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## *Introduction*

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Low-income individuals often lack access to the type of financial services that middle-income families can take for granted, such as checking accounts, direct deposit, bank loans, or saving opportunities. High-cost or low-function financial services, barriers to saving, lack of insurance, and credit constraints increase the economic challenges faced by low-income families. Using a unique data set from a survey I designed and that was administered in 2005–06 by the Survey Research Center at the University of Michigan to more than a thousand households in the Detroit area, this book analyzes the financial constraints and choices of low-income families and describes the ways low-income families use financial services, through both formal (“mainstream”) and informal (“alternative”) financial institutions. It discusses policies that would help low-income families achieve more stable economic lives.

Access to affordable financial services is important to the lives of low-income families, who must deal with sometimes abrupt fluctuations in income that occur because of job changes, instability in hours worked, medical illnesses and emergencies, divorce or other changes in family composition, and many other factors. If these families have limited access to savings, credit, or insurance, even small income or expense fluctuations may create serious problems in their ability to pay rent, utilities, and other bills. That is because many low-income families often lack the financial “slack” that can permit other households to ride out tough times (see Mullainathan and Shafir 2009). Financial slack can be thought of as breathing room provided to households by the ability to make relatively

costless adjustments to align resources with needs. The costlier or more difficult these adjustments are, the less slack these households can be said to have. Some amount of slack can be generated internally (as by increasing work, reducing nonessential expenditures, or selling assets), but generally speaking, households use the financial system to facilitate slack (as by holding savings, accessing credit, or buying insurance). No slack too often means that small problems can escalate rapidly and undermine the fragile financial stability of these households.

Unfortunately, families often have only limited access to the sound financial products that could help them generate financial slack. In fact, higher-cost financial services can reduce the slack available to households. For example, many low-wage individuals see their take-home pay reduced by the high transaction costs they face when using check-cashing services to obtain their income. Moreover, inadequate access to financial services—such as direct deposit to a bank account or its functional equivalent—can contribute to taxpayers' using refund anticipation loans and expensive check-cashing services that diminish the value of the earned-income tax credit.

Limited access to mainstream financial services can also hinder the ability of low-income families to save. Savings are important because they help to smooth short-term income and expense fluctuations. Small savings can be used to provide a buffer against unforeseen events, such as illness. Savings can also provide capital for important long-term investment opportunities. Middle- and upper-income families regularly use their savings to invest in educational opportunities, in the health of family members, in home ownership, and in pension funds for retirement; lower-income households face similar types of needs, including job training, higher education, or other strategies to improve their income prospects. Having a measure of financial stability through savings may also improve other outcomes, such as job training or education, both for heads of household and their children.

Constraints on access to mainstream financial services can also increase borrowing costs. The ability to borrow on reasonable terms can be important to low-income households for several reasons. Low-income households facing fluctuations in income and expenses may need to resort to high-cost borrowing because they lack lower-cost ways of generating financial slack. It is not easy for them to reduce expenditures; because of low asset holdings, low income, low credit scores, or thin credit files, it is often difficult for them to get access to lower cost debt; they may lack insurance; and they are less likely to have precautionary savings. They may be able to fall back on friends and family for help, but such borrowing can often put strains on those who lend, who are likely to be lower-income themselves. Access to credit can also be important beyond meeting short-term needs, for achieving educational goals, including vocational or job training. Access to reasonable terms for mortgages also facilitates more sustainable home ownership.

## Generating Slack: Financial Services, Savings, and Credit

Transactional services, savings, and credit are critical for low-income households' financial stability. Because these households have no slack in their lives, small decreases in income or increases in expenses can cause major problems. Yet well-designed and appropriately regulated financial services could help these households build greater financial stability. Better access to transactional services, savings vehicles, and reasonable credit will not, in and of itself, transform the lives of low-income individuals, but better access would give households useful tools to manage their finances in order to generate financial slack. If households are able to set up a regular means to receive income and pay bills, to build savings, and to access reasonably priced credit, they would be less vulnerable to serious disruptions stemming from income and expense shocks, and perhaps better able to take advantage of new opportunities, such as job training, improved child care, or a better job.

### *Transactional Services*

A quarter of low-income households, and 13 percent of moderate-income households, are “unbanked,” that is, they have neither a checking nor a savings account (Bucks and others 2009; FDIC 2009). In lieu of bank-based transactions, savings, and credit products, these households often rely on more costly alternative financial services. Providers offer a wide range of services, including short-term loans, check cashing, bill payment, tax preparation, and rent-to-own products, most often in low-income urban neighborhoods.

Alternative financial services providers are the only source of basic financial services for many low-income persons, but those services come at a high price. For example, while check-cashing outlets offer essential services, the fees involved in converting paper checks into cash are high, relative both to income and to analogous services available to middle- and upper-income families, such as check deposit into a bank account or electronic direct deposit. Check-cashing fees vary widely across the country and between types of checks, but they typically range from 1.5 to 3.5 percent of face value. The Federal Reserve reports that financial institutions processed checks totaling nearly \$31.6 billion in 2009 (FRS 2010). Almost all of these checks are low-risk payroll (80 percent) or government-benefit (16 percent) checks (Bachelder and Ditzion 2000). While even payroll checks are not without some credit and fraud risk, average losses from “bad” checks at check-cashing firms are low and compare favorably with interbank rates (Barr 2004).

