a problem in and of itself. People should just save and borrow as necessary to cope with the spikes and dips in income. But to do that kind of saving and borrowing, you have to have access to affordable, quality financial services designed for those purposes. Many people don't. But even when families have tools to cope with their financial ups and downs (be it by saving, borrowing, or earning more), volatility brings costs.⁴³

At the most basic level, volatility, when combined with illiquidity, can require households to expend a large amount of a scarce resource: attention. Sendhil Mullainathan and Eldar Shafir, in their book *Scarcity*, survey decades of research in psychology and economics in order to illustrate how limited a resource attention is and the problems that arise when people can't pay enough attention. The most important point is that attention is zero-sum. That means that each moment of focus a household with a volatile income spends figuring out their budget is stolen from making other important financial decisions and choices, or from activities like parenting or community engagement.⁴⁴ That's a cost that all of society bears, not just these households and their families and neighbors. Henly and Lambert followed up on their research about the prevalence of unpredictable schedules and found that, independent of non-standard hours (nights and weekends), unpredictability increased stress and conflict at home.⁴⁵ Some of these costs are obvious once people see the havoc an unpredictable schedule and volatile income can wreak. A 2014 *New York Times* profile of a Starbucks barista so clearly demonstrated the serious negative consequences of her frequently changing work schedule (especially on her ability to find quality child care), and how common irregular and volatile schedules were for Starbucks workers,

that the company announced changes to its scheduling policies within forty-eight hours.⁴⁶

But there are also costs and harms that are harder to see—and they can be long-term, even intergenerational ones. Studies suggest that people who experience income volatility tend to be more risk averse, which can limit their willingness to invest in their own or their children's future.⁴⁷ There's evidence that children from households with volatile incomes perform poorly in school. Teenagers, in particular, were more likely to face suspension or expulsion or to drop out.⁴⁸ James Heckman, winner of the Nobel Prize in 2000 for his scholarship about early childhood education and lifetime outcomes, has noted how short-term income shortfalls can rapidly cascade into decreased investment in children's education.⁴⁹

Volatility wreaks havoc with all the standard advice on how to manage finances. How do you create a realistic budget—and stick to it—if for half the year your income isn't close to average? In the moments that income unexpectedly dips, as Janice knows, it can be tempting to choose a quick fix like a payday or auto title loan that can end up being extremely costly and amplifying future volatility problems. Even when households don't turn to predatory products, a drop in income can—and does, for many of the households we followed—lead to missed bills, late fees, utility disconnections, evictions, or damaged credit.⁵⁰ With a greater number of families choosing insurance plans with high deductibles to hold down the total cost of medical insurance, an income dip can lead to delaying or doing without medical care.⁵¹ Even the inability to buy groceries in bulk, because of an actual income dip or the risk of one, can materially increase the total amount families pay for household goods.⁵²

Income volatility can also interfere with the existing social safety net. Some welfare programs require beneficiaries to work a certain number of hours each week, assuming that the number of hours worked is under the control of the employee, rather than the employer.⁵³ Qualification for programs like food stamps and health insurance subsidies is based on an average monthly income threshold. But of course volatile incomes mean that families bounce in and out of eligibility.⁵⁴ Bouncing in and out of Medicaid ineligibility causes interruptions in care for chronic conditions, particularly in places

where the doctors who accept Medicaid and private insurance don't overlap.⁵⁵ There can also be severe penalties for "fraud" in these programs, receiving benefits when your income is too high. But households subject to volatile incomes may not, themselves, know when or whether they will cross thresholds of eligibility. For instance, as of 2016, the Pennsylvania Medicaid Application asks whether anyone in the household has a hard time predicting their income, but in the very next question requires applicants to do exactly that—for the next twenty-four months—in order to establish eligibility.

"Stop worrying so much"

Janice's father's church is down a narrow road, on the left just before the pavement ends and the road turns into a patchy mix of asphalt and pebbles. It's small, not like the large stone churches on the main street of town. The building sits in the middle of a grass-covered plot with no driveway or parking lot. Two car-sized rectangles of gravel mark parking spots, but on Sundays, when church members arrive in suits and dresses, cars spread across the lawn.

The church has a single-story brick façade, and in the past year, members erected a small portico above the main door, supported by four white columns, making the entrance a bit grander. Janice's father usually moves about as he preaches. Sometimes the sermons are "shouting sermons" in the Pentecostal tradition, but on this day it's a teaching sermon, anchored in Jeremiah 7:21–23, a call to repentance: "Walk ye in all the ways that I have commanded you." As Janice's father has aged, services have become shorter. Now they usually end after two hours, not like past days when he preached all morning and sometimes into the afternoon.

Janice worries about the ups and downs of her finances, but she mostly keeps her concerns to herself and doesn't trouble her parents. Janice's father is sympathetic to her struggles; he senses the stress created by car payments and utility bills in the months when Janice's paychecks are short. "He knows I'm on my own without a husband. He came to me and said, 'It's good you pay your tithe. But you are not supposed to lose things because you pay your tithe. Pay your car

note first.” Even when Janice can’t afford the 10 percent tithe for the church, she makes sure to put something in the collection plate on Sundays.

One Sunday, Janice’s father called a prayer line. The members stood to receive prayers, forming a line down the center aisle. Each person waited his or her turn to receive a prayer to heal illness or ease other struggles. Janice’s father placed his palm on the head of the person at the front of the line, offered a prayer, and gave a gentle shove backward.

Janice was having a particularly stressful week. “I was *worried*. It was going rough,” she remembered later. When Janice got to the front of the line, her father paused. “He was standing right in front of me. And he had his hand on top of my head.” Instead of offering a prayer, he lowered his voice so only Janice could hear. “Stop worrying so much,” he whispered. “It will be all right.”

In that moment, Janice felt a weight lift. “And, really, the worry just went away. It just went away. And I don’t think I worried about nothing since.” Janice paused for a moment as she reconsidered. “You know, every now and then something bad goes through my head. But now I don’t hold it and worry about it like I did. Now I don’t do that.” She took a few more moments to think about her life. “I’m not a very important person. I just do what I do, and go home. I try to be a good person. It gets difficult sometimes, but I try to be a good person.”

Chapter 2

Spending

Sarah and Sam

The preschool girls bounced around the gym, chatting, laughing, and occasionally breaking into dance. Teenagers quieted and herded them into a corner to wait for their names to be called. When their names were announced over the PA system, the kids ran onto the floor and high-fived the teacher who stood in the middle of the gym, handing out certificates of achievement. Every girl was awarded one. Parents, perched on the wooden bleachers, smiled and clapped.

Sarah Johnson sat off to the side, filming the scene. She started this program a few years earlier, after searching unsuccessfully for a weekend performing arts program for her own preschool daughter, Amy. The ones she found were either too expensive or too far away. So Sarah won approval from the local public high school, where she worked, to use its facilities. She then recruited high school girls from the drama, chorus, and cheerleading squads to serve as teachers. The program met every Saturday morning during the school year and more frequently during summer months. In just three years, its enrollment had grown to include more than one hundred children.

Chapter 7

Sometimes Poor

Becky and Jeremy

The small town where Becky and Jeremy Moore live is not the most obvious place to go to understand poverty in Ohio: suburban, largely white, and mainly middle class. Statistics would instead point you to the high-poverty Appalachian counties to the south, or to cities like Dayton, Youngstown, and Toledo, which have recorded worrying increases in concentrated poverty in recent decades.¹

We were in Becky and Jeremy's town because we were interested in more than poverty, and, in line with that, most of the families we got to know there were not poor. Becky and Jeremy's annual resources, just below \$38,000 after taxes, put them safely above the government's regional poverty line. That line, known as the Supplemental Poverty Measure (SPM) to differentiate it from the government's "official" poverty measure, has the important advantage of taking regional price differences into account, and we have used it throughout the book. Becky and Jeremy and their four children were in fact living on an income 43 percent higher than the SPM poverty line for a family of six in their part of Ohio.²

Like many families, however, their income was unsteady. When we looked closer, we realized that the ups and downs in Becky and Jeremy's income meant that during the year of our study, they spent six months living below the poverty line. Becky would never describe their family as poor, yet, by the numbers, they sometimes were.³ When their income dipped so low that they had trouble putting food on the table, Becky reluctantly signed up for food stamps—\$295 received on the first of the month—and secured help from the state for health expenses for the children.

Becky was conflicted and somewhat embarrassed. "I didn't want the state to have to be the primary insurer for the [kids]," she told us. "I didn't want the taxpayers to have to pay." She paused for a moment, looking for the right words. "I feel there are folks who are worse off." She wasn't the only person we met who spoke this way, reluctant to accept public benefits. Nor was she the only person we met who wrestled with the unfamiliar situation of being both poor and not poor. Becky's experience of poverty is common. In fact, temporary poverty like Becky experienced is far more common than the chronic, grinding deprivation that easily comes to mind when thinking of poverty. The idea that most people who require help are born poor and will always be poor, subsisting only thanks to state benefits, is increasingly out of whack with the facts.

This chapter describes two ways to see poverty in a broader frame. First, to the lists of challenges faced by the persistently poor we need to add the problem of volatility described in chapters 1, 2, and 3. Those chapters show that the instability of income and spending revealed in the Diaries is most pronounced and most challenging for the poorest. This is a core part of America's hidden inequality. Second, episodic poverty like Becky's accounts for a large share of poverty and requires new and fundamentally different policy solutions.

Other Americas

The Other America, Michael Harrington's influential book on poverty, deserves a spot on the shelf of books that have transformed the way Americans view our society. Published in 1962, Harrington's book

helped build the momentum that culminated in passage of Lyndon Johnson's War on Poverty legislation. It exposed growing, and often shocking, economic and social divisions in postwar America.⁴ At a time when the middle class was expanding and many (white) families found themselves on a firmly upward path, Harrington denied readers the comfort of assuming that life's blessings were equally shared.

Harrington described the poor as segregated, trapped, and caught in "cultures of poverty," unable to capitalize on America's postwar boom.⁵ The poor people that Harrington described were marginalized, yet hardly marginal in number. He cited U.S. Census data, available in government reports that were not yet widely reported, which showed that the poor comprised one in four Americans. An estimated 40 million people, he wrote, were getting by on less than \$3,000 per year. Translated into today's dollars, that's roughly \$24,000, close to the 2015 federal poverty line of \$24,250 for a family of four.⁶

Harrington's book sparked outrage. Americans of all stripes were shocked by the concentrated poverty in inner-city neighborhoods and the economic decay of rural communities. More than anything else, Harrington argued that poverty was often invisible:

That the poor are invisible is one of the most important things about them. . . . Poverty is often off the beaten track. It always has been. The ordinary tourist never left the main highway, and today he rides interstate turnpikes. He does not go into the valleys of Pennsylvania where the towns look like movie sets of Wales in the thirties. He does not see the company houses in rows, the rutted roads (the poor always have bad roads whether they live in the city, in towns, or on farms), and everything is black and dirty.⁷

At the same time that *The Other America* made the invisible visible, it also codified the ways people imagined poverty. Harrington focused on poor communities concentrated in large cities and isolated hamlets, their disadvantage reinforced by the overlapping curses of geography, racial injustice, weak education, poor jobs, inadequate housing, and, more than anything else, pervasive hopelessness.

Fifty years later, the veil Harrington pierced has been lifted.⁸ Today, it's not hard to see the kinds of poverty that Harrington dragged into the open—poverty-related news stories, documentaries, movies, books, and even popular music are available at a click.⁹ Yet people like Becky and Jeremy do not fit into Harrington's picture, and they still are out of the frame of most conversations about poverty. Harrington's gaze landed far from communities like theirs where, most of the time at least, people are not poor. When people think of poverty in America the dominant images are the ones that Harrington focused on—inner cities, Appalachian hollows, and the rural South and West—where deep poverty persists.

Despite the increased attention to poverty it continues to be difficult to understand *how* poor families spend their lives—what combination of factors holds them back; how some escape; how some trespass poverty lines, moving in and out of poverty; and how they seek to cope. We have an even tougher time comprehending why Becky and Jeremy—and other families that are not poor by standard measures—still feel the tug of poverty.

As we've noted, the Diaries households are not a statistically representative sample. We purposefully selected households so that a quarter of the households in our sample are poor, but the data do not capture important parts of the American experience with poverty. Because we were interested in American workers, we excluded households that didn't have at least one employed member. We recruited people who were not the most disadvantaged households in their communities. As a result, we didn't encounter people living in entrenched poverty.¹⁰ The Diaries, however, allowed us to see other aspects of poverty often missed by broad-brush approaches.

Taisha

Taisha Blake, almost thirty, lives near downtown Cincinnati, not far from her sister and parents, whom she calls an "awesome family and support system." Taisha is raising her seven-year-old son, Rashid, alone. In her early twenties, before Rashid was born, Taisha hopped from job to job. "If something would upset me, I would leave and

find another job," she told us. But those days are past. "Now when I have problems at work," Taisha said, "I suck it up and keep moving."

"Plus," she added, "the economy is different." A few years before the study, Taisha trained for sixteen weeks to be a nurse's aide; she learned interviewing skills and how to write a résumé, and received eighty hours of supervised training. A manager she'd worked with during training was impressed. "She said to call her when I completed the program," Taisha recalled, "and I would have a job." She did. Taisha was hired as a nurse's aide, working part-time for \$13.75 an hour, three nights a week, for a total of twenty-four hours. Her mother and sister took turns watching Rashid in the evening so Taisha could work her shifts. Then she shifted to PRN basis—Latin for *pro re nata*, which translates to "as needed." For Taisha, that meant she wouldn't be sure how many hours she might work in a week, but she assumed she would get more hours and earn more. In fact, she earned much less. "With the job change [from part-time to as-needed status], I had expected to get a lot more than eight hours every two weeks," Taisha said.

Taisha managed to pick up extra shifts when Rashid started first grade and needed new clothes. The extra shifts not only offered more hours, they also paid a higher hourly wage via an incentive plan. Taisha, short on money, took special care to make sure her boss logged her hours correctly. The hospital, however, soon faced a budget crisis. The incentive plan that had provided a higher hourly rate for overtime was cut, first from 60 percent over \$13.75 to 45 percent over. For Taisha, that amounted to a \$2 an hour wage cut. Then the 45 percent bonus was cut to zero.

Taisha's income fell below \$15,000 that year, which put her 21 percent below the SPM poverty line.¹¹ That total included the value of food stamps and housing assistance she received, and a \$3,700 tax refund aided by the EITC. On top of her low yearly total, Taisha had to deal with unsteadiness from month to month. In September she earned \$500. In October, she received close to \$1,000. But in November, December, and January, her income hovered back around \$600. By spring, the hospital was busier, and for a couple months she brought in more than \$1,000. And then it dropped again.

Back in January, when Taisha's income had dropped so precipitously that she couldn't pay the month's gas and electric bills, she was

forced to use her rent money toward the utilities, even though it meant paying a \$25 late fee to the landlord. When Taisha's tax refund arrived in the third week of February, she paid the March rent, gas, and electric early, able for once to keep a step ahead of her bills.

Taisha would like to work more, and, at the end of the Diaries year, she was discussing a full-time position with her supervisors at the hospital. "Gradually, I would like to go to school, graduate, and get a better-paying job so that I can move away from subsidies and be more financially independent," she said. But for most of the year she was caught in a double bind shared by many of the families in our study. "I don't have any money," she said. "You can't save something you don't have." Along with insufficient resources, though, her ability to save was undermined by instability, making it more important, but even more difficult, to plan and build.¹²

Poverty and Instability

Taisha's experience living on a very low and volatile income echoes the results we found in chapter 1. From the Diaries, we learned that households like Taisha's, with incomes below the poverty line, had income in nearly six of twelve months that was far from average (above or below by at least 25 percent). Not only were these spikes and dips frequent, they were large. Figure 1.2 shows that income spikes for the poorest households averaged 58 percent of monthly income, and their dips were 49 percent below average.¹³ The finding that poor households experience more volatility than better-off families was echoed in a variety of studies described in chapter 1, including analyses of bank transaction data, national economic surveys, and self-reported qualitative assessments.

The data show that living in poverty is not usually about struggling to make ends meet each month on a small, but predictable, budget. Rather, insufficiency of resources is accompanied by instability. Poor families thus do far better during some months and far worse in others. The income spikes present chances to catch up on overdue bills and make postponed purchases. The income dips, on the other hand, can present severe financial challenges that are not always evident

in yearly data. Figure 3.4 showed in nationally representative data that the poorest families are also the most vulnerable to major crises: 60 percent report having no way to get through three months with the resources they could muster, even if borrowing from family and friends. Poverty is accompanied by volatility and illiquidity. Studying poverty only through the lens of yearly income misses much of this—and overlooks possible solutions.¹⁴

While we were gathering our data, other researchers were investigating income volatility for poor households in other ways. Bradley Hardy and James Ziliak, researchers at American University and the University of Kentucky, respectively, used data from the Current Population Survey to examine the year-to-year volatility experienced by families between 1980 and 2009. They found that the richest 1 percent of the population saw the sharpest increase over the period.¹⁵ But in any given year (rather than over the entire nineteen years), income volatility for the poorest 10 percent was far greater for the poor than for the richest. And because the poor had fewer tools to cope, it likely also had much bigger ramifications for their lives. At the same time, once-reliable strategies for coping were disappearing. Before 1990, the earnings of spouses tended to be negatively correlated, meaning that one partner typically experienced earnings spikes and dips at different times than the other partner, cushioning the family's total volatility. But Hardy and Ziliak showed that changed after 1990. Spouses' incomes became more likely to move up and down at the same time, amplifying rather than buffering volatility. Moreover, while government support helped reduce volatility for lower-income households, as it did for Taisha, its role became less significant than in the past.

As noted in the introduction, there are some limited month-to-month data on the finances of households from the Survey of Income and Program Participation (SIPP). A team of researchers studying family welfare assembled data across a twenty-five-year span of the SIPP (which covers families qualifying beginning in 1984).¹⁶ Overall, month-to-month income volatility for families with children was relatively stable in that time. But two groups saw substantial changes. Volatility increased for the poorest 10 percent of households, and it fell for the richest 10 percent. Thus, over the past generation, the gap

in income volatility between the poorest and richest grew by more than 400 percent, reinforcing divides based on income and wealth.¹⁷

Sometimes Poor

Most poor households in our data were not, in fact, poor during the entire study year. As Figure 7.1 shows, only 8 percent of poor households were always below the poverty line. The other 92 percent saw their incomes rise above the line an average of three months during the year.¹⁸ At first, the magnitudes surprised us. We thought, perhaps, that part of the reason was related to months in which tax refunds arrived, usually February or March. So we removed tax refunds from

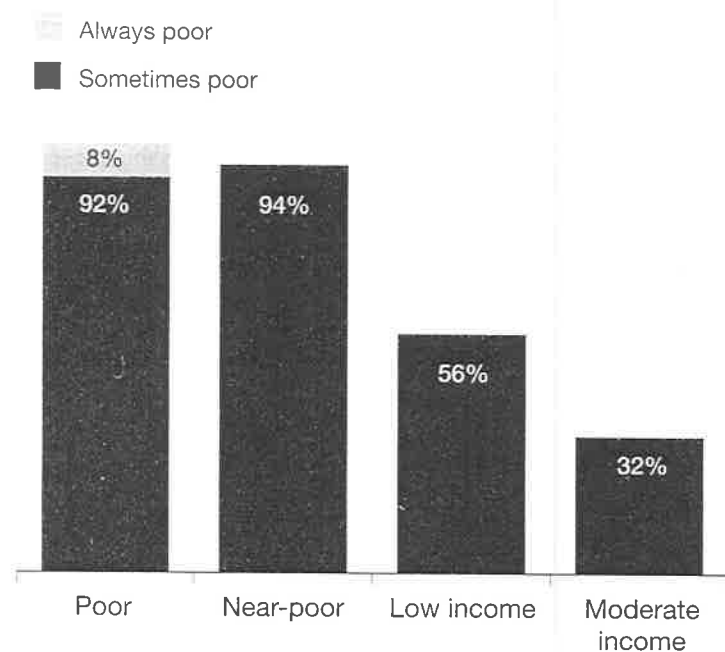


Figure 7.1. Households that were below the poverty line for at least one month during the year in the U.S. Financial Diaries. Only 8 percent of families whose annual income was below the poverty line spent all year below the line. In contrast, 32 percent of households with annual incomes above 200 percent of the poverty line spent at least one month below it.

the data. Even then, 81 percent of those judged poor by annual incomes had months when they weren't poor.