Surprisingly, it is not just the unbanked who use alternative financial services. Many low- and moderate-income families with bank accounts regularly rely on high-cost nonbank providers to conduct much of their financial business—such as cashing checks, buying money orders, or taking out payday loans (Barr 2009; Rhine and others 2001). Recent literature sometimes refers to these households

as “underbanked,” although that of course assumes the outcome of the empirical analysis is that these households need more banking.

The high costs of alternative financial services raise several concerns. First, the costs of these basic financial transactions reduce take-home pay (Bachelder and Ditzion 2000; Kennickell, Starr-McCluer, and Surette 2000). As discussed below, our research shows that many low-income households can often avoid those high fees in practice, but they incur other costs as a result. High fees for tax preparation and filing, check cashing, and refund anticipation loans can reduce the value of earned-income tax credits by over 10 percent (Barr 2004; Berube and others 2002). Bringing low- and moderate-income families into the banking system, if key changes were made to financial products, could help reduce these high transaction costs, substantially increasing the purchasing power of these families. Second, without a bank account, low-income households face key barriers to saving. Promoting low-income household savings is critical to reducing reliance on high-cost, short-term credit; lowering the risk of financial dislocation resulting from job loss or injury; and improving prospects for longer-term asset building through home ownership, skills development, and education. Third, without a bank account, it is more difficult and more costly to establish credit or qualify for a loan. Holding a bank account is a significant predictor of whether an individual also holds mortgage loans, automobile loans, or certificates of deposit (Hogarth and O’Donnell 1999).

Although there are many reasons why some low- and moderate-income households lack a bank account, the financial and nonpecuniary costs of account ownership are important in their decision to become and remain unbanked. Despite the need to understand how the decisionmaking process of low- and moderate-income households interacts with external constraints, there has been little research to inform us about how these households make decisions about bank-account ownership or about the kinds of financial products that they would find attractive.

This study explores how the structure of accounts may influence household decisions. Checking accounts may be ill suited to the needs of many low- and moderate-income households. In particular, bank accounts are not structured to be low cost and low risk for low-income households. Financial institutions find low-balance accounts expensive and frequently require high minimum balances, credit checks to open accounts, high bounced-check and overdraft fees, and long check-holding periods (Barr 2004). The minimum-balance requirement on many checking accounts is a significant barrier for low-income households. In addition, households with little slack may overdraw frequently. Moreover, banks, unlike check-cashing outlets, sometimes hold checks for several days before crediting the deposit of funds; for low-income customers, this wait may not be practical. Such accounts are not designed for the lives and finances of low- and moderate-income households that live paycheck to paycheck.

Some low- and moderate-income households have had a bank account in the past but were unable to manage their finances, for example, engaging in repeated overdrafts that went unpaid. Households that have had past problems with their accounts are listed in the ChexSystems, a private clearinghouse that most banks use to decide whether to open accounts for potential customers. Thus not only does their own experience with high and unexpected fees as bank customers in the past keep some low-income households from opening an account, but they may also be formally barred from doing so by banks' use of ChexSystems.

These features of traditional bank accounts, and past problems households have had with managing their accounts, partially explain why many low- and moderate-income households are unbanked. In addition, as some researchers have pointed out, formal financial institutions are often less prevalent in low-income neighborhoods than alternative financial services providers (Temkin and Sawyer 2004). Still, for some households, noneconomic factors, such as mistrust of financial institutions, or inertia, may matter; and immigrant households often face documentation barriers to account ownership. Lack of financial education may also play a role in these choices. Our survey evidence helps to untangle these factors, as discussed further below.

### *Savings*

Low-income families are less likely than higher-income households to hold significant savings or assets (Scholz and Seshadri 2009). These families often find it difficult to save and plan financially for the future. Living paycheck to paycheck leaves them vulnerable to medical or job emergencies that may endanger their financial stability, and their lack of savings undermines their ability to invest in improving their skills, purchasing a home, or sending their children to college. Yet low-income households often lack access to even basic institutional saving vehicles. High-income households receive a disproportionately large share of the tax benefits for retirement savings and home ownership (Gale and others 2009). Most low-income workers either work for firms that have no savings plans or are not covered by such plans (Orszag and Greenstein 2005). Twenty-five percent of low-income households lack a bank account, a critical entry point for saving (Bucks and others 2009). Given the low levels of assets among low-income households, most banks have historically not wanted to serve these customers. Thus saving by low-income households is depressed by the lack of sufficient income to afford saving, the low rates of return offered to the poor because of their low levels of wealth, and the lack of supply in savings products for the poor. Government tax incentives and employer-based savings plans tend to help better-off households the most, while leaving many low-income households to fend for themselves.

Yet evidence suggests that some low- and moderate-income households can and do save. For example, a high portion of low- and moderate-income

workers participate in 401(k) plans if offered the chance to do so (Orszag and Greenstein 2005). From 2005 to 2006, nearly 78 percent of federal employees earning less than \$40,000 participated in the Thrift Savings Plan (FRTIB 2007). Just under 34 percent of families in the bottom income quintile saved in 2007 (Bucks and others 2009). Automatic enrollment in employer-sponsored pension plans boosts participation and asset accumulation among low-income employees, as well as among African American and Hispanic employees (Choi and others 2002; Madrian and Shea 2001). If welfare-benefit asset limits were raised, low-income households might respond by saving more, although the empirical evidence to date is mixed (Hurst and Ziliak 2006; Nam 2008; Sullivan 2006). Low-income households can save, and savings are shaped in part by the institutional mechanisms that encourage saving.

Low-income households may have different uses for their savings compared with middle- and upper-income households. For example, Social Security covers a substantial share of low-income households' retirement needs, and it may be impractical to expect poor households to set aside more out of their current income for retirement. Yet there are many purposes for which low- and moderate-income households need savings, including housing, education, childbirth, divorce, emergencies, or simply managing cash flow. These households need easily accessible mechanisms through which to save and may need help in building up their savings. Many low-income households have been able to build up savings, for example, through home ownership. For some households, home ownership provides a means to build equity over time, as well as residential stability and economic security; for other households, the home ownership choice and the debt undertaken to purchase a home may be less beneficial (Bostic and Lee 2009).

Low- and moderate-income households have lower savings and fewer assets to fall back on in an emergency. At the same time, they have difficulty obtaining insurance for important life risks, including medical needs, divorce, and job loss. Insurance helps smooth consumption and protect asset accumulation while also preventing or minimizing cascading shocks. For example, an auto accident without insurance can lead to a job loss, which can have devastating consequences for family finances. Given insurance constraints, saving for precautionary reasons may be important for low-income households. At the same time, given income constraints, regular saving may put a heavy burden on consumption or contribute to high-cost borrowing for the poorest families. Government insurance programs might help provide some slack by making it unnecessary for families to rely solely on self-insurance through savings.

### *Credit*

Many low- and moderate-income households use an array of short- and long-term credit products provided by a range of institutions both formal and informal. Alternative credit products include payday loans, tax-refund anticipation

loans, pawnshop loans, rent-to-own products, and secured credit cards. Some households use bank overdrafts regularly, at high cost, while others use credit cards, which often charge high interest rates and high fees. Some households have access to home mortgage and home equity loans, including loans from both prime and subprime lenders, as well as automobile loans and consumer loans backed by car titles. Again, for many low-income households these sources of credit are often costly. In addition, short-term credit products, such as payday loans, are structured in a way that makes it easy for households repeatedly to overborrow, and many subprime home mortgages are structured to disguise their true costs (Barr 2004, 2005, 2007). At the same time, credit access may provide an important insurance mechanism for low-income households facing emergencies and may provide an important means for smoothing consumption in the face of income volatility. Abstract debates about whether credit access enhances or reduces welfare miss the point. Research on human failings in decisionmaking suggests that credit access through misleading products and inducements to overborrow can reduce the welfare of the household (Barr, Mullainathan, and Shafir 2008, and chapter 11, this volume), just as credit access through straightforward products can in principle be welfare enhancing. Policy needs to focus on how to move the market toward provision of welfare-enhancing products and services.

In sum, low- and moderate-income households are financially underserved. They often lack savings, rely on expensive, short-term credit (formal or informal), and have limited access to formal financial services of the sort that many middle-class families take for granted. Only recently, and on a small scale, have some financial institutions begun to offer banking accounts and other services tailored to the needs of low-income households. Moreover, regulatory gaps often leave families unprotected in credit transactions, and national saving policies focus heavily on middle- and upper-income Americans. As a result of these financial service failures in both public and private sectors, low- and moderate-income households face barriers that can make it difficult for them to advance economically by effectively managing their financial lives.

## Overview of the Book

This book is based on information from a unique data set collected in a 2005–06 survey (that is, before the global financial crisis) of more than a thousand low- and moderate-income families in the Detroit area. I designed the Detroit Area Household Financial Services study to obtain detailed information on the financial services used by these families. As described more fully in chapter 2, the survey was conducted with the University of Michigan's Survey Research Center. We attained a 65 percent response rate and completed 1,003 household interviews. Data reported in this book are from the 938 respondents living in low- and moderate-income census tracts.

The Detroit area provides a useful context for studying the use of financial services by low- and moderate-income (LMI) households. Like many cities in the industrial Midwest and Northeast, Detroit has an eroding manufacturing base, high levels of unemployment and poverty, and strong patterns of residential segregation (see Farley, Danziger, and Holzer 2000). An in-depth look at the use of financial services in the local area permits us to understand household attitudes and behaviors within the context of local financial services offerings and market structures. Thus, this survey can provide a more nuanced and textured understanding of LMI households than can be gained solely with aggregated national data (see, for example, FDIC 2009).