More striking, though, was the experience of Becky and Jeremy and other households that we initially thought would be insulated from poverty. Nearly all of these households in our sample were sometimes poor as well. Looking across the study year, 94 percent of those living on annual resources near the poverty line (between the poverty line and 1.5 times the line) spent at least one month in poverty. And that was also true for 32 percent of those with yearly resources greater than twice the poverty line, people whose yearly incomes located them squarely in the middle class. As the first row of Table 7.1 shows, the near-poor families who spent any time below the poverty line spent an average of 4.8 months in poverty during the year, while those with incomes above twice the poverty line nevertheless spent 1.6 months in poverty.¹⁹

Outside the community of social service providers, policy wonks, and poverty researchers, episodic poverty is not well appreciated. Four decades after Harrington's book, a group of prominent poverty scholars noted that the perceptions of poverty that *The Other America* helped create remained: "Popular perceptions of the permanence of poverty and welfare receipt are widespread. We speak easily of 'the poor' as if they were an ever-present and unchanging group. Indeed, the way we conceptualize the 'poverty problem,' the 'underclass problem' or 'the welfare problem' seems to presume the permanent existence of well-defined groups within American society."²⁰

But Becky and Jeremy's experience moving in and out of poverty is common. The most recent data available from the U.S. Census's SIPP show that 90 million people, *nearly one-third of all Americans*, experienced poverty for two months or more between 2009 and 2011. In contrast, just 10 million people, less than 4 percent of the population, were poor for the entire three years. As with Becky and Jeremy, most spells of poverty did not last long: about two-thirds lasted less than eight months, and 44 percent lasted four months or less. If we look only at one year (2011), 8.3 percent of Americans were poor every month of the year, but about one-quarter of Americans spent two or more months below the poverty line. While these data are from 2009 to 2011, years in which America was pulling itself out of the

Table 7.1. Months in Poverty Defined by Income and by Spending

	Income group based on yearly income			
	Poor	Near-poor	Low income	Moderate income
Months in income poverty	9.1	4.8	2.1	1.6
Months in income poverty that are also months in spending poverty	8.1	3.7	0.6	0.6
Percentage of months in income poverty that are also months in spending poverty	89%	77%	29%	38%
Number of households	53	68	27	20

Source: U.S. Financial Diaries.

Note: The columns show poverty status based on yearly income, while the rows give a monthly view. This analysis is limited to households that had at least one month of income below the poverty line during the study period.

Great Recession, the picture of episodic poverty then is in fact not dramatically different from the experience in 2005 to 2007, the years before the recession.²¹

The data tell a clear story: families leave poverty in great numbers, and they enter poverty in great numbers. Only a small share lives in poverty for long periods. Most Americans who experience poverty are far from Harrington's depictions. They are not trapped

in poverty, even if they are never so distant from it; neither do they permanently escape it even when their income rises significantly.²²

The results make sense given the large number of people living near poverty. In 2015, 58 million people, 18 percent of the U.S. population, had household income that placed them above the federal poverty line but below twice the line.²³ The group includes Becky and Jeremy Moore, Janice Evans, Sandra Young, and Abida and Tahmid Khan. Couple the large population living near poverty lines with the volatility problem, and the broad extent of episodic poverty in America is inevitable, a mathematical certainty.

Over the years, others have attempted to draw attention to episodic poverty. Mary Jo Bane and David Ellwood, both Harvard professors, wrote in the 1980s about the prevalence of poverty "spells," experienced by people who temporarily enter and exit poverty. They later took those ideas to Bill Clinton's administration, where their studies provided a basis for rethinking poverty reduction policy. Bane and Ellwood based their understanding of episodic poverty on an analysis of the University of Michigan PSID survey described in the introduction. In data from the 1980s, they found that nearly 45 percent of spells below the federal poverty line lasted no more than a year; 70 percent lasted no more than three years; and just 12 percent stretched beyond a decade.²⁴ The prevalence of relatively short spells led them to propose time limits on the receipt of public support, coupled with job training, an expansion of the EITC, and, if needed, wage subsidies. (Bane famously resigned to protest Clinton's signing of the Republican-led welfare reform bill in 1996 that featured time limits but stripped out much of the support they had recommended.)

Still, perceptions of short-term poverty episodes—and what they mean for the fight against poverty—tend to rely on the same sort of incomplete picture that informs the life-cycle arc. The shocks commonly blamed for knocking families into a poverty spell are the same major life changes that are assumed to be responsible for pushing families off the life-cycle tightrope.²⁵ In a 2010 essay in the *Stanford Social Innovation Review*, for example, Rourke O'Brien and David Pedulla wrote: "Episodic poverty is often precipitated by the loss of a job, a sudden illness, or another unexpected crisis."²⁶ This is true in part. The Financial Diaries reveal, however, that poverty

spells also occur as the result of less significant events, such as a series of smaller-than-normal paychecks or the end of a side job. Indeed, among our households, it was these supposedly minor changes that accounted for much volatility. Sometimes these problems build on each other, sending even higher-earning households into a poverty spell, although none on its own would ordinarily pose an insurmountable challenge.

Becky and Jeremy's spells of poverty were driven by the ups and downs of paychecks, not by major shocks. There is no reason to think this would have changed had Jeremy not switched jobs. Episodes of poverty would remain part of their life as long as they remained near-poor, with regular income spikes and dips.

Statistical Slices

We are not suggesting that concern for the temporarily poor displace concern for the persistently poor. Rather, both types of poverty must be considered to see the full picture. It is a counterintuitive fact of statistics that *at any given time*, a large share of the poor may include those who experience long-term, persistent poverty, even if at the same time the large majority of people who have *ever* been poor are in fact poor for short periods.

To see the math, consider a year in an imaginary society occupied by just one hundred people. Further imagine that five people out of the hundred are persistently poor—they are below the poverty line every month for a year. Another fifteen people are poor temporarily for four months each, with their poverty episodes spread evenly through the year; thus, five people are in the midst of temporary poverty episodes each month. In any given month, then, ten people are poor: five persistently and the other five temporarily. The average poverty rate is thus ten out of one hundred, or 10 percent. The percentage of poverty attributable to persistent poverty is then 50 percent in each and every month, a relatively high figure. Yet among the twenty people who experience poverty at some point during the year, the fraction that is persistently poor is five of twenty, or just a quarter of the whole. In other words, most people who are ever poor—75 percent—are temporarily poor.

We give this example to show how perspectives can vary depending on the way you measure poverty, and even the statistical slice you analyze. But the example is not far from the actual facts in the United States today. In national monthly data from the SIPP, the persistently poor comprise 35 percent of those ever poor in 2011; the episodically poor comprise the other 65 percent (not radically different from the 25/75 split in the hypothetical example).²⁷

As with the example, the persistently poor are a relatively large share of people who are poor at any given moment, but they are a much smaller share of all those who are ever poor during the year. If your interest is in aiding those who are poor right now, the persistently poor should command much of your attention. But if your interest is also in aiding all who will be poor this year, or reducing the national poverty rate, focus must expand to include the tens of millions of households that are sometimes poor.

How We Measure (and Think About) Poverty

When Harrington published *The Other America*, the United States did not yet have a standard way of defining poverty. It wasn't until seven years later, in 1969, that the government started using the "official" federal poverty measures. Based on research conducted by Mollie Orshansky, an economist at the Social Security Administration, the measures used the cheapest of several food plans developed by the Department of Agriculture to reflect a nutritionally adequate diet for a year. Since food costs generally accounted for a third of household spending, Orshansky then tripled the food budgets to arrive at a minimum cost-of-living estimate for a single person. That figure was then adjusted for household size and has been updated for inflation ever since. While the line remains the primary way that the government assesses poverty, economists have for decades debated its relationship to a family's actual needs or whether it estimates an adequate standard of living. A few years ago, the Census Bureau worked with experts to define the Supplemental Poverty Measure, which narrows the focus to money available to spend on basic necessities, such as food, clothes, and shelter (and which most of our analysis refers to).²⁸

While both the federal poverty line and the Supplemental Poverty Measure are rendered in terms of income, they are rooted in ideas about spending. So why don't policymakers assess poverty by directly monitoring spending instead? The main reason is practical: it is usually much easier to collect data on income than on spending.²⁹

For families, though, what matters is whether they can actually spend as needed. If Becky can keep food on the table and fill the van with gas, she has a sense of security even if her income is unsteady. So even if, for practical reasons, we continue to track, measure, and monitor poverty in terms of income (which captures the general availability of resources), we need a policy frame that is also rooted in protecting and supporting families' ability to spend when needed.³⁰ In short, we need a framework that incorporates both insolvency (which is essentially the traditional view of poverty) and illiquidity (which emerges from a cash-flow view). As chapter 3 showed, even poor households can partially stabilize their consumption in the face of income spikes and dips. They do so by drawing on their own resources and those of their family and neighbors. At the same time, the fact that households can only partially and incompletely protect their consumption means that even temporarily low incomes often mean sharp cuts in consumption.