The results presented in chapter 2 suggest that existing financial services, credit, and payment systems impose high transaction costs on lower-income households, increase their costs of credit, and reduce their opportunities to save. Like their higher-income counterparts, lower-income households regularly conduct financial transactions, but the financial services system is not designed to serve them well. About 30 percent of the adults surveyed were unbanked. A substantial share indicated that lower fees, less confusing fees, or more convenient bank hours and locations would make them more likely to open a bank account. The study shows that households use a range of formal and informal mechanisms to meet their financial service needs. A surprisingly large share (65 percent) of those with bank accounts had also used money orders in the recent past, as had 77 percent of the unbanked. Money orders, pawnshops, and payday lenders appear to complement formal financial services for many of these households, who commented on their convenience and ease of use.

There was significant variation in saving patterns. About one-third of these families contributed to savings each month, while 42 percent said that they never saved. Savers were more likely to be employed and to have more education. Many of those who did not save reported that they found it difficult to live on their current income. They were also more likely to have health expenses. When households faced a large expenditure need, they got help from family and friends, borrowed money, or spent down assets. Slightly less than 20 percent reported that they were in deep financial trouble.

Chapters 3, 4, and 5 explore financial services usage patterns in greater detail. Chapter 3 explores the full portfolio of low-income households, including transactional, credit, and saving behavior. For the vast majority of these households, annual outlays on financial services for transactional and credit products are relatively small, around 1 percent of annual income. This estimate suggests that many of these households are able to avoid regular use of the most expensive financial services options. As in other studies of consumer use of financial services, however, the top spenders take up a disproportionate share of spending. Moreover, although annual outlays are low, the study finds that LMI households face substantial nonpecuniary costs of using alternative financial services, such as



waiting in line to pay bills in person, lacking ready mechanisms to save, and burdening friends and family with borrowing needs. Low-income households with bank accounts are more likely to be employed and have access to more forms of credit than unbanked households, resulting in greater use of financial services and higher total outlays; contrary to expectations, most outlays by the median banked household are for alternative financial services rather than banking services. Having a bank account is also related to the steps households take to maintain financial stability when income cannot cover their expenses. Finally, even when controls for income, education, and employment are implemented, large, unexplained racial differences in bank-account ownership are found: African American respondents are 12 percentage points less likely to have a bank account than their nonblack counterparts in the survey. These results suggest that policies designed to expand access to traditional bank accounts are unlikely to improve financial outcomes unless accompanied by improvements in the functionality of banking products for low-income households.

Chapter 4 characterizes the features of an account-based payment card—including bank debit cards, prepaid debit cards, and payroll cards—that elicit a high take-up rate among low- and moderate-income households, particularly those without bank accounts. The chapter applies marketing research techniques, specifically, choice modeling, to identify the design of specific financial services products for low- and moderate-income households, who often face difficulties acquiring or maintaining standard bank accounts but need banking services. After monthly cost, the nonmonetary features of a payment card, such as the availability of federal protection and the type of card, are the factors LMI consumers weigh most heavily when choosing among differently designed payment cards. The study estimates a high take-up rate for a well-designed payment card. The sensitivity of the take-up rate with respect to cost varies by income and bank-account ownership. These results can guide private and public sector initiatives to expand the range of financial services available to LMI households, particularly as the federal government embarks on a wide-ranging effort to move federal benefits and tax refunds to electronic transmission and as federal regulators weigh new consumer protections for payment cards in the wake of the passage of the Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act of 2010.

Chapter 5 combines the household survey data with information collected on the location of banks and alternative financial services providers in the Detroit area. The chapter reports the results of testing whether proximity to a bank is associated with a greater probability of having a bank account. In fact, all else being equal, the probability of having a bank account is predicted not by bank proximity but rather by proximity to alternative financial service providers. To disentangle the simultaneity between household and business location decisions, the chapter implements an instrumental variables strategy using historical

bank-branch locations and municipal zoning laws as exogenous determinants of the current location of banks and alternative financial services providers. The results suggest that public policy efforts to attract low-income households to the mainstream banking sector would be better focused on expanding the range of products offered by depository institutions rather than solely focusing on expanding geographic access to bank branches, although the presence of bank branches in low-income neighborhoods is likely to have other benefits not fully captured by this analysis.

Chapter 6 explores the use of alternative credit products. Households use various sources for alternative credit, depending in part on their available collateral and borrowing needs. Rather than treating each source as a substitute, LMI borrowers appear to use payday loans, pawnshops, refund anticipation loans, and other services as complementary products. Unlike loans from mainstream providers (banks and credit unions), which, when used by LMI households, are mostly applied to home improvement or repairs and mortgage or car payments, loans from alternative financial services sources are reportedly used to pay off bills, to cover recurring expenses, or to consolidate debts. Individuals who use these credit sources are more likely to be in financial trouble and have experienced hardships in the past year. They are also more likely to believe that borrowing is an acceptable way to make up for short-term reductions in income.