As Bruce Meyer and James Sullivan document in national data, measuring poverty in terms of spending shows very different trends over time than poverty measured by income. While income-based poverty has shown relatively little progress over time, poverty measured by consumption has clearly fallen. Meyer and Sullivan attribute the divergence partly to measurement error in the income of the poorest households and partly to households' ability to smooth consumption. Their work illustrates the value of bringing consumption more fully into poverty analysis.³¹ Evidence from the Financial Diaries reinforces this distinction between "income poverty" and "spending poverty." The first and second rows of Table 7.1 illustrate how the incidence of poverty depends on whether you measure poverty by levels of income or spending. The first row shows the number of months people spent in poverty, on average, based on monthly income (as measured according to SPM guidelines and conditional on spending at least one month in poverty). As noted above, those

whose annual income is below the poverty line spent nine months of the year in poverty. Those who are near-poor, like Becky and Jeremy, spent nearly five months below the poverty line. In contrast, for those counted as "moderate income" (with yearly income more than twice the regional poverty line), 1.6 months were spent in poverty. These better-off households see their incomes dip into poverty less often, both because they experience somewhat less income volatility and because they start at a greater distance from the poverty line.

We see a different picture, though, when we ask how many of those months would still be counted as months in poverty if measured directly by their spending levels. Did people manage to maintain their spending through borrowing, relying on savings, and perhaps getting help from others? The analysis here is restricted to households with at least one month when income fell below the poverty line. The second row of Table 7.1 shows that households spent fewer months in "spending poverty." The average "near-poor" household experienced only 3.7 (about three-quarters) of their income-poor months below poverty thresholds. For the average "moderate-income" household, just 38 percent of their months in income poverty were also months in spending poverty. Again the best-off households fare better: the percentage of income-poor months that are also spending-poor months falls as households become richer.³² So, in line with what we found in chapter 3, some households can maintain spending above the poverty line even if their income drops below. To do so, they depend on the coping tools described in previous chapters—saving, borrowing, and sharing. But when coping tools are weak, spending falls with income and avoiding the experience of poverty is impossible without public support.

New Ways of Seeing

As we came to know Becky, Jeremy, and others in the study, we saw that conventional wisdom about fundamental economic and social relationships—particularly around earning, spending, saving, and borrowing—was outdated. Just as our year with the households led us to reevaluate common ideas about income and wealth, we saw the need to reassess ideas about poverty, too.

America desperately needs solutions that will lift more families from poverty. The entrenched poverty described by Harrington persists as an American dilemma, and the geographic segregation of the poor has only widened in the past half century.³³ Families who spend long periods in poverty are the most disadvantaged, and the safety net meant to bolster their livelihoods has withered and must be rebuilt.³⁴ Most of the ideas that are offered to solve poverty focus either on bolstering income itself (the EITC, TANF) or on ensuring a minimum level of specific types of consumption (for example, the SNAP “food stamp” program or the health care supports in the Affordable Care Act).

But seeing that many families are not consistently poor and are instead regularly in and out of poverty, and seeing that this is occurring as a feature of their economic lives—and not as an exception—suggests that a broader framework is needed. For these families, the mechanisms to cope with the ups and downs that we’ve described in this book—saving, borrowing, and sharing—have particular urgency. Policymakers and advocates who seek to reduce poverty are usually distinct from those who seek to help people better manage their financial lives. But, in fact, the lives of the Diaries families show that their agendas need to intertwine.

When poverty is the result of volatility and illiquidity, public assistance should be provided with a less onerous application process that relies on broader, yet more easily gathered, data. Applying for public benefits today is often clunky and slow. It can require standing in lines, filling out extensive forms, parsing complicated eligibility criteria that vary for each type of public benefit, and answering burdensome follow-up questions. This is expensive not only for applicants but also for taxpayers. Moreover, the data gathered do not necessarily capture cash-flow information or generate sufficient insight about instability. As a result, they do not inform the best possible decisions about how to spend our assistance dollars. Government’s assessment of benefits eligibility—in both form and substance—should carefully take new data into account, with a premium put on becoming quicker and more nimble in the process.³⁵

When considering income and spending volatility, one aim should be to help households help themselves. Yet policy too often under-

mines that goal. In more states than not, families must deplete most available resources before they are eligible for public assistance. This makes it difficult for families to build up a buffer stock that will help them smooth their consumption on their own. So far, only eight states have eliminated asset restrictions before families can receive funds from the TANF program. The numbers are more encouraging for food stamps and emergency energy assistance, with 34 and 39 states, respectively (plus Washington, D.C.), having eliminated asset restrictions.³⁶ Research by the Urban Institute shows that when asset limits have been relaxed for food stamps (SNAP), low-income households are more likely to save and have bank accounts, and, most important, once they leave the SNAP program, they are less likely to keep returning for additional periods.³⁷

TANF also has work requirements: individuals are eligible for help only if they are working a certain amount. For low-wage workers with volatility in the number of hours or amount of earnings they receive week by week, this is a complicated provision to comply with. Too many hours, and they lose eligibility as a result of too much income, but too few hours, and they lose eligibility for failure to work. Work requirements need to build from the realities of today’s labor market described in chapter 1.³⁸

Finally, most of the public support to help the poor is designed to pay for specific, approved expenses, such as food or medical care. However, given the nature of the spikes and dips that cause families to dip below the poverty line, this distinction becomes difficult to implement. Often, what people need is a flexible bridge to a few months from now.

The cash-flow perspective pushes toward an expanded poverty-reduction tool kit, one that accommodates the vulnerability of the near-poor while recognizing the pervasive instability in the lives of the persistently poor. As was the case in the previous chapters, conversations need to embrace both illiquidity and insolvency as distinct but often overlapping problems. The families’ stories reveal that, alongside efforts to help those whose poverty drives instability, we also need new ideas to keep instability from driving people into poverty.

their account in the next thirty days.¹⁵ The Safe-to-Spend feature provides an example of how banks can use straightforward and clear cash-flow-based advice to benefit consumers. This model could, in theory, be developed further by factoring in additional consumer information such as recurring charges, historical earnings, and spending patterns. Over time, people may come to expect that the financial advice they receive be informed by a more comprehensive view of their financial lives.

Coping in a World of Uncertainty

The Diaries show the power of a cash-flow view into families' finances. They reveal instability that is hard to see when measuring income or spending on an annual basis or comparing point-in-time snapshots of savings accumulated and debts owed. They document month-by-month ups and downs of income and spending that complicate families' already complicated choices. They reveal gaps in employer practices, government programs, and financial products, which do far too little to help families negotiate these realities.

One benefit of the Diaries project is that we see across silos. We see how work and health and education intermingle with finance. We see how families and friends both complicate and help. We see how even small interventions can sometimes have big results because of how things are connected. Scheduling improvements that are intended to give workers more power and improve family life, for example, also help them budget and think long term. What seem like small steps can meaningfully enhance greater stability—and ultimately mobility—for struggling families. On the flip side, the Diaries show how big, long-term interventions, like some designed to help build retirement savings, fail for lack of attention to households' short-term constraints.

We have entered a new economic reality in which even a middle-class annual income is no longer a guarantee of financial stability. Government, employers, and financial institutions must work together in new and different ways. The Diaries reveal *why* people are struggling. Our challenge now is to help people feel more secure and in control, week by week, month by month.

Notes

Introduction: A Hidden Inequality

1. In 2010–14, 34.5 percent of Ohio adults had attained a high school degree only; 11.2 percent had completed less school than that, and 54.3 percent had an associate degree or higher. “Educational Attainment for Adults Age 25 and Older for the U.S., States, and Counties, 1970–2014,” U.S. Department of Agriculture Economic Research Service, <http://www.ers.usda.gov/dataFiles/CountyLevelDatasets/Education.xls>.
2. Data on manufacturing are from the U.S. Bureau of Labor Statistics, “All Employees: Manufacturing 2016–01: 12,356 Thousands of Persons (+ see more) Monthly, Seasonally Adjusted, MANEMP, Updated: 2016–02–05 7:51 AM CST,” <https://research.stlouisfed.org/fred2/series/MANEMP>. Data on union membership are from the U.S. Bureau of Labor Statistics, “Union Members Survey,” January 28, 2016, <http://www.bls.gov/news.release/union2.nr0.htm>.
3. The life-cycle story is formalized in Brumberg and Modigliani, “Utility Analysis and the Consumption Function.”
4. Mullainathan and Shafir, *Scarcity*.
5. Pew Charitable Trusts, “Americans’ Financial Security Perception and Reality,” 7 (figure 5). The Pew Survey of American Family Finances is a nationally representative survey of 7,845 households conducted in November and December 2014. The survey question was “Which of the following is more important to you (financial stability/moving up the income ladder)?” The Pew brief notes that this is “an increase of 7 percentage points since 2011. This probably reflects families’ desire for greater control over their financial situations—something focus group participants mentioned frequently—but it may also indicate a growing recognition that moving up the income ladder can be challenging. In 2009, nearly 4 in 10 Americans (39 percent) felt that it was common for someone to start poor, work hard, and become rich. Five years later, just 23 percent of Americans believe that.” The portion of U.S. Financial Diaries (USFD) households that chose financial stability over moving up the income ladder was 78 percent. In the USFD sample, poorer households were more likely to choose mobility, with financial stability becoming more important as households gain income.
6. The research in India was led by Orlanda Ruthven, in Bangladesh by Stuart Rutherford, and in South Africa by Daryl Collins. Rutherford created the original financial diary study, and the three further developed the methodology. Collins led efforts to systematize the method and was an integral member of our team as we brought the financial diaries to the United States. We are greatly indebted to Daryl as a cocreator of the U.S. Financial Diaries project. She and Stuart Rutherford have continued to refine and extend the method in applications around

the world, as have others, including the organization Microfinance Opportunities. For more, see Collins et al., *Portfolios of the Poor*.

7. Data analyses using the Panel Study of Income Dynamics (PSID) are from the PSID website, accessed August 6, 2015, <https://psidonline.isr.umich.edu/Publications/Bibliography/search.aspx>. Other data sets have also been used to shed light on economic insecurity in America. These include the Survey of Income and Program Participation (SIPP) (see, for example, Wolf et al., “Patterns of Income Instability among Low-Income Families with Children”) and the Current Population Survey (see, for example, Hardy and Ziliak, “Decomposing Trends in Income Volatility”). Other specialized surveys, like the Fragile Families Survey run by researchers at Princeton and Columbia, also illuminate the changing situations of American families (see Garfinkel, McLanahan, and Wimer, *Children of the Great Recession*).

8. The data are from a cross-sectional snapshot of earnings of full-time male workers in 2013, taken from the U.S. Census, “Annual Earnings of Men, by Age and Highest Level of Education Completed,” table P-32, “Educational Attainment—Full-Time, Year-Round Workers 18 Years Old and Over by Mean Earnings, Age, and Sex: 1991 to 2013,” <http://www2.census.gov/programs-surveys/cps/tables/time-series/historical-income-people/p32.xls>.

9. This depiction comes from Duncan, “The PSID and Me.” This story is told in several places. We also draw on Duncan, Hofferth, and Stafford, “Evolution and Change in Family Income, Wealth, and Health.”

10. Duncan, Hofferth, and Stafford, “Evolution and Change in Family Income, Wealth, and Health,” 164.

11. *Ibid.*, 165.

12. Gottschalk and Moffit, “The Rising Instability of U.S. Earnings.”

13. Hacker, “The New Economic Insecurity,” 113. The ideas there draw on Hacker, *The Great Risk Shift*.

14. Gosselin, *High Wire*.

15. Among the earliest social scientists to write on precarity is the French social theorist Pierre Bourdieu, who links precarity to the deterioration of social relationships and the rise of social isolation. In an essay translated as “Insecure Jobs Are Everywhere Now,” Bourdieu writes: “It has emerged clearly that job insecurity is now everywhere: in the private sector, but also in the public sector, which has greatly increased the number of temporary, part-time or casual positions; in industry, but also in the institutions of cultural production and diffusion—education, journalism, the media, etc.” (*Acts of Resistance*, 82).

16. In summarizing the literature, Jonathan Latner shows that all of the major studies find increasing year-to-year volatility in national surveys. Latner, “Income Volatility and Social Stratification.” A notable exception to these findings is Dahl, DeLeire, and Schwabish, “Estimates of Year-to-Year Volatility in Earnings and in Household Incomes from Administrative, Survey, and Matched Data,” who find that income volatility is flat between 1984 and 2004 in national administrative data on labor earnings.

17. Dynan, Elmendorf, and Sichel, “The Evolution of Household Income Volatility.” They measure volatility by the standard deviation of percent changes in annual income across two-year spans.

18. By 2011, the latest year captured in the 2015 Pew study, families on average had a roughly equal chance of experiencing a large gain or a large loss. Previously, gains had outweighed losses as families advanced, but the chance of losses has increased over time. The new data show about one in five households benefiting substantially from one year to the next, with a gain in income larger than 25 percent. But about one in five experiences a loss of the same size. Pew Charitable Trusts, “The Precarious State of Family Balance Sheets,” figure 2. The data are from 1979 to 2011.

19. The PSID has been analyzed over and over by different researchers. They agree that income volatility is pronounced but disagree about how quickly it has grown or when. Some recent work suggests that there is considerable heterogeneity, such that evidence for average

volatility may be driven by a small, highly volatile subset of the sample. See Jensen and Shore, “Semiparametric Bayesian Modeling of Income Volatility Heterogeneity.” The other PSID analyses cited here suggest more widely felt experiences of volatility.

20. Pew Charitable Trusts, “The Precarious State of Family Balance Sheets,” 3.

21. The ability to view distant events through the PSID is captured by the depiction of the PSID as a “telescope on society” in House et al., *A Telescope on Society*.

22. We knew we were undertaking a much more ambitious and complicated way of collecting data than that of a typical survey. The extent that was true soon became clear. The project was designed to take two years, but getting the details right meant spending four years on basic research and most of an additional year verifying numbers.

23. In addition to adjusting for regional differences in cost of living, the SPM framework modifies income to yield a measure of resources available to spend on food, clothing, shelter, and utilities (often abbreviated as FCSU). See Short, “The Supplemental Poverty Measure: 2014.”

24. Under those region-specific (SPM) lines, a family in rural Mississippi made up of two adults and two children was considered poor if their yearly income in 2012 was no more than \$20,744. In the Cincinnati metro area, the costs of city living push the poverty line up to \$23,415 for that family. In New York City, the line was much higher at \$29,849. It was higher still in San Jose at \$34,296. The lines here are from 2012, the year that is most relevant for the Financial Diaries sample. Separate lines are specified for renters and homeowners. The lines illustrated in the text apply to renters.

25. The real median household income in the United States was \$56,516 in 2015 (in 2015 dollars). See Proctor, Semega, and Kollar, *Income and Poverty in the United States: 2015*.

26. To acknowledge the major time commitment and sharing of personal data that went along with participation in the study, families were given up to \$600–700 worth of gifts, as well as nonmonetary gifts (e.g., coffee mugs, notepads, and pens), over the course of the study. Money was distributed in the form of gift cards that could be used at a wide variety of retailers. Households were generally not notified about these gifts in advance, nor were gifts provided on a predictable schedule.

27. Attrition slightly changed the composition of the sample, though given the goal of the study (a deep dive, rather than a statistically representative view), not in a material way for our findings. See the U.S. Financial Diaries issue briefs that describe the sample and how we identified and recruited households (www.usfinancialdiaries.org).

Chapter 1: Earning

1. Throughout the book we report net incomes (after all payroll deductions), rather than gross income. There are a variety of reasons for this including the fact that households usually don’t think of their income in gross terms. In places where we refer to income in terms of the SPM, we make adjustments to net income according to the SPM guidelines so that our reported figures are consistent with measures of poverty and access to benefits that use SPM thresholds. The SPM framework modifies income to yield a measure of resources available to spend on food, clothing, shelter, and utilities. See Short, “The Supplemental Poverty Measure: 2014.”

2. Mullainathan and Shafir, *Scarcity*, 107.

3. Central Mississippi Yellow Pages (2012 Aspenwood Directories, Pittsburg, Kansas).

4. Neshoba County African-American Heritage Driving Tour (pamphlet), <http://www.neshobajustice.com/documents/RootsofStruggle.pdf>.

5. While the U.S. Supreme Court ruled in the landmark 1954 case, *Brown v. Board of Education of Topeka*, that maintaining segregated schools was unconstitutional, school districts in

the South delayed implementing integration. The delays continued for fifteen years until the Court's 1969 decision in *Alexander v. Holmes County Board of Education*. Immediate integration was ordered. *Alexander v. Holmes* applied to nineteen school districts in Mississippi, including several near Janice's district, but the reach of the ruling stretched across the South.

6. Because eleven months of the year have a few days more than four weeks, people who are paid biweekly receive three paychecks in a month twice a year, and people who are paid weekly receive five paychecks in a month twice a year. This is a source of income volatility and in theory is predictable. We discuss this in more detail later in the chapter, but our measures of income volatility are not primarily driven by these calendar issues.

7. Swings, spikes, dips, and the coefficient of variation (CV) were calculated from net income, while excluding tax refunds, in order to focus on earnings, and money given from friends or family, to avoid including informal credit. Details on the methodology and evidence can be found in Morduch and Schneider, "Spikes and Dips" and Hannagan and Morduch, "Income Gains and Month-to-Month Income Volatility." Income from tax refunds acted as another significant income spike for most households in the study and figured prominently in household financial management.

8. These results, and other sample-wide results unless otherwise noted, include 235 households. For income volatility analyses we exclude household-month observations where spending or income was below \$100 and months when households received any tax income. In Figure 1.2 we also exclude four months spread across four households that were in the top 1 percent of spikes, which skew the result for the top income group. These four months have income spikes ranging from 448 to 569 percent of their households' average income. The number of spikes and dips is annualized.

"Poor" households have income below the local threshold established by the U.S. Census Supplemental Poverty Measure; "near-poor" households have incomes 100 percent to 150 percent of the threshold; "low-income" households have incomes 150 percent to 200 percent of the threshold; and "moderate-income" households have incomes 200 percent or more of the threshold.

9. Short, "The Supplemental Poverty Measure: 2014." This measure takes into account that the cost of living in Mississippi or rural Ohio is much lower than in New York City or San Jose. In 2013, the benchmark poverty threshold for the nation was \$21,397 for a family with two adults, two children, and no mortgage.

10. The bank data included over two years' worth of data on all Chase consumer products, including checking accounts, savings accounts, credit cards, mortgage and home equity loans, and auto loans. The Chase research was led by Diana Farrell and Fiona Grieg. See Farrell and Grieg, "Weathering Volatility" and "Paychecks, Paydays, and the Online Platform Economy."

11. The Chase report notes: "We acknowledge that our estimates of volatility may be underestimated across the income spectrum but particularly in the lowest quintile because our sampling approach requires that individuals have a minimum of \$500 in deposits each month." Farrell and Grieg, "Weathering Volatility," 10.

12. Farrell and Grieg, "Weathering Volatility," 3; Farrell and Grieg, "Paychecks, Paydays and the Online Platform Economy," 10.