These results have important implications for the effective regulation of and policy toward short-term credit markets. Understanding households' preferences and behavior related to borrowing and saving is essential to analyzing how firms and households would respond to government regulation designed to address problems in this sector. The use of short-term credit, particularly for living expenses and emergencies, suggests caution about overregulating. Moreover, regulation of singular parts of the alternative financial services sector may be counterproductive when borrowers' portfolios include multiple short-term credit products.

Chapter 7 explores home mortgage credit. In spite of the recent impetus to reform home mortgage markets and to hold lenders accountable for abuses, little systematic evidence is available about the manner in which fair-lending violations and abusive practices in mortgage lending manifest in the mortgages held by those households. While studies of racial discrimination in mortgage markets have been conducted for decades, the role of mortgage brokers in lending has only recently increased and been studied.<sup>1</sup> This chapter uncovers the mechanisms through which differential mortgage pricing disadvantages two groups of LMI

1. Until the financial crisis, some 60 to 70 percent of loans were originated through the broker channel. Some economists have argued that mortgage brokers contributed to the subprime boom and bust by aggressively marketing high-cost and potentially confusing mortgages to low-income borrowers (Quigley 2008).

home owners: black borrowers and borrowers who use mortgage brokers. These borrowers pay more for mortgage loans than other borrowers, after controlling for a wide variety of factors.

This robust, random, stratified household-level survey reports data on different dimensions of high-cost mortgage pricing, such as balloon payments, up-front points and fees, “teaser” rates, and prepayment penalties, along with whether a household uses a mortgage broker.<sup>2</sup> The data set links household and mortgage characteristics to describe mortgage pricing among low- and moderate-income households, their creditworthiness and attitudes about borrowing, and their use of mortgage brokers. Especially noteworthy is that the survey was conducted at the height of the subprime lending boom in 2005 and 2006 and in a state—Michigan—where antipredatory lending statutes were relatively weak.

The chapter estimates differences in mortgage pricing among home mortgage borrowers, focusing on price differences (the intensive margin), rather than on loan denial differences (the extensive margin). We attempt to control for the fact that the price and other features of mortgages may differ across borrowers because of their incomes, the size of their down payments, their risk appetite, their creditworthiness, and how much they shop around for the best terms. While the approach cannot completely rule out these demand-driven explanations, the empirical results are most consistent with lender and broker, that is, supply-driven, origins for differences in loan terms.

Within similar low-income neighborhoods, black home owners pay higher interest rates—110 basis points higher, on average—than similar nonblack home owners and are more than twice as likely to have prepayment penalties or balloon payments attached to their mortgages than nonblack home owners, even after controlling for age, income, gender, creditworthiness, and a proxy for default risk. In addition, borrowers who used a mortgage broker are over 60 percent more likely to pay more in points or fees than those who did not use a broker.

The heterogeneity in pricing across racial groups and across transaction types (broker versus nonbroker) is unexplained after accounting for many demand-driven explanations. However, there may be other potentially important sources of heterogeneity that are unobservable in the study but may be observed by the lender, such as more precise measures of income volatility or documentation of income and assets (see Edelberg 2007 for a discussion of these issues). Our approach cannot distinguish between racial differences in pricing and the presence of omitted financial characteristics that are correlated with race but are not included in our data. Nonetheless, a well-functioning mortgage market should

2. Susan Woodward and Robert Hall (2010) use loan-level data with mortgage-pricing variables but not many household-level characteristics, while Andrew Haughwout, Christopher Mayer, and Joseph Tracy (2009) merge data from LoanPerformance (LP) and Home Mortgage Disclosure Act compliance reporting to examine racial differences in subprime mortgage pricing.

eliminate the disparate treatment of minority borrowers and of borrowers who use mortgage brokers, and our results indicate that the mortgage markets were not functioning well during the subprime lending boom.

The differences in loan terms by race, particularly in the up-front costs, which are not fully captured by the Home Mortgage Disclosure Act, suggest that collecting a broader set of loan terms might be important for fair-lending enforcement.<sup>3</sup> The prevalence of brokers in this market and the finding that so many borrowers are presented with just a single mortgage option (and therefore know little about alternatives) potentially provide empirical support for models of predatory lending in which lenders use an informational advantage to their benefit (for example, Bond, Musto, and Yilmaz 2009). These results provide new insights into the ways in which brokers operate in low- and moderate-income communities and help researchers to understand the full costs of home ownership to low- and moderate-income borrowers.

Chapter 8 discusses personal bankruptcy, which affects nearly one in ten families over the course of their lives. The debate over bankruptcy reform in 2005 reflects policymakers' beliefs on the causes of bankruptcy. Those favoring bankruptcy laws that intend to make it more difficult to file or get relief argue that lenient bankruptcy laws increase the incentive to file and that a decline in bankruptcy's stigma has eroded moral restraints on filing. In their view, households engage in profligate borrowing knowing that they can evade paying debts by filing for bankruptcy. Others argue that bankrupt debtors face crushing financial burdens and that many people who could file for bankruptcy do not file, indicating that stigma may be an important deterrent. In the view of many, the credit-card industry's marketing and pricing strategies have increased the likelihood that households will become overly indebted and resort to bankruptcy.