13. The Federal Reserve's Survey of Household Economics and Decisionmaking (SHED) was first run in September 2013. The survey has been repeated subsequently with different samples and questions. The SHED focuses on adults over age eighteen. An online panel of 50,000 individuals was sampled randomly, and 8,681 were asked to take the survey in 2015. About 65 percent (5,695) agreed. Weights were used to recover nationally representative answers. The survey was administered online, and if households didn't have a computer, they were provided a laptop. The question (19) is: "In the past year, which of the following best describes how your (and your spouse/partner's) income changes from month to month?" There were 5,642 respondents. Board of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015," 151.

14. The data here are from 2015, based on publicly available data, weighted to be representative of the broader population using sample weights. Our analysis was aided by a set of extra calculations performed at our request by researchers at the Federal Reserve. We are grateful to David Buchholz, Arturo Gonzalez, and Jeffrey Larrimore of the Federal Reserve's Division of Consumer and Community Affairs for sharing that unpublished information.

15. In turning to year-to-year volatility, there is also evidence that the poorest households fare the worst. See, in particular, Hardy and Ziliak, "Decomposing Trends in Income Volatility." They show that from 1980 on there has been significant growth in volatility at the bottom and top, in particular (and at other income levels, too, but less dramatically).

16. Controlling for job changes reduces the CV of earnings from jobs by 33 percent; controlling for volatility in earnings within each job reduces the CV of earnings from jobs by 47 percent. These results exclude households with CV greater than 1.0, leaving a base sample size of 231 households.

17. Farrell and Grieg, "Paychecks, Paydays, and the Online Platform Economy," 34.

18. Canada, France, Germany, Italy, Japan, and the United Kingdom have recorded similar declines. See Bailey and Bosworth, "US Manufacturing."

19. Data for the figure are from Lawrence Katz and Robert Margo, "Technical Change and the Relative Demand for Skilled Labor: The United States in Historical Perspective," table 1.6, panel A, via Autor, "Why Are There Still So Many Jobs?" Autor notes that the Katz and Margo table "is based upon the 1920 through 2000 Census of population IPUMS and 2010 American Community Survey." See also Bouston, Frydman, and Margo, *Human Capital in History*, 15–57.

20. Autor and Dorn, "The Growth of Low-Skill Service Jobs and the Polarization of the U.S. Labor Market."

21. Reich, *Beyond Outrage*.

22. Bureau of Labor Statistics, "Union Members—2015."

23. Desilver, "Job Categories Where Union Membership Has Fallen Off Most."

24. One overview for general readers of the evolution of thinking in manufacturing during this time period is Womack, Jones, and Roos, *The Machine That Changed the World*.

25. Production jobs means workers actually employed in the manufacturing process, as opposed to managers, and clerical positions in the sector. Nicholson, "An Update on Temporary Help in Manufacturing."

26. For a detailed look at how jobs themselves have changed, see Kalleberg, *Good Jobs, Bad Jobs*.

27. Comin, Groshen, and Rabin, "Turbulent Firms, Turbulent Wages?"

28. Strain, "Do Volatile Firms Pay Volatile Earnings?"

29. Bureau of Labor Statistics, "Characteristics of Minimum Wage Workers, 2015."

30. Haley-Lock and Ewert, "Waiting for the Minimum"; Lambert, "Passing the Buck."

31. Roughly equal shares of hourly and nonhourly workers had steady hours, 43 percent and 39 percent, respectively. Those employees typically worked forty to forty-four hours per week.

32. Lambert, Fugiel, and Henly explore three dimensions of work schedules: (1) advance schedule notice, (2) fluctuating work hours, and (3) schedule control. While lack of control is a problem, evidence of steadiness can be good or bad. They note on page 13 that: "Limited advance schedule notice and hour fluctuations may be especially problematic for employees with limited say over the timing of their work schedules. When workers control their work schedules, variations in the number of hours worked may reflect employee-driven flexibility, a job quality highly valued by today's workers." On the other hand, steady hours may be a mixed blessing, sometimes reflecting "rigid job requirements that do not yield when personal matters require attention."

33. The Ford Foundation summarizes this research on its Equals Change blog. Wann, "American Tipping Is Rooted in Slavery?"

34. Morrison and Gallagher Robbins, "Chartbook: The Women in the Low-Wage Workforce May Not Be Who You Think."

35. "Realizing the Dream."
36. Bureau of Labor Statistics, "Persons at Work in Nonagricultural Industries by Age, Sex, Race, Hispanic or Latino Ethnicity, Marital Status, and Usual Full or Part-Time Status."
37. Fox, "The Rise of the 1099 Economy."
38. "The Costs of Nonpayment."
39. Fox, "A College Degree Just Might Get You a Side Job."
40. Farrell and Grieg, "Paychecks, Paydays, and the Online Platform Economy."
41. Bureau of Labor Statistics, "Persons at Work in Nonagricultural Industries by Age, Sex, Race, Hispanic or Latino Ethnicity, Marital Status, and Usual Full or Part-Time Status."
42. We considered U.S. Financial Diaries households with two earners. We found that "the coefficient of variation of earnings from the primary earner is just 5 percent higher than that of the household, due to the labor income of the secondary earner, which indicates relatively little volatility-reduction from secondary workers on average." See Hannagan and Morduch, "Income Gains and Month-to-Month Income Volatility?"
43. The Aspen Institute's EPIC program has published an overview of research on income volatility and its effects, which is a useful resource. Expanding Prosperity Impact Collaborative, "Income Volatility: A Primer."
44. Mullainathan and Shafr, *Scarcity*.
45. Henly and Lambert, "Unpredictable Work Timing in Retail Jobs."
46. Kantor, "Working Anything But 9 to 5?"
47. Recent evidence shows that people who are more likely to face income uncertainty or to become liquidity constrained tend to be more risk averse. See Guiso and Paiella, "Risk Aversion, Wealth, and Background Risk."
48. Wolf et al., "Patterns of Income Instability among Low- and Middle-Income Households with Children."
49. Heckman, "The Economics and the Econometrics of Human Development."
50. Desmond, *Evicted*.
51. See Halliday, "Income Volatility and Health"; Smith, Stoddard, and Barnes, "Why the Poor Get Fat"; and Sanger-Katz, "The Big Problem with High Health Care Deductibles."
52. Orhun and Palazzolo, "Frugality Is Hard to Afford."
53. Lambert and Henly, "Double Jeopardy."
54. Ben-Ishai, "Volatile Job Schedules and Access to Public Benefits"; Lambert, Fugiel, and Henly, "Precarious Work Schedules among Early-Career Employees in the US."
55. Khullar, "How to Stop Bouncing between Insurance Programs under Obamacare."

Chapter 2: Spending

1. The median income in the United States was \$52,280 in 2012 (the year we tracked the Johnsons' finances). In Sarah's area, the median family income was about \$47,000. U.S. Census, <http://quickfacts.census.gov>.
2. The Johnsons also received occasional child support from Mathew's father and from the mother of Sam's daughter Anne; in our study year, those payments totaled \$3,500. The couple also benefited from an income tax refund of another \$3,500.
3. While the Johnsons' income was relatively steady from month to month, they had some months with larger inflows, mainly due to the receipt of student loan payments, timed to meet school expenses. They also received a tax refund in the spring. The Johnsons are unusual in having relatively steady income but variable expenses; in the Federal Reserve's 2015 survey, only 5 percent of households that reported steady income also had notably variable expenses (Board

of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015," 18).

4. Sarah doesn't automate most of her bills, in order to have more control over which she pays when. Her payments depend on her priorities each month and how much cash she has on hand. Her paycheck arrives every two weeks, sometimes at the same time as Sam's, but not always. Two months a year, she receives an "extra" check because of when paydays fall. About half of the Diaries households share this pattern, with one member's paychecks arriving twice each month and the other's paychecks every other week. Sarah finds the months in which she and Sam are paid at different times to be much easier than the months in which checks pile up.

5. Elizabeth Warren and Amelia Warren Tyagi describe this tension in their 2003 book, *The Two-Income Trap*. Based on an analysis of bankruptcy filings, they find that the rising costs of education, housing, and health care have outpaced the gains families have made by sending two workers into the workforce. People do not spend more proportionally on discretionary spending than they did in prior decades, yet they find themselves with less of a cushion between earnings and expenses. And because most families must have two earners in order to make ends meet, they spend more on child care, health care, and elder care and have more potential for financial challenges as a result of job losses.

6. The Johnsons had just two automatically debited monthly payments: \$7 for Netflix and \$35 for a life insurance premium. (Sarah was careful not to commit to more.) The rest of their spending varied. They bought gas every few days, in \$20 or \$40 increments, rather than filling up the tank. In part to manage cash flow, they went to the grocery store to buy food almost every day, rather than shopping in bulk.

7. During the Diaries interviews families often read directly from their bank or loan statements or receipts; however, not all of the recent household spending was easy for respondents to recall, and sometimes the spending of other family members was unknown. We estimate that the USFD data understate annual household spending, relative to annual household income, by approximately 10 percent for the average household. To avoid bias in the results, we checked the spending data against our other information about the household, asked the household follow-up questions if needed, tried to highlight only the largest instances of verifiable spending volatility, compared results across a variety of sample definitions, or else showed results that would only strengthen along the expected direction of bias.

8. Households below the poverty line experienced an average of 2.2 months of unusually high spending (this is in addition to the month in which tax refunds arrive, which is typically also a month of unusually high spending). Households above the poverty line averaged 1.9 months with expense spikes.

9. Board of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015," question I11, appendix C. The nationally representative survey included 5,642 respondents.

10. The comparison of spending spikes and income spikes excludes months with tax refunds, but a similar result arises when months with tax refunds are included.