The debate over bankruptcy reform has inspired a spirited dialogue among academics about households' decisions to file for bankruptcy (Keys 2010; Sullivan, Warren, and Westbrook 1989, 2000, 2003; Warren and Tyagi 2003; White 1998; Fay, Hurst, and White 2002; Jacoby, Sullivan and Warren 2001; Gross and Souleles 2002; Gan and Sabarwal 2005; Mann 2007). Four core explanations for the decision to file are the role of adverse events as triggers for bankruptcy, the financial benefits of bankruptcy as an incentive to file, decreases in stigma from filing, and market structure explanations (see Gan and Sabarwal 2005 for a partial literature review). Evaluating these explanations empirically is a challenging task, both because of the theoretical indeterminacy of the claims and because of the limitations of existing data sets in addressing the relevant questions. There are not sufficient data to permit an extensive comparison of the financial services behaviors, attitudes, and economic outcomes among low-, moderate-, and middle-income households who file for bankruptcy and those who do not. As explained further in chapter 8, the survey research design does not allow analysis that would untangle causation. At the same time, the survey

3. Specifically, the reported annual percentage rate in the Home Mortgage Disclosure Act includes up-front costs such as points and fees, but lenders are not required to disclose these separately. In addition, the annual percentage rate is disclosed only for high-cost originations.

results suggest that the decision to file is a complex one for households and that this decision is part of myriad economic decisions made by households experiencing other financial difficulties.

Low- and moderate-income households have few assets, human capital, or steady flows of income to cope with the financial difficulties that come their way. Many of them experience concurrent serious adverse events and a range of financial hardships. They often deploy a range of methods to cope, including filing for bankruptcy. The data would not tend to support theories of filing driven mostly by strategic factors. Bankruptcy is but one of the outcomes associated with financial instability. We see some meaningful differences among households who would benefit from filing and those who would not. These differences are muted when one looks at who actually files, suggesting that the decision to file may be based in part on unobservable factors.

Chapter 9 investigates the tax-filing experiences and refund behavior of low- and moderate-income households. The chapter documents households' tax-filing behavior, their attitudes about the withholding system, their use of tax refunds to consume and save, and the mechanisms by which they would like to receive their income. It also documents the prevalence of the use of tax preparation services and the receipt of tax refunds and refund anticipation loans. Finally, the chapter argues that there may be a role for tax administration to enable low- and moderate-income households to make welfare-improving financial decisions.

Chapter 10 extends the analysis of tax-filing behavior from the previous chapter to explore how and why LMI households use the tax system to save. This chapter analyzes the phenomenon that low- and moderate-income tax filers exhibit a "preference for overwithholding" their taxes. The chapter argues that the relationship between their withholding preference and portfolio allocation across liquid and illiquid assets is consistent with models with present-biased preferences and that individuals exhibit self-control problems when making their consumption and saving decisions. The results support a model in which individuals use commitment devices to constrain their consumption. Mental accounting and loss-aversion explanations for tax filers' preference for overwithholding are less likely to explain the patterns in the data. Dynamic inconsistency among LMI tax filers has important implications for saving policies and for tax administration generally.

Chapter 11 explains how insights from behavioral economics can improve our understanding of consumers' financial services behavior, market responses to that behavior, and different approaches to regulation. Policymakers typically approach human behavior through the perspective of the "rational-agent" model, which relies on normative, a priori analyses. The model assumes that people make insightful, well-planned, highly controlled, and perfectly calculating decisions guided by considerations of personal utility. This perspective is promoted in the social sciences and in professional schools and has come to dominate much

of the formulation and conduct of policy. An alternative view, developed mostly through empirical behavioral research, and the one articulated here, provides a substantially different perspective on individual behavior and its policy implications. According to this highly empirical perspective, behavior is the amalgam of perceptions, impulses, judgments, and decision processes that emerge mentally. Actual human behavior is often unforeseen and misunderstood by classical policy thinking. A more nuanced behavioral perspective can yield deeper understanding and improved regulatory insight.

Consider the recent mortgage crisis in the United States. While the potential causes are myriad, a central problem was that many borrowers were offered and took out loans that they did not understand and could not afford, with disastrous results for borrowers, financial firms, and the national economy. Borrowers, and all of us generally, are not explained in important ways by the rational-agent model. At the same time, the chapter argues that a behavioral policy perspective that focuses only on the individual is incomplete. In some contexts, firms have strong incentives to exploit—or to overcome—consumer biases. Thus policy also needs to account for market context and the incentive and behaviors of firms. And, of course, firms will shape their conduct in response not only to the behavior of individuals but also to the actions of regulators. The chapter outlines some of the main research underpinning the behavioral perspective. It explores how firms interact with consumers in different market contexts and proposes a model for understanding this interaction. The chapter then develops an analytic framework for behaviorally informed regulation and concludes with examples of relevant policy applications.

Chapter 12 provides an epilogue to the study. The financial crisis from which the United States is only now emerging caused widespread harm to our economy, and low- and moderate-income households were least able to weather the crisis. In response to the crisis, a number of key reforms have been put in place, including the creation of a new consumer financial protection bureau, mortgage-market and credit-card reforms, and initiatives to reach out to the “unbanked.” The chapter concludes the discussion by suggesting strategies to transform the financial services system to better serve low- and moderate-income households. In particular, it highlights how behavioral perspectives can shape better financial education, improve access, and enhance consumer protection. This “three-legged stool” holds promise for improving the financial stability of low- and moderate-income households.

## Key Findings

Several key findings emerge from our research. First, low-income families are financial decisionmakers who need a range of financial services. Basic transactional services—receiving income, storing it, and paying bills—are less available

and more expensive for low-income households. In addition, low-income households may have more acute needs for certain forms of finance. For example, less-skilled adults are more likely to face unemployment or involuntary part-time employment, and their incomes are more cyclical or volatile (Keys 2008; Bania and Leete 2007; Hoynes 2000). Their need to smooth consumption may therefore be higher than it is among high-income households. This means that flexible credit or moderate levels of short-term savings may be quite important to the economic well-being of these families.

Second, lower-income families use both formal and informal means to manage their financial lives. Although low- and moderate-income U.S. households are less likely to hold checking or savings accounts than middle- and upper-income households, many such households do have bank accounts, and many low-income households, both banked and unbanked, also use a range of alternative financial services (Barr 2009; Berube and others 2002). This suggests that formal financial institutions are not fully meeting their needs. For instance, changes in banking have made low-fee, low-balance bank accounts far less available in the past fifteen years—and many payday loan customers believe their loan is cheaper than the cost of returned check fees (Elliehausen and Lawrence 2001).

Third, lower-income families have substantially less wealth than high-income families. In itself, this is not surprising, since these families have less capacity to save and invest (Scholz and Seshadri 2009). But for some groups, particularly African Americans and immigrants, income differences alone do not explain these wealth differences; wealth holdings are lower even after accounting for income and demographic differences.

Fourth, the lower wealth holdings of low-income families have substantial implications for many aspects of their lives. Lower home ownership rates can mean more frequent residential relocation, which can in turn lead to poorer access to schools, doctors, or family support. The lack of short-term savings can lead to greater use of payday lenders for short-term loans and greater use of credit-card debt. Lack of checking accounts can result in fees paid to check-cashing outlets or increased use of tax-refund loans (Barr 2004). Use of these services increases the costs of financial services to lower-income families and makes saving even harder.

Fifth, when thinking of savings and the financial needs of lower-income households, policymakers should consider their need for short-run economic flexibility, which savings and access to formal financial institutions could provide. By contrast, much of the recent policy discussion about saving among the poor has focused on long-term investment gains such as home ownership or future educational needs. While saving as a vehicle for long-term asset accumulation and investment is important, this is only half the story. The value of low levels of savings and low-cost credit to short-term economic flexibility and consumption smoothing is equally important. Indeed, for many low-income families

the substantial dollars needed to ensure access to college or to stable economic retirement may be unattainable and can only happen if individual savings are supplemented by government assistance programs, such as Pell grants and Social Security.

In sum, low- and moderate-income households have no financial slack. And the financial system as it is currently organized makes it harder for these families to cope. While many low- and moderate-income households engage in a range of strategies to manage their finances, these strategies can impose heavy economic and noneconomic costs on these households. Restructuring the financial system to better serve them could improve outcomes and social welfare.

## Policy Directions

Policies that incorporate behavioral insights to improve the institutional context for financial decisionmaking may be especially useful in improving social welfare. Such insights can enhance financial education, access, and consumer protection—three essential areas for improving the financial lives of low-income households.

Far too often, financial education is pursued without a clear idea of the goals to be achieved or the ways in which financial decisionmaking actually occurs in particular contexts. There are three promising approaches in this regard. First, providers of financial education can come together to determine core financial competencies and to rigorously evaluate different approaches to embedding these competencies in educational offerings. The Treasury Department recently took the first steps in assessing these approaches.<sup>4</sup> Second, rather than attempting to “teach” these competencies divorced from institutional context, financial education providers, financial institutions, and the public sector can seek ways to improve customer understanding in the context of particular financial choices the individual is faced with at particular moments in time—the choice to save for retirement at the moment of hiring, for example. Third, policymakers could view disclosures as a useful moment to increase financial understanding rather than as a moment to increase the amount of financial information provided. For example, under the Credit Card Accountability, Responsibility, and Disclosure Act, credit-card monthly disclosures must now inform consumers of the financial consequences of making only the minimum payment and to indicate the amounts needed to pay off the balance in a shorter time.<sup>5</sup>

In addition to improving financial education, policymakers should focus on improving access to financial products and services that might better enable low-

4. Financial Education Core Competencies; Comment Request, 75 *Federal Register* 52596 (August 26, 2010).

5. Credit Card Accountability Responsibility and Disclosure (CARD) Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734.



income households to manage their finances. For example, banks can be given incentives to expand their offerings of low-cost, electronically based accounts. These can be structured as individually owned, debit card–accessed deposit accounts without check-writing privileges or the ability to overdraw or can be offered as prepaid debit cards on a pooled basis with pass-through federal deposit insurance. Bank accounts and prepaid cards tailored to the needs of lower-income families are likely to expand their use of formal financial services.