11. The results on bill payment behavior should be considered suggestive, since data error could lead to unreported bill payments among Diaries households. Still, we find ample evidence of irregularity in bill payment in general, including changes in the part of the month in which bills are paid, instances of unusually large payments that would compensate for missed bill payment elsewhere, and reports of lateness, late fees, and threats of utilities disconnections or asset repossession.

12. Pew documents that 60 percent of families experienced a major expense "shock" in a twelve-month period. Pew Charitable Trusts, "How Do Families Cope with Financial Shocks?" 5, figure 1.

13. Board of Governors of the Federal Reserve System, "Report on the Economic Well-Being of U.S. Households in 2015." Data on medical expenses come from p. 153, question

and more of the world connected in online social networks, that form of credit enhancement is becoming more and more accessible to people" (interview, November 1, 2016).

16. Federal Reserve, "Federal Fair Lending Regulations and Statutes: Overview," http://www.federalreserve.gov/boarddocs/supmanual/ech/fair_lend_over.pdf.

17. Rush, "Using Business Credit Scores to Graduate Borrowers."

18. Zelizer, *Economic Lives*, 90.

19. Zelizer, *The Social Meaning of Money*, 5. For a comparison of sociological and economic views on earmarking, drawing on examples from the U.S. Financial Diaries, see Morduch, "Economics and the Social Meaning of Money."

20. Zelizer points out that this idea of earmarking is related to mental accounting, which economists have explored, but it differs because, in her view, that idea "fails to acknowledge that social norms affect the definition of a specific earmark and the strength of the boundaries around it." Zelizer, "Special Monies."

21. The Mission Asset Fund in San Francisco has pioneered work along these lines.

Chapter 7: Sometimes Poor

1. We have benefited from comments from Ajay Chaudry, Frank DeGiovanni, Signe-Mary McKernan, Caroline Ratcliffe, and participants at a seminar on poverty and income volatility at the Center for the Study of Social Organization Seminar in the Department of Sociology at Princeton University, organized by Viviana Zelizer, in March 2016.

2. Becky and Jeremy's family income during the year was 42 percent above the federal poverty line, which makes no accommodation for regional price differences. See Meyer and Sullivan, "Identifying the Disadvantaged," for a discussion of competing poverty concepts. They describe the advantages of the SPM but note that it "uses a complex and convoluted way of determining changes in poverty over time" (112). A key issue is that the SPM framework does not judge well-being simply by income. Instead, the SPM framework modifies income to yield a measure of resources available to spend on food, clothing, shelter, and utilities. See Short, "The Supplemental Poverty Measure: 2014."

3. As described in chapter 3, Becky and Jeremy overwithheld taxes during the year, so their tax refund was larger than it otherwise would have been. Tax refunds for near-poor households like theirs were often bolstered by the earned income tax credit (EITC).

4. *The Other America* became part of the intellectual and moral armory that Lyndon Johnson drew on to formulate the War on Poverty in 1964. See Maurice Isserman, foreword to Harrington, *The Other America*. In his 1964 State of the Union address, Johnson declared that "our aim is not only to relieve the symptoms of poverty, but to cure it and, above all, to prevent it." See Matthews, "Everything You Need to Know about the War on Poverty." Johnson's legislative push produced initiatives that remain central to today's safety net: Head Start, Medicare and Medicaid, VISTA and other new job programs. The War on Poverty saw the expansion of food stamps too and, perhaps most important, the expansion of the Social Security system to retirees, widows, and the disabled.

5. The context for Harrington's book is described by Maurice Isserman in his 2012 foreword to *The Other America*. Isserman argues that while Harrington uses the language of a "culture of poverty" introduced by the anthropologist Oscar Lewis, his interpretation departs from Lewis's. Harrington focuses on the economic and social structures that reinforce poverty rather than psychological and cultural determinants.

6. In 1960, \$3,000 was the equivalent of \$24,135 in 2016 dollars. The federal poverty line for 2015 is from <https://aspe.hhs.gov/2015-poverty-guidelines#thresholds>. The poverty

comparison here uses the "official" federal poverty line, which shows that poverty rates fell since Harrington wrote. With the growth of the U.S. population, the 43 million people in poverty in 2015 translates to 13.5 percent of the population (rather than approximately one-quarter in Harrington's day). See Proctor, Semega, and Kollar, *Income and Poverty in the United States: 2015*. In most of this book, however, we use the census's SPM. Researchers have created a version of the SPM that can be used to compare poverty rates across time, called the anchored SPM. Estimating back to 1967, the anchored SPM shows a drop in poverty by 40 percent, driven by government policies rather than changes in the labor market. See Weimer et al., "Progress on Poverty?"

7. Harrington, *The Other America*, 3.

8. The list of books on poverty is now long. For a range of important perspectives, most highlighting entrenched poverty, see, for example, Danziger and Cancian, *Changing Poverty, Changing Policies*; Blank, *It Takes a Nation*; Edelman, *So Rich, So Poor*; Wilson, *The Truly Disadvantaged*; Jencks, *Rethinking Social Policy*; Abramsky, *The American Way of Poverty*; and Alexander, *The New Jim Crow*.

9. Harrington's polemic differed greatly from other influential works like James Agee's deeply reported essays in Agee and Evans, *Let Us Now Praise Famous Men*. Contemporary ethnography has also provided rich portrayals of lives lived in poverty, including Desmond, *Evicted*; Edin and Shafer, *\$2 a Day*; and Newman, *No Shame in My Game*.

10. The eligibility criteria for our sample required participating households to have a source of earned income, but 3 percent of our households spent the year without a job and surviving on public support. Household members lost the jobs they held between being recruited and the study beginning, and they did not find jobs during the time we followed them.

11. Here we measure Taisha's annual sum as resources available to spend on FCSU as defined by the SPM poverty framework. Her annual total by SPM measures is \$160 more than her net income. The SPM resource definition gives Taisha's capacity to spend on FCSU after accounting for government benefits received. The official poverty measure captures her capacity to spend on anything after accounting for government benefits received (but not in-kind benefits like SNAP). Taisha's net income (which we use to measure income volatility) captures her capacity to spend on anything that was not paid for via paycheck deductions, also after accounting for government benefits received.

12. The notion that poor people cannot save is rebutted by McKernan, Ratcliffe, and Shanks, "Is Poverty Incompatible with Asset Accumulation?"

13. For the near-poor (those with incomes between the poverty line but no more than 1.5 times above it), for example, the average was 2.3 spikes and 2.3 dips. For this group, instability was a problem, but a less acute one. As we discussed in chapter 1, bank account data collected by the JPMorgan Chase Institute, as well as the Federal Reserve's household data, also showed this pattern of income volatility. Measurement error is always a problem when viewing the ups and downs of the poorest families. What looks like a rapid drop in income could be the result of a careless transcription error by researchers or a forgotten income source by respondents. By following just 235 households, rather than thousands, the Financial Diaries are small enough in scale that we could diagnose and correct measurement error household by household. We spent most of a year verifying data after we collected it. Still, the process was not perfect, especially when collecting spending data, and here the small scale can work against us: every data problem weighs more heavily since each household is a larger fraction of the whole (one of 235 rather than one of, say, 5,000). The problem worsens when looking at particular regions or when dividing into income groups. Our findings, though, align broadly with those of other studies using alternative approaches and data sets.

14. The connection between instability and poverty was prominent in the earlier financial diaries collected in India, Bangladesh, and South Africa that formed the basis of the book *Portfolios of the Poor*. There, the authors described a "triple whammy" to capture the condition of

poverty. The three elements are (1) low income, (2) instability, and (3) a lack of mechanisms to cope with the instability. The triple whammy describes many poor households we saw in the United States. The connection between poverty and instability in the original financial diaries is also described by Morduch in “Notre façon de voir la pauvreté.” Related ideas are described in the context of year-to-year instability in India in Morduch, “Poverty and Vulnerability.” The analysis of spikes and dips in the book deliberately departs from the SPM framework used to measure poverty; most important, we track income without subtracting out-of-pocket spending for medical necessities.

15. Hardy and Ziliak use the U.S. Current Population Survey, a national survey used to calculate the U.S. poverty rate (“Decomposing Trends in Income Volatility”). Hardy and Ziliak measure poverty using the official poverty line.

16. The data stretch from the SIPP 1984 panel to the 2008 panel. The SIPP provides a window on month-to-month income volatility (as measured by the coefficient of variation), and the researchers narrowed their focus to households with children. See Morris et al., “Income Volatility in U.S. Households with Children.” They find that the increase in month-to-month income volatility for poor households is mainly from unearned income (not job income), suggesting that the changes may be bound up with changes in the availability of public transfers. The changes do not seem to be due to changes in the racial or ethnic composition of the poorest households.

17. The SIPP shows that volatility for the richest group fell, while the Current Population Survey shows an increase. Part of the difference may be due to month-to-month income volatility (measured by the SIPP) and year-to-year volatility (measured by the Current Population Survey).

18. This analysis draws on Morduch and Siwicki, “In and Out of Poverty.” The paper includes analyses of the impacts of government transfer programs for Diaries households, showing that most programs do more to raise their incomes overall than to reduce the variability of income. The length of time under the poverty line was calculated using the SPM definitions. To conservatively address measurement error, we dropped data on all months in which reported income or spending was under \$100. The data on months spent below the line are conditional on spending at least one month below the line. (The census definition of a poverty spell, in contrast, is a minimum of two months.) The patterns in the Financial Diaries are clear, but this is a place where we need to be especially careful in extrapolating to the broader population. The households are not statistically representative of the American population, and, apart from putting households into buckets by income, Figure 7.1 does not control for how close households are to the poverty line on average.

19. This analysis excludes household-month observations where spending or income was below \$100. Monthly spending figures in this analysis are also adjusted to exclude the spending categories that are excluded from the SPM-adjusted income.