Employers of low-wage workers also shape the financial choices these workers make. Employers can encourage the use of direct deposit, and they can work with local banks and other providers to ensure that their workers have access to accounts and other products structured to their needs. Employer-based savings plans, with automatic savings provisions, can encourage saving, not simply for retirement but also for shorter-term or emergency needs. Employers might have incentives to offer their workers debit-card accounts with “financial stability” features—such as direct deposit, automatic bill payment, and automatic savings plans. Such products might improve employee stability, reduce lost productive time, and improve retention. These theoretical outcomes need to be empirically tested.

Policymakers can advance these efforts in a number of ways. For example, the Internal Revenue Service could be authorized to establish an automatic way for unbanked households to receive their tax refunds. These accounts would decrease the use of refund loans, increase opportunities for saving, and lower administrative costs in the tax system (Barr 2007). States could use their electronic benefit transfer programs for cash welfare, unemployment, and other state-administered benefits to improve the types of financial offerings for these households, consistent with their goals of enhancing the economic welfare of low-income or unemployed households (Barr 2004).

Policies should also be pursued to encourage saving among low-income households. Making the IRS’s saver’s credit for retirement savings contributions refundable would expand the opportunity for tax-advantaged retirement savings to low-income families (Gale, Iwry, and Orszag 2004); Congress could enact a new automatic individual retirement account for a broad range of workers who have no access to pension plans at work (Iwry and John 2007); and new tax credits could be provided to banks and thrifts for setting up automatic savings plans for low-income households to meet their shorter-term savings needs (Barr 2007).

Moreover, government currently assists low-income families in crucial ways in meeting their financial retirement needs, investing in education, covering major health expenditures, and, in some instances, meeting other needs. These programs need to be preserved and strengthened. Long-term financial stability for Social Security is probably more important than improved access to individual retirement savings plans for low-wage workers, since 65 percent of retirees rely on

Social Security for more than half of their current income (Mishel, Bernstein, and Allegretto 2005). Broadly available health insurance could help workers avoid incurring long-term debt or filing for bankruptcy when faced with a health crisis. Pell grants and other forms of educational subsidies can help low-income families educate their children beyond high school and give their children greater economic opportunities. Moreover, the government plays a central role in enhancing the take-home pay of low-wage workers through the earned-income tax credit, which helps lift millions of families out of poverty every year. The tax credit has been effective and should be expanded and simplified.

While education and access are critical, so too is consumer protection. Improved disclosures might help consumers make better decisions about borrowing. There may be a need to require greater and more standardized disclosure of the financial implications of credit across both the mainstream and alternative financial sectors, including credit-card fees, overdraft policies, and payday loans. Such cross-sector disclosures could improve the ability of consumers to comparison-shop across functionally similar credit products. Tailored disclosures regarding the consequences of certain borrower behaviors, such as making only the minimum payment on credit cards, might also help consumers make better choices (Barr 2007).

Moreover, policymakers ought to consider how advances in behavioral economics, which have improved retirement savings outcomes, could be applied in the credit arena (Barr, Mullainathan, and Shafir 2008). While market forces in these two financial areas are quite different, the fundamental mistake that individuals make in not understanding the power of compound interest is strikingly similar. In the one case it leads to undersaving, and in the other to overborrowing. Congress could pursue opt-out strategies in the credit arena that would make it more difficult for households to make bad decisions with severe consequences. For example, credit-card companies could be required to establish opt-out credit-card repayment plans with the standard pay-down occurring over a reasonably short period of time (Barr 2007). As another example, Congress could require lenders to offer a standard set of home mortgages with straightforward terms; borrowers could opt out, but the opt-out rules would be “sticky,” making it harder for lenders to encourage borrowers to take out loans not in their interest (Barr, Mullainathan, and Shafir 2008).

The Credit Card Act and the Dodd-Frank Act made a series of critical changes that are likely to significantly enhance consumer protection in the years ahead. Most important, the Dodd-Frank Act created the Consumer Financial Protection Bureau, which is authorized to supervise and enforce consumer protections across much of the bank and nonbank financial sector. For example, the bureau is authorized to improve and simplify mortgage disclosures; to police mortgage brokers and originators; and to ban unfair, deceptive,

and abusive acts and practices. Behavioral insights and empirical testing can help the bureau improve disclosures and to be sensitive to the ways in which different contexts can lead to dramatically different outcomes based on sales practices and other factors.

In sum, a better understanding of the financial behaviors of low-income households can significantly help policymakers and private institutions to advance financial education, improve access to quality financial products and services, and create new consumer protections. Policies to improve education, access, and protection may enhance the financial stability of low-income households by providing them with better ways to generate financial slack. Improving financial stability, in turn, may hold out the prospect for significantly enhancing their well-being. It is to that task of better understanding household behaviors that the remainder of the book is dedicated.

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