20. Duncan, Hofferth, and Stafford, “Evolution and Change in Family Income, Wealth, and Health.”

21. The data for 2009–11 are from the Survey of Income and Program Participation, as reported by Ashley Edwards (“Dynamics of Economic Well-Being”). Even though the SIPP is a representative sample, it is an unrepresentative period in American economic life, coming so soon after the Great Recession of 2007–8. Still, Edwards shows that the basic shape of the evidence lines up with data from earlier periods. Between 2005 and 2007, 27.1 percent of Americans experienced at least two months of poverty (versus 31.6 percent between 2009 and 2011). The rate of chronic, persistent poverty was 3.5 percent in 2009–11 and 3 percent in 2005–7. Most studies of episodic poverty focus on spells of at least two months in a row. Given the relatively short time frame of the Diaries (most households were observed for a year only), we instead focus on spells as short as one month in the analysis of the Diaries experience.

22. Researchers have written much on poverty dynamics and intergenerational poverty. An overview is provided by McKernan et al., “Transitioning in and out of Poverty.” They find that slightly more than half of the U.S. population (focusing on adults ages twenty and older) experiences an episode of poverty at some point before age sixty-five. In analyzing long-term poverty, they find that about half of those who exit poverty will become poor again within five years.

23. Proctor, Semega, and Kollar, *Income and Poverty in the United States: 2015*. Using SPM poverty lines (and resource definitions), rather than the official poverty line, 103 million people, 32 percent of the U.S. population, had household resources that placed them above the SPM poverty line but below twice the line. See Short, “The Supplemental Poverty Measure: 2014.”

24. Data are from Bane and Ellwood, “Slipping into and out of Poverty,” 11.

25. Bane and Ellwood found that in the 1980s entrances to poverty were often associated with major shocks to households—events like divorce, a departing household member, or a health crisis. Their evidence suggested that we should spend less time focused on the spikes and dips of earnings and more on the structural challenges of families. Nearly half the time, they found, it was family structure and life-cycle events that marked the start of an episode of poverty. The discussion is from Bane and Ellwood, “Slipping into and out of Poverty,” 11. Their work has been extended to 1987 by Stevens, “The Dynamics of Poverty Spells.”

26. O’Brien and Pedulla, “Beyond the Poverty Line.”

27. The data for 2011 are from the Survey of Income and Program Participation, as reported by Ashley Edwards (“Dynamics of Economic Well-Being”). The percentages in poverty are our calculations using figures from appendix tables A-2, A-4, and A-6.

28. The federal poverty line has been debated and adjusted over time, particularly in the 1970s. The details here are from Fischer, “The Development of the Orshansky Poverty Thresholds.”

29. The Financial Diaries show the importance of measurement issues. The biggest challenges of collecting household financial data arise when transactions are small and frequent, and thus easy to forget, and in cash so there is often no record of the transaction. Cash wasn’t a big factor in terms of income. The median household in our study received just 4 percent of inflows in cash (often help from family members), though there were a few families that received a much larger percentage in cash, so that the sample average was 19 percent. By contrast, nearly half of all transactions were in cash, making up 35 percent of the spending by value of the median household (42 percent for the average). Moreover, the cash purchases were small: half were \$10 or under, and 84 percent under \$50. The recall of cash is exacerbated by time. Our field researchers sought to meet with households every two weeks, but the gaps between meetings typically stretched to three to five weeks because of busy schedules and irregular work hours. When households had to try to remember smaller transactions from more than two weeks in the past, the quality and quantity of spending data fell. Similar issues arise in large national surveys. As a comparison, the Federal Reserve of Boston collects representative data on modes of consumer payments. In 2013 they found that 26.3 percent of transactions were in cash. Schuh and Stavins, “The 2013 Survey of Consumer Payment Choice.”

30. Most poorer countries base poverty measurement on spending data, which is easier to collect than income when large shares of workers are employed in informal labor markets, especially in farming and other forms of self-employment. It also has the advantage of accounting for consumption smoothing. Meyer and Sullivan, (“Identifying the Disadvantaged”) argue that consumption data for the poorest households tend similarly to be more accurate than income data in the United States.

31. See Meyer and Sullivan, “Winning the War” and Meyer and Sullivan, “Identifying the Disadvantaged.”

32. Spending in the Diaries study tends to be underreported relative to income. This increases the number of months that households appear to be in consumption poverty. Across the full year, we observed households in consumption poverty roughly as frequently as they were in income poverty. Despite this bias, we still saw the average household avoid consumption poverty when in income-poor months.

33. Massey and Fischer, "The Geography of Inequality in the United States, 1950–2000."

34. The withering of the safety net since the late 1990s is documented in Edin and Shafer, *\$2 a Day*. If Floyd writes that "by 2014, TANF provided a temporary safety net in the form of cash benefits to only 23 families with children for every 100 families in poverty, down substantially from 68 assisted families in 1996." Floyd, "Our Safety Net Misses the Poorest."

35. Propel, a start-up designed to make applying for benefits much easier, provides one model.

36. Corporation for Enterprise Development, "Asset Limits in Public Benefit Programs."

37. See Ratcliffe et al., "Asset Limits, SNAP Participation, and Financial Stability?"

38. See Ben-Ishai, "Volatile Job Schedules and Access to Public Benefits." The data about how much pain this actually causes are sparse because they require a state-by-state analysis of the rules. TANF in practice adjusts to some of these labor market realities by allowing many TANF recipients to meet their "work" requirement in supported activities like a "job club." If a TANF recipient has a job where the hours fluctuate from week to week, then the number of hours of participation in the job club could be adjusted to meet the number of total required hours. A reduction in work hours alone would not then negatively affect eligibility. We appreciate insights from Caroline Ratcliffe and Heather Hahn of the Urban Institute.

Chapter 8: Secure and in Control

1. The Aspen Institute Initiative on the Future of Work has explored these ideas specifically in relationship to gig economy workers, with the needs of independent contractors in mind, but they apply just as well to part-time workers and those with irregular schedules; see "Common Ground for Independent Workers."

2. For more about San Francisco's Retail Workers Bill of Rights, see <http://retailworkerrights.com>. Similar bills have been offered in ten other states, as well as Washington, D.C. See DePillis, "The Next Labor Fight Is over When You Work, Not How Much You Make."

3. Lambert, "The Limits of Voluntary Employer Action for Improving Low-Level Jobs."

4. Walmart has taken steps in this direction as well, as described in Irwin, "How Did Walmart Get Cleaner Stores and Higher Sales?"

5. The argument to redirect the tax system to help poor and low-income families save is developed in Sherraden, *Assets and the Poor*. As we note in chapter 3, Sherraden's Individual Development Account proposal is one attempt to shift incentives to help a broader part of the population. The Diaries suggest that families need a broader range of saving services, but Sherraden's diagnosis of the federal subsidy and tax system still has currency.

6. The Retirement Savings Contribution Credit, or "saver's credit," was enacted as part of the Bush administration's 2001 tax plan to promote retirement savings for moderate- and low-income workers. It allows tax filers to reduce their federal income tax liability by making eligible contributions. Because it is "nonrefundable," it can reduce a taxpayer's federal income tax liability to zero, but it cannot result in a tax refund. Mark Ivry has written extensively about the potential benefit of a broader, refundable saver's credit. See also Alicia Munnell's contribution to Hacker and O'Leary, *Shared Responsibility, Shared Risk*. Rather than expanding the existing saver's credit, or creating a new credit, another route would be to expand the EITC, as

described by Halpern-Meekin et al., *It's Not Like I'm Poor*. A further proposal is to allow households to receive a tax credit in the first part of the year in order to provide families with a boost to their short-term savings, acting as a near-term emergency savings account and providing a buffer against near-term economic shocks.

7. See Jones, "Information, Preferences, and Public Benefit Participation?"

8. Note that Digit was part of the inaugural cohort of the Financial Solutions Lab, an incubator for financial technology innovators sponsored by the JPMorgan Chase Foundation and run by CFSI, where Schneider works. The authors have no financial interest in Digit.

9. Cowley, "New Payday Options for Making Ends Meet." See also Knope, "All the Ways Uber and Lyft Drivers Can Get Paid Instantly." CFSI notes that a trend among financial technology start-ups has been to seek to partner with employers as a distribution channel. They highlight DoubleNetPay, a company that integrated with prominent payroll provider ADP in order to enable workers to schedule payments around their paycheck cycles and deduct planned fixed expenses ahead of time. They say that "by pulling fixed expenses out, consumers can focus on managing their discretionary spending." Falvey et al., "Financial Solutions Lab Snapshot" 4.

Companies could also time workers' pay to when they need the money most, just as some bill payees allow customers to choose payment dates. Katherine Lopez, the nonprofit worker in California, spent time and attention deciding which bills to pay with the first paycheck of the month and which to pay with the second. Imagine if employers paid workers just enough in that first paycheck to cover what they'd calculated as critical, "must-pay" bills. Katherine and Sarah could then count on being able to put all of their second paycheck toward other needs. Employers could do this across an annual cycle, too. For example, they could offer the option of a "thirteenth month" of earnings or a bonus, which employees could access at any time during the year at their discretion. Presumably, workers would receive less in other paychecks, but they might value the opportunity to access their pay in a more flexible way.

10. "The 2013 Federal Reserve Payments Study."

11. For discussion of this idea, see John, "Making Retirement Saving Even More Valuable by Adding Automatic Emergency Savings."

12. Information about the myRA account from the U.S. Department of the Treasury can be found at <https://myra.gov>.

13. Clarity and control are also important when it comes to work schedules and government benefits. If workers had more certainty and transparency around how much work is coming and when they'll be needed, and how much government support they can expect and when it will arrive, some of their financial difficulties would be eased.

14. Theodos et al. "An Evaluation of the Impacts of Two 'Rules of Thumb' for Credit Card Revolvers."

15. Simple's description of Safe-to-Spend can be found at <https://www.simple.com/help/articles/getting-started/safe-to-spend>.